

Final report



Promoting and Implementing Strategies for Risk Management and Assessment

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1. Project objectives, partnership and deliverables

The PRISMA (PRomoting and Implementing Strategies for risk Management and Assessment) project focuses on two objectives. The first objective of the 5 project partners is to test the cross-sectoral implementation of the risk assessment and risk management (prevention) strategies as described in the brochures and handbook of the InterregIVC project MiSRaR (Mitigation Spatial Relevant Risks in European Regions and Towns). The partners will test these strategies on the following priority risks: rail transport of dangerous substances (Safety Region South-Holland South, NL), risks of dangerous substances in SEVESO II industries and its road and rail transport (municipality of Aveiro, Portugal), urban fires in the historic city centre (Municipality of Mirandela, Portugal), fires in the urban area with protected wooden houses (North Tallinn, Estonia) and forest fires (SZREDA).

The second objective is to promote risk management and organize knowledge exchange between other local, regional and provincial governments and cross-sectoral risk management partners within the European Union (and associated states) on:

- the concepts, strategies, best practices and lessons learnt on risk assessment, risk management and the relation with disaster preparedness as described in the aforementioned handbook;
- the practical experiences with the implementation of the handbook as described under objective 1;
- the consequences of the 'EU staff working paper on Risk Assessment and Mapping Guidelines for Disaster Management' for local, regional and provincial governments and the possibilities for connecting national and decentralized risk assessment and risk management policies.

When we drafted the project we foresaw two specific results. 1.) the development of 5 risk management strategies for the priority risks of the partners and 2.) the promotion and dissemination of the risk management approach as described in the MiSRaR handbook through 3 international congresses). The overall expected result was to create better knowledge and understanding within the EU on the principles of risk management and risk assessment. This report will both reflect on the achievement of the third and final phase of this project (following on the first two reports) and the question to what extent the initial overall and specific results have been achieved.





2. Executive Summary Third Semester

During the third semester of the project, project activities focused on the drafting of 5 policy memoranda on risk management strategies for political decision makers in the 5 partner towns and regions and the drafting of 5 risk management plans. The partners were brought together in the fourth advice and counseling meeting among the partners in Aveiro, preparing the partners towards the implementation of their risk management plans. Following this meeting, all partners organized local meetings with their respective local networks on the implementation of these strategies.

During this semester also the 3 PRISMA conferences were organized.

We are proud to report that all activities have been implemented as planned and also the financial resources have been used as planned although some minor deviations occurred that are explained in the financial deviation section. They did however not influence the overall project implementation and its outputs and all deviations occurred on a budget neutral basis. The project has been evaluated by the project partners during the evaluation meeting on June 5th and 6th in Dordrecht (VRZHZ). The specifics of the major outcomes of the evaluation are highlighted in section 7 of this report.





3. Evaluation of project management/implementation process

The cooperation among the partners has been excellent. The only challenges we encountered related to some political obstacles at partner level due to change of political leadership (Aveiro) and two changes of project manager in North Tallinn, which required additional time in relation to sound project financial management and resulted in some delays of operations. The effects could however be limited as a result of the strong cooperation of the partners.

Partners were in regular contact with each other and were cooperative and supportive to one and another. There were no internal or external difficulties. The European cooperation aspect of this project has already strengthened the quality of each partner within the project as experiences and lessons learned are easily shared and feedback in relation to challenges met are exchanged at an European level. It is important to mention that the level of experience in the fields of disaster mitigation differed to a great extent and some of the partners encountered significantly more challenges than others, purely as a result of the level of development in their respective cities or region. Also, the political environments in each partner differed significantly, which illustrated well the need of lobby within a mitigation process, but also hindered some of the partners more in their implementation than others. The added value of the mutual cooperation, not only through the partner advice and counseling meeting, but moreover through the continuous cooperation on these subjects, proved to be invaluable in relation to the development of the risk management strategies. Partners continuously provided good practices, feedback on drafted documents and advice throughout the project.





4. Follow up on deviations from second semester

In the previous report, we indicated that three partners encountered delays in the implementation of their activities. Underneath, we have indicated the activities that were delayed during the second period and how they were followed during the third period.

4.1 **Mirandela:** Risk Assessment Report

Follow up: Mirandela submitted its risk assessment report in March 2014

4.2 **Mirandela:** 2st local risk assessment meeting

Follow up: Mirandela organized its second local risk assessment meeting on the 28th of October, 2013.

4.3 **SZREDA:** 2st local risk assessment meeting

Follow up: SZREDA organized the second risk assessment local meeting on the 17th of December 2013.

4.4 **Tallinn:** 2st local risk assessment meeting

Follow up: North Tallinn organized the Meeting on the 3rd of January 2014.

4.5 **SZREDA:** first and second local capability assessment meeting

Follow up: SZREDA organized the first capability assessment meeting on the 7th of April 2014 and the second on the 8th of May 2014.

4.6 **Tallinn:** first and second local capability assessment meeting

Follow up: Tallinn organized its first local capability assessment meeting on 2nd of April 2014.

The second local capability assessment meeting was held on 9th of May 2014.





5. Activities, deliverables and deviations for the third semester

5.1 Task C – Performing a capability assessment

C1 Policy Memorandum on risk management strategy for political decisions makers including CBA

During the third period of the project, all partners drafted a memorandum on risk management strategies for the political decision makers in their respective towns and regions. The memoranda are included as a annex.

Deliverables for C1	
What?	Delivered?
5 Policy Memoranda on risk	Yes

Deviations for Task C

Deviations for Task C	
Deviation	Explanation / Solution
There are no deviations for task C	

5.2 Task D

D1 Risk management plan including risk assessment, capability assessment and implementation strategy

Following on the previous steps of the MiSRaR mitigation approach, all partners drafted their risk management plans. (included)

Deliverables for D1	
What?	Delivered?
5 Risk Management Plans	Yes

D2 The fourth partner advice and counselling meeting in Portugal on risk management strategies

The fourth PAC-meeting was held in Tallinn on January 7th and 8th, 2014. During the meeting the local partners from Tallinn were present as well. The project partners presented their capability assessments and compared and discussed their work and relevant lessons learnt. The different approaches, lessons learnt and recommendations for the MiSRaR handbook have been described in detail in the meeting report . During the meeting, the drafting of the policy memorandum for the political decision makers was discussed as well as the expected political perspectives in their organizations.





During the second day, partners discussed the development of a risk mitigation strategy and the drafting of a mitigation plan. The relevant chapter of the MiSRaR handbook and practical ideas were used to capacitate the partners in their work during the third period. At the end of the meeting, partners agreed on the actions to be taken for preparation of the conferences and discussed a few project management issues.

All reports of the local and international meetings are included as an annex.

Deliverables for D2	
What?	Delivered?
Advice and Counselling meeting	Yes

D3 Five local implementation strategy meetings

All partners organized their fourth local implementation strategy meeting. The meetings were used to present and disseminate the documents drafted and to gather feedback on the drafts as to further develop the memorandum and the risk management plans.

Deliverables for D3	
What?	Delivered?
Five local implementation strategy meetings	Yes

Deviations for Task D

Deviations for Task D	
Deviation	Explanation / Solution
There are no deviations for task D	

5.3 Task E Promoting lessons on MiSRaRs risk assessment and risk management strategy

E 1 Produce project dissemination materials

During the project period attention was given on a regular basis to the project and the importance of a structured risk management in line with the MiSRaR approach. Among the most relevant dissemination instruments were the factsheet, the four PRISMA newsletters and several press releases / radio interviews. The newsletter was available on the different websites of the partners. The media (newspapers and TV) was also involved as a result of press conferences organized in Stara Zagora, during the fourth Partner Advice and Counseling meeting and the first conference, and in Tallinn during the second conference.

The project partners organized 14 presentations (overview and presentations are included) which contributed to a great extent to the level of dissemination of the project results. Not only on the partner level, but also on a national scale. Among the most





relevant dissemination moments, was a presentation to the Secretary General of Home Affairs of Estonia during his visit to the Netherlands and a number of presentations during the closing conference of the EU project EMRIC. Also a number of presentations were held for the partners of the Camino project en for experts of the different safety regions in the Netherlands on risk assessment. As a result of these presentations, the Safety Regions in the Netherlands adopted the approach to use risk assessment as an instrument towards structured risk management as described in the MiSRaR approach. PRISMA partners are involved in this network of experts, which deals with changing the Netherlands policies in this field. Mirandela and VRZHZ has written and published an article on mitigation of forest fires which has been placed in Earthzine, thus also generating attention for both MiSRaR as well as PRISMA.

As scheduled conferences were organized in Stara Zagora (Bulgaria), Tallinn (Estonia) and Aveiro (Portugal). With an average of 40 participants and a lot of attention from the press and the regional and national governments in these countries, we consider these conferences very successful. It is important to mention that the content of the conferences and this project is rather "specialistic", which draws a primarily technical crowd. A conference report and a presentation "impression of the PRISMA conferences" are available on the website. The Lead Partner also produced a Layman's report on the project that has been used to disseminate the project results to a wider audience. (all documents included as annexes)

Deliverables for E1	
What?	Delivered?
5 Translated Third Press Releases 5 Translated Fourth Press Releases 5 Translated Third Newsletters 5 Translated Fourth Newsletters 1 Layman's report	Yes

Deviations for Task E	
Deviation	Explanation / Solution
There are no deviations for task E	





6. Presentation of the technical results

Underneath we present the main overall results of the PRISMA project, its initial purposes and an evaluation of the project results.

A. Stakeholder Analysis

Purpose: The objective of this activity was twofold. Within the project context the stakeholder analysis aimed at mapping the relevant networks and potential partners per partner case in the specific geographical areas (in most cases a town, but sometimes a region). On an operational level agreements could be made with the network partners. In more general terms, within the MiSRaR approach, a stakeholder analysis is used to not only target potential partners and alliances, but also potential "points of resistance". Identifying these counter forces at an early stage enables its mitigation when implementing risk management activities. Each separate PRISMA case was used to test the MiSRaR approach in this field.

Evaluation: All partners implemented a stakeholder analyses and this turned out to be a highly relevant and useful exercise. It is important to indicate that due to the fact that these were pilot cases, the partners had to make a deliberate decision to limit the amount of possible partners within the project to keep it feasible. Most important factors in these decision was the limited availability of both time and funds.

In the MiSRaR approach the formal declaration of principles plays an important role. It is here that partners ran into more practical issues. The declaration turned out to be a valuable instrument to indicate mutual intention in the process, but it was not feasible to turn them into legal frameworks at the local level. As a formal instrument, considering the multiple stakeholders involved, in some cases this became a contra-productive procedure as it takes away flexibility during the risk management implementation phase. Framing it at the start is therefore not always desirable. Declaration were drafted and widely supported by the partners, but were not signed as formal documents. They became more living documents that changed as needs changed during the subsequent mitigation process.

As indicated in the MiSRaR approach, the stakeholder analyses is not a one-time-only activity at the start of a process, but a continuous activity that needs reassessment on a continuous basis. Because we aimed for a consistent project approach for PRISMA, the stakeholder analysis in PRISMA has been approached as a concrete step at the beginning of the project, linked to direct outputs. The practice however showed the significant added value of making the stakeholder analysis (and subsequent partner involvement) a continuous part of the risk mitigation process. Not in the last place because each step in the process often requires different types of partners. It is important to mention that a broad approach at the start is essential with an aim to create broad support for the follow up. During the capability assessment, other parties will become relevant. During the process, more focus will be put on the positioning of the risk scenario's and the types of





measures. This means that some partners will not be relevant anymore during the implementation of the mitigation strategy. As said, continuous reassessment is essential. As a result of the project, the partners have created a much stronger local network, that on the basis of shared principles will more easily cooperate in the future.

European Value-added: The added value on the European level in our view should be viewed within the context of the applicability of the MiSRaR approach on a European level. It has been our objective to sharpen the MiSRaR approach on the basis of the cases in the PRISMA project. In relation to this specific step, the lessons learned have been transferred in our MiSRaR approach thus making it a more relevant instrument on the European level.

B. Risk Assessment Report

Purpose: The objective of the risk assessment report is to obtain insights in the types of risks in a specific geographical area. These insights are used as a basis for the further development of the risk mitigation approach. It does not only concern knowledge on the chance that a risk will occur, but also assessments of vulnerability, expected developments, specific risk location (spatial distribution), different types of scenario's etc. These insights provide concrete tools for the development of measures and the prioritizing of these measures.

Evaluation: All partners implemented a risk assessment. Depending on the specific local situation and the types of risk they deal with, different types of instruments have been used.

It has become apparent that the risk-analysis is an essential part of the approach and a rightfully part of the mitigation process. Without a proper insight in the aspects of a specific risk, it is impossible to develop a well-founded risk policy. At the partner level, it became clear that the essential instruments and data to do so were not always present. The implementation of the analysis also turned out to be highly labour intensive. It has become clear that there is a great need for a common (European), user friendly set of analyses instruments and data sets to facilitate this crucial step at the local level. It is important to mention that this need was felt at all partners despite their different local realities and level of development in this field.

It has also become clear that the risk analysis has to be based on a very wide set of indicators, including for example the chance that risks occur and the effects of smaller and larger scenario's. These indicators and assumptions have not been standardized on a European level, what leads to very different results in an analysis that cannot be explained by factual differences between countries or situation (and are therefore different on paper and not in reality). As cooperation is essential among different partners and different levels of government, even internationally, such European standardization is in our view essential to deal with risks on both a local, regional, national and European level.





Also, the use of high quality risk maps has been determined as a crucial factor in the implementation of the risk assessment report. Combining map layers for chances, effects and vulnerability provides spatial insights that can hardly be obtained through other processes. It is crucial to develop a common language and symbolism as to improve the relation between the risk policies and spatial development. Not only as to focus on risk sources on a map, but also on chances and effects.

As with the previous step, also in this phase the practice of the pilots showed that the risk assessment is not a standalone phase at the start of the mitigation process, but a process that needs continuous updating. In our practices, it turned out that the further we were in the mitigation process, the more focused the assessment became (geographical, but also in relation the specific effects of risk or resilience towards management steps). During the capacity analysis, new question continue to arise as well as connected insights which requires a continuous adaptation of the risk analysis.

European Value-added: As indicated in the explanation above, this step clearly illustrates the need for European standardization of indicators and assumptions in the risk assessment phase as to enable better integration and understanding of the assessment results. It is a great risk that policy makers have completely different understandings of risk situations especially when these risks target multiple actors in different regions or even countries. This will highly influence the quality of risk mitigation actions and if not tackled will have serious negative consequence on risk mitigation at a European level in relation to risks that have a European scope (for example global warming and its effects). We are repeating this point, but the objective of our MiSRaR approach is to develop a mitigation approach that can be used on a general level and facilitate a common understanding of Risk Mitigation at the European local level. PRISMA is used to test the different steps in this approach and it has clearly illustrated the need for this when dealing with assessments that have a trans-boundary effect (as most of them do). Bringing partners together in a stakeholder analysis and subsequent discussions on the results of such an assessment already clearly illustrated the importance of a shared language, indicators and nomenclature of risk mitigation. We therefore consider our experiences also relevant for the development of the EU guideline for risk assessment and risk mapping and the to be developed guidelines for resilience management for failure of critical infrastructure.

C Policy Memorandum on Capability Assessment

Purpose: In the approach, we have determined that in the capability assessment phase, mitigation instruments are to be identified and prioritized, including the implementation of a CBA. Because we were dealing with pilots, the CBAs were too expensive and time consuming and required approval by the relevant authorities, we have chosen (as described in the proposal) to develop a policy memorandum on this subject. This memorandum includes a proposal for a CBA and recommendations for a future investigation for the CBA.





Evaluation: The capacity analysis has been implemented by all partners on the basis of the analyzed and prioritized risk scenario's. During the work on the capacity analyses often additional risk analyses was needed.

Furthermore, it turned out that basic instruments are lacking to analyze all sorts of potential risks. We have chosen to develop a number of basic instruments for the partners to do so, for example through an "Event Tree Analysis", comparing capacities with different safety zones and the correlation between CBA and the risk diagram. In our view, it is highly desirable to expand this toolbox of instruments, preferably at a European scale.

European Value-added: As indicated, the aim of the whole project is to test an approach for Risk Mitigation that can be used by local and regional governments throughout Europe (and elsewhere). The experiences in this phase contribute to the improvement of this approach and (we hope) the EU guidelines for risk assessment and mapping.

D Risk Management Plan

Purpose: In the MiSRaR approach we have written that the eventual mitigation strategy on the basis of the risk assessment and capacity analyses will be framed in a mitigation plan. This will also include attention to the required financial means, lobby and support, legal instruments and frameworks and other factors that influence the implementation. As written in the MiSRaR handbook, there is no pre-determined format for so. The mitigation plan can be a stand-alone document, but it can also be part of a wider spatial development plan or a paragraph in a disaster response plan. It was not our aim to actually advise the relevant authorities in this field through the five mitigation plans, but to show that attention has been given to all aspects of the process in the test fase and that this approach is to be used as a learning instrument for the future. Although the relevant authorities did take the advice in account in multiple occasions, this was not the specific objective of the project. We consider this to be additional output.

Evaluation: The five partners successfully drafted their risk management plans.

European Value-added: The sharpening of the mitigation approach through the pilots contributes to the European use of the mitigation instruments. Beside this, the actual designed strategies could be relevant for other local governments with the same type of risk.

E. Dissemination Conferences

Purpose: The objective of the three conferences was to promote the use of a risk management policy on the basis of risk analysis en a structural approach in general in the target regions of the project and the wider national audience. Specific attention has been given to the EU guidelines in this field and to promote the MiSRaR approach. A





specific objective of the conferences was to exemplify the connectivity of spatial planning policies and safety to the involved partners and to illustrate the importance of partnership in these activities. Aside from the general dissemination of the project results the partners used the conferences to present their specific proposals for risk mitigation in their respective areas to a wider audience.

Evaluation: Three conferences have been organized in respectively Stara Zagora, Tallinn en Aveiro. Considering its specific technical angle, the conferences were well attended en generated significant media attention. The objectives as described in the purpose above were met. It was very rewarding to see that after the conferences the messages as conveyed through the presentation resonated on the national and regional level. Policy makers in the respective countries have indicated that the approaches have been reflected in their national policy development as well. Although not a specific objective of the project, the spill over effects reflect on the need of a general European approach for risk mitigation.

It has to be mentioned that the conferences, despite the international angle, primary attracted nationals of the countries were they were organized. Reaching out to a European audience turned out to be rather difficult when travel costs are not covered for the participants.

European Value-added: the conferences contributed to a wider spread of the European thinking in terms of risk management and assessment and the discussions during the conferences have provided input for recommendations and improvement of the MiSRaR handbook and the European risk management policies.





7. Evaluation technical results

7.1 General Lessons learned

In relation to the MiSRaR approach:

Generally speaking, it has become very clear that the MiSRaR approach can successfully be used by decentralized bodies throughout Europe and contributes to a structured approach towards risk management. Furthermore, it contributes to the realisation that risk management is directly linked to other policy fields, specifically spatial planning. As a consequence it requires the use of a broad network en increasing dialogue in a commonly shared jargon among safety experts en experts of the related fields. Risk management is therefore to a great extend the management of networks. Through a structured process, disclosing insights in risks and solutions, networks are created and win-win situations emerge. It also clearly shows that a broad amount of measures are possible which link to different aspects of risks with different periodization and financial consequences. As a consequence it is crucial to implement sound cost-benefit analyses, although they are expensive and time consuming. Following the practice in risk management which searches for a realistic balance between costs and benefits, also within the approach itself such an assessment should take place. Sometimes common sense is sufficient or even more effective than detailed analyses and calculations while in other cases detailed approaches are essential to arrive at new insights. An important realisation within that context was that technical norms which are used in the analysis sometimes in the basic assumptions appear to have a more political than scientific basis. They are as a result not necessarily true and require further investigation, preferably within a European context.

In relation to the project approach:

Working with 5 pilots in 5 geographically different realities and scenario's certainly contributed to more insights in the applicability of the MiSRaR approach and its instruments. Working simultaneously together, using the same building blocks, worked as a stimulus for the mutual learning process and mutual consultation and the identification of positive and negative elements per sub-component. All partners gained new insights within their own chosen risk profile. Furthermore it has contributed significantly to the actual management of the chosen risks and to civil and political support for the approaches that derived from the risk management process.

It has to be said though that the step-by-step approach, using predefined components, also lead to a rather artificial "cutting" of the approach, while in practice, these phases are much more connected and interdependent and actually overlap and iteratively influence one and other. There is a very close interconnection between risk assessment and capability assessment. This means the process is not linear, but more incremental with 'loops' backwards and forwards. During the capability assessment new research





questions arise which should have been part of the risk assessment. Especially the wish to implement mitigation in spatial planning generates more and more the need for detailed insights in the spatial distribution of risks (scenarios, probabilities, effects and different kinds of vulnerabilities). Often these new research questions for the risk assessment also generate the need for additional risk map layers.

It also needs to be stressed that the strict presentation of the projects as pilots (with a certain framework) negatively influenced the generation of sufficient political support (because they were just pilots). Support that in normal circumstances is direly needed to create the envisaged change.

Risk mapping is of the utmost importance for the mitigation process. Risk mapping should consider all parts of the risk concept, separate and combined: risk sources, probabilities, effects of scenarios, hazards (probabilities combined with effects), vulnerabilities (of all kinds of societal interests) and also response potential. The combining of layers clearly provides insight in different risk zones and visualizes this for all concerned (professionals, politicians, the public). "Maps tell more than a thousand words". The importance of risk mapping does not only come from the need to have detailed insight in the risk itself, but also from the need to build a direct connection with spatial planning. After all, spatial planners mainly communicate by means of maps.

The required detailed insight in risks (first lesson mentioned) and the importance of good risk mapping (fourth lesson mentioned) make it very important to generate local information and knowledge. Local spatial and temporal distribution of probabilities, effects and vulnerabilities needs to be researched and observed locally. While general principles for and choices in mitigation (and preparedness) strategies might be prepared on other levels, actual spatial mitigation and implementation 'on the ground' demands for local input and commitment. Local experts, local databases and local inhabitants are needed. Advantage of such an approach is that at the same time the local network for implementation can be built, improving support for the mitigation solutions. This is especially the case with the involvement of inhabitants (public participation).

The mitigation process is "knowledge intensive": a lot of different experts and stakeholders have to be involved. The minimum is a close cooperation between civil protection and spatial planners, which unfortunately is not the general practice in most municipalities. Because there are many different issues which have to be addressed in this knowledge intensive process, it is advisable to make several working groups that deal with specific issues. Moreover it is important to respect different responsibilities of the stakeholders. Each partner participates in the process with their own assignment and mandates. Be sensitive for their interests and what they can and cannot do or share (information). Only then it is possible to build relationship of trust.

The mitigation process might be "knowledge intensive", but it is not exclusively technical. A mix is needed between professional expertise and objectiveness on the one hand and





political sensitivity on the other hand. This becomes especially manifest in the phases of political consultation (risk evaluation, setting objectives, capability evaluation).

Information sharing is a critical part of the mitigation process. Not only because the process is information and knowledge intensive (see before), but also because it is essential to obtain the desired interconnection between the different planning processes on different levels and for different purposes (spatial planning, prevention, civil protection etc.). The different planning processes have different phases and "lifetimes". The start of spatial plans, prevention plans etc. very often does not coincide with one another and also the period for which they are made might differ. This is "simultaneity problem" is partly local, due to local priorities and policy processes, but also partly national, due to lack of conjunction between different legislations. For mitigation planning it is therefore important to know the "rhythm" of the different planning process, in order to be able to implement mitigation in other plans.

In relation to the dissemination of the project results

The conferences and presentation certainly contributed to the spread of the MiSRaR and PRISMA approaches. The setup of the conferences was very useful for the national and regional stakeholders, but lacked the means to actually generate international attention.

Linking the website to the already existing MiSRaR website achieved the envisaged results. During PRISMA, the website generated a lot of visitors, and the success of MiSRaR as a consequence brought relevant people directly into contact with PRISMA and its results. Due to our monitoring systems, we could follow what visitors did, and all available documents have actually been downloaded by users throughout the world. This actually lead to a number of international visits to Dordrecht, even as far as delegations from South Korea. The VRZHZ has been approached numerous times with requests to use the documentation made available through MiSRaR and PRISMA, illustrating both the success of the dissemination instruments as well as the need for the instruments that both projects generated and fine-tuned.

In order to be able to accommodate the international interest in the MiSRaR approach, it would be desirable to provide the current partners with the opportunity to advise on location with the use of the instruments, using their own specific experiences in the pilots. Perhaps financial instruments will make such a dissemination approach possible in the future.

7.2 Strengths of the PRISMA project.

The following points proved to be important strengths of the PRISMA project.

- Structured step-by-step approach
- Linkages with other policy fields





- Not only focused on victims but also on other civil interests
- Linkages between analysis and practical implementation
- Instruments that focus on multiple aspects of risks
- Including prioritisations and cost-benefit analysis in the approach
- Focus on the building of strong local networks and partnerships
- Risk awareness of the stakeholders is gradually built during the process. Through the discussions about the risk and capability assessment a shared understanding of risks and solutions is built. This takes time and cannot be forced.

7.3 Challenges to be tackled in the future

The following challenges in our view should be tackled in future interventions to allow for better risk mitigation:

- The instruments have to be expanded and most importantly standardized on a European level
- Norms and assumptions for analysis of risks should be validated and standardized on a European level, based on scientific research and insights. Analysis and political decision making have to be clearly separated as the latter often clouds the first.
- Causal webs for risk scenarios should be simplified and standardized as much as possible. Risk assessment of low frequency risks is all about assumptions, because it is based upon calculations and methodological analysis, rather than statistical and historical data. The problem is that the validity of these assumptions can very seldom be proved. The scientific merit of methods and assumptions is very often lacking. Moreover, in many cases the methods and assumptions are part of a (political) influencing process, in which scientific soundness is not the key or even disregarded totally. Extra complicating is the fact that the probabilities (which only can be assumed for low frequency risks) have a big influence on the outcome of a CBA (cost-benefit ratio), meaning it is very difficult to have informed choices about the mitigation measures.
- The risk and capability assessment need to be structurally maintained, because the world is ever-changing and also because the implementation of measures results in a new situation.

7.4 Recommendations to stakeholders

The following points are recommendations we would like to make to the relevant risk management stakeholders:

- Cooperate from the start with spatial planning units especially when it comes down to implementing spatial relevant mitigation measures. Cherish this relation and invest in it, also when there is no direct project to implement. National governments should facilitate public-private partnerships and bringing together resources to achieve communal goals.





- Separate short, middle and long term interventions but always incorporate them simultaneously when providing recommendations when dealing with risk mitigation measures.
- Make linkages with other policy objectives and instruments to make proposals more promising. It will also help to optimize the use of the available resources. It remains the best to search for inter-sectorial win-win situations: mitigation solutions that also generate benefits for commerce, local communities, ecology or other hazards.
- A mitigation strategy and the concrete measures should be transparently communicated to the public (inhabitants). They need to know what is done about the risks in their environment and also need to know what they themselves can do to prevent incidents, to prepare and during incidents. Communication about mitigation measures therefore should be part of the broader risk communication strategy. The risk communication, risk awareness and risk acceptance can benefit from public participation during the mitigation (design and implementation) process.

7.5 Recommendations to the EU

- Promote the direct connection between risk assessments on all scales (national, regional and national) and support “lower” governments in making these assessments and using them for risk management purposes.
- Uniform principles, definitions, tools and risk mapping symbols in a addendum on the EU guideline and update this addendum regularly with new insights as a “living document”
- Promote European research on the effects of risk scenario’s and make the results part of the EU risk assessment methodology
- Promote the link between risk assessment, environmental assessment and spatial planning develop European legislation to enforce the use of all hazard risk assessments in spatial planning activities.
- Promote the cross-border cooperation for risk and crisis management. Provide resources to disseminate risk management approaches among local and regional governments
- Make a European risk assessment and prioritize risks on European level.
- Take in account that risk management strategies and tools work with objective information but be realistic about the political evaluation. In the end mitigation is not from the technical experts but from the politicians.





8. Financial Report

8.1 PRISMA Budget use

Staff					
	Planned Total	Used	Saldo	% used	
VRZHZ	€ 283.488,00	€ 321.048,36	€ -37.560,36	113%	
Mirandela	€ 47.652,00	€ 37.450,41	€ 10.201,59	79%	
Aveiro	€ 38.760,00	€ 38.758,17	€ 1,83	100%	
Tallinn	€ 36.630,00	€ 36.479,62	€ 150,38	100%	
SZREDA	€ 41.625,00	€ 31.288,01	€ 10.336,99	75%	
Total	€ 448.155,00	€ 465.024,57	€ -16,869,57	104%	

Travel and subsistence					
	Planned Total	Used	Saldo	% used	
VRZHZ	€ 19.474,00	€ 12.503,77	€ 6.970,23	64%	
Mirandela	€ 11.280,00	€ 6.428,89	€ 4.851,11	57%	
Aveiro	€ 14.258,00	€ 4.673,47	€ 9.584,53	33%	
Tallinn	€ 18.124,00	€ 19.049,52	€ -925,57	105%	
SZREDA	€ 17.460,00	€ 11.193,78	€ 6.266,22	64%	
Total	€ 80.596,00	€ 53.849,48	€ 26,746,52	67%	

Subcontracting					
	Planned Total	Used	Saldo	% used	
VRZHZ	€ 92.500,00	€ 86.763,25	€ 5736,75	94%	
Mirandela		€ 4.876,90	€ -4.876,90		
Aveiro	€ 3.000,00	€ 3.976,86	€ -976,86	133%	
Tallinn	€ 7.000,00	€ 5.218,29	€ 1781,71	75%	
SZREDA	€ 2.000,00	€ 2.932,00	€ -932,00	147%	
Total	€ 104.500,00	€ 103.767,30	€ 737,70	99%	

Overall	€ 652.298,00	€ 652.063,43*	€ 234,57	100%	
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* Including 29.422,08 euro overhead (4,73%)





8.2 Explanation of financial deviations

Staff: The total in staff costs have been slightly overspend (4%), but on an overall budget neutral basis and within the boundaries of the 10 percent cost type budget flexibility. On a partner level Mirandela and SZREDA underspend their budget as their personnel cost per hour turned out to be lower than anticipated on in the budget planning. In the case of VRZHZ this turned out to be higher, which explains their overspending on staff. More time was worked on the project than reported on in this financial report (which has been reflected on however in the timesheets), but the VRZHZ decided to not further claim them as the maximum budget use had been reached.

Travel and Accommodation: Travel and accommodation has been underspend all over the board except for Tallinn, which organized the largest amount of activities. Main reason for underspending is that travel costs turned out to be much lower than anticipated on. The activities have been planned well in advance which led to more economic air fares and hotel costs and some activities have been combined to save on travel costs. Sound planning of all partners significantly attributed to the lowering of these costs.

Subcontracting: Subcontracting has been implemented in line with the budgetary planning in the project proposal with a slight underspending of 1 percent. Two specific irregular items require explanation. In the first place Mirandela did spend budget on subcontracts although this was not planned at first. The main reason is that one of the activities in Portugal changed location to Mirandela and as a consequence they had to contract catering and venue etc. Secondly, they required an external expert to implement a subsection of their risk assessment . Main reason was the fact that they did not have that expertise in-house. Secondly, SZREDA overspend their planned budget for subcontracting. Main reason is that fact that their conference turned out to be somewhat more expensive to organize than planned. (increase of 932 euro). This was also the case in Aveiro for the organization of their conference. All changes were made on the basis of budget neutrality and jointly decided on by the partners.

Total: The overall project budget has been used for 100% of its initial plan. Main reasons for spending the budget almost exactly as planned relates to the increased costs of labor for VRZHZ which has been explained under the staff section. Even more time has been put in the project, but considering budget restrains we did not include it all in the final report.





9. Annexes

All annexes are included on the USB device attached. Annexes are numbered in line with the description of tasks and deliverables as used in the reports.

