



Driving Innovation in Crisis Management  
for European Resilience



## D934.16 – COMMUNITY ENGAGEMENT TOOL

SP93 - SOLUTIONS

DECEMBER 2017 (M44)



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| <b>Contact:</b>                       | <a href="mailto:coordination@projectdriver.eu">coordination@projectdriver.eu</a> |

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## Revision Table

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## The DRIVER+ project

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Current and future challenges due to increasingly severe consequences of natural disasters and terrorist threats require the development and uptake of innovative solutions that are addressing the operational needs of practitioners dealing with Crisis Management. DRIVER+ (Driving Innovation in Crisis Management for European Resilience) is a FP7 Crisis Management demonstration project aiming at improving the way capability development and innovation management is tackled. DRIVER+ has three main objectives:

1. Develop a pan-European Test-bed for Crisis Management capability development:
  - Develop a common guidance methodology and tool (supporting Trials and the gathering of lessons learned)
  - Develop an infrastructure to create relevant environments, for enabling the trialling of new solutions and to explore and share CM capabilities
  - Run Trials in order to assess the value of solutions addressing specific needs using guidance and infrastructure
  - Ensure the sustainability of the pan-European Test-bed
2. Develop a well-balanced comprehensive Portfolio of Crisis Management Solutions:
  - Facilitate the usage of the portfolio of solutions
  - Ensure the sustainability of the portfolio of tools
3. Facilitate a shared understanding of Crisis Management across Europe:
  - Establish a common background
  - Cooperate with external partners in joint Trials
  - Disseminate project results

In order to achieve these objectives, five Subprojects (SPs) have been established. **SP91 Project Management** is devoted to consortium level project management, and it is also in charge of the alignment of DRIVER+ with external initiatives on crisis management for the benefit of DRIVER+ and its stakeholders. In DRIVER+, all activities related to SIA (from the former SP8 and SP9) are part of SP91 as well. **SP92 Testbed** will deliver a Guidance methodology and guidance tool supporting the design, conduct and analysis of Trials and will develop a reference implementation of the test-bed. It will also create the scenario simulation capability to support execution of the Trials. **SP93 Solutions** will deliver the Portfolio of Solutions (PoS) which is a database driven web site that documents all the available DRIVER+ solutions, as well as solutions from external organisations. Adapting solutions to fit the needs addressed in Trials will be done in SP93. **SP94 Trials** will organize four series of Trials as well as the final demo. **SP95 Impact, Engagement and Sustainability**, is in charge of communication and dissemination, and also addresses issues related to improving sustainability, market aspects of solutions, and standardization.

The DRIVER+ Trials and the Final Demonstration will benefit from the DRIVER+ Test-bed, providing the technological infrastructure, the necessary supporting methodology and adequate support tools to prepare, conduct and evaluate the Trials. All results from the trails will be stored and made available in the Portfolio of Solutions, being a central platform to present innovative solutions from consortium partners and third parties and to share experiences and best practices with respect to their application. In order to enhance the current European cooperation framework within the Crisis Management domain and to facilitate a shared understanding of Crisis Management across Europe, DRIVER+ will carry out a wide range of activities, whose most important will be to build and structure a dedicated Community of Practice in Crisis Management (CoPCM), thereby connecting and fostering the exchange on lessons learnt and best practices between Crisis Management practitioners as well as technological solution providers.

## Executive summary

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This report summarises the results of the second former SP3 Trial, which took place between October and December 2015 in Scotland. It summarises the former D33.2 Task from the DoW: “A series of workshops will be run to share knowledge and experience, and assess indicators and behaviour of citizens, such as activities, feelings and opinions. Experimentation will cover sufficient end-user community groups, in both rural and urban settings”.

The report presents the community resilience awareness raising solution and the results of the Trial with eight end-user community groups in rural and urban areas of Scotland. The solution is adapted from an existing community resilience engagement tool (CART toolkit) selected in the former DRIVER D33.1. This study investigated community resilience awareness by analysing the effects of the delivery of a workshop with tools adapted from the CART toolkit.

The report provides an overview of the solution, the methodology, analysis and results of the workshops and discussion of further trialling opportunities within the DRIVER+ project.

A mixed method approach was chosen; the results of the quantitative data from the survey (n= 69) and the qualitative aspects of the survey and the follow up survey (n=53) were all synthesised to produce a deeper understanding of the participant’s questionnaire data.

The results revealed overall, higher ‘vulnerability’ scores in rural communities, indicating these community groups feel more vulnerable but the results also reveal they feel better prepared; a heightened awareness of their vulnerability may provide the impetus to better preparation.

The results found that the workshops had no significant effect on the community’s own assessment of their vulnerability; however, assessment of capability of the community to deal with a crisis increases after the workshop, this is the same for urban and rural communities.

It may be concluded that rural communities are already generally better prepared due to awareness of their own vulnerability, so more can be gained from performing the workshops in urban communities – however, regardless of rural or urban areas, community efficacy increases after the workshops.

New threats were highlighted by communities post workshop delivery and there was an increased consensus of the threats the communities face post workshop. Often two or three major threats would be focused on as ‘threats to address’ by the end of the workshop.

The feedback from the communities regarding the workshops was significantly positive; community members recognised the CART tools used in the meeting to be very effective with a score of “Good/Very Good” from 97% of those surveyed regarding “workshop content”. The “workshop overall” survey question scored Good/Very Good by 97% of participants. In both cases, 3% of participants rated the workshops as “Fair”. No participants rated the workshops as “Poor”. In the “one month after” surveys; there was evidence of behavioural changes; for instance, community participants raising resilience issues from the workshops at subsequent community council meetings and practical changes implemented within the communities.

The Community Engagement Tool can be used as a potential solution within the Trials that are being planned (SP94), especially if the Trials will involve active participation from citizens. Besides, in particular Trial 3, with a specific focus on volunteer management and citizen involvement, may benefit from including this solution. Based on the Updated Gaps Assessment workshop (SP92), the definition of the research questions to be addressed within each Trial, and the solution selection review process (SP94) the final decision on incorporating the Community Engagement Tool in the Trials will be made.

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## List of Acronyms

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| Acronym | Definition  |
|---------|---|
| BRC     | British Red Cross                                 |
| CART    | Community Advancing Resilience Toolkit            |
| CoPCM   | Community of Practice in Crisis Management        |
| DoW     | Description of Work                               |
| ESRIF   | European Security and Research Forum              |
| SIMD    | Scottish Index of Multiple Deprivation            |
| SNS     | Scottish Neighbourhood Survey                     |
| SP      | Subproject  |
| SPSS    | Statistical Package for the Social Sciences       |
| SWOT    | Strengths, Weaknesses, Opportunities & Threats    |
| UNISDR  | United Nations Office for Disaster Risk Reduction |
| WP      | Work Package                                      |

# 1. Introduction

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## 1.1 Background

---

DRIVER+ aims to build European resilience through the improvement of crisis management in Europe and its uptake of innovative solutions. Resilience in this context is understood as the ability of a *system* to respond to adversity and adapt before, during and after an emergency. Civil Society Resilience encompasses three levels of the society's organisation: individual, community and local governance. This deliverable focuses on resilience at the level of a community. It draws on a systems theoretical perspective and model for community resilience that is described more extensively in the former DRIVER D33.1 and will be briefly explained in section 1.2.

DRIVER+ reflects the political will for further integration of community resilience within crisis management systems globally. With the Hyogo Framework for Action (1), and the subsequent Sendai Framework (2), the UNISDR advocates a community approach to Disaster Resilience and a proponent of raising awareness of citizens that can contribute to disaster prevention. In line with this view, European citizens should be regarded as a decisive and integral active part of crisis management solutions and every individual has his or her own resilience capabilities that need to be enforced and deployed in a crisis situation (3). These examples of global political trends towards citizen-based resilience methods add weight towards DRIVER+'s aim of a more civilian-centred policy approach to disaster resilience in Europe.

This deliverable reports on the trialling of a solution to raise community resilience awareness in rural and urban communities. The solution was tested in Scotland, a European nation with a well-established resilience programme, with a focus on community-led participation - The Scottish Government's National Outcome (11) aims for: 'strong, resilient and supportive communities where people take responsibility for their own actions and how they affect others' (4). Further community policy proposals have underlined this commitment. The Community Empowerment (Scotland) Bill was introduced to the Scottish Parliament in 2015 to facilitate "new rights for community bodies and give public sector authorities new duties to boost community empowerment and engagement" (5). From an emergency planning perspective, The Scottish Government, as part of the "Preparing Scotland - Scottish Guidance on Resilience" report (6), has published community resilience guidance literature targeted at end-user community groups (7) that offers advice and planning measures that communities can implement, with further information for templates relating to household and community plans that communities can implement themselves to improve their resilience. Government initiatives like these underline a resilience framework strong at national policy level with the aim of enhancing resilience at the Scottish community level through community engagement, empowerment, resilience building and asset ownership (8). Reasons for this are multi-level; including the pragmatic need to increase the efficiency of public money spend, but also to enhance inclusion, self-reliance and sustainability at community level (8).

This deliverable's proposed solution activates a community's "resilience awareness" to engage communities in the resilience planning process. This solution proposes that to increase a community's awareness of resilience, community members must be engaged in a participative, facilitative, bottom-up fashion to activate resilience thinking. The solution was designed to activate communities' resilience awareness within end-user community groups, to inform and facilitate knowledge sharing, to highlight strengths and challenges of their community and importantly, to provide input for further discussion, community resilience planning, and voluntary engagement with community resilience by the communities themselves.

## 1.2 Theoretical framework

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This report's theoretical framework is based on the former DRIVER D33.1, which outlined a systems based community resilience model (Figure 1.1). This model is an expansion of a previous model developed in a TNO-lead community resilience study commissioned by the Dutch Ministry of Security and Justice (9). In order to provide context for this deliverable, the community resilience model will be broadly summarised.

Figure 1.1 presents a systems approach of resilience (as a combination of resistance, recovery and adaptivity), including the capacities that influence resilience. The capacities are classified into five domains: social, economic, institutional, physical and natural.

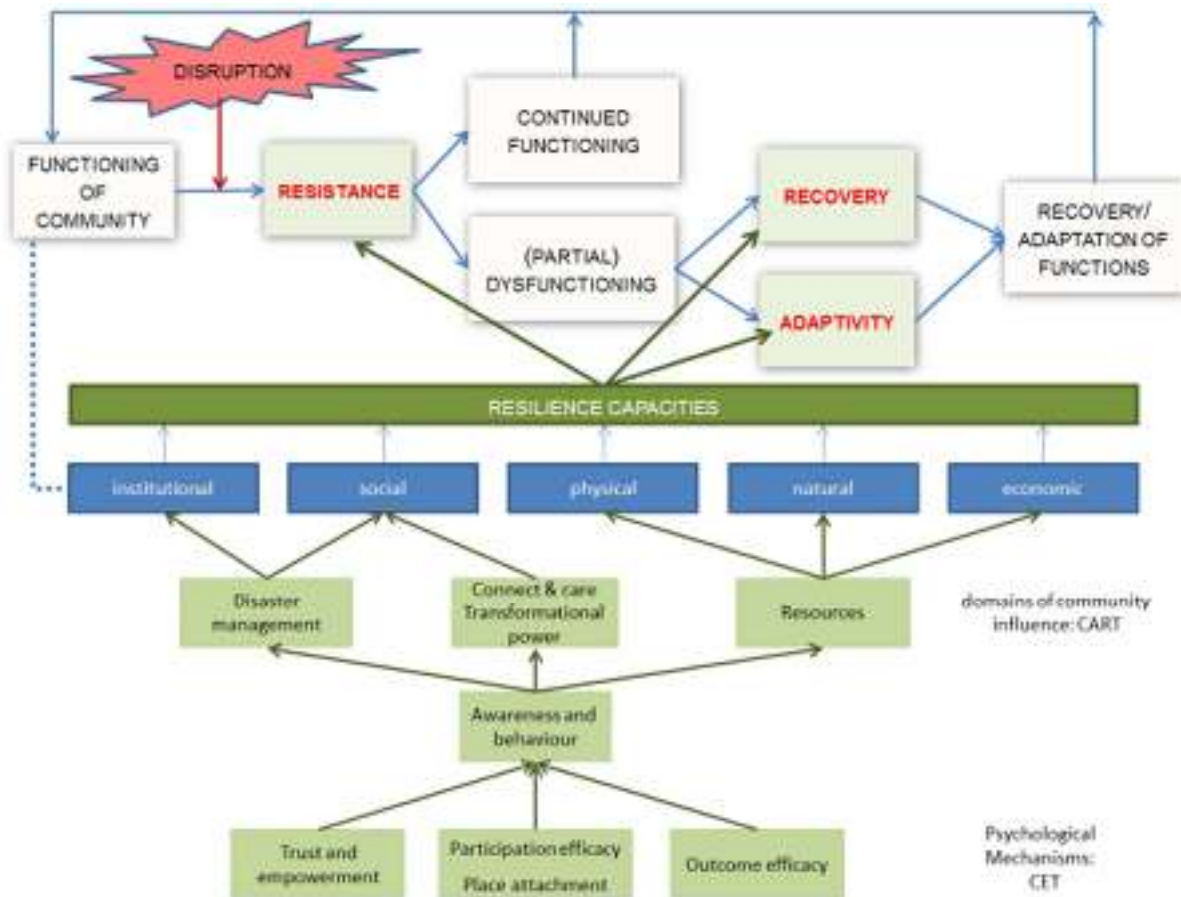


Figure 1.1 Resilience Model (taken from former DRIVER D33.1)

The psychological mechanisms for community resilience are based on the indicators from Douglas Paton's community engagement theory (10). The theory is a multi-level model that operates on three levels: (i) Individual (outcome expectancy), (ii) Community (community participation, collective efficacy, place attachment) and (iii) Societal (empowerment and trust). More information about the relevance of CET for community resilience can be found in D934.17

The Community Advancing Resilience Toolkit (CART) (11) provides the domains of community resilience within the model. The four domains of CART are (i) Disaster management (ii) Connectivity (iii) Resources and (iv) Transformational power. The proposed solution that is discussed in this Deliverable is an adaptation from CART and these domains are addressed through the development and delivery of community workshops, based on specific tools from CART. More information about the selection and relevance of CART for community resilience can be found in section 2.1.

Within the broader DRIVER+ crisis management cycle generally three phases can be distinguished (preparation/mitigation (before a crisis occurs, response (during a crisis) and recovery (after a crisis). This deliverable's solution is implemented in the preparation/mitigation phase. Ideally the community resilience model can be used across all phases at the individual, community and professional level.

### 1.3 Scope

The purpose of this deliverable is to present the trialling results of the community engagement tool, specifically former DRIVER Task 33.2 as led by BRC during the former DRIVER project.

This document presents the results from the former SP3 Trial of the community resilience engagement tool in eight rural and urban locations of Scotland using a workshop format. The report also suggests further trialling opportunities within the DRIVER+ project.

## 1.4 Outline

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This document contains the following chapters:

- Chapter 2 presents the objectives, research questions and methodology
- Chapter 3 presents the solution and describes the trialling process
- Chapter 4 presents the Trial results and analysis
- Chapter 5 presents the main conclusions and next steps

## 2. Methodological Approach

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### 2.1 Selected solution

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The selection of an appropriate community engagement tool for the DRIVER+ trialling is based on a review of a wide range of community resilience enhancement approaches<sup>1</sup>. Ostadtaghizadeh et al. (12) conducted a comprehensive review of assessment tools available for evaluating community disaster resilience, using international electronic databases including Scopus and ISI Web of Science. As noted by Ostadtaghizadeh, et al. (12) most studies on available tools are based on an analysis of community characteristics rather than on how to measure the level of community resilience, based on theoretically grounded and valid indicators. These characteristics relate to the level of communities' preparation and response. The research on community resilience is not very mature in that sense.

For this Trial, one specific solution has been selected to evaluate its usefulness and usability. Some of the approaches reviewed originated from government/NGO initiatives that were meant to raise awareness and to identify possibilities for enhancing community resilience. These are based on theoretical insights, but they are not scientifically tested or validated. This means that there is not a lot of (systematic) information available about their validity or generalizability. This does not mean that these are not useful tools, but it is difficult to judge this on the basis of the information that is available. Two approaches Disaster Resilience Of Place, DROP (13), and Community Advancing Resilience Toolkit, CART (11), seem to have a more explicit theoretical grounding and there are a number of publications available about the tools and underlying models. Looking at these two tools, the theoretical model that is the basis for DROP has been discussed rather extensively in academic journals (13; 14), but there is less information about its empirical application, whereas CART offers a broad, more community participation oriented set of tools, and there is also a number of articles available about its application in different contexts (15; 16). Based on these considerations, we have selected CART by Pfefferbaum et al. (11) as the solution to use as the basis for our Trial.

### 2.2 Aim and Objectives

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The aim of this Trial was to test the relevance and effectiveness of the selected community engagement solution (CART) through the delivery of a series of workshops aimed at raising community resilience awareness amongst end-users. To assess the effect of the solution on community resilience awareness, the Trial was based on the measurement of four specific variables of community resilience (these variables have been selected based on the literature review).

In order to further assess the effectiveness of the solution to enhance community resilience in different types of communities, the solution was administered both in rural and urban areas.

To satisfy the aim of the Trial, three objectives have been set:

- To investigate the effectiveness of the solution at raising community resilience awareness.
- To investigate whether there were any behavioural changes in the month after the delivery of the workshop.
- To investigate the views and opinions of the participants on the effectiveness of the workshop.

### 2.3 Methodological approach of the solution: participative approach

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In order to test the effectiveness of the selected solution, the solution has been applied across different communities in Scotland. The methodological approach is adopted from the original toolkit and adapted to the specific purpose and context.

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<sup>1</sup> This review was conducted as part of the former DRIVER task 33.1. The main findings are included in this Deliverable.

CART is based on a participative methodology, using a workshop design (11). Kesby et al. (17) explain that participative methodology is “working with rather than on people; about generating data and working in ways that increases participant’s ability to bring about positive change in their own lives”. This means that whilst conducting research, the approach aims to simultaneously gather data and creating impact for the participants. This research methodology has been used in developing countries when carrying out social research, but is particularly effective when used within communities and community groups. One challenge to using participatory methodology is the “negative discovery” risk (18) whereby the participants may look to over-exaggerate their problems as they may feel that if they do, they will be more likely to gain assistance to tackle their problems. This leads to disempowerment and feelings that their community are worse off than they really are. Our results show that communities felt more empowered through our awareness session.

The introduction of our workshop outlined that the workshops was part of a bigger European project and a single part of a larger community resilience toolkit currently being developed alongside our Dutch and Danish partners. The project team also advised that the workshop was a “one off” session at this point to explore community resilience awareness and that by taking part they were contributing to European research on community resilience thinking. We used a basic participative workshop exercise at the start of the session that involved the participants setting expectations of what they expect from the session and the workshop facilitator outlining what we can offer and also the limits of the session to achieve mutual expectations of the workshop.

In line with research ethics, CART does not only make the participants aware of their resilience weaknesses and barriers, but also the strengths and opportunities that their community has – each of the eight sessions provided practical solutions and ideas that could be implemented or followed up on by themselves by the end of the session. Two examples from sessions included - drawing up a phone list in emergencies or a map of the community where defibrillators are kept. Additionally the research team created a BRC community guide and contacts list which signposted each community with local information. Each participant received this at the end of the session.

The research project used snowball sampling to select participants. Using this non-probability sampling technique allowed the research team to contact community groups that the BRC had a relationship with, in order to gain access to harder to reach community organisations that would agree to work with us on this project within the time-frame specified. The target population comprised of citizens of Scotland, aged 18 and over (no minimum age) who were willing to participate in a four hour workshop. The minimum age range was decided upon in order that they can easily provide full, autonomous consent to take part in the workshop.

The snowball sample method was conducted by contacting local community councils, thus many of the final participants were directly involved or connected to individuals who were involved within their local communities. The sampling method was utilised pragmatically, as due to time constraints for recruiting participants, it was not possible to obtain a complete list of the population from which to randomly sample in a systematic manner. The project team approached 34 community councils and 22 community groups in total. The research team acknowledges the limitations of the snowball sample method and that the participants selected may be more homogenous due to the typical demographic of community groups. The data derived cannot be proven to represent the views of the wider communities as a whole, but represent the views of the community representatives that participated in the workshops, however the community groups are varied in other ways - two of the urban areas selected are considered “deprived” communities, furthermore, an island community, a student community and village communities all participated, these participants all faced a broad range of resilience challenges. The student community and lower deprivation communities were more ethnically diverse, while the other communities were more ethnically homogenous

The eight communities that were finally selected for the workshops (Table 2.1) were chosen and confirmed based on ability to provide participants within the time-frame of the study and fulfilling the quota of rural and urban communities required for this study. While this limits the research’s generalisability, the goal of the study was not to generalise the findings, but to gather indications as to whether the workshops show a

change in community resilience awareness and behaviour. Thus this study, albeit non-generalisable, remains valid. The small sample size and type of sample means that no causal links can be attributed to the workshop method as a result of these scores, however descriptive analysis can be offered to determine if the solution is suitable for further testing and trialling within DRIVER+. The Community Engagement Tool can be used as a potential solution within the Trials that are being planned (SP94), especially if the Trials will involve active participation from citizens. Besides, in particular the Trial 3, with a specific focus on volunteer management and citizen involvement, may benefit from including this solution. Based on the Updated Gaps Assessment workshop (SP92), the definition of the research questions to be addressed within each Trial, and the solution selection review process (SP94) the final decision on incorporating the Community Engagement Tool in the Trials will be made.

**Table 2.1: Community Participant Table**

| Community                      | Rural/Urban | Community Participants   |
|--------------------------------|-------------|--|
| Newton Stewart                 | Rural       | Community council and affiliated residents   |
| Callander                      | Rural       | Community council members, local journalist, policeman, Scottish Ambulance Service and Stirling Council resilience officer |
| Rassay                         | Rural       | Community council members and affiliate residents  |
| Bonnar Bridge                  | Rural       | Community council members and affiliated residents   |
| Edinburgh (Craigmillar)        | Urban       | Community council members and affiliated residents   |
| Edinburgh (Wester Hailes)      | Urban       | Community council members and affiliated residents   |
| Aberdeen (Aberdeen University) | Urban       | University Student Association   |
| Inverness (Raigmore)           | Urban       | Local community residents  |

## 2.4 Trial design

As the main objective of the Task is to evaluate the usefulness and usability of the CART as a community resilience enhancement tool, the measurement of the effects of the workshops is the overall objective of the Trial (rather than the design of the workshops itself). The Trial used a parallel mixed methods design, whereby quantitative and qualitative data collection was carried out simultaneously. Quantitative and qualitative data are both collected from participants through Likert scale questions and open ended questions with general observational notes taken during the workshop.

This parallel approach allows the study to balance the weaknesses of one method with the strengths of another, as has become increasingly common (19). Combining quantitative and qualitative research into one framework has been criticised by some, because the epistemological and ontological principles are said to be incompatible (20). However, from a practical standpoint, different methods of data collection and data analysis techniques are capable of being merged in order to produce rigorous academic research (20). A mixed methods approach provides statistical evidence of measurement along with deeper understanding and insight of the enquiry; allowing for a more complete, comprehensive account of the research problem (21). It was especially important to enable a multi-layered view of the issue due to the comparatively small sample size within this study (n=69).

The testing of the solution takes a broadly deductive approach, whereby an existing theory and previously applied approach (11; 16; 15) for raising community resilience awareness is adopted and integrated within

the workshops, holding the assumption that the delivery of the workshops will raise participant's awareness of community resilience and testing this theory through analysis of the workshop method.

### 2.4.1 Measuring the effects of the solution: survey method

Surveys were deemed an appropriate data collection method for testing this solution. Surveying communities allowed the individual participants to be anonymous, thus more likely for truthful answers to be gleaned on what may be considered sensitive issues within the community (22). Three surveys were administered to each participant: Pre-workshop, post-workshop (immediately at the end) and one month after the workshop, in order to measure the effects of participation. The surveys were adapted from existing questions within the CART toolkit in order to increase the reliability of the study findings (23).

The study explored four variables by asking the same set of questions at three intervals (see Annex 6). These variables were: 1) Vulnerability 2) Community Capability 3) Individual Preparation 4) Community Preparation<sup>2</sup>. The "Pre" and "post" surveys also collected demographic data and ratings of aspects of the workshop. The "one month after" survey additionally surveyed questions related to behavioural changes.

The surveys also asked open ended questions to collect qualitative data regarding the most likely threats their community faces and allowing space for comment on the workshops and its effectiveness. These were analysed using categorical analysis. This allowed for methodological triangulation and helped to put some of the Likert scale data into context.

During an informal pilot workshop, with participation of British Red Cross employees, the survey was tested for any issues regarding clarity of questions or technical problems with the online questionnaire tool prior to full dissemination. The pilot included a qualitative section at the end allowing for feedback on the survey itself. Changes to the survey were made based on the feedback and the results. Changes included terminology regarding data and advisory organisations; clarity of questions; and ensuring that the order of questions did not affect subsequent responses.

### 2.4.2 Analysis of the survey results

The results of the three surveys were collected and subsequently analysed using the statistical software package SPSS. The responses from respondents that did not participate in all three surveys (pre-workshop, post-workshop, one month after) are excluded from the analysis to make sure the effects of the solution at these different times are tracked properly. The surveys have been administered by the British Red Cross, whilst the analysis of the results was done by TNO, thereby guaranteeing the confidentiality and anonymity of participants. In total, there was a 90% return rate of all participants across all three measurements.

The 6-point Likert-scale: ranged from 'strongly disagree', to 'strongly agree'. A middle 'neutral' option was not deemed necessary, as this enquiry endeavoured to measure participants' perceptions of each individual statement and minimise non-respondents - survey respondents can sometimes confuse a 'neutral' response with 'I don't know', meaning that their level of agreement can at times not be reflected accurately (24).

## 2.5 Community Engagement and Participant Ethics

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The research team engaged with community participants using the snowball sampling method mentioned earlier. The research team initially approached actors on a number of levels (Government Emergency Planning Departments to Local Activist groups, local environmental group, local elected officials and hobby / interest groups) but success was achieved mainly through local authority and local community council contacts.

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<sup>2</sup> These variables were selected based on the literature review in former DRIVER D33.1

Communications were tailored for each group targeted. A selection of “Posters” and other materials were used to attract participants and also to and engage the wider stakeholders within the community (Annex 4). Posters were tailored to each community by investigating the top local community risks and linking to those risks. Each participant was also offered an Amazon gift voucher as an appreciation for their participation. As discussed in Head (25) the practice of financially compensating research participants is becoming increasingly common. The author argues that this practice is generally deemed acceptable when it is a small amount (25). It is important to discuss though, because it could affect the recruitment and outcomes of research. The gift voucher that was given to the participants in this Trial was for a small amount (£20) and meant as an appreciation for participation and compensation for travel expenses.

Permission was sought for the testing of the workshops prior to the workshop and a detailed consent document was signed by each community participant prior to taking part. Each participant was free to leave at any point of the session and the follow up survey was on a voluntary basis.

The first part of the workshop outlined the full context of the DRIVER+ project, the length of the workshop and what the workshop would entail, in order to set clear parameters for the community groups to reduce potential for feelings of stress and anxiety. This also involved reiterating verbally that they are free to withdraw their participation at any time. The facilitator let it be known that the project was funded in part by the EU for full disclosure. The workshops were carried out at times most suitable to the community groups we were dealing with. This resulted in six workshops during daytime and two evening sessions. The facilitator was constantly aware of any power differentials between individual community members and worked to mitigate stronger voices to allow a more equal representation for every participant. The workshop locations were places where many similar activities had carried out and the safety of participants was at little to no risk. The workshop was delivered at a level any member of the workshop could participate at; therefore overly scientific terms were replaced with more layman terms wherever possible, with the emphasis being on gathering their information, rather than the facilitator speaking at the audience. Information about the Trial, informed consent, anonymity and confidentiality beyond the confines of the project was confirmed with the participants before carrying out the workshops (Annex 1-3).

### 3. Developing and Testing the Community Engagement Tool

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This chapter describes how the selected solution (CART) has been adapted in order for the Trial to take place in eight Scottish communities.

#### 3.1 The Community Engagement Tool

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The Community Advancing Resilience Toolkit (CART) (11) uses a combination of several participatory data gathering methods to create a toolkit that can support communities in gaining information on the level of resilience capabilities in their community. The CART framework is used mainly by community organisations and as such can be considered a “bottom-up” approach to community resilience. The framework has an added benefit of bringing community members together collectively to discuss the topic of resilience in relation to their local situation, increasing their awareness of resilience and improving community cohesion through the exchange of ideas throughout the process. The CART framework helps users to collect community information following a process whereby the community generates an initial profile of their community, refines the profile, develops a plan and implements the plan. The process is iterative and communities traditionally use the following tools throughout the process: (i) assessment survey; (ii) key informant interviews; (iii) data collection framework; (iv) neighbourhood maps; (v) ecological maps; (vi) stakeholder analysis; (vii) SWOT analysis; (viii) capacity and vulnerability assessment.

CART is considered a comprehensive “bottom-up approach” and is organised within a modular set-up allowing for the selection of specific, relevant tools to the community involved. CART’s range of participatory instruments within the toolkit allows a community to reflect upon its capacities and identify actions aimed at improving certain specific capacities or addressing areas that are lacking to improve the resilience of the community. Four domains are distinguished: (i) Connection and Caring (participation, relatedness, shared values, support systems, fairness, hope); (ii) Resources (natural, physical, human, financial and social resources); (iii) Transformative potential (identify and frame collective experiences, data collection, analysis, planning, skill building to create the potential for community change); (iv) Disaster Management (disaster prevention, mitigation, preparedness, response and recovery).

For this proposed DRIVER+ solution, four tools from the CART toolkit that address the CART domains are selected and delivered within a workshop method developed by the Former DRIVER BRC research team research team. This method is applied and tested with eight different communities in Scotland.

#### 3.2 Applying the Community Engagement Tool

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Eight “Community Resilience Awareness” workshops were delivered. Four were delivered in rural areas and four in urban areas within Scotland. Each workshop consisted of between 8-12 community participants apart from the Inverness base community that consisted of three participants. The workshops were introduced and facilitated by British Red Cross DRIVER+ Project members with each workshop lasting approximately four hours.

Four tools (Annex 5) have been selected from the CART framework as the basis for the design of the workshops; these tools were selected because they cover each of the four CART domains and were most suited towards a community-based workshop model. The tools selected and ordered specifically to allow for a logical narrative that engages the participants throughout the process. The first tool begins with the Data Collection Framework, giving an interactive overview of the community, then a conversation stimulated by the data and shared community experiences/knowledge, this follows into a relationship ecological map, culminating in a SWOT analysis that produces a wall sized visual community profile, created by the community members themselves (the names of the tools in some cases have been simplified so as not to confuse the participants with resilience jargon).

**(i) “Our Community” – Community Data**

An interactive discussion around community data, using existing statistical data from official sources provided by the facilitator (See Annex 5) – discussed and critiqued by the community providing community knowledge and context. The community data provided by the facilitators was from the Scottish Index of Multiple Deprivation (SIMD) and the Scottish Neighbourhood Survey (SNS). Participants used this information to discuss within groups and add their own information based on their own experiences (See Figure 3.1).

**(ii) Community Conversation**

A facilitated discussion using CART Community Conversation questions in order to capture key points from the community conversation. Combining the knowledge from the first tool with the discussion resulting from the community conversation resulted in a community profile captured on flipchart paper (See Figure 3.1).

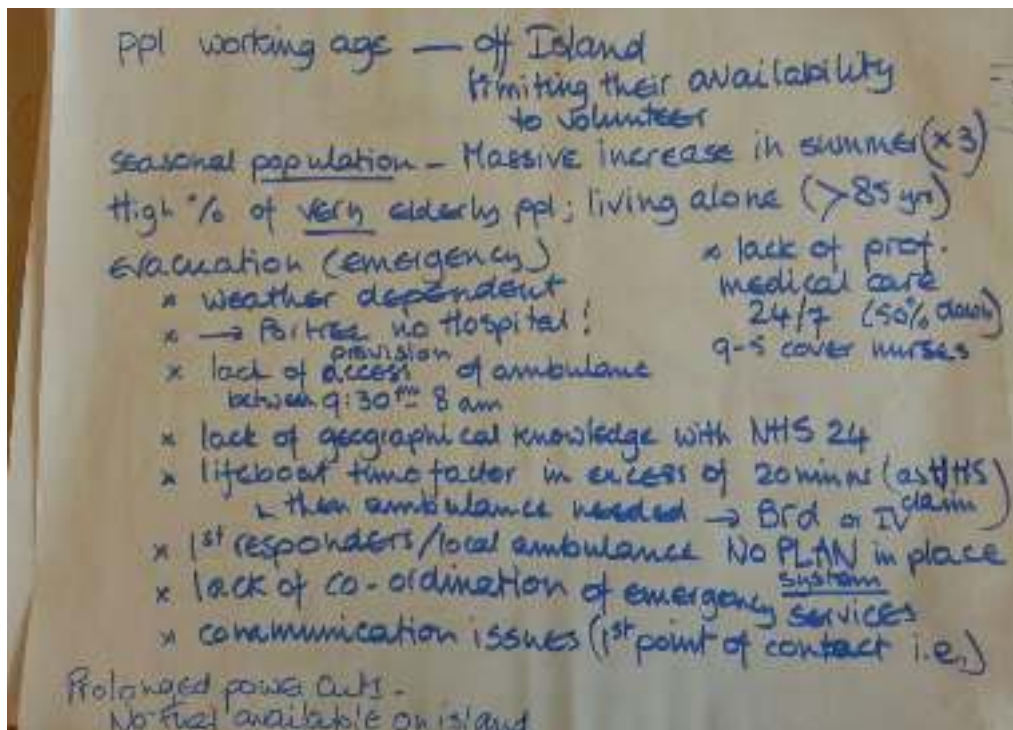


Figure 3.1: Community Data and Community Conversation Results Example – The community of Rassay

**(iii) Community Relationship Map**

The participants were split into groups and each group was tasked with drawing a community relationship map in the form of a spider diagram. The name of the community was placed in the middle of the flipchart paper and the groups produced examples of connections their community has with the outside world and the nature of these connections. This was executed by drawing a line between the community and connection in such a way as to indicate whether it was a strong relationship, a weak relationship or a stressful relationship. Each relationship was then encircled, the size of that circle indicating how important that relationship was to their own community’s resilience. (See Figure 3.2) The groups produced different interpretations of their community, and this was followed up with comparative discussion and reflections led by the facilitator.



Figure 3.2: Community Relationship Map Example – The community of Rassay

**(iv) SWOT Analysis**

The facilitator provides a large SWOT diagram template projected onto the wall. The group as a whole were invited to write onto “post-it notes” what they believe are the strengths, weaknesses, opportunities and threats that their community faces and stick them onto the projected diagram. This produced a visual, impactful representation of the characteristics and issues their community faced (See Figure 3.3) and this was reflected on by the facilitator asking questions around what this says about their community.



Figure 3.3: SWOT Analysis Example – The community of Callander

Based on these four visual representations created, the community holds a final “steps ahead” discussion where the community decides informally on actions that could support future community planning based on the findings of the workshop. At the end of the workshop, the workshop provided a “useful contacts list” specific to each community, alongside a British Red Cross wind-up torch and blanket for each participant.

The role of the facilitator was to guide the participants through the four themes for each CART tool session: Introducing the tools in context to the audience, facilitating the implementation of each of the four CART tools, asking probing questions and to facilitate discussion, however participants were encouraged to take ownership of/lead discussions.

By the end of the project participants had completed three short surveys (i) Pre Workshop, (ii) Post Workshop and (iii) 1 month after the workshop to collect data from the participants regarding their demographics, their resilience awareness/knowledge and their experience of the workshop. The one month after survey also enquired as to any behavioural changes that had been implemented since the workshop.

### 3.3 Trial Process and Timeline

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The selection of CART as the community engagement tool that would be tested in Task 33.2 was borne in the work on Task 33.1 and described in D33.1. The specific workshop methods and organization of the CART tools into the workshop was formulated and refined at two partner meetings (Ispra, Feb 2015 and Inverness, July 2015) as an iterative process. Research questions and objectives were set, including variables to measure in order to inform the information we would collect from the three interval surveys. A draft Research proposal included full “facilitator guidance” for the workshop method was presented to fellow partners (TNO, DRC) who assisted in adapting the solution and the surveys to inform the final solution.

In order to find suitable communities for the Trial, the research team originally applied to the former DRIVER SP2 for use of DRIVER platforms, but this was not deemed possible within the time-frame of the deliverable (mainly because there was no budget and time available to translate the materials in the local language of the platforms). The research team at the British Red Cross then decided to approach existing contacts including our Scottish Government and Emergency Response contacts, but due to potential clashes with their own community planning policies, it was deemed best to test out the tool first with local community groups. Community Councils and local community groups were receptive to our workshops and often supported the participant recruitment process. In 7 of the 8 workshops, the target participant quota was reached.

The research team allocated workshop times in line with the community’s availability and eventually delivered eight workshops on time and to schedule by the end of December 2015. Figure 3.4 shows the step by step timeline of the trialling process of preparation, delivery, analysis and writing of the report.

In preparation of the workshops, necessary materials were developed and sourced. These included end of session handout materials, resilience handouts for each individual session, resilience kits, information on the workshop for participants, informed consent document, CART tool documents, as well as pre and post workshop questionnaires. In addition, facilitation materials such as flipcharts, pens, pencils, notepads, tape etc. were sourced for each workshop.

The workshops were held over a 4 month period (between August and December 2015) in eight different communities in Scotland. Four rural and four urban, including an island community, a student community, social deprived communities and village to city communities.

The four month period was sufficient in order for the research team to write-up workshop notes for the report and to allow for flexibility of dates and times in accordance with the availability of the participating communities. All participants agreed to fill out a pre and post questionnaire survey and a 90% return rate was achieved for the “one month after” surveys. The follow up surveys were carried out a month after each community received our workshop solution (therefore all follow up surveys took place between September

2015 and January 2016). These surveys were carried out by phone and data was recorded by the caller who also was the facilitator of that session for consistency.

The data processing, data analysis, drafting and final write up of the research report began in January 2016, with the final draft produced at the end of July 2016. The quantitative data from the surveys was analysed using SPSS and the qualitative data was either assembled thematically or quotes extracted to add context to the workshop delivery.

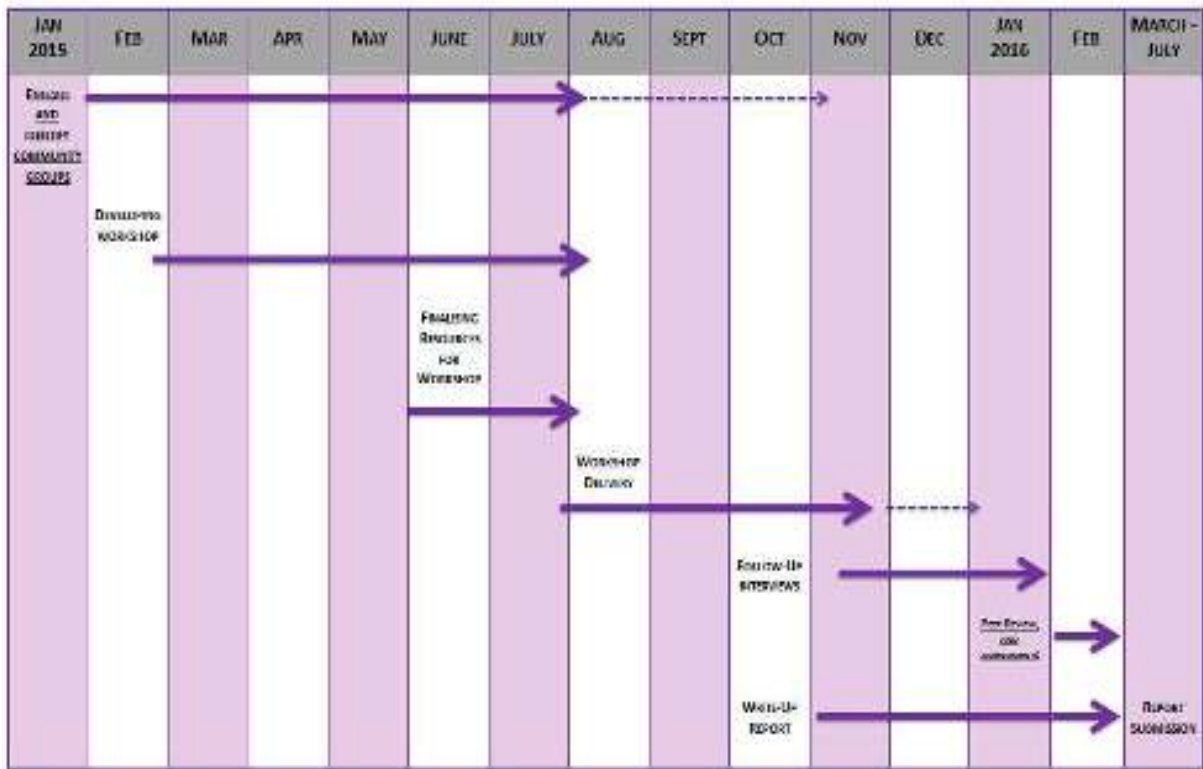


Figure 3.4: Trialling Process (GANTT Chart)

### 3.4 Profiles of the participating communities

All community groups were selected from geographical boundaries set by either the Scottish Index of Multiple Deprivation or the Scottish Neighbourhood Survey (SNS). The below information provides a brief summary of each community that was selected to test the solution.

#### 3.4.1 Urban Communities

##### *Edinburgh - Wester Hailes*

Wester Hailes is an urban area located on the western edge of Scotland's capital city, Edinburgh. The union canal flows directly through Wester Hailes and the area has in the past suffered from flooding, including multiple instances whereby sand-bagging was required for residential areas. The area is mostly residential of which a large proportion is 1970s post-war social housing. Wester Hailes is considered an area of high deprivation within Edinburgh; the area has suffered from an image problem regarding crime, alcohol and drug dependency and suffered additional stigmatisation in the 1980s due to national news broadcasting indicating the prevalence of HIV in Edinburgh, using the Wester Hailes area as an example (26). All of these issues were mentioned by the residents within the workshop.

### ***Edinburgh – Craigmillar***

Craigmillar is an urban area located in the South East of Scotland's capital city, Edinburgh. The area is considered one of the most deprived areas in Edinburgh and in Scotland. The area was initially built due to its proximity to mines and breweries. Following the closure of local industries, unemployment and deprivation increased, including crime, drug use, alcohol dependency and lower literacy rates. Geographically, Craigmillar is disconnected from the rest of the city, separated by Arthurs Seat - an extinct volcanic rock which forms a visual and potentially psychological barrier to the rest of the city (27). The area has active community-led urban regeneration activities where local stakeholders collaborate with one another in partnerships; one result of this is a refurbished art-deco building - The Whitehouse Kitchen, which serves as a community hub for some of these community partnership activities and was also the location for the workshop.

### ***Aberdeen - Aberdeen University***

Aberdeen is an affluent coastal city with the River Don flowing through the city. Aberdeen's wealth comes from oil drilled from the North Sea and drives the local economy. The city is considered affluent albeit a recent drop in oil price has had detrimental economic effects on house prices, employment and investment. Aberdeen has two universities, Robert Gordon University and The University of Aberdeen resulting in a high student and migrant population. The workshop sessions were held with a student community that lived within the vicinity of the University of Aberdeen in an urban area.

### ***Inverness - Raigmore***

Inverness is Scotland's most northern city, situated geographically on the northeast tip of Loch Ness, with the River Ness running through the middle of the city. Inverness is the fastest growing city in Scotland and one of the fastest growing cities in Britain, resulting in high population growth (28). The city is considered the capital of the Scottish Highlands with almost a quarter of the Highland population living in or around the city and is also home to Scotland's newest university - the University of Highlands and Islands (UHI). The city's main economy is from the energy sector and tourism (29). The workshop session was held with members from the Raigmore area of Inverness.

## **3.4.2 Rural Communities**

### ***Callander***

Callander is a small rural town located in central Scotland on the eastern edge of Loch Lomond and The Trossachs National Park. Geographically the River Teith flows directly through the city. Reported frequent flooding, road closures and falling rocks from the mountain side are some of the issues residents have to deal with. Callander is a wealthy town, but with the typical issues of a small village, such as outward migration due to the lack of opportunities for young people. The town's main economy and employers are in the tourism, hospitality and retail sectors (30). The town has a successful community newspaper known as the Ben Ledi View, which is well respected among the community, of which a local journalist took part in our community workshop. The majority of the residents of Callander are home-owners rather than renters.

### ***Raasay***

Raasay is one of the Inner Hebridean Islands to the East of mainland Scotland and to the West of the Isle of Skye. The island can only be accessed by a ferry from the Isle of Skye and is solely responsible for transporting people and resources to and from the island. Raasay has a population of approximately 150 people and the island has a newly built community hall that serves as a hub for community activities. The community is aging and also suffers from outward migration as the population has been steadily decreasing since the 19th century (31). The island suffers the effects of severe weather often, including flooding,

storms, and falling trees blocking roads. There is only one road to access the ferry route and only one ferry route, so when these are affected, the population of the island is directly affected.

### ***Newton Stewart***

Newton Stewart is a rural town in Wigtownshire, in the Scottish borders. It acts as a commuter town for the surrounding smaller towns and villages. Newton Stewart has a population of approximately 4000 people and is considered the gateway to Galloway Forest Park – a successful national park in Scotland. The River Cree runs through Newton Stewart and the town has suffered frequent recent flooding and historical flooding. The area has a number of existing community resilience partnerships set-up to combat this (32).

### ***Bonar Bridge***

Bonar Bridge is a small rural town in the Highlands of Scotland; it sits on the North bank of the Kyle of Sutherland, a river estuary that separates Sutherland from Ross-shire. The river estuary flows into the Dornoch Firth. Flooding has been a consistent issue in Bonar Bridge, the remote location and Bridge access has also been a source of risk during severe weather and road closures.

## 4. Analysis and Results

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This chapter will critically assess and discuss the results of the data collected from the survey results. The results and discussion are combined, consistent with the mixed methods approach selected.

As described in Chapter 2, the aim of the Trial was to apply the CART approach as a community engagement tool (focused on sharing knowledge and experience, assessing indicators and behaviour of citizens, including activities, feelings and opinions of end-users) in order to assess its effectiveness to raise community resilience awareness. To further assess its applicability and effectiveness in different types of communities, the solution was tested in both rural and urban areas.

Three objectives were set to satisfy the main Trial aim:

### 1. To investigate the effectiveness of the solution at raising community resilience awareness

In order to measure the effectiveness of the workshops in increasing awareness about community resilience and activation of participants, we administered a short survey at three different times: before the workshop, directly after the workshop and one month after the workshop. The questions in this short survey addressed the awareness of the participants about the vulnerability of their community, their opinions about the resilience of their community (capabilities to deal with a crisis), and whether or not they are prepared for a crisis. The study also considered whether the threats they perceived of their community changed after participating in the workshop.

### 2. To investigate whether there were any behavioural changes in the month after the delivery of the workshop.

To explore the second objective, participants were asked a series of questions one month after the workshop, in order to identify any changes related to their resilience behaviours.

### 3. To investigate the views and opinions of the participants on the effectiveness of the workshop.

To explore the third objective, participants were asked a series of questions directly after the workshop and were asked to rate the workshop based on five indicators – “workshop content”, “workshop delivery”, “facilitators knowledge” “workshop venue” and “workshop overall”.

## 4.1 Effectiveness of Raising Community Resilience Awareness

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All participants of the workshops indicated that they found participation interesting and inspiring. Most of them said they were planning to take concrete actions to prepare themselves and their community for crises as a result of the workshop.

The survey that was administered at three different time interval consisted of the following questions:

1. Do you think that your community is vulnerable to a crisis?
2. Do you feel that your community is capable of dealing with a crisis?
3. Have you prepared yourself for a crisis?
4. Is your community prepared for a crisis?

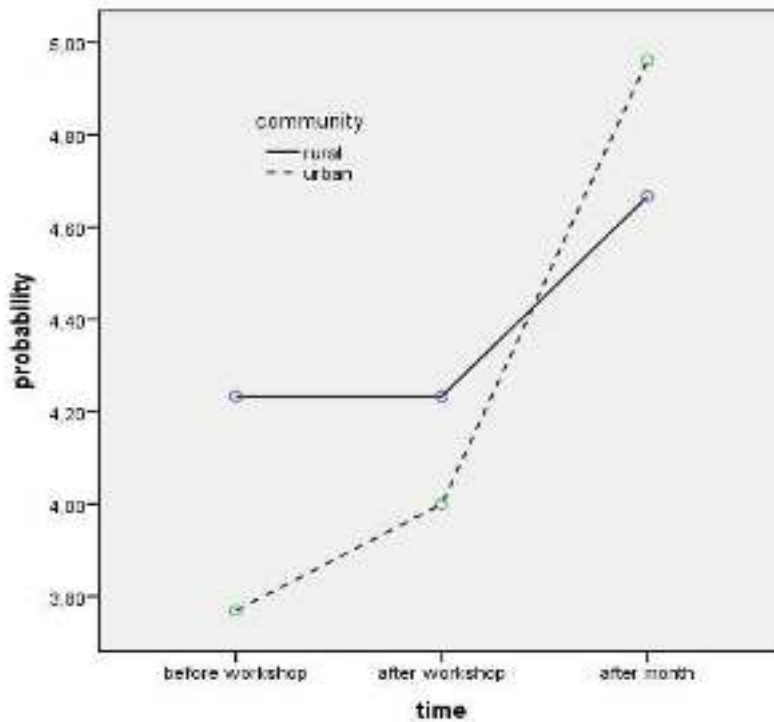
The results of the surveys were analysed in SPSS using a factor analysis<sup>3</sup>.

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<sup>3</sup> This is a basic multivariate statistical analysis technique that is used to analyse the relation between different variables for complex concepts, such as – in this case – community resilience.

### 4.1.1 Vulnerability

The results show that the members of communities who participated in the workshops became more aware of their vulnerabilities. Figure 4.1 shows the mean scores of the question: ‘Do you think that your community is vulnerable to a crisis?’



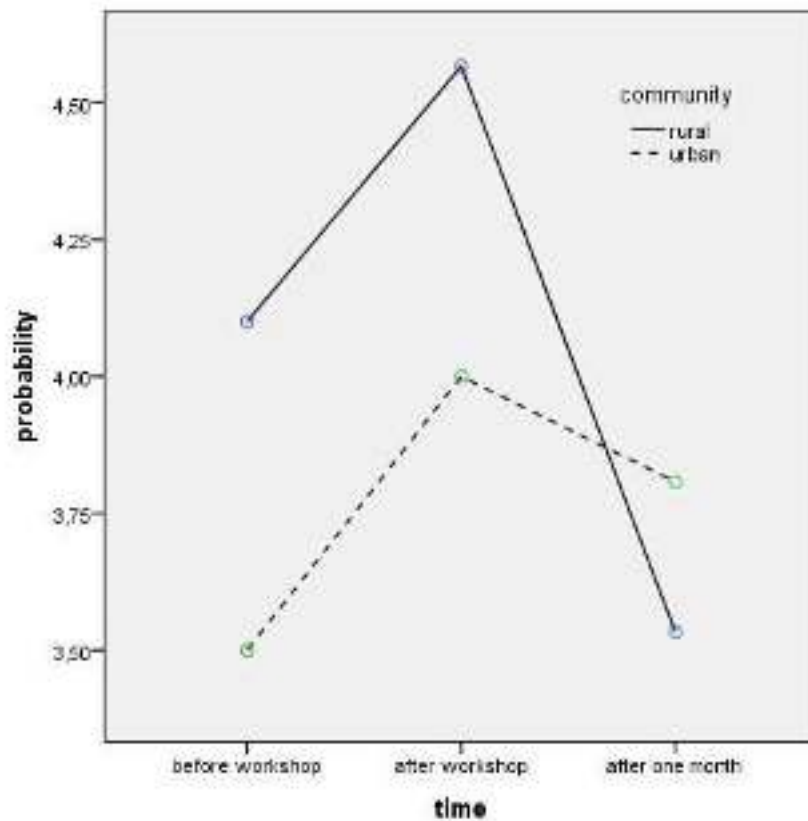
**Figure 4.1: Assessment of Vulnerability as a Function of Time (pre, post and after month)**

There is an overall effect of time ( $F(2,108)=7,21$ ;  $p=.001$ )<sup>4</sup>, no overall difference between communities ( $F(1,54)<1$ ) and no interaction between time and community ( $F(2,108)=1,41$ ;  $p=.25$ ). The time effect is not due to a difference between the scores between pre and post workshop ( $F(1,67)<1$ ), but to a difference between post workshop and after a month ( $F(1,54)=7.61$ ,  $p=.008$ ). This means that in the month after the workshop both rural and urban communities became more aware of the vulnerability of their community.

### 4.1.2 Capabilities

Furthermore, the results of the survey indicate that participants became more aware of their community’s capabilities to deal with a disaster, both at the individual level as well as at the collective (community) level. It seems however, that this awareness of capabilities decreases over time (based on the survey one month after participation in the workshop). Figure 4.2 shows the results for the question ‘Do you feel that your community is capable of dealing with a crisis?’.

<sup>4</sup> For all of the questions, analysis of variance was conducted, which basically compares the variance (range of scores) within experimental conditions to the variance across conditions. If there is a systematic difference between groups the p-value will be low. Generally a norm of  $<.05$  is taken, in order to conclude that differences between conditions are statistically significant.

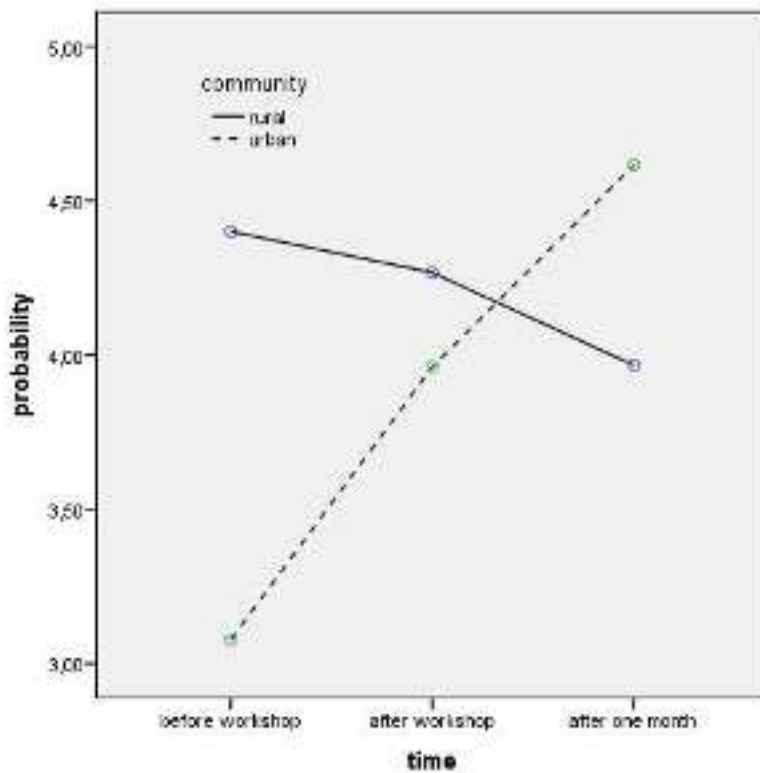


**Figure 4.2: Assessment of Community Capability as a Function of Time (pre, post and after month)**

For this question the results show that there is a time effect as well ( $F(2,108)=5.41$ ,  $p=.004$ ), no main effect of the type of community ( $F(1,54)=2.04$ ,  $p=.16$ ) and a significant interaction ( $F(2,108)=3.42$ ,  $p=.036$ ). In order to explain the interaction effect we conducted separate analyses for the different types of communities. The results show that there is only an effect of the intervention for rural communities ( $F(2,28)=11.65$ ,  $p<.0001$ ) and not for urban communities ( $F(2,24)=1.51$ ,  $p=.24$ ). For rural communities there is a significant increase between pre and post measurement ( $F(1,41)=9.29$ ,  $p=.004$ ) and a significant decrease between the scores that were taken directly after the workshop and after a month ( $F(1,29)=16.31$ ,  $p<.0001$ ).

#### 4.1.3 Preparedness

Figure 4.3 shows the results for the third question: Have you prepared yourself for a crisis? There is an effect of time ( $F(2,53)=3.73$ ,  $p=.03$ ), no overall difference between communities ( $F(1,54)=1.41$ ,  $p=.24$ ) and an interaction between time and community ( $F(2,53)=10.16$ ,  $p<.0001$ ). Separate analyses for each type of community showed that there is only an effect of the intervention for the urban communities ( $F(2,24)=14.39$ ,  $p<.001$ ) and not for the rural communities ( $F(2,28)<1$ ). For the urban communities there is a significant increase in assessed individual preparation between pre and post measurements ( $F(1,26)=9.46$ ,  $p=.005$ ) and also between the scores directly after workshops and after a month ( $F(1,25)=4.22$ ,  $p=.051$ ).



**Figure 4.3: Assessment of Individual Preparation as a Function of Time (pre, post and after month)**

Figure 4.4 shows the results for the last question ‘Is your community prepared for a crisis?’ there is an effect of time ( $F(2,53)=8.17, p=.001$ ), no overall effect of community ( $F(1,54)=1.70, p=.20$ ) and a significant interaction ( $F(2,53)=5.68, p=.006$ ). Separate analyses show that there is only an effect for urban communities ( $F(2,24)=11.03, p<.0001$ ) and not for rural communities ( $F(2,28)=1.48, p=.25$ ). For urban communities they assessed community preparedness higher after the workshop than before ( $F(1,26)=21.02, p<.0001$ ) and this score remains the same after a month ( $F(1,25)=2.44, p=.13$ ).

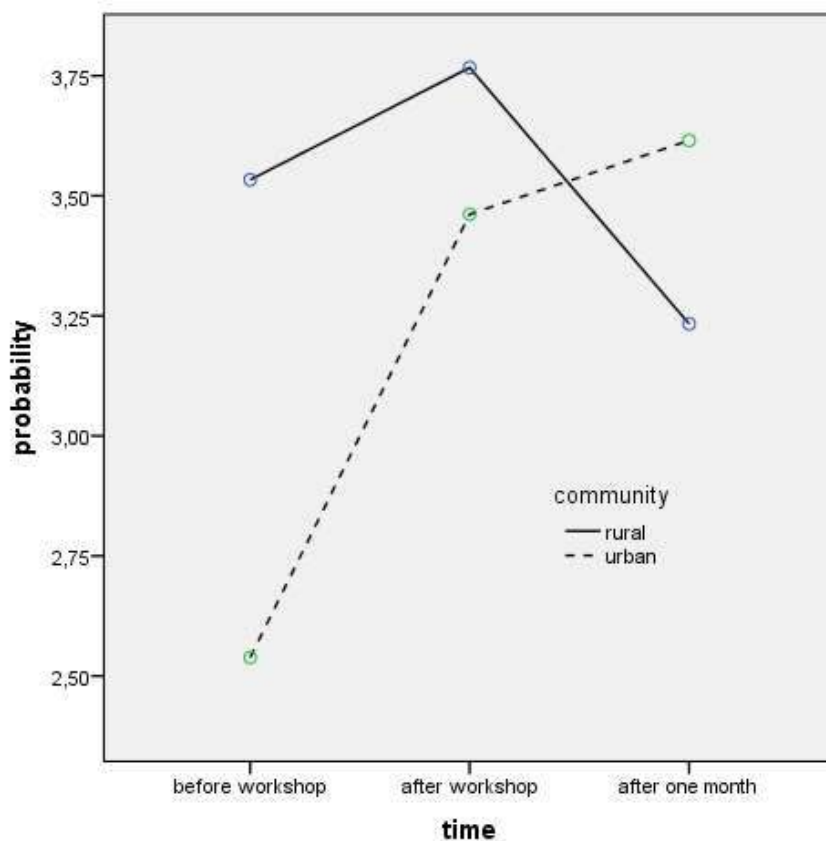


Figure 4.4: Assessment of Community Preparedness as a Function of Time (pre, post and after month)

#### 4.1.4 Conclusions

The results from the analysis of the four questions of the survey revealed overall, higher scores of rural communities for vulnerability, they feel more vulnerable but the scores also reveal they feel better prepared, awareness of vulnerability may provide the impetus to better preparation.

The results found that the workshops had no significant effect on the community’s own assessment of their vulnerability; however, assessment of capability of the community to deal with a crisis increases after workshop, this is the same for urban and rural communities.

The results of the Trial indicate that participating in a resilience awareness workshop using the (adapted) CART solution is effective in increasing awareness of vulnerabilities and capabilities. In particular for urban areas, where it seems there is less awareness to start with, the results show an effect in the assessment of the level of preparedness for themselves and their communities.

The differences between urban and rural communities may be explained by the fact that many rural areas in Scotland are more prone to certain risks, such as flooding, making members of these communities more aware of this vulnerability, and more prepared as well. With regard to the higher level of preparedness as reported by rural communities, this may have to do with the more isolated location of many rural communities, with less professional response or other help close by, such smaller, tight-knit communities are often more used to helping each other out in times of crisis and being more self-reliant.

Based on these results it seems that CART is an effective toolkit to be used by communities for enhancing awareness about resilience. Based on the differences between rural and urban areas, it seems that more may be gained from performing the workshops in urban communities – however, regardless of rural or urban areas, community efficacy (the feeling that the community is able to effectively deal with a crisis, based on capabilities (Figure 4.2) and preparedness (Figure 4.4)) increases after the workshops.

In order to test whether the application leads to sustained awareness within these communities further research, after more time, is needed. A month between the workshop and the final survey is too short to be able to say something about long term effects.

## 4.2 Behavioural Changes

A month after the workshops participants were asked about any behavioural adaptations: 1) whether they thought about risks and resources of their community; 2) whether they discussed what they had learned at the workshop with other members of the community; 3) whether they gathered additional information about their community's resilience and 4) whether they had made any preparatory actions with regard to risks. Table 4.1 shows the mean scores on these questions for both rural and urban communities.

**Table 4.1: mean scores and p-values for the behavioural responses after workshop**

|             | rural | urban | p-value |
|-------------|-------|-------|---------|
| Thinking    | 4.43  | 4.73  | .12     |
| Discussing  | 3.77  | 4.31  | .14     |
| Information | 3.97  | 4.39  | .20     |
| Actions     | 3.70  | 4.65  | .007    |

The answers could be given on 6-points scales. As can be seen in Table 1 the mean scores were between 3 and 5, with '3' meaning rarely, '4' occasionally and '5' frequently. The scores of the urban communities are overall somewhat higher than of the rural communities, but only for the preparatory actions a significant difference was found between the two types of communities (thinking:  $F(1,54)=2.51$ ;  $p=.12$ , discussing:  $F(1,54)=2.27$ ,  $p=.14$ , information  $F(1,54)=1.66$ ,  $p=.20$  and actions  $F(1,54)=7.76$ ,  $p=.007$ ). This means that all communities occasionally thought, discussed and gathered information about risks and resources in their community. But the urban communities took significantly more preparatory actions than the rural communities in the month following the workshop.

In the qualitative responses about the actions taken as a result of the participation, yielded several concrete examples of behavioural change in the month after the workshop. Some examples of concrete actions include the start of a campaign to get a nurse on the island community. Another community have spoken to the emergency planning department of their local council and indicated that the workshop helped to inform their community plans. In one community, a review of defibrillator locations within the village as taken place since the workshop. There were also many individual resilience behaviours that changed amongst participants, keeping spare water stocked, knowing where the nearest first aid points and checking on vulnerable neighbours were all also mentioned.

### 4.2.1 Conclusions

Several specific behavioural changes were reported in the month after the delivery of the workshop (Table 4.1). These behavioural changes included the raising of resilience issues that were derived from the workshops, often at subsequent community council meetings. Thus, it seems that the solution is an effective tool for enhancing community resilience engagement. Several concrete actions are reported a month after the workshop. However, to be able to assess the long-term effects on behavioural change, more research, after more time, is needed.

### 4.3 Risk Perception

In addition to the questions about the perceived vulnerability, capabilities, and behavioural changes, respondents were also asked about the threats they deemed most likely for their community. Results were collated for each community and categorized into resilience themes. For example, answers such as “people moving away from the community” and “population numbers dropping” would be categorized under the theme “Falling/Low population”.

#### 4.3.1 Rassay Community

Table 4.2 shows some noteworthy differences and trends between the pre and post answers to the “most likely threats” question. Pre workshop there was quite a wide spread of answers, with electrical outage, ferry problems and lack of medical staff/supplies availability considered the main issues on this island community. In the post test, there was a broader consensus that Ferry Problems and Medical staff supplies availability was the two main resilience threats facing this island, with electrical outages not scoring as high post-test. While not shown in the table, discussion within the workshop centred on how these two high-scoring issues were intrinsically linked. If the ferry failed, then medical staff and supplies would not be readily available beyond basic first aid provisions.

**Table 4.2: ‘Most Likely Threats’ Rassay Community (11 participants)**

| Most Likely Threats Categories<br>(After Thematic Analysis)          | Count,<br>Pre Test | Frequencies,<br>Pre Test (%) | Count,<br>Post Test | Frequencies,<br>Pre Test (%) |
|--|--------------------|------------------------------|---------------------|------------------------------|
| Emergency Service Response   | 1                  | 3%                           |                     |                              |
| Lack of medical staff/supplies availability                          | 4                  | 13%                          | 8                   | 36%                          |
| Lack of collaboration between (individual, community, professionals) | 2                  | 7%                           | 2                   | 9%                           |
| Communications Failure   | 1                  | 3%                           |                     |                              |
| Ferry Problems   | 6                  | 19%                          | 6                   | 27%                          |
| Island Isolation   | 1                  | 3%                           |                     |                              |
| Electrical Outage  | 6                  | 19%                          | 3                   | 13%                          |
| Lack of Water supply   | 2                  | 7%                           |                     |                              |
| Storm Damage   | 2                  | 7%                           | 1                   | 5%                           |
| Falling/Low Population   | 2                  | 7%                           | 1                   | 5%                           |
| Blizzards  | 1                  | 3%                           |                     |                              |
| Fallen Trees   | 1                  | 3%                           |                     |                              |
| Fire   | 1                  | 3%                           |                     |                              |
| Extreme Weather (unspecified)  | 1                  | 3%                           |                     |                              |
| Lack of Employment   |                    |                              | 1                   | 5%                           |
| <b>Total</b>   | <b>32</b>          | <b>100</b>                   | <b>22</b>           | <b>100</b>                   |

### 4.3.2 Edinburgh - Craigmillar

Table 4.3 shows a broad range of answers in both the pre and post “most likely threats” question. Pre workshop there was quite a wide spread of answers, with snow and severe weather generally considered the main threats to the community. Lack of funding was mentioned once pre-test, but due to the community being considered “deprived”, the community-led discussions during the workshop focused more in the lack of funding, broken promises and cutting of regeneration schemes by the government. The post workshop scores suggests a stronger consensus that lack of funding to turn around the community’s fortunes was the number one resilience threat for this community.

**Table 4.3: ‘Most Likely Threats’ Craigmillar Community (9 participants)**

| Most Likely Threats Categories<br>(After Thematic Analysis)          | Count,<br>Pre Test | Frequencies,<br>Pre Test (%) | Count,<br>Post Test | Frequencies,<br>Pre Test (%) |
|--|--------------------|------------------------------|---------------------|------------------------------|
| Climate Change   | 1                  | 5%                           | 1                   | 5%                           |
| Community scared to help   | 1                  | 5%                           |                     |                              |
| Drugs  | 1                  | 5%                           |                     |                              |
| Flood  | 1                  | 5%                           |                     |                              |
| Earthquake   | 1                  | 5%                           |                     |                              |
| Lack of funding  | 1                  | 5%                           | 4                   | 21%                          |
| Fracking   | 1                  | 5%                           | 0                   |                              |
| Lack of knowledge  | 1                  | 5%                           |                     |                              |
| Lack of skills   | 1                  | 5%                           |                     |                              |
| Lack of collaboration between (individual, community, professionals) | 1                  | 5%                           | 2                   |                              |
| Snow   | 3                  | 14%                          | 1                   | 5%                           |
| Storm Damage   | 1                  | 5%                           | 1                   | 5%                           |
| Flooding   | 1                  | 5%                           | 1                   | 5%                           |
| Extreme Weather (unspecified)  | 1                  | 5%                           | 3                   | 16%                          |
| Plane Crashes  | 1                  | 5%                           |                     |                              |
| Gas explosions   | 1                  | 5%                           | 1                   | 5%                           |
| Bomb scare   | 1                  | 5%                           |                     |                              |
| Lack of Services   |                    |                              | 1                   | 5%                           |
| Loss of Power (electricity, gas)                                     | 1                  | 5%                           |                     |                              |
| Fire   |                    |                              | 2                   | 11%                          |
| Terrorist Attack   | 1                  | 5%                           | 1                   | 5%                           |
| Transport Disruption   |                    |                              | 1                   | 5%                           |
| <b>Total</b>   | <b>21</b>          | <b>100</b>                   | <b>19</b>           | <b>100</b>                   |

### 4.3.3 Edinburgh – Wester Hailes

In Table 4.4, the pre-test scores reflected what would be expected for a community living near a river bank. Severe Weather (general) and Flooding were the two biggest scores, also loss of power. Surprisingly post-test, while severe weather stayed stable, flooding was not mentioned as much,

But the post test scores highlighted a number of social issues that came out of the community-led discussions that were not mentioned pre-test, including: crime, lack of resources, government interference, and lack of respect in community and a lack of community ethos. Drug use was also a social factor and was referenced pre and post-test by participants.

**Table 4.4: 'Most Likely Threats' Wester Hailes Community (7 participants)**

| Most Likely Threats Categories<br>(After Thematic Analysis) | Count,<br>Pre Test | Frequencies,<br>Pre Test (%) | Count,<br>Post Test | Frequencies,<br>Pre Test (%) |
|---|--------------------|------------------------------|---------------------|------------------------------|
| Severe Weather (unspecified)                                | 4                  | 18%                          | 4                   | 26,6%                        |
| Fire  | 1                  | 4,5%                         | 1                   | 6,6%                         |
| Flooding  | 5                  | 23%                          | 1                   | 6,6%                         |
| Snow  | 1                  | 4,5%                         |                     |                              |
| Smog  | 1                  | 4,5%                         |                     |                              |
| Loss of power   | 3                  | 14%                          | 2                   | 13,3%                        |
| Earthquake  | 2                  | 9%                           |                     |                              |
| ISIS  | 1                  | 4,5%                         |                     |                              |
| Illness   | 1                  | 4,5%                         |                     |                              |
| Poverty   | 1                  | 4,5%                         |                     |                              |
| Health of community   | 1                  | 4,5%                         |                     |                              |
| Drugs   | 1                  | 4,5%                         | 2                   | 13,3%                        |
| Lack of Resources   |                    |                              | 1                   | 6,6%                         |
| Government Interference                                     |                    |                              | 1                   | 6,6%                         |
| Crime   |                    |                              | 1                   | 6,6%                         |
| Lack of respect in community                                |                    |                              | 1                   | 6,6%                         |
| Lack of Community ethos                                     |                    |                              | 1                   | 6,6%                         |
| <b>Total</b>  | <b>22</b>          | <b>100</b>                   | <b>15</b>           | <b>100</b>                   |

### 4.3.4 Callander

In Table 4.5, pre-test and post-test scores indicate Flooding to be the biggest resilience threat facing this community, with road closures being the second biggest threat, mainly due to their only being one road in and out of a village that often bursts it's riverbanks. High winds and fires were also considered issues, as falling trees or fires could result in road closures also. This community's results stayed consistent and may be a result of a highly organised village community who knew their main threats.

Table 4.5: 'Most Likely Threats' Callander Community (11 participants)

| Most Likely Threats Categories<br>(After Thematic Analysis) | Count,<br>Pre Test | Frequencies,<br>Pre Test (%) | Count,<br>Post Test | Frequencies,<br>Pre Test (%) |
|---|--------------------|------------------------------|---------------------|------------------------------|
| Flooding  | 11                 | 28%                          | 9                   | 23%                          |
| Road Closures   | 7                  | 18%                          | 5                   | 13%                          |
| Severe Weather (unspecified)                                | 5                  | 13%                          | 7                   | 18%                          |
| Snow  | 4                  | 10%                          | 6                   | 15%                          |
| High Winds  | 2                  | 5%                           | 3                   | 8%                           |
| Fire  | 3                  | 8%                           | 2                   | 5%                           |
| Storm   | 2                  | 5%                           | 2                   | 5%                           |
| Loss of Power   | 1                  | 2,6%                         | 1                   | 2,6%                         |
| Fallen Trees  | 1                  | 2,6%                         | 1                   | 2,6%                         |
| Ice   | 1                  | 2,6%                         |                     |                              |
| Transport Accident  | 1                  | 2,6%                         | 1                   | 2,6%                         |
| Hillwalker Crisis   | 1                  | 2,6%                         |                     |                              |
| Health Issues   |                    |                              | 1                   | 2,6%                         |
| Public utility failures (general)                           |                    |                              | 1                   | 2,6%                         |
| <b>Total</b>  | <b>39</b>          | <b>100</b>                   | <b>39</b>           | <b>100</b>                   |

#### 4.3.5 Newton Stewart

Table 4.6 indicates strong pre and post test scores for severe weather, with more than 1 in 3 post-test answers indicating severe weather as a most likely threat. Snow and loss of power also scored strongly, pre and post- test. This community was also well organised and knowledgeable of their communities resilience issues.

Table 4.6: 'Most Likely Threats' Newton Stewart Community (13 participants)

| Most Likely Threats Categories<br>(After Thematic Analysis) | Count,<br>Pre Test | Frequencies,<br>Pre Test (%) | Count,<br>Post Test | Frequencies,<br>Pre Test (%) |
|---|--------------------|------------------------------|---------------------|------------------------------|
| Severe Weather (Unspecified)                                | 7                  | 17%                          | 5                   | 36%                          |
| Flooding  | 3                  | 7%                           |                     |                              |
| Snow  | 10                 | 24%                          | 2                   | 14%                          |
| High Winds  | 6                  | 14%                          | 1                   | 7%                           |
| Loss of power   | 10                 | 24%                          | 4                   | 29%                          |
| Sea tides   | 1                  | 2%                           | 1                   | 7%                           |
| Loss of water supply  | 1                  | 2%                           |                     |                              |
| Fire  | 2                  | 5%                           |                     |                              |
| Ice   | 1                  | 2%                           |                     |                              |

| Most Likely Threats Categories<br>(After Thematic Analysis) | Count,<br>Pre Test | Frequencies,<br>Pre Test (%) | Count,<br>Post Test | Frequencies,<br>Pre Test (%) |
|---|--------------------|------------------------------|---------------------|------------------------------|
| Storms  | 1                  | 2%                           |                     |                              |
| Pandemics   |                    |                              | 1                   | 7%                           |
| <b>Total</b>  | <b>42</b>          | <b>100</b>                   | <b>14</b>           | <b>100</b>                   |

#### 4.3.6 Aberdeen

Table 4.7 stays fairly consistent with pre and post test scores, with flooding scoring highest for this coastal city for both pre and post workshop. However, the workshop has saw new threats being considered, including: Lack of Communication technology, Lack of funding and lack of resilience knowledge within the community. The workshop has allowed the participants to consider technological issues, social governance issues and social cohesion issues, which may not have been considered before the workshop.

**Table 4.7: 'Most Likely Threats' Aberdeen Community (13 participants)**

| Most Likely Threats Categories<br>(After Thematic Analysis) | Count,<br>Pre Test | Frequencies,<br>Pre Test (%) | Count,<br>Post Test | Frequencies,<br>Pre Test (%) |
|---|--------------------|------------------------------|---------------------|------------------------------|
| Fire  | 1                  | 5%                           | 1                   | 5%                           |
| Lack of resources   | 1                  | 5%                           | 1                   | 5%                           |
| Loss of Power   | 3                  | 14%                          | 2                   | 10%                          |
| Flooding  | 5                  | 23%                          | 3                   | 15%                          |
| Traffic congestion  | 1                  | 5%                           |                     |                              |
| Severe weather (unspecified)                                | 2                  | 9%                           | 3                   | 15%                          |
| Electrical outage   | 2                  | 9%                           |                     |                              |
| Storms  | 1                  | 5%                           | 1                   | 5%                           |
| Wind  | 2                  | 9%                           | 2                   | 10%                          |
| Terrorism   | 1                  | 5%                           | 1                   | 5%                           |
| Lack of Preparedness  | 1                  | 5%                           | 1                   | 5%                           |
| Lack of training for volunteers                             | 1                  | 5%                           | 1                   | 5%                           |
| Snow  | 1                  | 5%                           | 1                   | 5%                           |
| Lack of communication technology                            |                    |                              | 1                   | 5%                           |
| Lack of funding   |                    |                              | 1                   | 5%                           |
| Lack of resilience knowledge                                |                    |                              | 1                   | 5%                           |
| <b>Total</b>  | <b>22</b>          | <b>100</b>                   | <b>20</b>           | <b>100</b>                   |

### 4.3.7 Bonar Bridge

Table 4.8 shows a broad range of results with flooding and power cuts considered the two main threats both pre and post- test. The participants choose to mention new threats such as general severe weather, lack of community participation and train crashes, while placing less emphasis on the previous threats mentioned pre-test.

**Table 4.8: 'Most Likely Threats' Bonar Bridge Community (7 participants)**

| Most Likely Threats Categories<br>(After Thematic Analysis) | Count,<br>Pre Test | Frequencies,<br>Pre Test (%) | Count,<br>Post Test | Frequencies,<br>Pre Test (%) |
|---|--------------------|------------------------------|---------------------|------------------------------|
| Lack of Services  | 1                  | 5,23%                        | 1                   | 6%                           |
| Fire  | 1                  | 5,23%                        | 1                   | 6%                           |
| Flood   | 3                  | 16%                          | 3                   | 18%                          |
| Electricity outage  | 1                  | 5,23%                        |                     |                              |
| Lack of water supply  | 1                  | 5,23%                        |                     |                              |
| Power cut   | 3                  | 16%                          | 4                   | 24%                          |
| Plane crash   | 1                  | 5,23%                        |                     |                              |
| Water contamination   | 1                  | 5,23%                        |                     |                              |
| Snow  | 1                  | 5,23%                        |                     |                              |
| Lack of Communication                                       | 1                  | 5,23%                        | 2                   | 11%                          |
| Vulnerable elderly  | 1                  | 5,23%                        |                     |                              |
| Storms  | 1                  | 5,23%                        | 1                   | 6%                           |
| Fallen Trees  | 1                  | 5,23%                        |                     |                              |
| Road accidents  | 1                  | 5,23%                        | 1                   | 6%                           |
| Nuclear waste spillage                                      | 1                  | 5,23%                        |                     |                              |
| Severe Weather (Unspecified)                                |                    |                              | 2                   | 11%                          |
| Lack of community participation                             |                    |                              | 1                   | 6%                           |
| Train Crash   |                    |                              | 1                   | 6%                           |
| <b>Total</b>  | <b>19</b>          | <b>100</b>                   | <b>17</b>           | <b>100</b>                   |

### 4.3.8 Inverness

Due to the small number of participants in this community, the range of resilience threats are broad (see

Table 4.9). As a result of the workshop, severe weather was consolidated as the number one threat, with bridge closures highlighted as a unique resilience issue not considered pre workshop.

Table 4.9: 'Most Likely Threats' Inverness Community (3 participants)

| Most Likely Threats Categories<br>(After Thematic Analysis) | Count,<br>Pre Test | Frequencies,<br>Pre Test (%) | Count,<br>Post Test | Frequencies,<br>Pre Test (%) |
|---|--------------------|------------------------------|---------------------|------------------------------|
| Severe weather (unspecified)                                | 1                  | 20%                          | 3                   | 50%                          |
| Power cuts  | 1                  | 20%                          | 1                   | 25%                          |
| Loss of telecommunications                                  | 1                  | 20%                          | 1                   | 25%                          |
| Transport disruption  | 1                  | 20%                          | 1                   | 25%                          |
| Bridge closure  | 1                  | 20%                          |                     |                              |
| <b>Total</b>  | <b>5</b>           | <b>100</b>                   | <b>6</b>            | <b>100</b>                   |

#### 4.3.9 Conclusions

New threats were highlighted by communities post workshop delivery and there was an increased consensus of the threats the community's face post workshop. Often two or three major threats would be focused on as 'threats to address' by the end of the workshop. As such, it seems that awareness about threats has increased as a result of the workshops.

#### 4.4 Workshop Reflections

Participants were given opportunity to provide qualitative feedback on the workshop. Participant feedback was broadly positive with only seven incidences of critical or constructive feedback given in this section of the survey. The participants highlighted that it allowed them to consider threats that they had not previously considered. Participant comments included that the workshops were well delivered, engaging and helped to improve knowledge of resilience that they can take to the community, incidences showed that information uncovered at the workshops were taken forward at community council meetings.

*"The workshop allowed you to consider threats that you wouldn't have considered previously and risks to dealing with crisis" Participant 14 - Craigmillar*

*"I think workshop was very useful, gave us reason to think about the preparation and crisis, where we normally don't think about it until it happens" Participant 19 - Craigmillar*

*"This engagement served to allow members within the community to consider their own preparedness and the perceptions/opinions of others within the community on the same subject." Participant 28 - Callander*

*"Very enjoyable session. Extremely well delivered and great to work again with Kirkcowan & PW Community Resilience Teams. We should do it more often!! Great!" Participant 39 – Newton Stewart*

*"The workshop is very educating and has broadened my knowledge on the importance of resilience within my community. During the course I learnt the importance of resilience in a workplace. This workshop enlightens that resilience is necessary outside ones place of work." Participant 52 - Aberdeen*

*"Participation from everyone was good. Made us all think as a group. Presentations (from each other) were very encouraging" Participant 8 - Rassay*

*"Feel much more positive/optimistic that we can do it. Seeing this was the first workshop of this kind - well done guys. Please give us feedback as this would be very useful for the Community Council. Feeling quite inspired - Thank you!" Participant 1 - Rassay*

Criticisms were also offered: 8% of participants that responded provided criticism or constructive comments for improvement. A common theme was limited time available during the workshops. Another comment was that there was not too many new insights, although this was not consistent with the majority of feedback that the workshops provided relevant new and increased resilience knowledge. A third criticism was that the workshop did not produced detailed plans for their community moving forward. One participant mentioned that they would be interested in discussing resilience with other community members, but would find it “hard to introduce” the subject to people that were not at the workshop.

#### 4.4.1 Workshop Ratings

In the post test survey, workshops were rated on a 4 point Likert scale ranging from Very Good (1) to Poor (4) The workshops were rated in five categories: “content”, “delivery” “venue” “facilitator’s knowledge” and “the workshop overall”. For the purpose of this deliverable (the assessment of the usefulness and usability of the solution), the ratings about the content of the workshops (Figure 4.5) and the overall workshop assessment (Figure 4.6) are most relevant:

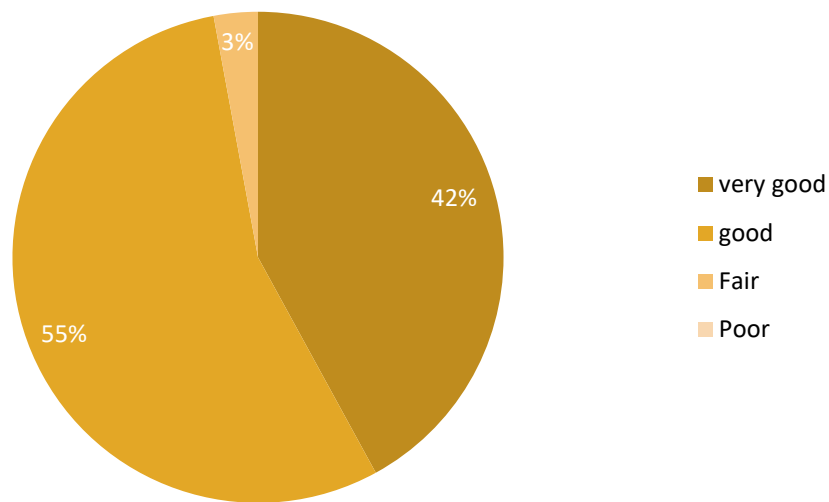
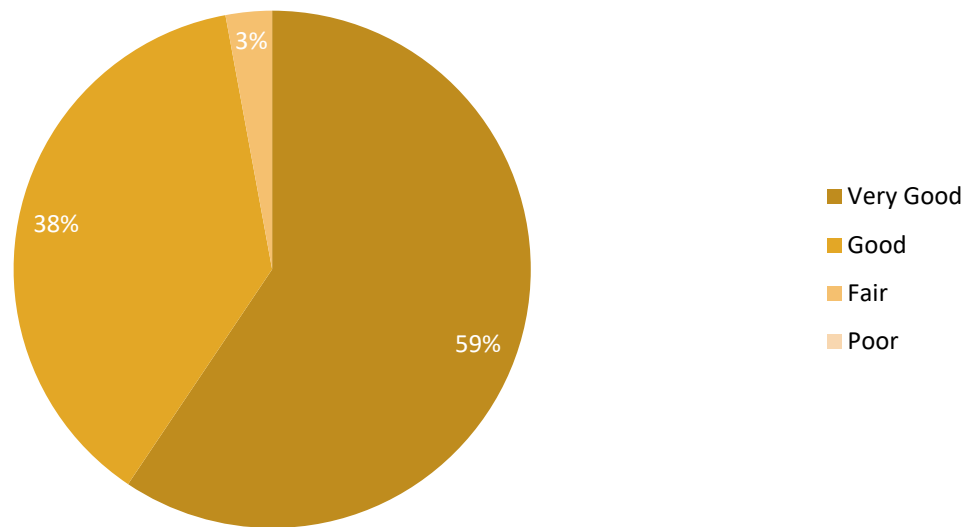


Figure 4.5: Participant Rating ‘Workshop Content’ Pie Chart

The workshops were rated as either “very good” or good” by at least 97% of participants. None of the participants rating any aspect of the workshop as “poor”. This suggests that the workshop’s content of the CART tool format was well received.



**Figure 4.6: Participant Rating 'Workshop Overall' Pie Chart**

Variables such as the venue of the workshop or the facilitator’s knowledge and delivery” did not negatively impact the effectiveness of the CART tool solution. The overall rating of the workshop (Figure 4.6) received a score of 59% of Very Good and 38% of Good, with 3% considered the workshop fair – indicating that the participants were likely positively engaged with the full workshop process and what it was trying to achieve.

#### **4.4.2 Conclusions**

The feedback from the communities regarding the workshops was significantly positive; community members recognised the CART tools used in the workshop to be very effective with a score of “Good/Very Good” from 97% of those surveyed regarding “workshop content”. The “workshop overall” survey question scored Good/Very Good by 97% of participants. In both cases, 3% of participants rated the workshops as “Fair”. No participants rated the workshops as “Poor”.

## 5. Conclusions

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This deliverable has presented the results of the workshop Trial conducted in the former DRIVER WP33. The effectiveness of the solution was tested in eight workshops between September 2015 and December 2016 and sought to raise community resilience awareness within rural and urban communities.

The key findings of testing the solution within the eight communities were that in general, the solution seems to be effective for enhancing awareness about resilience. The workshops had no significant effect on the community's own assessment of their vulnerability; however, assessment of capability of the community to deal with a crisis increases after workshop, this is the same for urban and rural communities. The results show that rural communities feel more vulnerable but also better prepared, and yet the workshop has been effective in increasing the feeling of capability within both rural and urban communities to deal with crisis's when they occur. Based on the differences between rural and urban areas, it seems that more may be gained from performing the workshops in urban communities because they show the greatest improvement and therefore, the workshops may have the biggest impact in urban communities. However, the solution has a positive effect across all communities.

New resilience threats were uncovered by communities as a result of the workshop and in the majority of cases a stronger consensus was reached as to agreeing on what are the most likely resilience issues that need to be tackled. Opportunities and strengths were highlighted and produced a fuller profile of their community for each participant who were now all at a similar level of resilience knowledge regarding their own community.

The workshops resulted in behavioural changes, this was borne out in the statistical analysis and also the qualitative feedback, which provided specific examples of behaviours implemented post workshop to improve their community's resilience or to address community issues. These behavioural changes included the raising of resilience issues that were derived from the workshops, often at subsequent community council meetings. Thus, it seems that the solution is an effective tool for enhancing community resilience engagement. The testing found that the workshops were received well in content, delivery, knowledge of the facilitator, venue and the overall experience. The workshops were rated positively by the vast majority of the participants.

### 5.1 Limitations of the Study

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The small sample size of the survey limits the amount of assumptions that can be made from the data; however, future DRIVER+ Trials could test this solution within the crisis management cycle using a larger randomised sample size, in order to provide confirmation and greater generalisability of the findings.

This report exists as a descriptive exploratory analysis of the effectiveness of the workshops in raising community resilience awareness. The results only provide a general outlook; readers should be wary of viewing them as any kind of absolute confirmation. The sample was not stratified, as the participants were chosen based on snowball sampling method. This also limits the generalisability of the findings. Due to restrictions on translation within the project, the study could not follow up on testing the workshops in other European states. The study mitigated these limitations by selecting communities that were sufficiently diverse within Scotland (rural, urban, island, mainland, coastal, inland, deprived, affluent etc.).

### 5.2 Next Steps

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The findings presented in this deliverable are relevant for other parts of DRIVER+. The next step is to plan the participation in the DRIVER+ Trials for the solution presented and tested in this deliverable to trial the solution in increasingly complex scenarios in line with the broader DRIVER+ series of Trials. The Community Engagement Tool can be used as a potential solution within the Trials that are being planned (SP94), especially if the Trials will involve active participation from citizens. Besides, in particular the Trial 3, with a specific focus on volunteer management and citizen involvement, may benefit from including this solution. Based on the Updated Gaps Assessment workshop (SP92), the definition of the research questions to be

addressed within each Trial, and the solution selection review process (SP94) the final decision on incorporating the Community Engagement Tool in the Trials will be made.

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## Annexes

### Annex 1 – Terminology

In order to have a common understanding within the DRIVER+ project and beyond and to ensure the use of a common language in all project deliverables and communications, a terminology is developed by making reference to main sources, such as ISO standards and UNISDR. This terminology is presented online as part of the Portfolio of Solutions and it will be continuously reviewed and updated<sup>5</sup>. The terminology is applied throughout the documents produced by DRIVER+. Each deliverable includes an annex as provided hereunder, which holds an extract from the comprehensive terminology containing the relevant DRIVER+ terms for this respective document.

| Terminology          | Definition  | Comment  |
|----------------------|---|--|
| Assessment           |   | Definition is still “under construction” and can be found online in the near future. |
| Civil society        | The process by which people, organisations and society systematically stimulate and develop their capacities over time to achieve social and economic goals, including through improvement of knowledge, skills, systems, and institutions.         |  |
| Community building   |   | Definition is still “under construction” and can be found online in the near future. |
| Community resilience | The sustained ability of a community to utilize available resources to respond to, withstand, recover from and adapt to adverse situations  |  |
| Crisis               | Situation with high level of uncertainty that disrupts the core activities and/or credibility of an organization and requires urgent action.  |  |
| Evaluation           | Process of estimating the effectiveness, efficiency, utility and relevance of a service or facility.  |  |
| Preparedness         | The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current disasters. |  |
| Prevention           | Measures that enable an organization to avoid, preclude or limit the impact of an undesirable event or potential disruption.  |  |
| Public               |   | Definition is still “under construction” and can be                                  |

<sup>5</sup> Until the Portfolio of Solutions is operational, the terminology is presented in the DRIVER+ Project Handbook and access can be requested by third parties by contacting [coordination@projectdriver.eu](mailto:coordination@projectdriver.eu).

| Terminology         | Definition  | Comment                          |
|---------------------|---|----------------------------------|
|                     |   | found online in the near future. |
| Societal resilience | Social entities and their abilities to tolerate, absorb, cope with and adjust to environmental and social threats of various kinds. |                                  |

## Annex 2 – Participant letter

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**BritishRedCross**

Dear Participant,

Thank you for agreeing to participate in the Community Resilience session “Raising Resilience Awareness in Communities”. Your input can help improve Community Resilience work across Europe and the United Kingdom.

The British Red Cross has a mandate to support a response during crisis for both natural and man-made disasters. There is also a role for the Red Cross in supporting disaster preparedness and resilience building in order to reduce harmful effects on individuals and Communities. We are committed to improving our approach and in sharing learning with wider resilience stakeholders to accomplish this. We are therefore pleased that you have accepted to take part in order to help improve support for the development of Community Resilience.

The session will be facilitated by David Karikas, Scott Davis and Eilidh Little / Graham Wood who form the Project’s Core Team and they will also be involved in the evaluation of the session.

Please find attached the following documents:

- **Workshop Agenda**
- **Project Summary**
- **Statement of Informed Consent\***
- **Informed Consent – Information Sheet**

\*We will ask you to sign the ‘Statement of Informed Consent’ before we begin the workshop. This is part of our responsibility obligations under this EU-funded project and it also ensure that you are fully informed so you can best make the choice that suits you..

### **Practical information**

The training will take place [< Location, Date, Time, Lunch / snack info, finishing time >](#) and the session should take approximately 4 hours.

There will be light snacks and refreshments provided during the session. Other members of your community, interest groups or your local resilience partners may be in attendance.

### **Evaluation of the session**

The evaluation of the session is a required part of the EU-funded DRIVER Project. This means that we will ask participants to take part in individual pre and post evaluations and to take part in a group discussion after the session. There will also be a short individual follow-up telephone discussion about 4 weeks after this session. As this is a research Project this information will be used to help evaluate the sessions and improve resilience building activities with Communities in the future.

All data will be anonymised and handled in accordance with Data Protection Legislation and the Information Commissioner’s Office good practice within the UK and/or the European Union. Both the Scottish Office for the Information Commissioner and the Regional Scottish Ethical Research Committee has been liaised with to ensure the project public engagement meets the required standards.

It is completely voluntary to take part in the evaluations and it is possible to attend the session without taking part in the evaluation. For further information please read the attached information sheet or contact the Project Manager, David Karikas (contact details below).

### **About the British Red Cross**

The British Red Cross helps people in crisis, whoever and wherever they are. We are part of a global voluntary network, responding to conflicts, natural disasters and individual emergencies. We help vulnerable people in the UK and abroad to prepare for, withstand and recover from emergencies in their own Communities.

Our work in the DRIVER project supports our ambitions to help make Communities more resilient. By being better prepared when a disaster strikes, Communities will experience less crisis and can recover more quickly.

If you have any questions or queries, please contact David Karikas, Project Manager on [DKarikas@redcross.org.uk](mailto:DKarikas@redcross.org.uk) or 01463 796 600.

Kind regards,

David Karikas,  
Project Manager – FP7 DRIVER (Crisis Management & Resilience)

## Annex 3 – Statement of Informed Consent

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BritishRedCross

|                            |  |
|----------------------------|--|
| <b>Project Full Title:</b> | Driving Innovation in Crisis Management for European Resilience                              |
| <b>Project Acronym:</b>    | DRIVER   |
| <b>Funding Body:</b>       | The European Commission (FP7/2007-2013) under Grant Agreement n°607798                       |
| <b>Project Website:</b>    | www.driver-project.eu  |
| <b>Your Contact Point:</b> | David Karikas, British Red Cross (Project Manager), 07710 733154 or DKarikas@redcross.org.uk |
| <b>Complaints Contact:</b> | Nigel Stafford (Senior Services Manager ER&P), 01463 796600 or NStafford@redcross.org.uk     |

### Important Information

Accompanying this form is the following information:

| Information                        | What it will tell you   |
|------------------------------------|---|
| Informed Consent Information Sheet | This will tell you about: <ul style="list-style-type: none"> <li>➤ Your participation in this research and your rights,</li> <li>➤ The selection of participants and treatment of data; and</li> <li>➤ Description of the research that is being undertaken.</li> </ul> |
| Project Summary                    | This will tell you about the FP7 DRIVER Project and the British Red Cross' involvement.   |

- **It is important that you read the information sheets before signing this form.** If anything about the forms, the Project and your involvement is unclear or you have questions which might affect your decision to take part you should not sign this form until you feel informed enough to make an informed decision. If you feel this is the case please get in contact with David Karikas (contact details above).
- By signing this form you are freely agreeing to take part in the research project. Please note you are under no obligation whatsoever to sign this form, provide any details or take part in the project.
- Even if you do sign this form you are not obliged to participate. You may withdraw yourself and any data relating to you from the project at any time for any (or no) reason. You may be asked for an explanation but you do not have to provide one if you do not want to. **Please note:** we will be unable

to withdraw your data from the data set once it has been anonymised. This may be as soon as the session ends.

- You are absolutely free to take time to consider whether to participate or not.

**Agreement to Participate**

**Please place an “X” in the appropriate boxes to indicate (dis)agreement with the following statements regarding your participation in “Raising Resilience Awareness in Communities” as part of the overall DRIVER project. Please also sign and date below.**

|  | Agree | Disagree |
|--|-------|----------|
| I confirm that I have read and understood this form and the accompanying Information Sheets and that it is my responsibility to read and understand them.  |       |          |
| I confirm that I have had the opportunity to ask questions regarding the “Raising Resilience Awareness in Communities” project and my potential involvement in it.   |       |          |
| I understand and agree that my participation is entirely voluntary, and that I may withdraw myself and data* relating to me from the project at any time.<br><br>*I understand that once my data has been anonymised as part of the study it will not be possible to remove my data from the study and I understand that my results will be unidentifiable to me. Any non-anonymised data will be deleted at my request. |       |          |
| I understand and agree that any data collected during my participation may be used, stored and shared as described in the Information Sheets.  |       |          |
| I freely consent to participate in the “Raising Resilience Awareness in Communities” project.  |       |          |
| I am happy to be contacted for a follow-up discussion before the end of April 2016 to provide a short supplemental input into the research.  |       |          |
| I am happy for my photograph to be taken during the session and for it to be used for the  |       |          |

|  |  |  |
|--|--|--|
| purposes of the research and to promote the project generally. |  |  |
|--|--|--|

| Participant       |  | Researchers       |   |
|-------------------|--|-------------------|---|
| <b>Name:</b>      |  | <b>Name:</b>      | Scott Davis / David Karikas   |
| <b>Email:</b>     |  | <b>Email:</b>     | SDavis@Redcross.org.uk<br>DKarikas@Redcross.org.uk  |
| <b>Telephone:</b> |  | <b>Telephone:</b> | Scott: 0131 338 5736 / David: 01463 796 615   |
| <b>Address:</b>   |  | <b>Address:</b>   | British Red Cross<br>Unit 3C, Cradlehall Business Park<br>Caulfield Road North<br>INVERNESS, IV25GH |
| <b>Date:</b>      |  | <b>Date:</b>      | _____ / _____ / _____   |
| <b>Signed:</b>    |  | <b>Signed:</b>    |   |

## Annex 4 – Detailed Information Sheet

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BritishRedCross

### FP7 DRIVER Project – Raising Resilience Awareness in Communities

#### Informed Consent – What you need to know

You have elected to participate in a Research Project called “Raising Resilience Awareness in Communities”, which is a part of the FP7 DRIVER Programme of Projects. In order for you to make an informed decision as to whether to participate it is important that you understand:

1. What your participation will involve and your rights,
2. Selection of participants and treatment of data about you; and
3. Why this Research is being undertaken.

The following information will explain all of this: **please read it carefully**. If you have any questions about this document or any other Project related question please ask David Karikas, Project Manager (07710733154 or [DKarikas@redcross.org.uk](mailto:DKarikas@redcross.org.uk)).

#### 1. Your participation and your rights

##### What will I be asked to do?

You will be asked to discuss how you might feel about local disaster / emergency / crisis scenarios and how you as a Community might approach being resilient. It is important to ensure that you are comfortable sharing and discussing this kind of information. You can withdraw from the sessions at any time should you find the session is creating distress beyond your comfort. The Project Team is committed to ensuring respect for your rights. Some key points to highlight are:

- Your participation is wholly voluntary.
- Risks have been minimized and there is no foreseeable likelihood of physical, mental or emotional harm.
- You have and retain the right to withdraw from participation at any time.
- We take your privacy very seriously and undertake to handle your data responsibly and in compliance with Data Protection Legislation and recognised good practice (The British Red Cross are registered with the Information Commissioners Offices as a Data Handler).
- Your data will be anonymised at the first opportunity.

##### What is involved and what are my rights?

Your participation is integral to the Project and will contribute to the quality and novelty of research on crisis management and resilience. Participation in the Project means that you will be asked to take part in the sessions and the evaluations as described below. Participation in the session and / or evaluations is entirely voluntary. You will not have to share information that you consider private or sensitive. You can

still take part in the session even if you do not want your data utilised and this will not affect how you are included. Your participation in the project can be withdrawn at any time without further notice. In that case your data will be deleted instantly. We point out that the complete withdrawal of your data may not be possible after the point in time data has been anonymised, clustered or generalized.

**Who should I contact if I have concerns?**

If you have any concerns you should contact the Project Manager David Karikas, [DKarikas@redcross.org.uk](mailto:DKarikas@redcross.org.uk) or 01463 196 600.

**Who should I contact if I have a complaint or serious issue?**

In the event of any serious issues / complaints you should contact the Project Complaint Officer **Nigel Stafford on 01463 796 600** or [NStafford@redcross.org.uk](mailto:NStafford@redcross.org.uk)

The Project Complaints Officer is not involved in the day-to-day running of the Project but has an overview so will be able to address your issue independently.

**2. Selection of participants and treatment of data**

**How many participants are needed?**

Approximately 80-100+ people with at least 4 groups from a rural and 4 groups from an urban setting.

**How will participants be chosen?**

There is significant evidence to suggest rural and urban communities respond differently to disasters so the project looks to bring together the resilience research under one approach to provide greater clarity how to better support that dynamic.

Participation will be open to any groups (or individuals) wishing to take part. Each group session will be limited to around 15 people purely down to manageability of the session. The only criterion is that individual participants are over the age of 18 years and there must be a reasonable mix (around 50 /50) of rural and urban participants. The sample is not larger simply due to lack of resources and time within the project.

**How are you contacting participants?**

Through the Scottish Government, Local Authority Ward Managers / Neighbourhood Managers, Local Resilience Partnerships, local Elected Members, Community Trusts, hobby & interest groups, environmental groups, parent-teacher groups and local Community Councils.

**What does the Project need participants to do?**

We would like participants to discuss with the Project Team how best to work with them on resilience issues. We would be looking to capture data for comparison and to evidence any recommendations that come out of the Community sessions. There will be brief pre, post and follow-up evaluations.

| Evaluation  | Format                    | When                      | Length                              |
|-------------|---------------------------|---------------------------|-------------------------------------|
| Pre-Session | Multiple Choice / Scaling | Before the session starts | Short – approximately 10-15 minutes |

|                     |                           |                                     |                                     |
|---------------------|---------------------------|-------------------------------------|-------------------------------------|
| Post- Session       | Multiple Choice / Scaling | After the session                   | Short – approximately 10-15 minutes |
| Follow-up Interview | Telephone Interview       | A number of weeks after the session | Short – approximately 10-15 minutes |

**What kind of data will this research produce?**

We hope through participative methods the Project Team can capture:

- What works well for Communities and what does not work well
- How Communities feel about resilience and how they feel they could be more resilient
- Also, some technical data about the Community such as geography, previous incidents, population, demographics etc.

For those who agree to a follow up interview there will be very limited personal data (contact details only) so we can contact those who are in agreement with a short follow-up discussion after the session. All other data will be anonymised on the day and at source.

**What will happen to the data gathered?**

Data will be used to draw conclusions about what methods work and do not work with Community groups in identifying and improving resilience. No data will be used for any marketing purposes and no data will be sold onwards to any party. Data will only be available to the Project staff and the Consortium for the research purposes you agree to.

Discussion from telephone follow-up interviews may be audio recorded to assist in accurate data collection. Audio may be transcribed to hard copy buy a third party. This party is known to the British Red Cross Research Team and has been thoroughly vetted.

Anonymised data will be shared with appropriate DRIVER Project partners. We will ensure there are no identifiable features in this data.

The anonymised data will inform part of a public document. This document will be freely available on the FP7 DRIVER Project website but no identifiable data will appear in the document.

The Project will publish the results in such a way that individual views and arguments cannot identify participants. The limited personal information gathered will be treated confidentially and the Project Team will duly respect this ensuring compliance with all data legislation and good practice.

**How will the data be stored, where and how long for?**

No sensitive data will be collected or stored. Any data will be held anonymously with the British Red Cross.

All files will be password-encrypted for Project staff only and held on secure servers.

Documentation of the Project must be available for full European Commission audit up to 7 years after the Project completion in 2018 (up to 2025/2026). Electronic records will be kept on a secure password-protected USB stick; hard copies will be in sealed document containers. All Project information will be held

in a secure filing cabinet in the British Red Cross Inverness Office as per the required UK and EC guidelines. After the retention / audit requirements of the EC have been satisfied all raw and contact data will be deleted and / or destroyed (electronic and hard copies).

The British Red Cross involvement in the Project has been reviewed by the Information Commissioners Office [ICO] (Scotland Office), NHS Ethics Board (Scotland office) and the Red Cross Ethics and Research Working Group and they have not identified any concerns with the approach. It is solely up to the British Red Cross to ensure compliance with legislation and good practice around data and ethics.

### **3. Description of Research**

This research is being led by the British Red Cross Project Team - David Karikas, Scott Davis and Graham Wood / Eilidh Little - in collaboration with Project Partners TNO and the IFRC Psychosocial Support Centre.

The Project focuses on how to define a baseline for a community's resilience and then how to potentially improve resilience. Through a bottom up Community lead participative approach the project will look to learn and highlight potential improvements for methods of engaging with and developing resilient communities. This aim is one of the key features of the FP7 DRIVER Project.

This particular part of the research commenced in May 2014 and comes to an end for the BRC in November 2016. The Project is funded by the European Union Seventh Framework Programme (FP7/2007-2013) under Grant Agreement n°607798 with the overall Project ending in October 2018.

#### **What are you researching?**

If it is possible to measure and start to improve a Community's resilience through participative methods proposed by FP7 DRIVER Project.

#### **Why are you undertaking this research?**

To support the development of more resilient Communities to natural and man-made disasters so there is less suffering, reduce crisis and improved recovery.

#### **How will you undertake the research?**

Through Community lead participation, building on good practice already in the Community and testing an approach developed through bringing together many ideas from across the globe.

#### **How will the data / information / evidence help the Project?**

Through providing evidence based recommendations gained from these practical sessions it is hoped that the FP7 DRIVER Project can help support Governments, Funders and Policy makers to adopt a resilience agenda for providing sustainable support to enhance Community resilience.

## Annex 5 – Communication materials

Poster (A4 for follow-up meetings after f2f or email – especially cascading circulation):



### BRITISH RED CROSS / EUROPEAN COMMISSION COMMUNITY RESILIENCE PROJECT

**INVITATION FOR RGU / ABERDEEN CITY GROUPS TO PARTICIPATE**  
**WED 16<sup>TH</sup> DECEMBER / 13:00AM (12:30 FOR REFRESHMENTS) / RGU SIR IAN WOOD BUILDING**



The ability of a community or a group to bounce back after a disruption is often known as **"community resilience"**. This autumn, the European Union FP7 DRIVER project, working with the British Red Cross are inviting local community groups to participate in a workshop to examine ideas that can help. Even if your community or group is prepared, bringing your experience to hand could assist communities across Scotland, Europe and the globe - your input could help others.

#### WHAT IS IN IT FOR MY COMMUNITY OR GROUP?

You will have support from the British Red Cross Project Team in reviewing your readiness, raising your awareness and identifying potential solutions to your local resilience issues. It will also provide an opportunity for your voice to be heard in a project that is looking to influence governments, policy makers and funders currently leading on community resilience work.

The project team appreciates people are busy and as a thank you for your participation they will provide:

- **a light lunch / refreshments during the session**
- **a starter emergency grab bag (containing helpful items for use preparing for and during an incident)**
- **a £20 Amazon gift voucher for participants (maximum of 15 participants).**

#### WHAT WOULD PARTICIPANTS ACTUALLY BE DOING?

As a group, you will try out different approaches the Red Cross team have adapted from resilience research across the globe. The sessions is participative and an action and contacts plan would be available at the end of the session to assist you in developing local resilience thinking.

#### WHAT ELSE?

The project is looking to work with 1 group of around 8-15 participants from the Aberdeen City area. Participants can be local interest groups, community residents, representatives or any other local who has an interest in resilience or maybe just wants to find out more. A session lasts about 3.5 hrs with breaks and refreshments.

**\*\*\*PLEASE GET IN TOUCH TO SECURE YOUR PLACE AS THERE IS A MAXIMUM OF 15 PARTICIPANTS\*\*\***

#### WHO DO I CONTACT TO FIND OUT MORE?

David Karikas, [DKarikas@redcross.org.uk](mailto:DKarikas@redcross.org.uk) 01463 796 615 or 07710 733 154

You can also find out more about the FP7 DRIVER Project here: <http://driver-project.eu/>

The research leading to these results has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement 101017706.

Additional Information (A4 for meetings or email – especially cascading circulation):



**EXPLORING YOUR COMMUNITY’S RESILIENCE WITH THE BRITISH RED CROSS**



**What is the opportunity?**

The British Red Cross DRIVER Project Team will be delivering ‘Community Resilience’ sessions within local communities across Scotland. The purpose of the session is to find out how communities feel about resilience and to try and raise awareness of how best communities can bounce back from disruption. It will be an excellent opportunity for views, experience and learning to be shared.

**What will the session involve?**

|   |  |
|---|--|
| <b>What will happen in the session?</b>   | The session will include various group discussions about your community’s readiness for an emergency or disruption and will use different practical approaches to look at these in more detail.  |
| <b>How long?</b>                          | Each session will be approximately 3 to 4 hours (including breaks) and refreshments will be provided.  |
| <b>Who can take part?</b>                 | You will need to be at least 18 years of age to participate and we are looking for a group of at least 10-15 participants per session. It could be any local group or community interested in resilience or just looking to find out a bit more. |
| <b>Where will the session take place?</b> | Flexible and by mutual agreement, we can come to you. Delivery can be during the day, evening or weekends.   |

**How will this benefit me and my community?**

- The session will help to explore and identify how “ready” your community is if faced with a disruption or emergency and also to discuss how any gaps might be addressed. If your community is already “ready” you could be helping others by sharing your approach.
- The British Red Cross DRIVER Project Team can also help with signposting you to services, contacts and potential funding opportunities which may assist in plans for making your community more resilient.
- Each participant (up to a maximum of 15) will also receive a “Starter” Emergency Grab Bag containing practical items for use during an emergency or disruption and a £20 Amazon Gift Voucher as a thank you (and to hopefully support your individual resilience plan).
- You will be helping the British Red Cross DRIVER Project Team feedback to the wider DRIVER Project about how community resilience develops, giving a voice to your community on how resilience might be thought about and practiced. The DRIVER Project looks to influence Governments, Policy Makers and Funders around resilience work - your input could help with this in a more community led approach.

**Why and how is the British Red Cross involved?**

The British Red Cross chartered mandate is the prevention and alleviation of human suffering in the British Islands and throughout the world. This aim is realised through assisting the UK Government and statutory services in times of disaster but also in supporting resilience building in communities to better cope with and recover from crisis.

Our involvement with the DRIVER Project which looks to build a more shared understanding and approach to resilience across Europe contributes to our mandate. The DRIVER Project Team specifically are responsible for testing the practical approaches and methods that we will cover in the sessions, ensuring a clear representation of local communities when reviewing resilience.

**Who do I contact to find out more?**

David Karikas, Project Manager, [DKarikas@redcross.org.uk](mailto:DKarikas@redcross.org.uk) 01463 796 615 or 07710 733 154

You can also find out more about the FP7 DRIVER Project here: <http://driver-project.eu/>

The research leading to these results has received funding from the European Commission’s Seventh Framework Programme (FP7/2007-2013) under Grant Agreement n°607295.



## BRITISH RED CROSS / EUROPEAN COMMISSION COMMUNITY RESILIENCE PROJECT

### OPEN INVITATION TO INVERNESS CITY GROUPS TO PARTICIPATE FROM NOW UNTIL NOVEMBER 2015



The ability of a community or a group to bounce back after a disruption is often known as “community resilience”. This autumn, the European Union FP7 DRIVER project, working with the **British Red Cross** are inviting local community groups to participate in a workshop to examine ideas that can help. Even if your community is prepared, bringing your experience to hand could assist communities across Scotland, Europe and the globe - your input could help others.

**What is it for our community or mine?**

You will have support from the British Red Cross Project Team in reviewing your readiness, raising your awareness and identifying potential solutions to your local resilience issues. It will also provide an opportunity for your voice to be heard in a project that is looking to influence governments, policy makers and funders currently leading on community resilience work. You will also receive a handy **starter emergency grab bag** containing items which may assist you during a disruption.

**What would practitioners do during a disruption?**

As a group, you will try out different approaches the Red Cross team have adopted from resilience research across the globe. The groups are participative and an action and contacts plan would be available at the end of the session to assist you in developing local resilience. Red Cross may also be able to provide other services to assist.

**What next?**

The project is looking to work with groups of around 10 participants per session. Participants can be local Inverness groups, community residents / representatives or any other local group who has an interest in resilience or maybe just wants to find out more. A session lasts between 2 and 4 hours with breaks and refreshments. A session can be delivered daytime, evening or weekends. It is entirely flexible to suit local availability.

The project team team appreciates people are busy and as a thank-you they will provide:

- a light lunch / refreshments during the session
- a starter emergency grab bag (containing helpful items for use prepping for and during an incident)
- a £20 Amazon gift voucher for participants (maximum of 20 vouchers in total available per session on a first come basis - sorry funding is limited).

**Who do I contact to find out more?**

David Rankin, Project Manager, [DRankin@redcross.org.uk](mailto:DRankin@redcross.org.uk) 01464 294615 or 01773 284154  
You can also find out more about the FP7 DRIVER Project here: <http://driver-project.eu/>

The research leading to these results has received funding from the European Community's Seventh Framework Programme (FP7/2007-2013) under Grant Agreement n°2407938.

|  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|
| Community Resilience Project<br>David Rankin, Project Manager<br><a href="mailto:DRankin@redcross.org.uk">DRankin@redcross.org.uk</a><br>01464 294615 - 07731 284154 | Community Resilience Project<br>David Rankin, Project Manager<br><a href="mailto:DRankin@redcross.org.uk">DRankin@redcross.org.uk</a><br>01464 294615 - 07731 284154 | Community Resilience Project<br>David Rankin, Project Manager<br><a href="mailto:DRankin@redcross.org.uk">DRankin@redcross.org.uk</a><br>01464 294615 - 07731 284154 | Community Resilience Project<br>David Rankin, Project Manager<br><a href="mailto:DRankin@redcross.org.uk">DRankin@redcross.org.uk</a><br>01464 294615 - 07731 284154 | Community Resilience Project<br>David Rankin, Project Manager<br><a href="mailto:DRankin@redcross.org.uk">DRankin@redcross.org.uk</a><br>01464 294615 - 07731 284154 | Community Resilience Project<br>David Rankin, Project Manager<br><a href="mailto:DRankin@redcross.org.uk">DRankin@redcross.org.uk</a><br>01464 294615 - 07731 284154 | Community Resilience Project<br>David Rankin, Project Manager<br><a href="mailto:DRankin@redcross.org.uk">DRankin@redcross.org.uk</a><br>01464 294615 - 07731 284154 | Community Resilience Project<br>David Rankin, Project Manager<br><a href="mailto:DRankin@redcross.org.uk">DRankin@redcross.org.uk</a><br>01464 294615 - 07731 284154 | Community Resilience Project<br>David Rankin, Project Manager<br><a href="mailto:DRankin@redcross.org.uk">DRankin@redcross.org.uk</a><br>01464 294615 - 07731 284154 | Community Resilience Project<br>David Rankin, Project Manager<br><a href="mailto:DRankin@redcross.org.uk">DRankin@redcross.org.uk</a><br>01464 294615 - 07731 284154 |
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## Annex 6 – CART Resources

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### Hand-Out Resource 1<sup>6</sup>: About Your Community (Information about the activity)

#### Working Together – Community Data – Specific to your community

The information from this activity will be used through the session to assist in discussions. Information will cover:

- Demographics
- Government Data (census etc...)
- Local information

As these workshops will be held in Scotland, community data will be sourced from the following local statistical sources:

- Scottish Neighbourhood Statistics
- Scottish Multiple Deprivation Index
- Scotland's Census
- Scottish Government Urban Rural Classification

The primary reason for the use of the About Your Community / community information is to help stimulate conversation around potential risks, strengths etc. that the information potentially reveals. Information helps to set the context for the discussion and the activities that follow. The story behind the actual information is complex and the conversation is best focused on how local knowledge helps to influence local resilience plans.

It worth appreciating that decisions / polices are influenced by information like this so communities actively engaged in their own information and local leaders / decision makers are more likely to be able to influence decisions made.

\*\*\*Have we missed anything you feel it is helpful to note and potentially will feed into later discussions?  
\*\*\*

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<sup>6</sup> All Handouts were originally printed on A3 size for the workshops (in Landscape orientation). The size has been adapted to fit the size of this deliverable, the content is the same.

## **Hand-Out Resource 2: Community Conversation (Information about the Activity)**

### Working Together – What helps to make communities resilient?

Community conversations can foster the exchange of information, ideas, and opinions among participants who have useful knowledge that can contribute to an understanding of a particular issue. Conversations are designed to assess how people think or feel about a topic. Because participants are in a group, it is possible to obtain a lot of information at one time. Individual comments often trigger new ideas from other participants including unanticipated information.

Community conversations can be meaningful as part of processes to assess needs, identify and solve problems, formulate goals and objectives, plan and design new programs, evaluate existing programs, and suggest or evaluate items for a survey. Community conversation results can be used to identify community strengths and challenges from the perspective of participants. An initial community conversation and follow-up groups or meetings can lead to strategic planning, the outcome of which might be a new program or sector-specific or community-wide action. The use of results will depend, in part, on community interest, resource constraints, and the ability of leaders to implement a plan of action.

### Participant profiles

There are many role types in a community that often are evident in groups. It is important for discussion to appreciate difference and as a group look to tap into that different.

There are many kinds of profiles and these are a just a few. Most of us will move from one profile to another depending upon a range of influences. The relevance is appreciating how can, as a group, we ensure a worthwhile and inclusive conversations?

These include, for example:

1. The caregiver: who wants to support everyone and does not like any conflicting opinions. This person tries to rescue those who are uncomfortable.
2. The rambler: who often goes off topic and has multiple points.
3. The challenging person: who does not want to be there and lets everyone know it. This type may challenge the groups effective discussions.
4. The superior person: who is judgmental and acts as if he/she is better than other participants. This person may attempt to dominate weaker members of the group.
5. The withdrawn person: who is content to listen only, without contributing.
6. The cooperative person: who is both a good listener and contributor, is a joy to have in the group.

The point in discussing roles is not to be judgmental but rather to recognise it is a part of most community and group dynamics. It is helpful to be realistic and manage challenges as this is an important part of embedding community resilience.

## **Hand-Out Resource 2.1: Community Conversation (Activity)**

### Working Together – What helps to make communities resilient?

Questions to initiate and promote each resilience theme of CART.

**[General Theme Question]** What comes to mind when you think of a community?

**[General Theme Question]** What crisis do you feel your community is potentially prone to? Which have happened?

**[Connect & Caring Theme Question]** How can, as a community, you help people in need if there is a crisis?

**[Resources Theme Question]** What resources are there that might help in a crisis?

**[Potential Theme Question]** What opportunities might there be to develop response capabilities in your community?

**[Disaster Management Theme Question]** What does your community do to prevent / prepare for crisis?

### **Hand-Out Resource 3: Relationship Map Discussion (Information about the Activity)**

#### Working Together – What relationships do you feel are important for developing a more resilient community?

What current relationships do you have? What relationship do you feel you need to have?

It is important that you make an honest assessment of relationships. Explore the nature, causes, and consequences of any benefits and costs associated with them.

**Step1: Identify the organisations with which you interact.** Consider the frequency with which you interact.

**Step2: Construct the framework for your community relationship map.** On the laminated exercise sheet the circle in the centre represents your community. Next you should draw circles representing agencies, groups, and individuals with whom you currently interact; the location of these other circles is irrelevant.

\*\*\*The size of the other circles should reflect the frequency or level of interaction with your community. A large circle represents extensive interaction and a small circle indicates that little interaction occurs. Put the name of your organization in the centre circle and the names of agencies, groups, and individuals with which you interact in the other circles.

**Step 3 Indicate the strength and nature of your relationships.** The strength of your relationship with each agency, group, or individual is described by connecting lines drawn from the central community circle to the other circle you have drawn. A solid line indicates a strong, positive relationship. A dashed line represents a weaker, positive relationship. A crossed line indicates a more challenging relationship. You may decide to draw two lines if a relationship changes across issues or concerns and/or if the relationship is positive part of the time and stressful at other times.

**Step 4: Interpret and use the community relationship map to plan improvements in your relationships.** Review your map with others in your community, noting the strength and nature of your relationships. There are a number of issues you might address depending on your goals. Consider, for example:

- 1) The potential benefits and costs of increasing the frequency of interaction with organizations with which you have little interaction
- 2) The pros and cons of strengthening weaker, positive relationships including what it would take and how your community would benefit
- 3) Ways to improve challenging relationships including whether a different frequency of interaction would help or hinder the relationship
- 4) What you can learn from your strong, positive relationships to improve other relationships
- 5) Whether there are agencies, groups, or individuals that are missing from your map that could help to advance your goals
- 6) Whether new relationships can be established to replace or offset challenging relationships



#### **Hand-Out Resource 4: Community Strength & Barriers (Information about the Activity)**

##### SWOT Analysis - Strengths, Weaknesses, Opportunities, Threats (for Enhancing Resilience in your Community)

**Step 1: List the strengths of your community with respect to your objective of enhancing resilience.**

Strengths are current resources and capabilities that you can call upon to accomplish your objective. They may include, for example, individuals with specific skills, existing processes, information, ideas, values and attitudes, positive morale, location, partners, structure, and technologies. It is in your interest to maintain, build, and leverage your strengths.

**Step 2: List the weaknesses of your community with respect to your objective.** Weaknesses limit your success or hinder your operation. As areas of your operation that need improvement, weaknesses may be reflected as a lack of resources and skills needed to accomplish your objective. Weaknesses may include, for example, costs, liabilities, location, inefficiencies, low morale, and limited participation. When feasible, weaknesses should be corrected, reduced, or eliminated.

**Step 3: List the opportunities available to your organization or community with respect to your objective.**

Opportunities are favorable circumstances (external to your organization or community) that create the potential for progress or advancement. They may pertain directly to your organization or community, or they may be part of a more advantageous environment. Opportunities may derive from, for example, changes in policies, programs, rules and regulations, personnel, funding, and technologies. Opportunities may be time limited. They should be optimized.

**Step 4: List the threats that your organization or community faces with respect to your objective.**

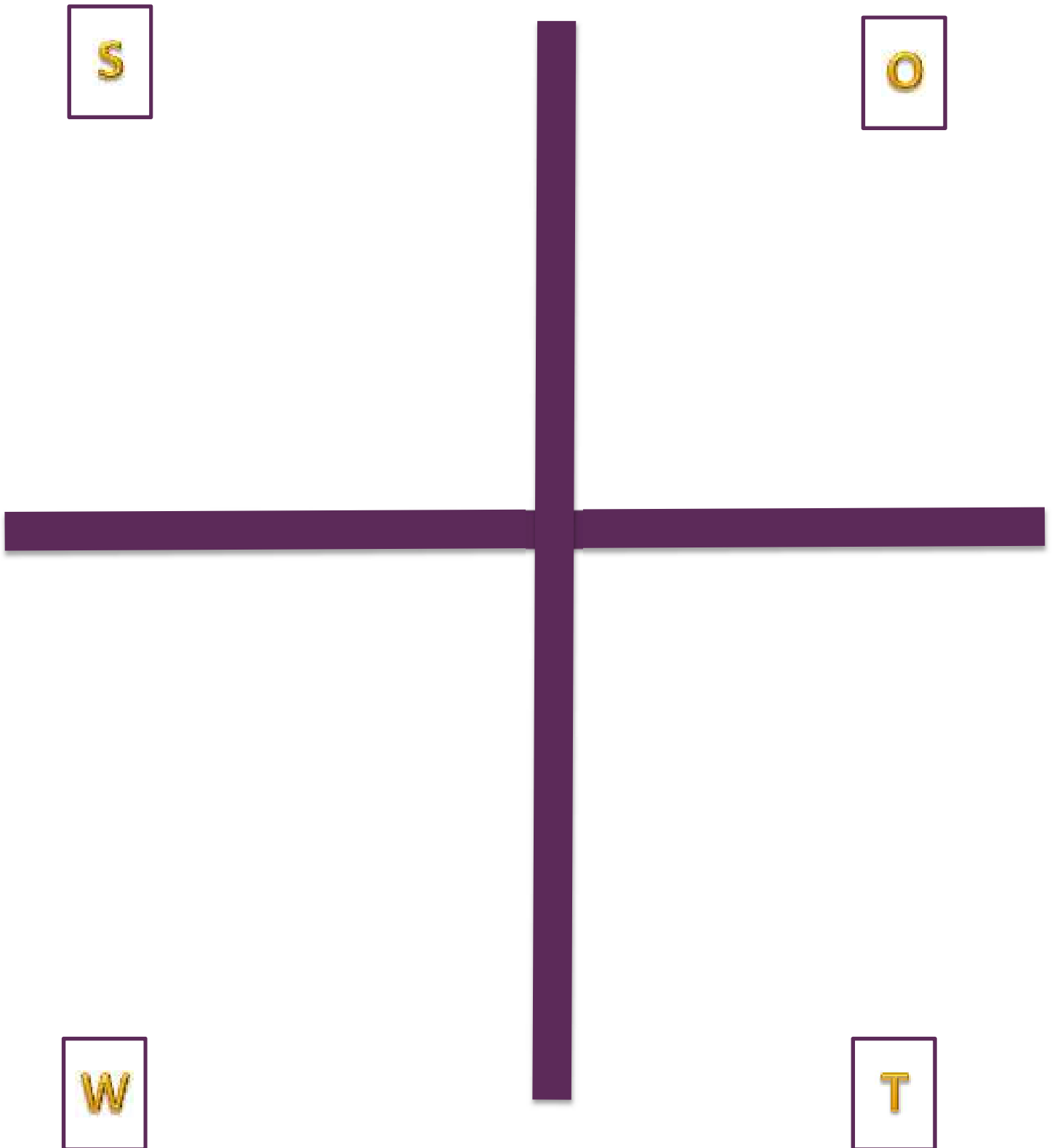
Threats represent potential peril or problems. They may pertain directly to your organization or community, or they may be part of a dangerous or unfavorable environment. Threats may exist with any probability, may be imminent or in the distant future, and may be of varying magnitude. Threats may arise from, for example, political, legal, economic, social, natural, or technological forces. When feasible, threats should be minimized, countered, and thwarted.

**Step 5: Create a SWOT matrix. List your strengths, weaknesses, opportunities, and threats in a SWOT matrix (see below) so that you can see them at a glance.** Ideally, you would like to transform your weaknesses into strengths and your threats into opportunities.

**Step 6: Identify your most important strengths, weaknesses, opportunities, and threats.** In preparation for creating strategies to accomplish your objective, focus first on those strengths, weaknesses, opportunities, and threats that are most important in terms of your objective. As time permits, you may want to consider secondary strengths, weaknesses, opportunities, and threats. Consider initially how you can correct the most harmful weaknesses, prepare for the most significant threats, and take advantage of the best opportunities to advance your objective. Think about how you can use your strengths to ameliorate your weaknesses and limit your threats.

**Hand-Out Resource 4.1: Community Strength & Barriers (Activity)**

SWOT Analysis - Strengths, Weaknesses, Opportunities, Threats (for Enhancing Resilience in your Community)



## Annex 7 – Workshop Survey (Pre, Post, One Month After Intervals)

### **WORKSHOP QUESTIONNAIRE FORM – PRE EVENT SECTION A: BEFORE THE EVENT (Pre-Workshop)**

**YOUR NAME:**

How would you rate the following? (Please tick one box)

|   | <b>Definitely Not</b> | <b>Probably Not</b> | <b>Possibly</b> | <b>Probably</b> | <b>Very Probably</b> | <b>Definitely</b> |
|---|-----------------------|---------------------|-----------------|-----------------|----------------------|-------------------|
| <b>Do you think that your community is vulnerable to crisis?</b>                        |                       |                     |                 |                 |                      |                   |
| <b>Do you have the feeling that your community is capable of dealing with a crisis?</b> |                       |                     |                 |                 |                      |                   |
| <b>Have you prepared yourself for a crisis?</b>   |                       |                     |                 |                 |                      |                   |
| <b>Is your community prepared for a crisis?</b>   |                       |                     |                 |                 |                      |                   |

What would you consider to be the most likely threats? (Three examples is sufficient)

**WORKSHOP QUESTIONNAIRE FORM – POST EVENT SECTION B: AFTER THE EVENT (Post-Workshop)**

**YOUR NAME:**

How would you rate the following? (Please tick one box)

|  | Definitely Not | Probably Not | Possibly | Probably | Very Probably | Definitely |
|--|----------------|--------------|----------|----------|---------------|------------|
| Do you think that your community is vulnerable to crisis?                        |                |              |          |          |               |            |
| Do you have the feeling that your community is capable of dealing with a crisis? |                |              |          |          |               |            |
| Have you prepared yourself for a crisis?   |                |              |          |          |               |            |
| Is your community prepared for a crisis?   |                |              |          |          |               |            |

What would you consider to be the most likely threats? (Three examples is sufficient)

**SECTION C: Workshop Evaluation (Post-Workshop)**

How would you rate the workshop components? (Please tick one box)

|                                    | Very Poor | Poor | Fair | Good | Very Good |
|------------------------------------|-----------|------|------|------|-----------|
| Content                            |           |      |      |      |           |
| Delivery Method                    |           |      |      |      |           |
| Venue                              |           |      |      |      |           |
| Facilitator's knowledge of subject |           |      |      |      |           |

How would you rate the workshop as a whole? (Please tick one box)

|                         | Very Poor | Poor | Fair | Good | Very Good |
|-------------------------|-----------|------|------|------|-----------|
| The workshop as a whole |           |      |      |      |           |

Please tell us the reasons for your ratings:

Please indicate how much insight you gained from each of the tools we used today?

|                                      | Very Poor | Poor | Fair | Good | Very Good |
|--------------------------------------|-----------|------|------|------|-----------|
| About Your Community                 |           |      |      |      |           |
| Community Conversation               |           |      |      |      |           |
| Mapping your Community Relationships |           |      |      |      |           |
| Abilities and Challenges             |           |      |      |      |           |

**SECTION D: QUESTIONS ABOUT YOU**

Gender: (please circle one option)

**MALE**

**FEMALE**

**OTHER: (please specify)**

How long have you lived in the town you now live in? \_\_\_\_\_ **Years**

How long have you lived in your present house? \_\_\_\_\_ **Years**

How many years have you lived in your community? \_\_\_\_\_ **Years**

Do you own or rent your home? *(Please circle one option)*

**OWN**

**RENT**

What is the postal code of your neighbourhood?

**WORKSHOP TELEPHONE QUESTIONNAIRE FORM – POST EVENT (FOUR WEEKS)**

Note to Telephone Interviewer:

Please ask the questions in order and accurately record the feedback from each participant. Within the ‘closing’ section, please take notes of any feedback related to the workshop.

Post-Event (After four weeks)

**We would like to ask you the following questions related to the workshop. You may notice the set of questions are similar to the questions asked at the workshop.**

How would you rate the following? (Please tick one box)

|   | <b>Definitely Not</b> | <b>Probably Not</b> | <b>Possibly</b> | <b>Probably</b> | <b>Very Probably</b> | <b>Definitely</b> |
|---|-----------------------|---------------------|-----------------|-----------------|----------------------|-------------------|
| <b>Do you think that your community is vulnerable to crisis?</b>                        |                       |                     |                 |                 |                      |                   |
| <b>Do you have the feeling that your community is capable of dealing with a crisis?</b> |                       |                     |                 |                 |                      |                   |
| <b>Have you prepared yourself for a crisis?</b>   |                       |                     |                 |                 |                      |                   |
| <b>Is your community prepared for a crisis?</b>   |                       |                     |                 |                 |                      |                   |

Behavioural changes

Finally, we would like to ask you about any potential changes you have made in your daily life since the workshops.

|   | <b>Never</b> | <b>Very Rarely</b> | <b>Rarely</b> | <b>Occasionally</b> | <b>Frequently</b> | <b>Very Frequently</b> |
|---|--------------|--------------------|---------------|---------------------|-------------------|------------------------|
| <b>Have you thought about risks and resources of your community over the last two weeks?</b>        |              |                    |               |                     |                   |                        |
| <b>Have you discussed what you learnt at the workshop with any other members of your community?</b> |              |                    |               |                     |                   |                        |

|   |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
| <b>Have you sought out any further information about your community's resilience since the workshop?</b><br><b>(E.g. Looked online, contacted community leaders etc...)</b> |  |  |  |  |  |  |
| <b>Have you made any preparatory actions with regard to risks for your community?</b>   |  |  |  |  |  |  |

Closing

**Do you have any other comments you would like to share?**

**Thank you for your time and participation**