



# SMART MATURE RESILIENCE

D5.4 – PEER REVIEW MEETING 2

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## EXECUTIVE SUMMARY

This report was prepared in the framework of Work Package (WP) 5, i.e. the WP coordinating the pilot implementation process of the tools developed in WP3 and WP4. It is the second of three peer-review reports aimed at summarizing the feedback from the partner CITIES on the pilot implementation process. Specifically, this report summarises the feedback from the partner cities on the joint pilot implementation of the Resilience Maturity Model, developed by TECNUN, University of Navarra and the Risk Systemicity Questionnaire, developed by the University of Strathclyde, between project months 17 and 22.

The aim of this report is to provide important input to the partners that are responsible for the finalization of both the aforementioned tools. The report demonstrates and highlights the main outcomes of the stakeholder training workshops that took place in the three tier-1 CITIES in January and February 2017, the organized webinars between the tier-1 and tier-2 partner CITIES, as well as a summary of the input received and the results of the 2<sup>nd</sup> review workshop, which took place in Donostia-San Sebastian, Spain from the 6<sup>th</sup> to the 8<sup>th</sup> of March 2017. Throughout the process, the tier-1 CITIES provided collective input having participated in this joint pilot implementation of the tools, while the tier-2 CITIES shared their additional feedback having followed the peer-reviewing activities within WP5, mainly through webinars and additional calls. The report summarizes the recommendations of the partner CITIES for the finalization of the tools, assesses the impact of both the tools for the stakeholders of each tier-1 CITY and states some general conclusions and recommendations. This input will be the basis for designing the subsequent joint pilot implementation of the Resilience Building Policies Repository and the System Dynamics Model.

The report is divided into five parts: The 1st part provides an introduction to the main elements and parts of the pilot implementation process, while it also provides information on methodology and process details. The 2<sup>nd</sup> part provides an overview of the pilot implementation of the Resilience Maturity Model, while the 3<sup>rd</sup> part follows the same structure, but this time focusing on the Risk Systemicity Questionnaire. Both these chapters, summarize the feedback from Kristiansand, Donostia/San Sebastian, and Glasgow, respectively, and present the reports on tools and webinars that have been produced by their respective, matching tier-2 peer(s). The 4<sup>th</sup> and final part of this report provides a general outlook on the pilot process, summarizes the tools' strengths and weaknesses as elaborated by the peer-review CITIES during the webinars and the review workshop and provides with some final recommendations for both the tools.



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# 1. INTRODUCTION TO THE PILOT IMPLEMENTATION

## 1.1. IN A NUTSHELL

This report is prepared in the framework of Work Package (WP) 5, i.e. the WP coordinating the pilot implementation of the Resilience Management Guideline, through a testing process of all the five resilience tools that are being developed within the SMR project. The report summarises the feedback from all partner CITIES on the pilot implementation and the peer-reviewing process of the Resilience Maturity Model and the Risk Systemicity Questionnaire.

As a matter of fact, during project months 17 and 22, the Smart Mature Resilience project has been undergoing an intensive period of local stakeholder training, where local stakeholders in the core CITIES of Donostia, Glasgow and Kristiansand received in-depth training on the use of the SMR tools that have been developed so far. All tier-1 partner CITIES have been able to use and test the different versions of these tools, throughout the pilot process. The report highlights and summarizes important inputs received from the peer-reviewing cities that will be used for the finalization of both the tools within WP3.

Apart from the pilot elements presented in the next pages, throughout the iterative pilot process, the tier-1 CITIES in close cooperation with their respective research partners, when needed, organized additional workshops and bilateral meetings with identified stakeholders to further explore synergies and collaboration potential between institutions, municipal departments and utilities and the Smart Mature Resilience project.

Throughout this process, the tier-2 CITIES acted as critical friends or peer-reviewers, attending the webinars and providing feedback on tool development and arising challenges. In order for the tier-2 CITIES to be able to provide concrete and accurate input, since they have not tested the tools themselves, ICLEI always briefed them before and during the webinars on what had taken place in the stakeholder training workshops and what the most crucial tool updates at the time are.



## 1.2. THE TOOL TESTING PROCESS

The joint pilot implementation for the Resilience Maturity Model and the Risk Systemicity Questionnaire took place between project months 17 and 22 (October 2017 – February 2017) in the three tier-1 CITIES, Kristiansand, Donostia-San Sebastian and Glasgow, and again was peer-reviewed by the four tier-2 CITIES of Bristol, Vejle, Rome and Riga. The tool testing activities have been guided by the respective tool developers (Tecnum and Strathclyde University), while ICLEI was acting as an external coach and coordinator, facilitating knowledge and information exchange between partners and CITY official and representatives.

During this period, partners and representatives of the three tier-1 CITIES had the chance to explore and validate both tools in the security sectors that were already identified (T5.2) and to provide input to the developers for the finalization of the tools. Citizens were also involved in the workshops in order to better engage with the general public and to make sure that the tools will be as much as possible tailor made to the three tier-1 CITIES' needs.

Specifically during months 20 and 21, and in order to facilitate the finalization of both tools and strengthen the co-creation process, 3 stakeholder training workshops on each tool were organized and conducted in the three Tier-1 CITIES aiming to train city stakeholders to use the tools, and introduce their main qualities and functionalities.

Following these 6 (3+3) training workshops, ICLEI conducted 6 (3+3) webinars during which, the implementing CITIES presented the activities and processes conducted so far and provided with detailed feedback on the stakeholder training workshops, while the tier-2 CITIES had the opportunity to ask questions and provide their insights and feedback on the ongoing tool development.

The webinars aimed to present the main tools functionalities to city representatives and stakeholders, strengthen the co-creative development of the tools and facilitate dialogue between the two tiers of cities that will help the developers finalize the tools. Given the different nature of each tool, it was agreed among partners that 6 webinars should be conducted instead of 3 joint ones; therefore,

- 3 webinars focused on the Resilience Maturity Model and
- 3 webinars focused on the Risk Systemicity Questionnaire



The webinars served for the Tier-2 CITIES as a way to receive a summary of the results, provide feedback and gain an insight into the outcomes of the training. Following each webinar, the respective tier-2 CITIES prepared a short report of 1-2 pages for each tool. These peer-review short reports have been an integral part of this document and are presented in chapters 2.2. and 3.2 of this report.

### WEBINAR METHODOLOGY

Each webinar involved the respective implementing city; the assigned tier-2 city/cities, Tecnun or Strathclyde University as a research partner and responsible for the tool development and ICLEI as moderator/facilitator. All webinars followed a structure that was result of the ongoing collaboration between ICLEI and the research partners through skype calls.

- Both tier-1 and tier-2 CITIES were introduced to the current state of each reviewed tool
- The implementing tier-1 CITIES presented the challenges and constraints experienced during the stakeholder training workshop on the tool
- The tier-2 cities asked questions based on a guideline questionnaire prepared in advance by the research partners. This was to make sure that the most relevant aspects for the tool development would be questioned and analyzed. The tier-2 cities' representatives posed additionally their own questions;
- The research partners concluded with lessons learnt and knowledge gathered that would help them finalize the tools

In anticipation of the webinars, the research partners provided guiding questions in advance of the discussion in order to include specific issues in the debate. These questions meant to foster a better understanding of requirements needed for the finalization of the tools and to make sure that the most relevant aspects of the tool development would be questioned, analyzed and highlighted during the webinars. The guiding questionnaires can be found in the Appendix of this report.

### REVIEW WORKSHOP

A crucial part of the testing and review process was the review workshop in Donostia/San Sebastian, Spain in March 2017. During this workshop, the tier-1 CITIES provided their feedback on the pilot implementation process to Tecnun and Strathclyde University, while the tier-2 CITIES shared their



additional feedback and summarized their recommendations for the finalization of the tools through a combination of facilitated panel discussion, based on guiding questions, in which the tier-1 CITIES were the interviewees and the tier-2 CITIES were the interviewers. ICLEI, in cooperation with TECNUN and Strathclyde University was responsible for the program development and facilitation of the workshop. More information on what happened in this workshop, what were the main outcomes and conclusions can be found in the SMR Deliverable D5.5.

City representatives, critical infrastructure stakeholders, first responders, climate change and resilience experts, simple citizens and university students have been invited and attended workshops and webinars. In the implemented workshops and stakeholder meetings, the identical methodology was used aiming to ensure replicability, comparability, and transferability and to put the emphasis on the Circle of Sharing and Learning.

#### USER MANUALS

Following the completion of the pilot implementation, the tools developed committed to create user manuals for each tool. During the workshops, draft manuals were shared already with the participants, in order for them to be able to look into them and re-visit the tools and the workshop activities in the following days, and until the end of the pilot implementation process.

### 1.3. PILOT IMPLEMENTATION TIMELINE

The steps and dates of the joint pilot implementation of the Resilience Maturity Model and the Risk Systemicity Questionnaire are shown in the following table:

PILOT ACTIVITY	DATE	LOCATION	RESPONSIBLE
1 <sup>st</sup> RSQ Stakeholder Training Workshop	24-01-2017	San Sebastian	ICLEI/STRATHCLYDE
1 <sup>st</sup> RSQ Webinar	30-01-2017	Online	ICLEI/STRATHCLYDE
1 <sup>st</sup> MM Stakeholder Training Workshop	02-02-2017	Kristiansand	ICLEI/TECNUN
1 <sup>st</sup> MM Webinar	06-02-2017	Online	ICLEI/TECNUN

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2 <sup>nd</sup> MM Stakeholder Training Workshop	07-02-2017	San Sebastian	ICLEI/TECNUN
2 <sup>nd</sup> MM Webinar	13-02-2017	Online	ICLEI/TECNUN
2 <sup>nd</sup> RSQ Stakeholder Training Workshop	09-02-2017	Kristiansand	ICLEI/STRATHCLYDE
2 <sup>nd</sup> RSQ Webinar	13-02-2017	Online	ICLEI/STRATHCLYDE
3 <sup>rd</sup> RSQ Stakeholder Training Workshop	21-02-2017	Glasgow	ICLEI/STRATHCLYDE
3 <sup>rd</sup> RSQ Webinar	24-02-2017	Online	ICLEI/STRATHCLYDE
4 <sup>th</sup> MM Stakeholder Training Workshop	23-02-2017	Glasgow	ICLEI/TECNUN
3 <sup>rd</sup> MM Webinar	24-02-2017	Online	ICLEI/TECNUN
2 <sup>nd</sup> Review Workshop	06-03-2017 to 08-03-2017	San Sebastian	ICLEI/ALL PARTNERS
MM User Manual	Under development	Online/Printed versions	ICLEI/TECNUN
RSQ User Manual	Under development	Online/Printed versions	ICLEI/STRATHCLYDE



## 2. PILOT IMPLEMENTATION OF THE RESILIENCE MATURITY MODEL

### 2.1. IN A NUTSHELL

The Resilience Maturity Model is a strategy and policy tool that enables cities to self-assess their resilience status and provides a roadmap for how cities' resilience development could be rolled out. The Resilience Maturity Model provides a collaborative environment that facilitates awareness and engagement among key partner in resilience building activities. Using the Resilience Maturity Model, CITIES become aware about the level of their capabilities, thereby positioning themselves within one of the maturity stages (S-Starting, M-Moderate, A-Advance, R-Robust and V-VerTebrate) for each dimension described in the model and in overall regarding resilience. These dimensions are: Leadership & Governance, Preparedness, Infrastructure & Resources and Cooperation.

During months 20 and 21, and in order to facilitate the finalization of both tools and strengthen the co-creation process of the Resilience Maturity Model (MM), 3 stakeholder training workshops were organized and conducted in the three Tier-1 CITIES aiming to train city stakeholders to use the MM, and introduce its main qualities and functionalities.

The Maturity Model should be used as a tool for discussion that helps create consensus on what needs to be done to build or enhance resilience guiding the decisions making process, contributing mainly to the following aspects:

- Common and holistic understanding of resilience concept:
- Enhancing communication among stakeholders:
- Identifying and supporting development of resilience-strengthening strategies

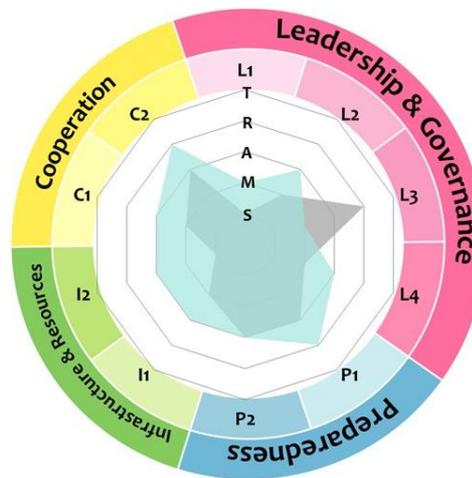
The Resilience Maturity Model defines five maturity stages: **Starting**, **Moderate**, **Advanced**, **Robust**, and **verTebrate**. Each of these maturity stages includes a description of the objectives of each stage, the actors/stakeholders involved in each maturity stage, in addition to a list of policies that should be developed in order to achieve the objectives defined in each maturity stage. The implementation of these policies will allow the CITY to move forward from one stage onto the next. These policies have been classified considering the four resilience dimensions mentioned before. Using these dimensions, an analysis of the city resilience level can be done independently for each dimension as cities can be



at different maturity stages depending on each policy dimension. Additionally, a set of indicators are proposed to monitor the level of implementation of the policies, while the varying roles of stakeholders in the different maturity stages are presented. The model should be used periodically to evaluate the CITY's progress in the resilience building process.



Graph 1: SMR Resilience dimensions



Graph 2: Resilience assessment

## 2.2. STAKEHOLDER TRAINING WORKSHOPS

The stakeholder training workshops on the Resilience Maturity Model took place from the 2<sup>nd</sup> to the 23<sup>rd</sup> of February in the three tier-1 CITIES (the 1<sup>st</sup> one in Kristiansand and then in San Sebastian and Glasgow). The aim of each session was to gather enough information from experts to develop a diagnosis about the current maturity level of each CITY based on the four resilience dimensions the model considers.

The present stakeholders were informed and advised that this process should be repeated periodically to evaluate the city progress in the resilience building process. The training workshops aimed to help testing and validating the tool, while also initiated stakeholder thinking on how it could fit within the European Resilience Management Guideline.



### 2.2.1. METHODOLOGY

Each workshop was facilitated by ICLEI and started with a presentation on the Smart Mature Project, followed by a presentation on the Resilience Maturity Model and its main functionalities, usability and features.

The invited experts + project partners worked on different dimensions, while all groups were facilitated by representatives from ICLEI and the present research partners. Each workshop invited and gathered 10-12 experts from various disciplines, therefore:

- 3 experts worked on leadership and governance (stakeholders from the municipality, in high level positions and elected officials)
- 3 experts worked on preparedness (with linkages to civil protection, emergency services, crisis management)
- 3 experts worked on infrastructure and resources (critical infrastructures and other type of infrastructures)
- 3 experts worked on cooperation (these were stakeholders involved in international networks, departments that work in the cooperation with other stakeholders, city departments that promote citizens participation, NGOs)

In total three exercises were conducted in each workshop and each CITY;

The first exercise (which was also the most important and longer one) aimed at identifying evidences about the actions undertaken by the CITY in each maturity stage. Each group had to go through the policies included in the five maturity stages in order to identify the concrete actions/policies that have been already implemented or are being implemented in their CITY. For each policy/action, the experts needed to provide information regarding:

- Description of the projects, activities and initiatives implemented under the examined policy
- Which are the stakeholders that lead the implementation process of these activities?
- Which are the stakeholders that need to be involved in the policy implementation process and what would their roles be?
- When did the policy start with its implementation (year)?
- They should also define a temporal timeline to implement the policy: short term (finished within 2 years), medium term (finished within 2-5 years) and long term (finished beyond 5 years).



- In the end they were asked to identify barriers, difficulties or challenges to implement the policy

The second exercise focused on reviewing the list of indicators proposed in the Maturity Model and answering the following questions:

- To what extent are these indicators suitable for measuring the development of the policies?
- Do you use them?
- Identify difficulties to measure those indicators
- Are these indicators
- Are you using other indicators to measure the implementation level of the policies you are implementing in your city? Please, specify units for each indicator.
- For each indicator, specify the range of values for each maturity stage.

The third and final exercise focused on stakeholders' roles and involvement in the various maturity stages. The exercise aimed to define the role of each stakeholder in each maturity stage and dimension, reflecting on his or her evolution from a reactive to a proactive attitude. Additionally, the experts were asked to identify the conflicts among these stakeholders when implementing the policies identified in the Maturity Model. They were asked to focus on barriers, problems and challenges that they have encountered in their work so far when implementing specific policies.

### 2.2.2. MAIN FEEDBACK AND RESULTS FROM KRISTIANSAND

The stakeholder training workshop took place on the 2<sup>nd</sup> of February 2017 in Kristiansand and gathered 10 stakeholders that were grouped into four teams; each team worked on each dimension of the Maturity Model. These experts were accompanied by two SMR project partners from the CITY of Kristiansand that brought the total number of participants to 12 people.

In order to make sure that all participants are aware of concepts and ideas around resilience, the workshop was opened by ICLEI with a presentation on commonly accepted definitions of resilience, co-creation and resilient cities. The participants then were able to dive into the exercises and provide input that would help Tecnun validate the various elements of the Resilience Maturity Model. Through an initial discussion, facilitated by ICLEI and CIEM, the CITY of Kristiansand decided that Kristiansand is positioned on the MODERATE stage of the Resilience Maturity Model.



First responders and civil defense officers were present and discussed that they find rather fascinating that the SMR project partners invited them and tried to involve them into the validation process of the Resilience Maturity Model. As one participant from the municipality mentioned, it is interesting that the academia is working together with practitioners to co-create the tools and make them interesting and relevant for each specific city. The municipal employees agreed that when the CITY starts building up on resilience, it should seek for a lot of cooperation agreements with external stakeholders and foster public-private partnerships, while when it has reached a certain resilience level, these agreements should limit to the most needed and robust ones. It is necessary to somehow 'force' the citizens at the beginning to adopt a 'resilience thinking' in order to better understand it.

Sectors (or silos) are a challenge for Kristiansand. Resilience means something very different for e.g. emergency services compared to education or social services, therefore, the city would always need more information and more preparation before each workshop to be able to actively engage stakeholders.

In general, the experts in Kristiansand were able to identify numerous evidences (activities, plans, protocols, meetings) for the already implemented policies included in the early and medium stages (Starting, Moderate, and some for the Advanced stage) of the Maturity Model. They were also able to find evidences for policies that were not being implementing yet, but for which they have already thought of as a future step or they have made plans in the CITY. However, from the advanced stage on, they find difficulties to identify evidences related to more advanced maturity stages. This can lead us to think that Kristiansand does not have achieved the Robust maturity stage and not even the advanced stage. Therefore, as initially classified, Kristiansand can be considered in a Moderate stage regarding resilience. Some of the policies of the Advanced stage may have started to be implemented, but the CITY cannot definitely be considered as advanced in terms of resilience yet.

### 2.2.3. MAIN FEEDBACK AND RESULTS FROM SAN SEBASTIAN

The 2<sup>nd</sup> Maturity Model stakeholder training took place in San Sebastian on the 7<sup>th</sup> of February 2017 and gathered 11 stakeholders that were grouped again into four teams; each team worked on each dimension of the Maturity Model. The same exact methodology was used, the exercises worked out well, but the language barrier appeared to be rather time-consuming in some cases. As a matter of fact, the workshop took place in Spanish, but the exercises and printouts were in English, therefore constant translation was needed. The session was initially intended to be carried out in English, but,



when asked, most of the participants did not feel comfortable speaking in English so the session was carried out in Spanish. The facilitators from Tecnun did a great job in this respect, but there was not enough time to fill out all the printouts. The invited experts carried different backgrounds and disciplines, from sustainability experts to first responders.

During this workshop, as it happened also in Kristiansand, experts from San Sebastian found it easy to identify evidences (activities, plans, protocols, meetings) for the policies included in the early stages (Starting and Moderate) of the Maturity Model. They were also able to find evidences for policies that were not being implementing yet, but they have already thought of implementing in the immediate future (of up to 5 years). However, from the advanced stage on, they experienced enough difficulties in identifying evidences or already implemented actions, activities or projects. Therefore, it is rather evident that the CITY has already surpassed the Starting stage and is on the Moderate stage. The CITY has already implemented some of the major policies that are included in the latter and the experts seemed quite optimistic that the CITY has done some very good steps forward in the previous couple of years. There is actually an interdepartmental Coordination Committee in charge of working on the coherence between the different strategies and plans from a resilience building perspective. The Departments of Environment, Public Safety, Social Welfare and the Office of Strategy are currently working to link under this resilient approach the Municipal Emergency Plan of Donostia / San Sebastián PEMDSS - 2016, the Adaptation Plan, the Klima 2050 Strategy , The Plan for Social Inclusion in DSS (now in elaboration) and the Strategic Plan of the City.

Another participant mentioned that the CITY has learnt from its mistakes of the past and that the current administration is trying to implement activities that will make the CITY more resistant to climate and man made threats. However, many participants pointed out that the main limitations for not applying a specific policy are lying around financial issues that need always to be supported by political decisions. The experts pointed out that the policies defined in the Maturity Model were useful for identifying the current city's resilience maturity stage and detecting limitations that the CITY currently has.

The second exercise validated the extensive list of indicators proposed in the Maturity Model to monitor the effects of implementing policies; the participants agreed that the proposed indicators to evaluate the resilience-building process are useful, but some of them are not easy to understand. Also, many of these indicators are not currently being used in the CITY of San Sebastian. The reason for this is that there is no department at the city council in charge of directly and exclusively promoting resilience and the resilience-building process. Furthermore, there is no person or department



responsible at the city council in charge of collecting information to quantify indicators for sustainability and resilience. Participants also argued that some of the indicators were quite difficult to quantify. For instance, in the leadership and governance group, they felt more comfortable plotting the evolution of the behaviour over time using a graph instead of giving a quantitative value for each indicator and each of the maturity stages.

Finally, participants found it difficult to complete the third exercise that focused on identifying the evolution in the involvement of the stakeholders in the resilience building process throughout the stages of the maturity model. The participants argued that they have no information in this respect or that they are not supposed or allowed to evaluate the involvement of other stakeholders that are active in the CITY. In general, the information they could provide was limited to the collaboration agreements that existed within the city council. Most experts have no information how different stakeholders of the city collaborate with each other. A participant that was familiar with the SMR project since last year mentioned that the first stakeholder mapping in the CITY took actually place during the SMR Kick-off workshop in San Sebastian in April 2016.

Concluding, the participants during the session were committed and engaged and showed much interest in the proposed exercises. They agreed that the Resilience Maturity Model can be a tool that can help them carry out an analysis of the current situation of the CITY regarding resilience and that enables to identify some gaps and think about stakeholders that can be involved in specific processes about implementing resilience building processes. However, the Maturity Model is a tool that provides with a strategic approach, therefore, it is important to involve experts that could share this approach and that could be able to understand correctly the potential, functionalities and strong values of the tool. In this respect, someone could say that the experts who participated in the preparedness group had an operational background, which led them somehow to focus on the prevention and preparedness issues and argue about the definition of strategic policies instead of actions and activities when responding to an event.

#### 2.2.4. MAIN FEEDBACK AND RESULTS FROM GLASGOW

For the Maturity Model Stakeholder Training that took place on the 23<sup>rd</sup> of February 2017 in Glasgow, another method was chosen. Following the CITY's participation in the 100 Resilient Cities programme of the Rockefeller Foundation, Glasgow has been considered as quite advanced regarding its resilience building efforts by the project partners. Therefore, it became apparent that the 9 stakeholders that joined the workshops would repeat information and insights if the same process like in San Sebastian and Kristiansand was followed. Therefore, the stakeholders were grouped into four



teams; each team worked on each dimension of the Maturity Model in a shorter workshop that lasted about 60 minutes each. These experts were accompanied by two SMR project partners from the CITY of Kristiansand that brought the total number of participants to 12 people.

The SMR partners from Glasgow, together with ICLEI, had a long preparatory meeting the day before the workshop; this meeting aimed to:

- Fill out information for the first three maturity stages in the exercises' sheets
- Discuss on the background, scope of work and profiles of the invited stakeholders

The three exercises were conducted in each workshop again; the first exercise aimed at identifying evidences about the actions undertaken by the CITY for the most advanced maturity stages. Once introduced to the tool and its scope, purpose and functionalities, the participants were asked to evaluate the evidences in the first three maturity stages; to add new evidences if they felt that some were missing and to even erase others if they felt that they are not appropriately positioned under the specific maturity stage. Then each group had to go through the policies included in the last two maturity stages in order to identify the concrete actions/policies that have been already implemented or are being implemented in their city.

This exercise led to a variety of results: Glasgow is considered to be in the robust stage, while in terms of cooperation and leadership/governance, Glasgow could even be positioned in a Vertebrate stage of the Maturity Model.

Another striking result of the last workshop with the preparedness group; Glasgow has two Resilience Teams; one consisted by the Sustainable Glasgow department and the city's participation in the 100 Resilient Cities programme, and another one that is consisted by municipal employees in the field of crisis management and emergency planning. These two teams are often having contrasting interests and find it hard to communicate and collaborate, but in this case they appeared to be eager to work with the Maturity Model in the future and be invited in further SMR trainings and workshops.

Glasgow partners and ICLEI took the indicators from the Maturity Model and made another mock-up brief exercise where the stakeholders were asked to draw the trend for each indicator. This exercise aimed to mainly trigger discussion about indicators and their use at the local context. Participants were comfortable discussing what indicators they use in every day work, how these indicators relate to resilience or the respective MM dimension in which they were working on, and also how to identify



good indicators of sustainability, and how indicators can be used to measure progress towards building resilience at local level in Glasgow.

The final exercise was around the stakeholders' roles and responsibilities. The participants were given a matrix of stakeholders and were asked to provide input about where relationships were needed to be developed between stakeholders in order to move to the next stage of resilience maturity. The printouts of these exercises are all with Tecnum that made good use of them in validating and updating the most advanced stages of the Resilience Maturity Model.

Following the completion of exercises, the participants were guided into a facilitated discussion on the importance of policies and indicators on resilience, and the importance of providing community and citizens with information in a clear, easy format, by hoping to make them more accessible and widespread among different citizen groups and spectrums.

## 2.3. PEER-REVIEW PROCESS OF THE RESILIENCE MATURITY MODEL

### 2.3.1. THE PROCESS IN A NUTSHELL

Following these 3 stakeholder training workshops, ICLEI conducted 3 webinars with the tier-2, peer-reviewer CITIES, during which, the implementing CITIES presented the activities and processes conducted so far and provided with detailed feedback on the stakeholder training workshops, while the tier-2 CITIES had the opportunity to ask questions and provide their insights and feedback on the ongoing tool development.

Following the webinars, the peer-review CITIES provided a short report each, summarizing their experience and providing with some recommendations for the further development of the tool. As it was also stated in the description of work, they would provide additional feedback based on the webinars during the review workshop in Donostia-San Sebastian, March 2017. These reports aimed to include feedback on the tool, based on three guiding topics: 1) constraints and commonalities that were identified during the webinar presentations and discussions, 2) comments on usability and transferability and 3) recommendations for the finalization of the tool. The most important information from these reports is summarized in the following sub-chapters. The agendas of each webinar can be



found in the Appendix of this report. The same goes for the guiding questionnaire, used to guide the tier-2 CITIES. The following table shows the plan for all the Resilience Maturity Model webinars:

<b>TIME</b>	<b>ACTIVITY</b>	<b>RESPONSIBLE PARTNER</b>
5 min.	Welcome, introduction and technical info	ICLEI
15 min.	Presentation on the Maturity Model and what happened in the training session	TECNUN
10 min.	Initial feedback from Tier-1 CITY	Tier-1 CITY
5 min.	Initial feedback from facilitator	TECNUN
35 min.	Discussion prompted by set of questions below*	Tier-2 CITY
15 min.	Learning gained from the implementation process that should be to be carried forward to the other implementation sessions (or to be included in the manual in the case of the final implementation session)	TECNUN
5 min.	Wrap-up and next steps	ICLEI



### 2.3.2. PEER-REVIEW REPORT – VEJLE

This report is based on the stakeholder training workshop that took place in Kristiansand and the follow-up online webinar/meeting between ICLEI, TECNUN, and the CITIES Kristiansand and Vejle. The report looks into: constraints and commonalities identified; recommendations for the finalization of the tool, and comments on usage and transferability.

#### CONSTRAINTS AND COMMONALITIES IDENTIFIED

One identified constraint regarding the tool as it is right now, is the lack of explanation on why and how we should use the tool and who would be the relevant persons to use it. In the future this will be needed possibly in a short, but precise way. Also, we have been informed that this will be part of the user manuals, so maybe this problem will be solved in the near future.

Another constraint is that the tool doesn't yet take into account that municipalities are divided into sectors like education, culture, health, economy etc. and thus have different levels of engagement and knowledge in terms of resilience and resilience building activities. This might mean, that different sectors need different kinds of information and maybe that different parts of the MM are of relevance for them. This can of course be taken care of in the further development (as planned by the project partners). Another consideration from us, is that we think that a lot of the problem solving in a resilient society requires direct collaboration across sectors and silos, so it will be important that the tool helps to facilitate collaboration and that it therefore might be a good idea to include other sectors in the further development of the pilot (including allocation of time and resources).

A final comment regarding would be that the tool will probably not reach its goal if it doesn't offer immediate feedback, following each workshop in which it has been used. The results deriving from the use of the tool by a CITY, department or team, are supposed to be the starting point to reflect on the CITY's current resilience maturity. If this is true or not, we were not really able to tell from the information received at the webinar. But if it is the case, this remark could be seen as a comment that we are on the right path regarding this tool. Vejle believes that these constraints would definitely be valid for Kristiansand too, and possibly for other CITIES in Europe.



## COMMENTS ON USAGE AND TRANSFERABILITY

Resilience is seen as an important and valuable subject to work on in recent years. It has generally interest all over the world right now. This means that the usage of the tool is relevant for many CITIES around the world and therefore it is transferable. But not everyone understands what resilience is. That said, the tool needs to make people who are not familiar with some terms to still understand them. It is also important to understand, that all sectors and departments in the municipality should be involved in resilience building efforts. A suggestion would be that all municipalities should develop a resilience strategy in the future.

To make the most of the Resilience Maturity Model it will be important, that stakeholders from different sectors to collaborate and co-create joint activities. It is important to guide stakeholders on how to use the model in their current workflows and how to overcome cultural clashes resulting from within silo-thinking. One way of doing this would be to engage with the employees straight under the CEO, who are working on the long-term strategic plan, as well as people coordinating crime prevention and crisis management; in general engage with coordinators who are responsible for the coordination and management among sectors and those who are responsible with bringing people together.

## RECOMMENDATIONS FOR THE FINALIZATION OF THE TOOL

What is most important here is to create a tool that can be easily disseminated and exploited by CITIES and municipalities around the world. The tool developers need to answer the following questions in order to finalize the tool.

- What is the main purpose and usage of the Maturity Model?
- What are the benefits of using it?
- What you can expect from its results - how you can use the results from the tool, for which purposes?
- Who are the most relevant users of the tool - who would be the relevant stakeholders to work together with the tool?

Also something else should be taken into account; the relationship between the municipality and stakeholders in different municipalities is varying because of legislation and other existing frameworks and rules (formal and informal) and because of how things work regionally and nationally. The tool developers should consider what this means regarding the use of the tool and the relationship between the municipality and stakeholders. The tool should also enable users to put in additional questions, ensure flexibility and take into account that each municipality is unique. The Maturity Model should be put online, and be made flexible, easy to use and user friendly. There should be a function



that proposes the next policies and adds recommendations on how to move from one maturity stage to the next one. The model should also focus on cross sector collaboration - by bringing in other sectors the further development (if possible); it should actually facilitate this cross-sector and across-silo collaboration and provide a thorough and detailed analysis of the results.

### 2.3.3. PEER-REVIEW REPORT – BRISTOL

This report is based on the stakeholder training workshop that took place in San Sebastian and the follow-up online webinar/meeting between ICLEI, TECNUN, and the CITIES San Sebastian and Bristol. The report looks into: constraints and commonalities identified; recommendations for the finalization of the tool, and comments on usage and transferability.

ICLEI and TECNUN talked us through the development of the Resilience Maturity Model. This will include a new addition to the tool for visualising resilience along the SMART trajectory; and against the four resilience dimensions Preparedness, Leadership & Governance, Infrastructure & Resources; and Cooperation; incorporated into a web application. The aims of the Resilience Maturity Model are to i) improve understanding of resilience, ii) improve communication between stakeholders, iii) assess the current resilience status of a city and iv) the identification and support of strategies which reinforce resilience

TECNUN facilitated the implementation workshop with Donostia's stakeholders, taking the eleven stakeholders from strategic planning and policy, through three main exercises which focused on different components of the Resilience Maturity Model – gathering evidence for resilience policies, checking the suitability of indicators and exploring stakeholder involvement. A series of guiding questions helped draw out specific observations on the implementation process and utility of the Resilience Maturity Model tool, which are summarised below against three main headings. We have supplemented San Sebastian's comments as appropriate with our own experiences of using the Resilience Maturity Model tool.

#### CONSTRAINTS AND COMMONALITIES IDENTIFIED

- **WORKSHOP GROUPS:** Stakeholders were organised into four groups to match the four resilience dimensions. On one hand this was helpful because it enabled discussions to go deeper



because of this focus, but on the other hand it would have been helpful to have had a plenary component to enable a more general reflection afterwards and sharing of group work.

- **POLICIES:** Donostia and Bristol are in agreement that the Resilience Maturity Model shows significant potential for assisting the resilience-building process in cities. This potential is hugely dependent on the quality of the policy wording and its applicability to municipalities. Stakeholders were largely comfortable with the wording of the resilience-building policies and where they were placed along the SMART trajectory. Bristol would encourage a thorough review of existing policies included in the Resilience Maturity Model to ensure there is a smooth and logical progression along the SMART trajectory plus good coverage of the SMR focus areas - critical infrastructure, social issues and climate change.
- **LANGUAGE:** There will always be translation problems due to the fact that the Resilience Maturity Model and the SMR tools are written in English.

#### COMMENTS ON USAGE AND TRANSFERABILITY

- **PURPOSE:** Overall workshop participants felt that the Resilience Maturity Model workshop has been a useful exercise. The process enabled the identification of the strengths and weaknesses of city resilience, the sharing of different perspectives and a period of reflection on the resilience-building process. It helps build an appreciation of the roles and leadership of stakeholders at each level of resilience maturity.
- **STAKEHOLDERS:** In practice, it is difficult to convene a workshop which lasts for nearly a whole day as this asks for a significant time commitment from participants. Therefore a shorter session would be preferable for future sessions.
- **RESILIENCE MANAGEMENT GUIDELINE:** It would be helpful to see how the Resilience Maturity Model works alongside the suite of SMR tools, particularly the Systems Dynamics Model which is at a very early stage.

#### RECOMMENDATIONS FOR FINALIZATION OF THE TOOL

1. **TOOL DEVELOPMENT:** Establish city requirements for the next phase of tool development, in particular the cities desired interface and any ICT requirements for the web application.
2. **MANUAL:** Explanation of how the Resilience Maturity Model works alongside its sister SMR tools. Guidance to be given on the main ways of using the Resilience Maturity Model including workshop formats and different approaches to facilitation.



3. POLICIES: Validation of current policy wording with Tier 1 and Tier 2 cities.
4. TRANSLATION: Explore scope for translating SMR tools into key languages.

#### 2.3.4. PEER-REVIEW REPORT – ROME&RIGA

This report is based on the stakeholder training workshop that took place in Glasgow and the follow-up online webinar/meeting between ICLEI, TECNUN, and the CITIES Glasgow, Rome and Riga. The report looks into: constraints and commonalities identified; recommendations for the finalization of the tool, and comments on usage and transferability.

The webinar was meant to share and discuss results of a stakeholder workshop held in Glasgow on the implementation test of the Resilience Maturity Model. The tier-2 cities Rome and Riga were asked to comment and to contribute with their questions, remarks and suggestions. After a thorough introduction and report made by TECNUN and the city of Glasgow, the two CITIES of Rome and Riga were able to provide their comments and suggestions for the Maturity Model that are summarized in the following lines.

##### CONSTRAINTS AND COMMONALITIES IDENTIFIED

For both CITIES, it was very useful to learn and be guided into how the stakeholder training workshop went and how useful it was for the stakeholders of Glasgow. At this stage of the project, someone can say that the Resilience Maturity Model is by now sufficiently comprehensive of all factors, policies and activities that provide with an accurate definition of the resilience stage of a city.

The selection of stakeholders involved in the workshop seemed to be adequate to the required results. In a more definitive phase, stakeholders' participation should certainly include additional appropriate sectors (e.g. first responders, research institutions as well as concerned citizens and media); even stakeholders that are not operating under the 4 dimensions of the Resilience Maturity Model should be actually invited.

There is still some ambiguity on the definition of stakeholders though, i.e. are they subjects having precise functions in resilience building or also those who play a mainly passive role? In this sense, should communities be considered stakeholders? The question is not of secondary importance, because the understanding of resilience by the general public is essential to obtain participation and keep stakeholders engaged and collaborating.



The idea behind the model can form a strong basis for building resilience at any CITY in Europe, even if some cities have specific needs and challenges due to size, climate and other factors. The tool allows having great understanding of where the CITY is now, at what stage, so it is a lot easier to understand what other factors and risks should be taken into consideration.

#### COMMENTS ON USAGE AND TRANSFERABILITY

It should be pointed that the Maturity Model raises important questions on resilience. We believe it would be highly efficient to run additional workshops, invite relevant stakeholders and discuss the issues with regards to the model's guidelines and its features (policies, indicators etc).

Transferability of the system, model and knowledge in general is a very important question. The way the model is built it is possible to think of how it can be employed in our city easily. However, there is still some place left for making the system more user-friendly. A topic we do consider of great importance is the comparison between cities in terms of risks and resilience. The point is relevant for both the Maturity Model and for the RSQ. We consider the application of MM and RSQ in cities belonging to our network as a wide-ranging test for fine tuning these valuable tools, therefore we have the ambition to consider them as part (the central part) of a methodology to assess risks and resilience level in a generality of different cities, within Europe and elsewhere.

#### RECOMMENDATIONS FOR FINALIZATION OF THE TOOL

We would recommend thinking in more detail of how the system can be more user-friendly, easier to understand. As it will be make a huge impact on the actual use of the model. The more people can easily understand it, the more efficient it will be. To do so, in our opinion, indicators and standards are at the base of comparable resilience assessment among different cities, bearing in mind that sometimes different cities can be evaluated (in terms of resilience maturity) by means of slightly different indicators. In overall, the Resilience Maturity Model offers an outstanding methodology to determine a city's resilience level and identify the policies that are needed to improve it; both the Maturity Model and the Risk Systemicity Questionnaire are at the base of resilience policy development. However, it is important not to utilize a too rigid application of indicators.



## 3. PILOT IMPLEMENTATION OF THE RISK SYSTEMICITY QUESTIONNAIRE

### 3.1. IN A NUTSHELL

The Risk Systemicity Questionnaire (RSQ) has been developed and tested in cooperation with the project cities between January and February 2017. The objective of this tool is to support cities in thinking about risk Systemicity scenarios: a sequence of casually related risks that are sometimes creating vicious circles. The RSQ is expected to help cities decide which risk scenarios they need to pay the greatest attention to and to consider possible policies that may be used mitigate these risks. The tool also seeks to raise awareness in cities regarding the level of knowledge the city has regarding these risks. RSQ is not following the traditional risk register (as recommended in EU guidelines), but is actually concerned with the network of interacting events and their dynamics, like:

- Complex ramifications/consequences
- Decision-maker responses causing unintended consequences
- Vicious cycles (feedback) where risk consequences feed themselves (*check Graph 3 in the next page of this report*)
- Focus on risk scenarios rather than individual risks (*check Graph 4 in the next page of this report*)
- Identification of powerful strategies/policies for risk mitigation that will shut down vicious circles dynamics or multiple networks

During the pilot implementation process in the 3 Tier-1 CITIES, ICLEI and Strathclyde implemented 3 Stakeholder Training Workshops (other RSQ tests took place too as can be seen in the SMR D5.5) which aimed:

- To support discussion about risk scenarios that may impact each implementing CITY
- To consider how networks of risks and vicious cycles may impact each implementing CITY
- Provides examples of policies that may be used to help mitigate the risk scenarios

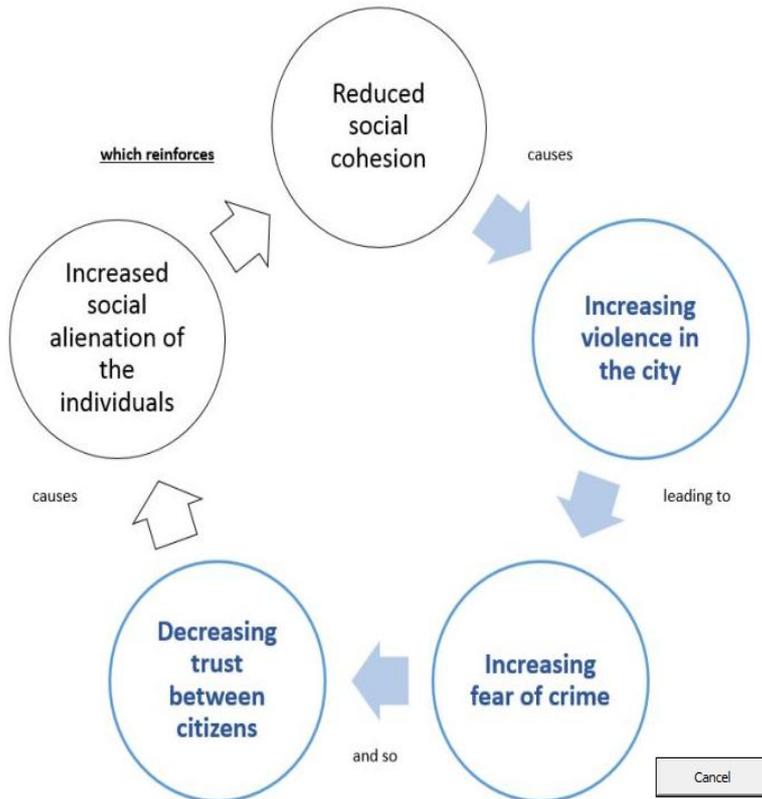


- To allow consideration of where limited resources should be best focussed in each implementing CITY

In order to enable testing among different citizen/stakeholder groups, and validate the usability and transferability of the tool, for each CITY the training workshop had a different objective:

- KRISTIANSAND - ENGAGEMENT WITH A WIDE SET OF CITY STAKEHOLDERS – to raise awareness of issues facing the city and to understand a wide set of views on the impact of risks and how they should be managed
- SAN SEBASTIAN - THOSE INVOLVED IN DEVELOPING THE RESILIENCE STRATEGY FOR A CITY – regular use to monitor changing impact of risk scenarios on the city's resilience strategy
- GLASGOW - CITY PROJECT TEAMS – to consider the impact of risk scenarios on the success of a planned project

Each workshop took a half day of work (from 3, 5 to 5, 0 hours) and as many as possible RSQ themes were completed.



Graph 3: Example of a vicious circle of risks

The scenario starts here and it is marked in blue font throughout

This is a title of the scenario

Those statements which are presented in the form of causal loop can be viewed as pictures. Some scenarios are causal chains which do not form a loop.

<b>"POPULATION'S INCREASED HEALTH PROBLEMS" - causal loop</b>				
Health services are being faced with intolerable pressures...				
CAUSES the quality of health services to reduce significantly				
WHICH LEADS TO health problems in the population rising towards intolerable levels				
CAUSING increasing costs of delivering healthcare services				
WHICH REINFORCES health services being faced with intolerable pressures				
HOW LIKELY DO YOU THINK THIS SCENARIO (in blue) WILL DEVELOP IN YOUR CITY/REGION?				
High likely	Possibly	Unlikely	We don't know	I don't know - someone else does
See policy suggestions for dealing with...		Health services under pressure	Peoples' health problems	

If available, click one of the 'policy' buttons to see policy ideas for the given risk.

Double-click one of the answers to select it

Graph 4: Example of a risk scenario included in the Risk Systemicity Questionnaire



## 3.2. STAKEHOLDER TRAINING WORKSHOPS

### 3.2.1. METHODOLOGY

Each workshop was facilitated by ICLEI and started with a presentation on the Smart Mature Project, followed by a presentation on the Risk Systemicity Questionnaire and its main functionalities, usability and features. Then, the participants are testing the RSQ, following a facilitated process of 5 main steps that are described below:

Step 1: The invited experts and project partners worked on the current version of the Risk Systemicity Questionnaire always in groups, while the discussion was facilitated by Strathclyde University. Each time, the group chooses topic (RSQ tab) to start with, while the facilitator has suggestions based on participants' interests and expertise. Then the facilitator shows an initial summary question (to which the answer should be 'likely' or 'possible' given topic has been chosen on this basis). Typically the initial summary question prompts discussion that will be relevant to scenarios to be seen, and so facilitator points this out and moves the group to the first scenario in the topic.

Step 2: Then, the facilitator reads scenario from text view and then shows the scenario in diagram; in addition the facilitator invites a response – a proposal from someone in the group and this again prompts discussion. The facilitator listens to discussion and proposes an answer (if none proposed by a participant). When a rough consensus appears the answer is 'fixed' and the group can move to next scenario (to keep pace going). Then, the facilitator moves to another scenario and might suggest and answer to the scenario, based on earlier discussion, by clicking on a proposed answer to prompt disagreement/response.

Step 3: The facilitator might use the comment box to summarise the discussion and get agreement from the group to the comments (note: this facility was only available in the Glasgow workshop but is now available following the trainings experience which produced many useful hand-written comments). Moving steadily through the scenarios related to the topic, it is always good to keep reasonable pace that reflects the number of planned to get through and the time available. A topic might take at least 30mins to get through, so this would be good to be kept in mind always.

Step 4: When all scenarios in a topic are complete, the participants are asked to review the final risk and awareness scores (pointing out that awareness is lowered by 'possible' answers). The facilitator is



checking if this 'makes sense' to the group. If not, then discussion with respect the answers provided is conducted. If yes, the group agrees on the next topic – this is often a prompt from the RSQ, but, if not, is usually obvious given the nature of the discussion.

Step 5 (final): The facilitator displays the summary 'tab' with the topics undertaken set out in order of risk level and then in order of awareness, displays the scenarios and their answers and final, concluding discussion is triggered.

### 3.2.2. MAIN FEEDBACK AND RESULTS FROM SAN SEBASTIAN

The 1<sup>st</sup> stakeholder training workshop focusing on the Risk Systemicity Questionnaire was carried out in San Sebastian on the 24/01/2017 having as objective to present to its 8 participants with a number of risk scenarios and to consider whether they have any implications for the resilience strategy for Donostia. As part of the RSQ implementation session, two different groups completed the questionnaire, after which the groups discussed agreements and disagreements. The ensuing discussion, debate and considerations that were stimulated were the most valuable output of the implementation. Most of the stakeholders participating in the workshop agreed that it was useful as a debate tool.

On the other hand, there were different opinions on the usefulness of the tool in terms of collecting knowledge. This was related to the topics themselves. Some participants said that the themes and the risk scenarios were quite obvious or that they were not treated deeply enough by the project team. The technical aspects were also quite soft. They could be really useful if the information was deeper in terms of technical aspects. The topics were found to be already well-known in the city. They insisted on the usefulness of the tool as part of debate but said that we should go into deeper detail on the specific risk scenarios and vicious circles that were introduced to them.

There was also another aspect that was pointed out, which was the language. As the workshop took place in English, and the tool itself includes a lot of information in English, the risk scenarios had to be translated for both groups in Spanish. As a result, the understanding of the topics and the vicious cycles were treated sometimes differently by the two groups as they were translated and interpreted differently by the group facilitators from Tecun. Another thing under debate was related to something technical again, but language related. The RSQ file was only working properly on the computers that



had Excel in English. So this is an important aspect that needs to be considered when implementing training workshops in other CITIES in the future.

Most of the participants of the workshop are engaged in strategic and management activities in the CITY. Some suggested that it would be good to use the RSQ having on board stakeholders that are more familiar with technical tools. However, some other participants argued that the group discipline mixture was adequate. Someone mentioned that apart from the risk scenarios, it would be good to add a tab that would show the consequences of the risks and the vicious circles they create. An example on this: When discussing a risk scenario around mental health problems and the overuse of chemicals, more specific information and data on results and consequences would be needed in order for participants to contextualise the scenario. However, others argued that the tool actually provides with so much information that it can get confusing in the end. This was something that probably happened because of the fact that the two groups were left to work independently on the tool. To overcome this, in the next workshops, all participants were part of only one group with one main facilitator from Strathclyde.

The session was useful as a framework for debate. The aspect that was least beneficial was the knowledge gathered during the training workshop. Participants felt that they needed to spend more time on each risk scenario to actually understand it better and be able to consider policies to mitigate potential risks. This leads to the assumption that more time would need to be spent in these workshops

Some of the participants' comments were: "it is a tool that has potential." "I did not feel I earned anything from this session" "how can we be sure that the most appropriate people with the specific knowledge are brought together to test this?" "Interesting tool"

Given the not so positive feedback, some changes are needed to the facilitation process. 1) Language was a problem 2) It could be more interesting to have all participants in the same group. 3) The topics dealt with were topics very familiar to the city as they have been working on them a lot. A way for participants to gather more knowledge might be to deal with topics they are not very familiar with; this would actually expand the tool's usability then.



### 3.2.3. MAIN FEEDBACK AND RESULTS FROM KRISTIANSAND

The 2<sup>nd</sup> stakeholder training workshop was carried out in Kristiansand on the 9<sup>th</sup> of February 2017 having as objective to present the participants with a number of risk scenarios and to consider whether they have any implications for their work within their organizations and their relationship with the CITY of Kristiansand. As part of the RSQ implementation session, only one group of stakeholders completed the questionnaire, and following each theme, the group discussed agreements and disagreements. The ensuing discussion, debate and considerations that were stimulated were the most valuable output of the implementation. Most of the people participating in the workshop agreed that it was useful as a debate tool. In this case, an external stakeholder group was focus group; also the RSQ topics were chosen per stakeholders that were invited. There were 6 external stakeholders (mainly from NGOs active in the area) plus 3 internal from the Kristiansand municipality who had an observal role.

Strathclyde opened the session with a statement that ‘the RSQ is approaching the ‘strengthen preparedness’ element of the SMR resilience definition’. The tool enables thinking on risk assessment from another point of view, considering the relationships between the different items of a risk registry, how risks interact with each other and what the vicious circles that are created are. The participants were interested to hear that the tool discusses and analyses complex ramifications of specific risk scenarios.

As most of the participants were representatives of NGOs and organizations dealing with social issues, the testing and discussion moved around the RSQ themes dealing with issues like social alienation, social inequalities, ageing population, immigration and health. It was agreed that risk scenarios that are consisting vicious circles are self-sustaining during time and therefore are rather dangerous for a city like Kristiansand that is settled and without any evident problems – the example of two killings outside a school in Kristiansand during the last months of 2016 was mentioned many times; the municipality has tried to control the situation and learn about what is happening among the young population, by checking what is being said and written in social media. According to some participants, the youth of Kristiansand does not trust the adults, and they show that by not sharing information on the incident and growing loneliness and alienation is the case. Also, a lot of discussion evolved around the fact that citizens in Norway in general begin to lose trust to each other. The trust level is different among different society groups and even within the same group. This is linked to the concentration of wealth and the fact that Norway has a large middle class. The participants mentioned growing differences between the wealthy and the not so wealthy; increased inequality of wealth.



While all participants agreed that the RSQ is a valuable tool for the city, they had doubts on what kind of resources are available for the follow up of the risk assessment. The SMR partners discussed that what was most important of this session was to move out of the administration and ask the opinion of external stakeholders in these topics. Most participants seemed interested in participating in the next sessions that will consider the policies to address the risks.

This training workshop achieved its objective as there is better understanding of the tool among participants now, while a minutes report was agreed to be circulated among the workshop participants. Some pointed out the danger that the outcome from the session will get into the wrong hands and be misunderstood (there is some sensitive information regarding immigration, increasing racism and youth loneliness). Also, some mentioned that the tool creates inevitably negativeness when discussing risks and vicious circles.

Some of the participants' comments were: "made me think." "Very worthwhile use of my time" "it was a good opportunity to meet stakeholders that have not met before." "We need to collaborate to address these scenarios." "Look forward to the report." "We must work together and not rely on the city." "Very interesting tool". This was probably the most successful session in terms of engagement and interest captured.

### 3.2.4. MAIN FEEDBACK AND RESULTS FROM GLASGOW

The third and last Stakeholder Training Workshop was carried out in Glasgow on the 21<sup>st</sup> of February 2017 having as objective to present the participants who all are involved in another HORIZON2020 project with a number of risk scenarios and to consider whether they would have implications for the work they have been doing in their project. The team that agreed to trial the tool was the RUGGEDISED (H2020) project team; this team consists of Glasgow City Council and a range of stakeholders including Glasgow Housing Association, Tennents Brewery, Scottish Power, as well as Strathclyde University. A few words about the project: The project itself brings together 3 lighthouse cities developing 32 smart solutions and 3 follower cities developing their own 27 smart solutions. Each city has selected a district where it will implement smart solutions. In the description of work, risk is mentioned many times as in: "identification and management of risks & issues and escalating where necessary".



The implementation process involved 5 project team members, who were presented with 5 RSQ themes and various risk scenarios. The team was asked to evaluate, consider and provide feedback on whether these risks would likely impact the RUGGEDISED project. Air pollution, poverty, inequalities, ageing population were among the most relevant scenarios for the team to consider. Ageing infrastructure would also be interesting. All participants agreed that the RSQ is useful not only to identify potential risks, but also to rate them and identify interdependencies and relationships between them. As part of the RSQ implementation session, the group of participants completed the questionnaire, and then the group discussed agreements and disagreements. The ensuing discussion, debate and considerations that were stimulated were the most valuable output of the implementation.

A lot of discussion evolved around the urban regeneration efforts in which Glasgow is engaged in relation to the increased social inequalities and alienation. The idea that if you regenerate an area in the city, you will improve the quality of life of people is not always working out in Glasgow; this is what the Drygate regeneration case shows, where the city ended up having a regenerated area with poor people living in the middle. Student flats in the Drygate area can be detrimental to community feel. The workshop participants agreed that the RSQ definitely manages to prompt discussion, especially as it uncovers risks and interdependencies that are not that obvious.

The participants discussed that regarding topics related to climate change or smart cities, commonly accepted and systemic behaviours make understanding of actual conditions for real projects sometimes difficult, even more when it comes to evaluation and rating of risks. It becomes eventually hard to evaluate causal chains and the subsequent reaction and motivation of stakeholders and actors involved in a project. Therefore, the tool can facilitate this process and foster stakeholder engagement through better and deeper understanding of the risk landscape. Another potential RSQ quality lies with the fact that triggering discussion around issues like loneliness, bullying, exploitation, inequalities in relation to mental health problems, will have a significant dynamic for future political and municipal will.

Participants had also other comments, minor ones, in terms of the wording used in the tool. For example, “bullying” is not the correct case in Glasgow, should be changed to “exploitation”. Strathclyde was able to use a new function of the tool that enables note keeping while actually working on an RSQ theme.

At the end of the workshop, participants were asked to evaluate the process; some of the comments were: “we should definitely get the final version of the RSQ.” “Very interesting tool” “some of the topics were very interesting, maybe not for the project directly, but definitely for the city of Glasgow or the citizens.” “We need to collaborate more and test more scenarios and themes.”



### 3.3. PEER-REVIEW PROCESS OF THE RISK SYSTEMICITY QUESTIONNAIRE

#### 3.3.1. THE PROCESS IN A NUTSHELL

Following these 3 stakeholder training workshops, ICLEI conducted 3 webinars with the tier-2, peer-reviewer CITIES, during which, the implementing CITIES presented the activities and processes conducted so far and provided with detailed feedback on the stakeholder training workshops, while the tier-2 CITIES had the opportunity to ask questions and provide their insights and feedback on the ongoing tool development.

Following the webinars on the Risk Systemicity Questionnaire, the peer-review CITIES provided a short report each, summarizing their experience and providing with some recommendations for the further development of the Risk Systemicity Questionnaire. As it was also stated in the description of work, they would provide additional feedback based on the webinars during the review workshop in Donostia-San Sebastian, March 2017. The most important information from these reports is summarized in the following sub-chapters. The agendas of each webinar can be found in the Appendix of this report. The same goes for the guiding questionnaire on the RSQ tool. The following table shows the plan for all the RSQ webinars:

Time (mins)	Activity	Responsible Partner
5 min.	Introduction to the activities of the webinar	ICLEI
15 min.	A brief factual explanation of what happened at the implementation workshop (for the benefit of the Tier-2 CITY)	Strathclyde University
10 min.	Initial feedback from Tier-1 CITY	Tier-1 CITY



5 min.	Initial feedback from facilitator	Strathclyde University
35 min.	Discussion prompted by set of questions below*	Tier-2 CITY
15 min.	Learning gained from the implementation process that should be to be carried forward to the other implementation sessions (or to be included in the manual in the case of the final implementation session)	Strathclyde University
5 min.	Wrap-up and Next Steps	ICLEI

### 3.3.2. PEER-REVIEW REPORT – BRISTOL

This report is based on the stakeholder training workshop on the Risk Systemicity Questionnaire that took place in San Sebastian and the follow-up online webinar/meeting between ICLEI, TECNUN, and the CITIES San Sebastian and Bristol. The report looks into: constraints and commonalities identified; recommendations for the finalization of the tool, and comments on usage and transferability.

Strathclyde Business School set-out how the RSQ tool is being implemented across the Tier 1 cities to test its three main applications – i) development of resilience strategies, ii) supporting city project teams and iii) as an engagement tool. Donostia then talked us through the implementation workshop. A series of guiding questions helped draw out specific observations on the implementation process and utility of the RSQ tool, which are summarised below against three main headings. We have supplemented DSS's comments as appropriate with our own experiences of using the RSQ tool.

#### USAGE & TRANSFERABILITY

- **PURPOSE:** The RSQ is proving a useful tool for encouraging debate on city resilience issues. Using a scenarios-based approach which investigates risk awareness and the likelihood of various scenarios playing out in a city, helps flush out different people's perspectives – how they think and



indeed work. Some participants in DSS didn't feel they gained much from the implementation sessions, others found it an interesting exercise. It would be helpful to have clearer objectives for using the RSQ.

- **WORKSHOP GROUPS:** It was a challenge to get the numbers and diversity of people in each workshop group right. Participants in DSS included directors, technical experts and politicians. There were differing opinions as to how well this worked and whether different groupings by discipline e.g. all strategic people together, might have been better.
- **INFORMATION:** There were conflicting views on the depth of information which could have been provided by the RSQ. The topics covered in the implementation session were already well known in DSS. Some participants felt that the session had not necessarily enhanced their knowledge. Usage of the RSQ might be encouraged if the level and quality of information provided goes deeper, including increasing the technical content.
- **ONE TOOL FOR ALL CITIES:** It's a considerable challenge to make one tool applicable across a range of cities. There was a discussion about how certain scenarios may not be applicable to specific cities.

### CONSTRAINTS & COMMONALITIES

- **LANGUAGE:** As the RSQ tool is written in English, there is the risk of people translating the tool in different ways, therefore a translated version is preferable.
- **ICT:** There were some technical problems encountered when using the RSQ tool. The spreadsheet-based tool runs on macros which aren't always permitted by corporate ICT (depending on the security settings for a municipality). This was a particular problem for the city of Bristol.
- **VICIOUS CYCLES:** Some of the linkages presented as vicious cycles didn't feel quite right. More time could be invested in making the scenarios more concrete through improving the causal links. Bristol would also concur with this perspective that the linkages need a sense-check and further validation.
- **TOPICS:** Four out of the nine topics in the RSQ were covered in the session. Scenarios on Health, Ageing and Social Cohesion created more debate than Flooding.

### RECOMMENDATIONS FOR FINALIZATION OF THE TOOL



1. **MANUAL:** Guidance to be given on the three main ways of using the RSQ including workshop formats and different approaches to facilitation.
2. **BESPOKE TOOL:** Explore the potential to tailor the RSQ to each city. It would also be beneficial to have free text cells to keep a log of any comments generated during the discussion.
3. **POLICIES:** Provide a consistent level of information for each policy irrespective of topic and scenario.
4. **VICIOUS LOOPS:** Reduce the number of casual links for each scenario and validate these linkages. We'd also welcome the inclusion of some virtuous circles if possible.
5. **TRANSLATION:** Explore scope for translating SMR tools into key languages.

### 3.3.3. PEER-REVIEW REPORT – VEJLE

This report is based on the RSQ Training/Implementation that took place in Kristiansand and the follow-up online meeting between ICLEI, Strathclyde University, Kristiansand and Vejle. The report looks into: Constraints and commonalities identified; recommendations for the finalization of the tool' and comments on usage and transferability.

#### USAGE AND TRANSFERABILITY

When using the tool in future trainings and workshops, it would be worth spending more time on preparing sessions so that to already know in advance what are the main risks each particular CITY is facing, and therefore to avoid topics and RSQ themes that may not be relevant.

One of the benefits from the workshop in Kristiansand was, that the participants by sitting together and having a vivid and interesting discussion, got more aware of the different roles they have concerning the risk management in their CITY; they also got to know how specific risks can contribute to increasing problems in various ways. It became evident also that all stakeholders have power and role in the CITY when talking about risk management and resilience building efforts.

The tool should be used in accordance with the overall strategic plan for the municipality. This means, that the municipality should be the one to lead efforts when planning how to use the tool. The Risk Systemicity Questionnaire is a tool that definitely should be placed into normal procedures in the municipality. For future use of the tool it is recommended that workshops using the tool are planned together with stakeholders, so that everybody can contribute beforehand to the specific needs and topics to be discussed. Regarding the tool finalization, it would be preferable if the tool was less static



and if it can incorporate features that will make it more user friendly and interactive, for group, but also individual use. Apart from the above, it looks to us like the tool could be a great benefit for municipalities.

### CONSTRAINTS AND COMMONALITIES IDENTIFIED

The risk scenarios are only in English, something that makes them difficult to be understood at times. This means, that it is important for the facilitator to put up the text on a screen and read it aloud as well. It is mainly important to listen to the participants and how they evaluate risks and risk scenarios, not just to use the tool as a systemic risk assessment process. The added value of the tool lies to the discussion that is triggered and to the fact that it brings stakeholders together; therefore, there should always be room for discussion and reflections. In order to use the tool, the user manuals and facilitator training/briefing is definitely necessary.

### RECOMMENDATIONS FOR THE FINALIZATION OF THE TOOL

For the finalization of the tool it is recommended to add an introduction, where users of the tool will be able to read:

- What the tool is and what its objectives are
- Why should the CITY use it – what are the benefits?
- A user manual/guideline that will show step by step how to use the tool

Language seemed partly to be a problem in the training workshop in Kristiansand. Therefore, a tool translation would be preferred at least on site when doing the workshop. The time needed for translation should be considered when developing the agenda for the training workshops.

### 3.3.4. PEER-REVIEW REPORT – ROME&RIGA

This report is based on the RSQ Training/Implementation that took place in Glasgow and the follow-up online meeting between ICLEI, Strathclyde University, Glasgow, Rome and Riga. The report looks into: Constraints and commonalities identified recommendations for the finalization of the tool, and comments on usage and transferability.

### USAGE AND TRANSFERABILITY

The tool is easy to use, and providing with a user manual, other CITIES can definitely implement similar stakeholder training workshops at local level. Rome was able to do that already and with quite a big success with their RSQ Stakeholder Focus Group. Also, the tier-1 CITIES have confirmed that



the workshop was ideal to identify or refresh thinking on potential risks they may face. Rome found the tool easy to use during the workshop; initial briefing with Strathclyde preceded the workshop implementation though.

The CITY of Riga would be very much willing to follow Rome's example and implement a similar workshop on the RSQ, where external stakeholders can be invited. Also, the tool is developed in Excel, something that makes it easy to use individually or in group mode.

A topic that Rome considers of great importance is the comparison between cities in terms of risks and resilience. The point is relevant for both the Maturity Model and for the RSQ. Rome considers the application of MM and RSQ in CITIES belonging to their network as a wide-ranging test for fine tuning these valuable tools, therefore they have the ambition to consider them as part (the central part) of a methodology to assess risks and resilience level in a generality of different cities, within Europe and elsewhere.

#### CONSTRAINTS AND COMMONALITIES IDENTIFIED

In overall, the Risk Systemicity Questionnaire provides an outstanding methodology to assess risks and identify risk interdependencies and to determine the resilience level of each CITY; the tool lies at the base of resilience policy development. Nevertheless, it would be good if the RSQ included an additional feature that would reveal next steps towards mitigating specific risks and in general what should be done towards building resilience policies and measures.

With regards to constraints, ensuring stakeholder involvement is always the biggest problem in both CITIES. For stakeholders it is always about having a risk database; identification and prioritisation of risks is considered to be done by someone else and be always in place. It is good to be able to bring stakeholders together, even not so many of them, and discuss about risks and how they can be a potential threat to their CITY. According to tier-1 CITIES the RSQ trainings helped a lot in making significant step towards stakeholder engagement. This is something that both Rome and Riga need; insightful workshops that will help understand the risk landscape having the stakeholders' input.

#### RECOMMENDATIONS FOR THE FINALIZATION OF THE TOOL

Rome suggests thinking about the introduction of a risk ranking evaluation in order to induce stakeholders to assess their risk perception in the most unbiased way. They again have utilized this



procedure in Rome for the RSQ Stakeholder Focus Group. Finally, they think that the difference between risks and hazards should be taken into consideration. This kind of distinction is currently utilized in natural risk assessment, but it can also be applied to a number of man-made risks (for example, sea storm hazard in New York city is medium to low, but the underlying risk is high to very high, since important infrastructures - like long sections of the metro - are below the average sea level).

The tool development shows already very positive results according to Riga. Most importantly it proved to be usable and makes a huge impact to make the first steps possible. Riga believes that there is still some room for improvement though. For example, smaller things like a progress bar and more sophisticated way of error presentation should be enhanced. This concerns advanced user experience rather than the actual model and its programming. What is most important, is to produce a user-friendly tool that is easy to use and provides with sophisticated presentation of results in order to attract and engage more stakeholders in each CITY.

## 4. OUTLOOK

### 4.1. SUMMARY OF THE REVIEW WORKSHOP INPUT

The second review workshop of the Smart Mature Resilience (SMR) project took place on the 6-8 March 2017 in Donostia-San Sebastian (Spain). The workshop focused on gathering feedback from the joint pilot implementation process of the Resilience Maturity Model and the Risk Systemicity Questionnaire. Both tools were presented to the participants of the workshop that served also as an SMR partner general assembly and was well attended with many representatives from each partner organization. Also, the workshop was used as a test bed to kick-off the pilot implementation of the final two SMR tools, the Resilience Policies Portfolio and the System Dynamics Model, are currently being developed; it also summarized the 3 stakeholder training workshops on the Community Engagement and Communication Tool that remained to finalize the pilot implementation of that tool.



The project partners and some additional invited stakeholders worked hard to provide sound and concrete input, critiques and comments during the San Sebastian meeting, following which the tool developers will integrate the feedback gathered into the final, public version of both the tools.

More information on the agenda, the sessions and the outcomes of the 2<sup>nd</sup> Review Workshop can be found in the SMR project deliverable D5.5.

## 4.2. ASSESSMENT OF STRENGTHS AND WEAKNESSES OF THE TOOL

STRENGTHS	WEAKNESSES
<b>RISK SYSTEMICITY QUESTIONNAIRE</b>	
<p>Traditional risk registers have been used extensively for many years and they are not considered innovation in the field anymore. The Risk Systemicity Questionnaire is rather unique as it moves beyond and shows the interaction and interdependencies between risks and the occurrence of vicious circles at city level.</p>	<p>The Risk Systemicity Questionnaire has only 9 completed themes so far. Some cities would possibly need more themes on climate change or critical infrastructure; the social dynamics topic is quite well covered though.</p>
<p>It can facilitate the creation of formal, informal and non-formal relationships between the CITY and all relevant and involved stakeholders.</p>	<p>Lack of local knowledge on stakeholders and their work can lead to misunderstandings and incomplete results</p>
<p>It is easy to use, when a user manual is in place, and if the facilitators receive basic training beforehand</p>	<p>Additional effort in design elements and user friendliness is needed. In order for the tool to be commercially exploitable, a user-friendly, online version is probably needed.</p>
<p>The setting of using the RSQ in interactive</p>	<p>It may be difficult for people to engage if the only</p>



workshops with project teams and external stakeholder groups can be very helpful in creating a common ownership feeling that will foster engagement and collaboration

available language is English – allocation of resources for translation services is needed

**STRENGTHS**

**WEAKNESSES**

**RESILIENCE MATURITY MODEL**

The tool is able to stimulate dialogue about resilience and resilience building efforts in a CITY. It can be a powerful strategy and policy tool that can influence political will

The tool needs a lot of work and allocation of resources to be used properly; it also requires advanced knowledge of the local context, policies, available indicators and activities happening in the CITY.

The tool provides knowledge on the CITY's resilience status and the ideal path to build up resilience. It can be used by higher level employees and elected officials and provide with a powerful tool that can be used in strategic meetings and planning procedures.

It may be difficult for people to engage if the only available language is English – allocation of resources for translation services is needed. Some of the policies need to be further analysed and described

It can promote identification of the strengths and weaknesses of city resilience, it can enable sharing of different perspectives and provides with a period of reflection on the resilience-building process.

It can be difficult to convene a workshop which lasts for nearly a whole day as this asks for a significant time commitment from participants.



It helps build an appreciation of the roles and leadership of stakeholders at each level of resilience maturity.

The tool can be problematic when bringing together people across sectors or silos; meetings can be lengthy and consensus may be difficult to be reached.

### 4.3. GENERAL RECOMMENDATIONS FOR THE FINALIZATION OF THE TOOLS

Having collected the input from all partners and CITIES involved in the project, the following table summarizes some recommendations for the finalization of the Resilience Maturity Model and the Risk Systemicity Questionnaire.

TOOL	RECOMMENDATIONS
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>RESILIENCE MATURITY MODEL</b></p>	<p>A user manual that provides guidance on how to use the MM together with facilitation approaches and timeframe for repetitive workshops should be produced</p>
	<p>The MM should engage and involve stakeholders outside of the four dimensions of the tool, to foster cross-sector and across-silo cooperation and collaboration</p>
	<p>Additional work is needed for the MM indicatorsö quantitative and qualitative indicators should be combined for the same policies, while for some a trend should be enough</p>
	<p>The MM indicators should be able to measure the performance of different resilient city initiatives and activities. The MM should take into consideration and integrate the varying characteristics of European CITIES</p>



When and if the tool is put online, it should incorporate a function that would provide immediate feedback on the performed activities and would provide an estimation of the effort needed by the CITY in order to move to the next maturity stage

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Translation of the MM policies and indicators should be considered. If this is not possible, then at least the manuals should be translated.

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## RISK

## SYSTEMICITY

## QUESTIONNAIRE

A user manual that provides guidance on the three main ways of using the RSQ including workshop formats and different approaches to facilitation should be produced

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Translation of the RSQ themes and risk scenarios should be considered. If this is not possible, then at least the manuals should be translated.

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Some effort should be done regarding wording and the use of specific expressions in the description of the risk scenarios, in order to fit the context of more CITIES, but also avoid increased negativeness when discussing risks and vicious circles.

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General recommendation for facilitators: the users should be asked to choose the RSQ themes in which they would like the discussion to focus upon; discussion about topics that are not relevant for a CITY should be avoided.

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The tool should include concrete information about resilience building policies and risk mitigation measures; , it should incorporate a function that would provide immediate feedback



on the performed activities to mitigate specific risks.

## APPENDIX

### APPENDIX I: STAKEHOLDER TRAINING WORKSHOP AGENDAS

1<sup>st</sup> MATURITY MODEL STAKEHOLDER TRAINING KRISTIANSAND – 02/02/2017

TIME	SESSION	RESPONSIBLE
9.00-9:15	Arrival & Coffee	
9.15-9.25	Brief introduction to SMR project and the training activities	ICLEI
9.25-9.40	Introduction to the Resilience Maturity Model	ICLEI, Kristiansand Kommune
9.40-10.00	Expectations and concerns in groups	
10.00-11.30	1st Group exercise – Resilience Policies	ICLEI/CIEM
11.30-12.30	Lunch	
12.30-13.30	2nd Group exercise – Indicators	ICLEI/CIEM



<b>13.30-13.45</b>	<b>Coffee break</b>	
<b>13.45-14.45</b>	<b>3rd Group exercise – Stakeholder mapping</b>	ICLEI/CIEM
<b>14.45-15.00</b>	<b>Wrap-up, WP5 Next Steps</b>	ICLEI

2<sup>nd</sup> MATURITY MODEL STAKEHOLDER TRAINING SAN SEBASTIAN – 07/02/2017

<b>TIME</b>	<b>SESSION</b>	<b>RESPONSIBLE</b>
<b>9.00-9:15</b>	<b>Arrival &amp; Coffee</b>	
<b>9.15-9.25</b>	<b>Brief introduction to SMR project and the training activities</b>	ICLEI/TECNUN
<b>9.25-9.40</b>	<b>Introduction to the Resilience Maturity Model</b>	TECNUN
<b>9.40 -11.40</b>	<b>1st Group exercise – Resilience Policies</b>	TECNUN
<b>11.40 – 12.00</b>	<b>Coffee Break</b>	
<b>12.00-13.15</b>	<b>2nd Group exercise – Indicators of the MM</b>	TECNUN
<b>13.15-14.00</b>	<b>LUNCH</b>	



<b>14.00-15.00</b>	<b>3rd Group exercise – Stakeholders in the MM</b>	<b>TECNUN</b>
<b>15.00-15.10</b>	<b>Wrap-up, WP5 Next Steps</b>	<b>ICLEI</b>

3<sup>rd</sup> MATURITY MODEL STAKEHOLDER TRAINING GLASGOW – 23/02/2017

<b>TIME</b>	<b>SESSION</b>	<b>RESPONSIBLE</b>
<b>9.00-10:00</b>	<b>Infrastructure and Resources MM Session</b>	<b>ICLEI</b>
<b>10:00–10:30</b>	<b>Reflections with SMR team</b>	<b>ICLEI/GCC</b>
<b>10.30-11:30</b>	<b>Co-operation MM Session</b>	<b>ICLEI</b>
<b>11:30-12:00</b>	<b>Reflections with SMR team</b>	<b>ICLEI/GCC</b>
<b>12:00 – 13:30</b>	<b>Lunch</b>	
<b>13:30-14:00</b>	<b>Reflections with SMR team</b>	<b>ICLEI/ GCC</b>
<b>14:00-15:00</b>	<b>Leadership and Governance MM Session</b>	<b>ICLEI</b>
<b>15:00-15.30</b>	<b>Reflections with SMR team</b>	<b>ICLEI/ GCC</b>
<b>15:30-16:30</b>	<b>Preparedness MM Session</b>	<b>ICLEI</b>



1<sup>st</sup> RSQ STAKEHOLDER TRAINING SAN SEBASTIAN – 24/01/2017

TIME	SESSION	DESCRIPTION
9.15-9:30	Arrival & Coffee	
9.30-9.45	Brief introduction to SMR project and the training activities	Vasileios Latinos, ICLEI Jose M. Sarriegi, TECNUN
9.45-10.05	Introduction to the Risk Systemicity Questionnaire	Susan Howick - Strathclyde
10.05-12.35	Group exercise – Using the RSQ Including Coffee Break	Strathclyde
12.35-12.50	Results and Discussion	Strathclyde
12.50-13.00	Wrap-up, WP5 Next Steps	Overview of the next steps, ICLEI

13.00 LUNCH

2<sup>nd</sup> RSQ STAKEHOLDER TRAINING KRISTIANSAND – 09/02/2017

TIME	SESSION	DESCRIPTION
9.00-9:15	Arrival & Coffee	
9.15-9.20	Welcome and intro to the training activities	Vasileios Latinos, ICLEI
9.20-9.30	Introduction to Resilience and the	Jose J. Gonzalez, CIEM



**SMR project**

<b>9.30-9.45</b>	<b>Introduction to the Risk Systemicity Questionnaire</b>	Colin Eden, Strathclyde University
<b>9.45-11.35</b>	<b>Group exercise – Using the RSQ Social Cohesion, Social Alienation, Ageing, Inequalities Including Coffee Break</b>	Colin Eden, Strathclyde University
<b>11.35-12.10</b>	<b>Results and Discussion</b>	Colin Eden, Strathclyde University
<b>12.10-12.30</b>	<b>Brief discussion on meeting objectives</b>	Strathclyde, ICLEI
<b>12.30</b>	<b>LUNCH</b>	

3<sup>rd</sup> RSQ STAKEHOLDER TRAINING GLASGOW – 21/02/2017

<b>TIME</b>	<b>SESSION</b>	<b>DESCRIPTION</b>
<b>9.15-9:30</b>	<b>Arrival &amp; Coffee</b>	
<b>9.30-9.45</b>	<b>Brief introduction to SMR project and the training activities</b>	Vasileios Latinos, ICLEI
<b>9.45-10.05</b>	<b>Introduction to the Risk Systemicity Questionnaire</b>	Susan Howick - Strathclyde
<b>10.05-12.35</b>	<b>Group exercise – Using the RSQ</b>	Strathclyde



**Including Coffee Break**

<b>12.35-12.50</b>	<b>Results and Discussion</b>	Strathclyde
<b>12.50-13.00</b>	<b>Wrap-up, WP5 Next Steps</b>	Overview of the next steps, ICLEI
<b>13.00</b>	<b>LUNCH</b>	

## APPENDIX II: WEBINAR AGENDAS

### MATURITY MODEL WEBINAR KRISTIANSAND-VEJLE – 06/02/2017

<b>TIME</b>	<b>ACTIVITY</b>	<b>RESPONSIBLE PARTNER</b>
12.00-12.05	Welcome, introduction and technical info	ICLEI
12:05-12:20	Presentation on the Maturity Model and what happened in the training session	TECNUN
12.20-12.30	Initial feedback from Tier 1 city	Kristiansand
12.30-12.35	Initial feedback from facilitator	TECNUN
12.35-13.10	Discussion prompted by set of questions below*	Vejle



13.10-13.20	Learning gained from the implementation process that should be to be carried forward to the other implementation sessions (or to be included in the manual in the case of the final implementation session)	TECNUN
13.20-13.30	Wrap-up and next steps	ICLEI

#### MATURITY MODEL WEBINAR SAN SEBASTIAN-BRISTOL – 13/02/2017

TIME	ACTIVITY	RESPONSIBLE PARTNER
10.00-10.05	Welcome, introduction and technical info	ICLEI
10:05-10:20	Presentation on the Maturity Model and what happened in the training session	TECNUN
10.20-10.30	Initial feedback from Tier 1 city	Donostia
10.30-10.35	Initial feedback from facilitator	TECNUN
10.35-11.10	Discussion prompted by set of questions below*	Bristol



11.10-11.20	Learning gained from the implementation process that should be to be carried forward to the other implementation sessions	TECNUN
11.20-11.30	Wrap-up and next steps	ICLEI
<u>MATURITY MODEL WEBINAR GLASGOW-ROME-RIGA – 24/02/2017</u>		
TIME	ACTIVITY	RESPONSIBLE PARTNER
12.00-12.05	Welcome, introduction and technical info	ICLEI
12:05-12:20	Presentation on the Maturity Model and what happened in the training session	TECNUN
12.20-12.30	Initial feedback from Tier 1 city	Glasgow
12.30-12.35	Initial feedback from facilitator	TECNUN
12.35-12.50	Discussion prompted by set of questions below*	Rome/Riga

## D5.4 PEER-REVIEW MEETING 2



12.50-13.00	Learning gained from the implementation process that should be to be carried forward to the other implementation sessions	TECNUN
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13.00-13.10	Wrap-up and next steps	ICLEI
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### RSQ WEBINAR SAN SEBASTIAN-BRISTOL – 30/01/2017

TIME	ACTIVITY	RESPONSIBLE PARTNER
11.00-11.10	Welcome, introduction and technical info	ICLEI
11:10-11:15	A brief factual explanation of what happened at the implementation workshop (for the benefit of the Tier 2 city)	Strathclyde University
11.15-11.25	Initial feedback from Tier 1 city	Donostia
11.25-11.30	Initial feedback from facilitator	Strathclyde University
11.30-12.00	Discussion prompted by set of questions below*	Bristol

## D5.4 PEER-REVIEW MEETING 2



12.00-12.10	Learning gained from the implementation process that should be to be carried forward to the other implementation sessions (or to be included in the manual in the case of the final implementation session)	Strathclyde University
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12.10-12.15	Wrap-up and next steps	ICLEI
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### RSQ WEBINAR KRISTIANSAND-VEJLE – 13/02/2017

TIME	ACTIVITY	RESPONSIBLE PARTNER
12.00-12.10	Welcome, introduction and technical info	ICLEI
12:10-12:15	A brief factual explanation of what happened at the implementation workshop (for the benefit of the Tier 2 city)	Strathclyde University
12.15-12.25	Initial feedback from Tier 1 city	Kristiansand
12.25-12.30	Initial feedback from facilitator	Strathclyde University
12.30-13.00	Discussion prompted by set of questions	Vejle



below\*

13.00-13.10	Learning gained from the implementation process that should be to be carried forward to the other implementation sessions	Strathclyde University
13.10-13.15	Wrap-up and next steps	ICLEI

RSQ WEBINAR GLASGOW-ROME/RIGA – 24/02/2017

TIME	ACTIVITY	RESPONSIBLE PARTNER
11.00-11.05	Welcome, introduction and technical info	ICLEI
11:05-11:15	A brief factual explanation of what happened at the implementation workshop (for the benefit of the Tier 2 cities)	Strathclyde University
11.15-11.25	Initial feedback from Tier 1 city	Glasgow
11.25-11.30	Initial feedback from facilitator	Strathclyde University

## D5.4 PEER-REVIEW MEETING 2



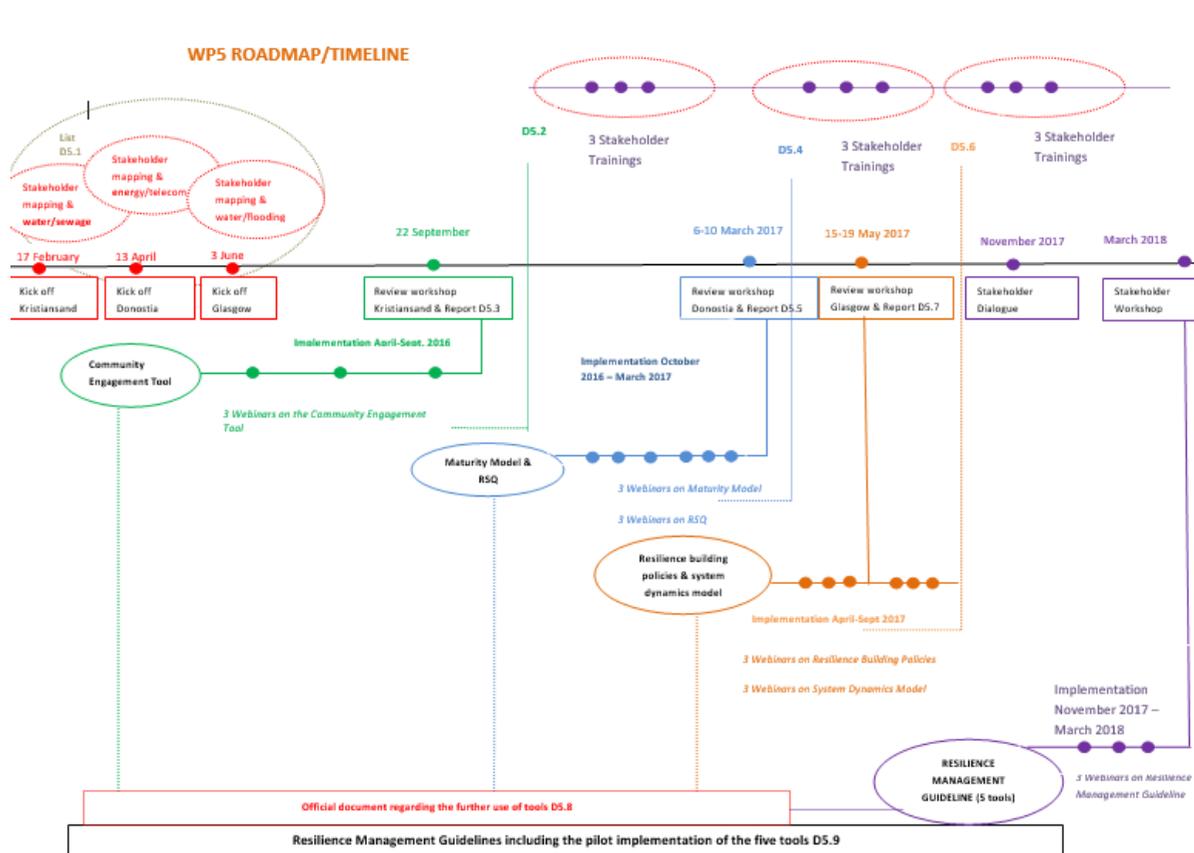
11.30-11.50 Discussion prompted by set of questions Rome/Riga  
below\*

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11.50-12.00 Learning gained from the Strathclyde University  
implementation process that should be  
to be carried forward to the other  
implementation sessions



# APPENDIX III: UPDATED TIMELINE FOR THE PILOT IMPLEMENTATION/ROADMAP





## APPENDIX IV: WEBINAR GUIDING QUESTIONNAIRES

### MATURITY MODEL GUIDING QUESTIONNAIRE

- Was the implementation session useful for the participants? What was of most benefit? What was of least benefit?
- Do you think that the MM prompted participants to reflect on the city resilience building process?
- Do you think that the MM is a useful tool to identify the current city's strengths and weaknesses regarding resilience?
- Do you think the MM can improve the communication between stakeholders?
- Do you think the MM can help to identify and support the strategies regarding enforcement of resilience?
- Do you think the assessment provided by the MM on the city's current maturity stage in preparedness, leadership, cooperation and infrastructure dimensions can be useful to improve the resilience building process?
- Did the implementation workshop meet its objectives?
- Did the participants believe that the time invested in the session was worth the value gained from the session?
- Are there any recommended changes to the facilitation process?

### RSQ GUIDING QUESTIONNAIRE

- Was the implementation session useful for the participants? What was of most benefit? What was of least benefit?
- Do you think that the RSQ prompted participants to think afresh about risks facing the city?
- Did the implementation workshop meet its objective? (Note that the 3 workshops have different objectives)
- Did the participants believe that the time invested in the session was worth the value gained from the session?
- Are there any recommended changes to the facilitation process