CIVIL PROTECTION FINANCIAL INSTRUMENT FINAL REPORT

March 2015

Project Title

KNOWLEDGE PLATFORM FOR ASSESSING THE COSTS AND BENEFITS OF FLOOD PREVENTION MEASURES FLOOD CBA

PROJECT IDENTITY

Starting Date:	01/01/2013	
Ending Date:	31/12/2014	
Duration:	24 months	
EC contribution (%) of	75.0/	
Total eligible cost	75 %	
Countries of implementation	Greece, England, Romania, Portugal, Germany, Spain	

KEYWORDS AND ABBREVIATIONS

CB: Coordinating Beneficiary

AB: Associated Beneficiary

LP: Lead Partner

FHRC: Flood Hazard Research Center of the Middlesex University, UK (AB1)

INGHA: National Institute of Hydrology and Water Management, RO (AB2)

FCSH: e-GEO, Centro de Estudos de Geografia e Planeamento Regional, University Nova de

Lisboa, PT (AB3)

UNI Kassel: University of Kassel, Fachgebiet Wasserbau und Wasserwirtschaft DE (AB4)

UPO: University Pablo de Olavide, SP (AB5)

SIGMA: SIGMA Consultants Ltd

CM: Coordination Meeting

CBA: Cost Benefit Analysis

MCA: Multi Criteria Analysis

FRM: Flood Risk Management

EC: European Commission

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1 GENERAL REMINDER

The main objective of the FLOOD CBA project was to establish a sustainable Knowledge Platform for the use of stakeholders dealing with the Cost-Benefit Analysis (CBA) of flood prevention measures in the context of different socioeconomic environments within the EU

More specifically, the tasks that were realised intended to,

- a) Facilitate the collection, assessment and the exchange of information amongst stakeholders (i.e. responsible authorities, technical services and scientific community) and provide overview and detail on current models and best practices;
- b) Consolidate the methodology and data sources and enhance the comparability of results of Cost-Benefit Analysis;
- c) Strengthen the performance of the existing prevention mechanism especially in the project participating countries;
- d) Promote the transnational cooperation of competent bodies all over Europe.

FLOOD CBA consortium involved six project partners with strong academic, technical, research and management background in the field of flood risk management, originating from six different EU countries, Greece, England, Romania, Portugal, Germany and Spain.

- SIGMA Consultants Ltd (GR) Coordinating Beneficiary
- Flood Hazard Research Center of the Middlesex University (UK) AB1
- National Institute of Hydrology and Water Management (RO) AB2
- e-GEO, Centro de Estudos de Geografia e Planeamento Regional, University Nova de Lisboa (PT) -AB3
- University of Kassel (DE) AB4
- University Pablo de Olavide (SP) AB5

During the project management activities, networking, capacity building, planning, demonstration, consultation, evaluation, capitalization and dissemination activities were implemented. The realised actions were organised under the following five (5) Tasks:

- Task A. Management and reporting to the EC;
- Task B. Building the Stakeholders Capacity;

- Task C. Improving the Process of Knowledge;
- Task D. Implementation of Pilot Activities;
- Task E. Information, Dissemination and Capitalization Actions

The core outputs of the project which were produced by the implementation of the above Tasks are listed below:

Task A. Seven (7) Coordination Meetings; A Monitoring and Evaluation System; Organizational Structure; Quality Handbook, Interim and Final Quality Reports

Task B. The FLOOD CBA Information Exchange Network; Consultation Plan; Stakeholders' Questionnaire for the consultation process; Report on Stakeholders' views and needs

Task C. Common characterization framework; Knowledge Base Platform; Guidelines for the implementation of a Cost Benefit Analysis; Guidelines for the presentation of other assessment methods of flood prevention measures

Task D. Training seminars; Training material; On line questionnaire on the operation of the Knowledge Base Platform; Results of answered questionnaires; FLOOD CBA Helpline Centre; Report of improvements for the operation of the Knowledge Base Platform

Task E. Communication and Dissemination Handbook; Project web site; Informative workshops; Informative Leaflets; Books of Guidelines; Articles in national and international press; e-Newsletters; Press releases; Booklet of the project achievements; Final conference; Capitalisation Plan; FLOOD-CBA Portal; FLOOD-CBA Forum; Exploitation Agreement; Layman's Report

2 GENERAL SUMMARY OF PROJECT IMPLEMENTATION PROCESS

2.1 General overview of the process

The present Final Report concerns the activities that were implemented in the framework of the project. The FLOOD CBA project was successfully accomplished within the duration of 24 months from the 1st of January 2013 until the 31st of December 2014.

The project management structure, the responsibilities among the project partners' and the overall strategy for the implementation of the project were set and agreed during the 1st CM of the project in Thessaloniki in February 2013. A monitoring and evaluation system was developed for the clear and exact tracking of the progress, the deliverables and the milestones of the project.

The partners' consortium developed a favorable transnational cooperation through the intense communication and regular meetings under the guidance of the CB. The project status in each participating country, the completed actions, and the accomplished targets, the schedule of forthcoming events and activities as well as project management issues were analyzed during the CMs that followed. The CMs were hosted by the CB in Thessaloniki (February 2013), by AB1 in Oxford (May 2013), by AB2 in Bucharest (September 2013), by AB3 in Lisbon (January 2014), by AB5 in Seville (May 2014), and by AB4 in Kassel (September 2014). The final coordination meeting was combined with the final conference in Thessaloniki (December 2014). These events were opportunities for the accomplishment of high level know-how and experience exchange as well as settlement of cooperation and project management issues.

A set of activities were dedicated to the enhancement of the partners' capacity to respond properly to the project requirements along with the development of a flexible structure ensuring the involvement of key actors from the private and public sector. In each participating country the national stakeholders were identified as a first step towards the development of a solid FLOOD CBA Network that would be operative during the whole project and even afterwards.

Further on the partners collected Background Information concerning the use of CBA in each country/region, including legal and methodological aspects. Each partner was responsible for compiling the information using official, reliable sources in their respective countries. A specially structured questionnaire helped the implementation of this procedure. The analysis of the results allowed clarifying the official use of CBA for Flood Risk Management in each participating country.

The Report on stakeholders' views and needs was the final deliverable under the Stakeholders' Capacity Building Activities. It helped to understand the very different realities of the application of CBA as well as the diverse demands and limitations that exist in each context. This deliverable was the result of the interaction among of all the networking and baseline assessment activities. Moreover the report was developed based on a Consultation Plan, a document specifically designed to allow collecting a wide range of opinions from stakeholders and the awareness of their needs.

The development of support tools and the establishment of an information exchange structure in the field of cost benefit and multi criteria analysis of flood risk management was the next step of the FLOOD CBA implementation. A 'characterization framework' of Cost Benefit Analysis features was produced that provides a common terminology and can be used to achieve a better understanding of the state of the method, its distinguishing capabilities and its leading edge functionality. Additionally, two separate Guidelines as the necessary Support Tools that would facilitate the design and undertaking of the appraisal process of the flood risk management measures were created. The first Guideline refers to the implementation of Cost Benefit Analysis while the second one refers to assessment methods other than the Cost Benefit Analysis and principally to Multi-Criteria Analysis.

The information exchange structure was the developed Knowledge Base Platform which is accessible through the project website, http://www.floodcba.eu/main/?page_id=7340&lang=en. The Knowledge Platform is a combined electronic library and case studies matrix for topics such as: EU policy, National legal and regulatory framework; Conceptual elements of Flood Prevention Cost Benefit and Multi Criteria Analysis; Definition and classification of benefits and costs; Flood risk mapping; Data needs and sources for evaluating the benefits and costs in monetary terms; Categories of flood risk management measures; Techniques for adjusting the future prices of costs and benefits to present values; Case studies; Relevant Projects. Being a wiki, the Knowledge Base Platform can be edited by any user who registered to the system, provided that the modifications are approved by the platform's administrator.

After the completion of the FLOOD CBA Support Tools and the development of the Knowledge Base Platform, the project partners initialized a participatory procedure in order to raise the awareness of policy makers and other interested stakeholders as well as to facilitate the further improvement of the developed FLOOD CBA products. The first step was the creation of training material on flood risk management and the implementation of a CBA. Training seminars were realized by all partners at national levels based on the produced training material, the Support tools and the Knowledge Base Platform. The next step was the development of an on-line questionnaire oriented to evaluate the operation and contents of the Knowledge Base platform. The national stakeholders and members of the FLOOD CBA Network were invited to answer the questionnaire. Their answers were accessed and depicted on a relevant report. The final results stemming from the outcomes of the training seminars, the on-line questionnaire, and the in-person contacts of the partners with their stakeholders led to the optimization of the Knowledge Base Platform.

A FLOOD CBA HELP-LINE Center was also established and now operates providing technical and scientific support to individuals or organizations involved in CBA and MCA of flood risk management. The users may contact the Help-Line Centre via the contact form provided on the project website. All questions/ requests are assessed by the FLOOD CBA consortium as well as by the experts of the FLOOD CBA Network. The answers to the requests are given free of charge.

Dissemination and publicity actions on national and European level were elaborated throughout the duration of the project, and were based on the Communication and Dissemination Handbook. The Handbook was compiled

under the CB's responsibility and adopted by all project partners. The main dissemination activities were the design, operation and frequent update of the FLOOD CBA website, www.floodcba..eu, the publication the CBA and MCA Guidelines, the realization of informative workshops, the presentation of the project in various national and international events, the production of informative leaflets, articles and press releases, the circulation of e-Newsletters, the publication of a booklet with the project's achievements.

The final conference of the project was organized on the 3rd of December 2014, in Thessaloniki by the CB. All project partners were present at the conference. The outcomes and results of FLOOD CBA were presented. The conference was also attended by national experts, invited by the project partners, who had the chance to present the status of civil protection mechanisms in relation to flood risk management as well as the progress of the EU Floods Directive adaptation in the project countries. The importance of the established transnational co-operation was pointed out along with the importance to extend this collaboration to future projects.

The sustainability and capitalization of the project results were described in the FLOOD CBA Capitalisation Plan. In favor of the realization of the Capitalisation Plan activities, the FLOOD CBA portal and the Flood CBA Forum were launched. The FLOOD CBA portal serves the continuous interactive communication of project partners with existing and new stakeholders, networks and further dissemination of project's results. The FLOOD CBA Forum supports any new collaboration and provides the space for further opinion and knowledge exchange.

An Exploitation Agreement attests the willingness of the project partners to contribute to the activities which comprise the Capitalisation Activities of the FLOOD CBA project that are scheduled for a five-year period after the closure of the project. All partners agreed on the content of the Exploitation Agreement and signed the document.

In the course of the project a Quality Management and Assurance system was implemented which ensured the quality of the project deliverables and the integrity of the internal cooperation procedures. The Quality Management and Assurance system was applied by an external quality auditor who conducted internal audits on a three-month basis and produced one interim and one final Quality Report.

As a general conclusion, it is appraised that the FLOOD CBA project was a bright venture which promoted significantly the transnational cooperation in the framework of flood risk management economic appraisal methods and civil protection decision making process.

2.2 Comparative analysis of initial and actual time schedule

The FLOOD CBA project was elaborated within the initially approved duration of 24 months, from the 1st of January 2013 until the 31st of December 2014. During the implementation of the foreseen tasks, some deviations from the time schedule of the Application Form were indicated. However these deviations did not affect the successful completion of the various Tasks and in certain cases they served the partners in order to realize the respective actions more efficiently. The partners agreed to discuss the finalization of each deliverable during the CM thus providing the opportunity for extended explanations and fruitful discussions. So, even though

the drafts were created on time, the final versions were in place with some delay compared to the initial schedule.

The initially planned outputs per Task via their actual realization are presented in the Tables below.

Task A

ACTIVITY - OUTCOME	Planned End	Actual End
Project Work Plan	31/01/2013	31/01/2013
Project's organizational structure	15/02/2013	15/02/2013
Project Monitoring and Evaluation System	28/02/2013	28/02/2013
Progress report 1 (8 months' period)	31/08/2013	31/08/2013
Progress report 2 (16 months' period)	30/04/2014	30/04/2014
Final report (24 months' period)	31/12/2014	31/12/2014
1st Coordination meeting	31/01/2013	21-22/02/2013
2 nd Coordination meeting	30/04/2013	20-21/05/2013
3rd Coordination meeting	31/08/2013	24-25/09/2013
4th Coordination meeting	31/12/2013	21-22/01/2014
5 th Coordination meeting	30/04/2014	20-21/05/2014
6th Coordination meeting	30/08/2014	09-10/09/2014
Final Coordination meeting	31/12/2014	02/12/2014
Quality Handbook	31/03/2013	31/03/2013
Interim Quality Report	31/12/2013	31/12/2013
Final Quality Report	31/12/2014	31/12/2014

There are no serious delays to be reported in the implementation of Task A. The majority of the outputs were realized according to the initial schedule.

Task B

ACTIVITY - OUTCOME	Planned End	Actual End	
Information Exchange Network – List of members	31/07/2013	31/07/2013	
Consultation Plan	31/03/2013	20/05/2013	
Stakeholders' Questionnaire for the consultation process	30/04/2013	30/06/2013	
Report on Stakeholders' views and needs	31/07/2013	25/10/2013	

The development of the IEN was completed according to schedule. A draft of the Consultation Plan was produced in time, 31/3/2013; however the partnership agreed to discuss its finalization over the forthcoming CM, i.e. May 2013 in Oxford. During the meeting the partners agreed on the final version. Following the same pattern, a draft of the Questionnaire for the consultation process was also in place at the original deadline. However its finalization aligned to the finalization of the Capitalization Plan therefore a subsequent delay to the consultation process occurred. The delay in the consultation process was also attributed to the summer period. This led to the

production of the final deliverable "Report on the stakeholders' views and needs" towards the beginning of September, and finalization of its content after the CM in Bucharest in September 2013.

The CB informed the EU desk officer about the progress of the report and about the inevitable delays mainly due to the summer period. The project officer agreed to receive the final deliverables in delay.

Task C

ACTIVITY - OUTCOME	Planned End	Actual End
Common characterization framework	31/10/2013	31/10/2013
Knowledge Base platform	31/12/2013	31/12/2013
Guidelines for the implementation of a Cost Benefit Analysis	28/02/2014	28/02/2014
Guidelines for the presentation of other assessment methods of flood prevention measures	30/04/2014	15/06/2014

The three out of four deliverables of this Task were accomplished according to the original schedule. With regards to the reported delay in the completion of the second Guidelines, it was considered necessary for AB1 to dedicate more time to the preparation of this deliverable since it required a more in depth investigation and also feedback (i.e. case studies) by the project partners. A first draft was presented during the CM in Seville in May 2014.

Task D

ACTIVITY - OUTCOME	Planned End	Actual End
Training seminars, one in each participating project country – List of trainees, Training material, Photos, Seminar work program	31/07/2014	19/11/2014
On line questionnaire on the operation of the FLOOD CBA Platform	30/06/2014	30/06/2014
Results of answered questionnaires	31/07/2014	30/11/2014
FLOOD CBA Helpline Centre	31/08/2014	15/09/2014
Report of improvements for the operation of the Helpline Centre	30/11/2014	15/12/2014

The main deviation to the initial schedule of Task D regards the realization of the training seminars. Even though the relevant training material was developed without delays in June 2014, the partnership agreed to overcome the initial deadline, i.e. 31/7/2014, since the summer was a difficult period to gather the interested stakeholders and conduct the seminars. Further to that, the partners decided that in favor of a more efficient training, the training material should be translated. For this reasons the seminars had to be realised at a later stage within autumn 2014. This delay had a consequent impact on the progress of the consultation process. The trainees were the core group to be invited to the on-line consultation process. Therefore the consultation process followed the realization of the seminars. Thus the report on the emerged results was not completed according to schedule. However, during the whole period, July – November, the on-line questionnaire was available and the consultation process was active.

Task E

ACTIVITY - OUTCOME	Planned End	Actual End
Communication and Dissemination Handbook	28/02/2013	28/02/2013
Project web site	31/03/2013	31/03/2013
Informative workshops	31/05/2013	09/10/2014
Informative Leaflets	31/05/2013	16/04/2013
Books of Guidelines	31/08/2014	30/10/2014
Articles in national and international press	31/12/2014	31/12/2014
e-Newsletters	31/12/2014	31/12/2014
Press releases	31/12/2014	31/12/2014
Booklet of the project achievements	31/12/2014	30/11/2014
Final conference	31/12/2014	03/12/2014
Capitalisation Plan	31/10/2014	15/12/2014
FLOOD-CBA Portal	30/11/2014	30/11/2014
FLOOD-CBA Forum	30/11/2014	30/11/2014
Exploitation Agreement	31/12/2014	15/12/2014
Layman's Report	31/12/2014	31/12/2014

No serious deviations were indicated in the timetable of Task E. The most important difference in comparison to initially schedule concerns the realization of the informative workshops. After the CM in Oxford (May 2013) the partnership decided that it would be more effective if the partners combined the workshops as back-to-back events with the CMs thus providing the chance to the national stakeholders to come in contact with all the members of the FLOOD CBA consortium. Therefore AB2, AB3, AB4 and AB5 realized their informative workshops following the schedule for the CMs in Bucharest, Lisbon, Kassel and Seville respectively.

Additionally, the Books of Guidelines (translated version by each partner) were produced with some delay due to the time consuming process of translation. However the partners succeeded in completing the task and disseminating the books at the national training seminars.

Finally, a draft Capitalization Plan was prepared according to schedule, however following the agreed methodology of the partnership, the document was finalized after the final CM in Thessaloniki, in early December 2014.

2.3 Comparative analysis of planned and used resources

The planned resources are described in the F forms and include costs for personnel, travel and subsistence, sub-contracting and overheads.

Full details of the actual expenditures are detailed in the financial statement and excel workbook which is attached to the Final Report. An overview is provided below.

Table of Expenditures

BUDGET LINE	Approved Budget	Actual Expenses
Personnel	387.353,00	415.932.00
Travel and subsistence	61.760,00	54.270,00
Sub-contracting / External assistance	101.500,00	80.455,00
Indirect costs / overheads	34.387,00	34.344,00
TOTAL ELIGIBLE COSTS	585.000,00	585.000,00

Any reallocations that occurred between the budget lines were within the 10% and 30.000€ flexibility rule, thus no official amendment was requested. The partnership made use of all the available sources and corresponded successfully to all foreseen tasks.

2.4 Comparative analysis of expected and actual results

The 'expected results' correspond to the results included in the T forms of the AF. All of the initially foreseen results were successfully achieved. More specifically:

1. Set up of a Knowledge Creation & Exchange Network within the EU.

The result was successfully achieved via the creation of the FLOOD CBA Information Exchange Network under Action B1. The Network was established based on the clusters of decision makers and key stakeholders identified by each partner at regional or national level. The initial structure of the Network included more than 80 members. In the course of the project the Network was revised based on the outcomes of various activities such as the informative workshops, the training seminars and the final conference.

2. Assessment of the baseline conditions referred to the implementation of economic appraisal of flood prevention measure.

The result was successfully achieved via Action B2 regarding the collection of background information in each participating country. In terms of uniformity, the assessment was conducted in all countries by using the same tool, a specially structured questionnaire. The analysis of the results allowed clarifying the official use of CBA for Flood Risk Management in each participating country.

3. Creation of flexible local clusters ensuring the active involvement and cooperation of target groups.

Six national/regional networks and 86 stakeholders were identified and became part of the network. These included mostly Public Administrations, such as Ministries, Agencies of Environment, Water Management Departments, Civil Protection Agencies, Emergency/Response/Preparedness Units, Hydraulic and Civil Engineering Bodies, and Urban and Land Planning Departments among others. Private sector was also represented by consultants and hydroelectric companies. The descriptive information gathered (e.g. level of action, competences, willingness to participate in the project or contact details) was of inestimable value to characterise stakeholders as well as to target the potential collaborators for the FLOOD CBA Project. As expected, the national/regional networks were active through the whole running of the project.

- 4. Establishment of an Integrated Information System and Advisory Service for the development of FLOOD CBA process
- 5. Delivery of support tools based on Information Technology applications, which will boost the acquisition and management of data and will guide the practitioners in evaluating flood prevention projects or strategies.

The above expected results, 4 and 5, were accomplished through the development of the FLOOD CBA Knowledge Base Platform in the framework of Action C2. This Platform provides knowledge on the various aspects of CBA and MCA and also makes available useful tools for an easy approach of a CBA study and initial calculations. The Platform operates interactively thus allowing the registered users to contribute their own knowledge or comments to the existing fields or even propose new fields of information.

6. Validating the applicability of the developed platform and the effectiveness of its communication lines.

An on-line questionnaire was created in order to serve the purpose of the evaluation of the contents and operation of the FLOOD CBA Knowledge Base Platform. This consultation process was successfully completed through the answers received by a broad range of stakeholders from all project countries and not only. A relevant evaluation report was produced through the assessment and valuable results were obtained.

7. Increase the perceptual awareness and conceptualization capacity of competent stakeholders.

A series of various initiatives served the purpose of achieving this goal. The invitation of national/regional key stakeholders to join the flexible clusters under the umbrella of the FLOOD CBA Information Exchange Network was the first step. The involvement of the stakeholders into the process of assessing their views on the CBA and MCA practices was the second step towards the capacity building target. The development of the Knowledge Base Platform and the invitation of the stakeholders to become registered users, the promotion of all the available informative and knowledge

material to them, further intrigued their active involvement in the project. The workshops, the training seminars and the in person contacts had a wide impact towards the targeted stakeholders' awareness raising on flood risk management CBA and MCA. Finally, the successful consultation process for the evaluation of the developed tools by competent stakeholders certified the accomplishment of their active involvement in the project and consequent increase of their skills and knowledge on the main aspects of the FLOOD CBA project.

8. Collaboration with the results of other projects in the area of concern.

A long list of relevant projects with short descriptions and links to the relevant websites is included in the Knowledge Base Platform. Additionally, FLOOD CBA joined the FACECOAST cluster "Face the challenge of climate change in the med coastal zones", which started its activities in January 2012, and currently includes more than 80 partners (see the partnership). The project was also presented by the partners in the framework of dissemination events of other projects in the area of flood and coastal risk management. During the final conference a special session was dedicated to the synergies with other EU projects and representatives of three consortiums presented their projects while discussions were launched for the beginning of new collaborations.

9. Drawing up of an Action Plan for the linkage of the project outputs with the implementation of the National and EU policy actions.

This result was achieved via the Capitalisation Plan of the project which was compiled towards the end of the project. The Capitalisation Plan describes a set of activities which will be carried out by the partnership after the end of the project within a period of five years. The proposed activities include, among others, the possibility of new projects and collaborations with national and local authorities for including the FLOOD CBA outputs in their plan actions, synergies with EU Networks such as the WGF, and possible training activities on the material produced by FLOOD CBA. These initiatives are in favor of and enhance the implementation of EU and National Policies mainly with regard to the Water Framework Directive, the Floods Directive and the Council Recommendation on Integrated Coastal Zone Management and the Protocol to the Barcelona Convention on Integrated Coastal zone Management, ratified by the EU in 2010.

10. Institution of a self-sustained transnational structure for further exploitation of the project results in the civil protection community.

In order to continue and maintain active new contacts and collaborations, the project partners established the FLOOD CBA Forum that will be responsible for the provision of future coordination and technical support actions after the project conclusion. The aims of the Forum will be: i) the coordination on items like know how and experience exchange, research and technology transfer etc. ii) the expansion of the cooperation in other geographical areas iii) the entering into new joined collaborations

and projects. The members of the local clusters as well as other European stakeholders are invited to the Forum.

3 EVALUATION OF PROJECT MANAGEMENT/ IMPLEMENTATION PROCESS

3.1 Positive aspects / opportunities

The positive aspects and opportunities indicated are the following:

- The experience and managing ability of the Coordinating Beneficiary led to the successful completion of the project with minor deviations concerning the expenses allocation and the time schedule which were managed through preventive actions so as to avoid disorders in the implementation of the various Tasks.
- The EC 'kick-off' meeting in Brussels offered the Project Team an opportunity to network with the EC
 officers as well as with other project leaders and gave the opportunity for further knowledge exchange
 among the European projects.
- The coherent organizational set-up facilitated the accurate administrative, technical and financial coordination of the project and gave the project partners the opportunity to exploit their resources in the best way.
- The involvement of experienced and high expert staff as well as the allocation of responsibilities to the
 partners according to their expertise resulted into the achievement of high-quality deliverables and an
 excessive knowledge transfer during the project.
- The national and regional key stakeholders such as Ministries, Agencies of Environment, Water Management Departments, Civil Protection Agencies, Emergency/Response/Preparedness Units, Hydraulic and Civil Engineering Bodies, Local authorities and Urban and Land Planning Departments, were successfully engaged from the early stages of the project thus providing a substantial support over the implementation of the FLOOD CBA activities such as the realization of the dissemination, the training seminars and the consultation process.
- The translation of the Guidelines and the training material into the partners' languages, Greek, Romanian, Portuguese, German and Spanish, broadened the impact of the deliverable as it became a useful tool to a larger number of stakeholders.
- The continuous networking of the FLOOD CBA consortium with WGF and other European Networks thus
 achieving important visibility of the project and promotion of the core outputs, as well as creating
 opportunities for future cooperations.

3.2 Internal and external difficulties encountered

The application of CBA Flood Risk Management was highly diverse across the participating countries, ranging from being a common, institutionalized practice to the total absence of the use of this method. This important variability caused a significant difficulty that all stakeholders could not be approached in a common and uniform

way. The partners had to design their activities according to the awareness level of their target groups and according to their needs. This difficult required an extra effort which however the partners were willing to devote to the project thus achieving the desired results.

3.3 Partnership cooperation

The Partnership Agreements between the CB and each AB were prepared and signed, pursuant to the CIVIL PROTECTION program guidelines and template. The documents were sent by the CB to the Civil Protection Unit.

The established transnational cooperation of the six project partners was proven to be a successful consortium. The effective collaboration is attributed mostly to the maturity and experience of the involved partners in the execution of partnership projects. The direct response to every request appointed by the CB facilitated the management and elaboration of the various tasks, as well as the reporting to the European Commission.

According to the project management scheme, which was described in the AF of the project, the project's organizational structure was formed and staffed. The partners appointed representatives to the five management units, a. Lead Partner; b. Coordination Office; c. Steering Committee; d. Working Group; e. Tasks Coordinators and f. Working Teams that were established (detailed description is provided in the Organizational Structure document)..

The communication among the project management and working units was based mostly on e-mails and phone calls. However the partnership cooperation was mostly unfolded during the seven Coordination Meetings, almost one every four months, that were realized: 1st CM in Thessaloniki, February 2013, the 2nd CM in Oxford May 2013, the 3rd CM in Bucharest, September 2013, the 4th CM in Lisbon, January 2014, the 5th CM in Seville, May 2014, the 6th CM in Kassel, September 2014 and the final CM in Thessaloniki, December 2014. The coordination meetings provided the chance for in depth discussions regarding technical, managerial and financial issues.

As far as the elaboration of the project's activities is concerned, the full involvement by each project partner throughout the duration of the project was acknowledged. During the 1st CM there was a scheduling of tasks' allocation to each partner, according to the approved application form of the project, which was respected and followed be all partners in the course of the project.

Apart from SIGMA being the LP, AB5 and AB3 were responsible for the implementation of Task B, AB1 was responsible for Task C, AB4 was responsible for Task D and AB2 was responsible for the dissemination activities under Task E. The allocation of the Tasks' responsibilities to all partners led to their substantial engagement to the project.

Even though the responsibility for the production of each deliverable lied with one partner each time, the rest of the partnership had to revise the initial drafts and contribute their own experience and case studies. Any comments, corrections and additions expressed on behalf of the consortium were integrated into the final tuning of the deliverable. Moreover there were activities that required all partners to work at regional and national level

in order to extract their results and provide them as feedback to a common deliverable, such as the Report on the Stakeholders' Views and Needs or the Report on the consultation process results.

3.4 Cooperation with the Commission

- The two interim reports of the progress of the project, including summaries of the project expenditures, were submitted to the Commission in August 2013 and May 2014 according to the EC guidelines.
- The EC gradually received the deliverables produced during the project with the submission of the two interim reports and the final report.
- Whenever necessary the CB addressed the EC desk officers, responsible for the FLOOD CBA project, for any financial and technical advice and kept them informed for any work program changes or any budget reallocations. The officers' response was always direct and prompt.
- The EC's support was visible on all the produced deliverables and publications, while a direct link to the EC was foreseen on the project's website.
- The kick-off meeting of the project in Brussels helped towards the clarification of various administrative and financial issues.
- In the course of the project the FLOOD CBA desk officers promoted the project's networking with the WGF by taking the initiative to present FLOOD CBA during the WGF meeting in Dublin in April 2014 (presentation by Mr. Horváth from DG ENV) and also by encouraging the participation of Mr Mark Adamson (chair of WGF) to the 2nd CM of the project in Oxford. This initiative helped the establishment of an important cooperation of the FLOOD CBA consortium with the WGF during the project and even afterwards.

3.5 Comments on European value added

The FLOOD CBA project was designed in order to address the need rising from the implementation of the 2007/60 Floods Directive according to which all Flood Risk Management Plans should take into account relevant economic aspects such as costs and benefits, especially for trans-boundary river basins.

In this context the project developed useful tools that may provide important help to end users and decision makers who are involved in the planning and implementation of flood risk management plans, within the framework of the Floods Directive, by guiding them, step by step to the implementation of a CBA study and leading them to useful results based on which a certain flood risk management scheme could be selected instead of another. These tools were the interactive Knowledge Base Platform, the Common Characterization Framework, the CBA and MCA Guidelines, and the training material.

Furthermore, the capacity building activities of the project highlighted the broad diversity among the participating countries in the field of CBA in flood risk management. This diversity set off a process of knowledge transfer

within the partnership from the strong experts in the CBA and MCA field to the "less" experts with a consequent impact to the awareness raising of the national involved stakeholders. This process had an added value at European level since it was an important step towards the reduction of the identified differences regarding the development and practice of Flood Risk Management in the different European countries.

Apart from the above, the European added value also derived from the following items:

1. Common planning and implementation of activities

The main deliverables of the project were produced on transnational level taking into consideration the experience from each partner country as well as the international practices. The implemented activities were always based on the common planning, base lines and standards.

The technical and dissemination products were revised by all partners and the final versions were produced after integrating their views and proposals. This practice ensured an in depth cooperation among the different European countries and facilitated the osmosis of good practices from places of higher competence in the field of flood risk management to areas of limited capacity.

2. Elaboration of dissemination activities at European level

During the project there was a special provision for the realization of dissemination activities at European level. These activities included:

- The kick-off meeting at Brussels with the EC desk officers and at the presence of the coordinating beneficiaries and work teams of other Civil Protection projects;
- The development and frequent updates of the project website with all latest information on the progress of the project;
- The participation of the project partners to various events such as workshops, exhibition and conferences
 and the continuous networking with other European consortia, such as the meeting of the WGF in Rome,
 in October 2014;
- The final conference of the project where experts from all the participating countries were invited to
 present the status of the Floods Directive implementation as well as their national Civil Protection
 mechanisms and tools mainly in the field of floods;
- The creation and dissemination of the booklet of the project achievements that was distributed to the attendants of the final conference and published on the project website;
- The issuing of dissemination material as well as the Guidelines and training material translated in the languages of all participating countries;

- Publication of two articles in EU circulations, and the Government Gazette (October 2013 issue) and the Regional Review (October 2014 issue);
- Dissemination of 5 e-Newsletters at EU stakeholders.

3. The institution of the FLOOD CBA Forum

The FLOOD CBA proceeded with the creation of a Forum which is a unit that t is responsible for coordination and technical support actions at European level in the field of implementation of the Flood Management Plans, coordination and elaboration of know how and experience exchange, research and technology transfer, networking with other relevant initiatives and institutions, expansion of the cooperation in other geographical areas.

3.6 Lessons learnt and possible improvements

The project was completed successfully in terms of technical and financial issues. There were certain aspects which supported the achievement of the foreseen results. These aspects derive from the section 4.1 of the present report.

- The effective and well organised project management is the key issue for the successful implementation
 of a project.
- The early warning of the EC and open discussion with the EC Desk Officers for any potential changes or
 occurring problems either with regard to the technical implementation of the Tasks or the budget
 allocation is of crucial importance.
- The establishment of an efficient quality monitoring and evaluation system that involves frequent internal
 audits facilitates the Lead Partner to easily follow the progress of the project, early identify potential
 deviations and apply the appropriate corrective or preventive activities.
- The frequent CMs, almost one every four or five months, help the consortium to evolve and establish communication channels for a successful cooperation.
- The early identification of the key stakeholders and their continuous involvement in the project implementation ensures the strong impact of the project outcomes and their capitalisation after the project ends.

Apart from the positive features of the project, some aspects which could have enabled the project to be even more effective were indicated.

The possible improvements include the following:

The whole interface of the website and the Knowledge Base Platform could have been developed not only
in English but also in all partners' languages. This could have encouraged more national stakeholders to

register themselves and use the available FLOOD CBA tools. However, some core deliverables, such as the Guidelines and the training material, were translated in all partners' languages and uploaded on the project's website.

- More money should have been allocated to the translations of the Guidelines. The translation services
 proved to be more expensive than initially estimated. Wherever necessary, part of the translations were
 conducted by the staff members.
- A second progress meeting at Brussels with the EC and the rest of the Working Teams of the 2012 Civil
 Protection projects might have been useful in terms of dissemination as well as direct clarification of
 possible questions. However, the good communication with the EC desk officers via emails covered this
 gap.
- One final event in Brussels would have been important in terms of dissemination, visibility and building of future synergies. It would also have been easier for the partners' national and other European stakeholders to attend the event, due to Brussels central location.

4 ACTIVITIES

4.1 Comparison between initially planned and actually implemented activities, including monitoring, evaluation and dissemination

In the beginning of the project, the CB developed an efficient quality audit system which comprised a set of internal audits on a three-month basis. The internal audits mainly concerned the scheduled deliverables and the integrity of their realization. Whenever a deviation or potential deviation was indentified a corresponding corrective or preventive action was applied and audited until its successful closure. The results of the internal audits and their findings are described in detail in the final Quality Report of the project which is attached as deliverable to the present Final Report.

The main findings of the internal audits are presented in brief as follows,

Task A. Management and reporting to the EC

The Actions under Task A were implemented successfully according to the AF. There were only the following two deviations:

- The second progress meeting in Brussels was not realized after relevant decision of the EC.
- The 5th CM was realized in Seville instead of Kassel. It was considered more appropriate due to the weather conditions, the meeting in Seville to be realized in May while the meeting in Kassel to be realized in September.

Any deviations concerning the actual timetable of the activities have been described under section 3.2 of the present report. A detailed description of the Actions and the deliverables produced are included in the following chapter.

Task B. Building the Stakeholders' Capacity

The Actions under Task B were implemented successfully according to the AF. The only differences concerned the initially planned and the actual time schedule of the activities. These differences concerning the actual timetable of the Task have been described in detail under section 3.2 of the present report. A detailed description of the Actions and the deliverables produced are included in the following chapter.

Task C. Improving the Process of Knowledge

The Actions under Task B were implemented successfully according to the AF. The only differences concerned the initially planned and the actual time schedule of the activities. These differences concerning the actual timetable of the Task have been described in detail under section 3.2 of the present report. A detailed description of the Actions and the deliverables produced are included in the following chapter.

Task D. Implementation of Pilot Activities

The majority of the Actions under Task D were implemented according to the AF. The on-line forum that has been described in Action D2, FLOOD CBA Exercise Test, was actually combined by most of the partners with the realization of the training seminars. At the end of the training sessions, the partners engaged their trainees to register themselves on the project's website and answer the on-line evaluation questionnaire. In this way the consultation process had a less spontaneous and more effective character. However, the partners also received spontaneous answers to the on-line questionnaire which were also included in the final report of results.

With regard to the organization of the training seminars, partner AB4 and AB5, found it more efficient and convenient to conduct in-house training, i.e. train their stakeholders in smaller groups by visiting them at their offices, instead of organizing one common event for all their stakeholders. In overall, the target of training 60 stakeholders in all the participating countries was accomplished.

Any deviations concerning the actual timetable have already been explained under section 3.2 of the present report. A detailed description of the Actions and the deliverables produced are included in the following chapter.

Task E. Information, communication and capitalization measures

The Actions under Task E were implemented successfully according to the AF. Slight deviations were indicated regarding the organization of the informative workshops. The CB and AB1 exploited the opportunity of larger events for the dissemination of the activities of FLOOD CBA in order to achieve a broader impact towards a bigger number of national stakeholders. The partners proceeded with these actions after receiving the positive opinion of the responsible EC desk officer.

The rest of the partners, AB2, AB3, AB4 and AB5 combined their workshops with the organization of the CMs in Bucharest, Lisbon, Kassel and Seville respectively. This change caused consequent delays to the initial time schedule regarding the workshops realization. However it gave the opportunity to the national stakeholders to meet and communicate with all members of the FLOOD CBA consortium.

Any other deviations concerning the actual timetable have been described under section 3.2 of the present report. A detailed description of the Actions and the deliverables produced are included in the following chapter.

4.2 Qualitative evaluation of the activities

To avoid repetition, and for ease of reading, the evaluation of each of these activities has been dealt together with the evaluation of the deliverables one by one, in chapter 5.

5 PRESENTATION OF THE TECHNICAL RESULTS AND DELIVERABLES

The T forms of the FLOOD CBA Application Form have been used in this section as reference to initially planned activities and deliverables.

In accordance with the final report specifications, each deliverable is presented based on the following analysis:

- description of individual deliverables;
- purpose of the deliverable;
- evaluation of the deliverable;
- value-added of the deliverable in particular European value-added and transferability;
- dissemination (where applicable)

5.1 Task A: Management and Reporting to the EC

Deliverables:

- Project Work Plan
- Project's organizational structure
- Project Monitoring and Evaluation System
- Progress report 1 (8 months' period)
- Progress report 2 (16 months' period)
- Final report (24 months' period)
- 6 Coordination meetings
- Quality Handbook
- Interim Quality Report
- Final Quality Report

Project Work Plan

<u>Description</u>: During the 1st CM in Thessaloniki the project partners agreed on the Project Work Plan which was in line with the approved AF. The Project Work Plan was revised in the course of the project. The emerged changes were depicted on the revised T forms which were submitted together with the two (2) Progress Reports to the EC.

<u>Purpose</u>: The purpose of the deliverable was the detailed definition of activities and obligations of the project partners according to the approved working plan and timetable, taking into consideration all necessary parameters that were specified in the Grant Agreement.

<u>Evaluation</u>: The deliverable was accepted by the project partners and was estimated as precise and detailed. The deviations from the originally approved technical forms were limited and well justified.

<u>Value-added</u>: The pattern of the specific project planning appears as appropriate for the design and implementation of future European projects by international consortiums. The deliverable was assessed by the CO's quality auditor in the framework of the 1st internal audit.

<u>Dissemination</u>: The deliverable was communicated to the project partners and the responsible EC desk officers.

Project's organizational structure

<u>Description</u>: The deliverable was compiled by the CB with the contribution of all Associated Beneficiaries (AB). According to the project management scheme that was described in the approved AF, the project management structure was formed and staffed. Each AB appointed representatives to the five Units that were established, a. Lead Partner; b. Coordination Office; c. Steering Committee; d. Working Group; e. National Working Teams. The project management structure was finalized during the 1st CM of FLOOD CBA in Thessaloniki.

<u>Purpose</u>: The purpose of the deliverable was the establishment of the appropriate organisational infrastructure and its effective function in order to assure the successful elaboration of the project.

<u>Evaluation</u>: The organisational structure of FLOOD CBA was estimated by the project partners as effective, flexible, and appropriately staffed since all necessary tasks were carried out successfully and any difficulties were smoothly overcome. The deliverable was assessed by the CO's quality auditor in the framework of the 1st internal audit.

<u>Value-added</u>: The pattern of the specific organizational structure appears as appropriate for the design and implementation of future European projects by transnational consortiums.

<u>Dissemination</u>: The deliverable was communicated to the project partners and the responsible EU desk officers and it is also attached to the final report.

Project Monitoring and Evaluation System

<u>Description</u>: This deliverable is a supportive tool for the monitoring and evaluation of the project execution. Time, cost and target's achievement were tracked and assessed via the use of specific measurable indicators. These data provided the necessary input for project evaluation and subsequent actions. The Monitoring and Evaluation System consists of the following modules:

- Gantt Chart, for the time monitoring of the Project execution
- Table of Project Deliverables and Milestones (including scheduled and actual completion dates, calculation of probable delays, identification of responsibilities).
- O Project Evaluation Spreadsheet. The evaluation of the project will be implemented at a separate spreadsheet using a series of progress indicators. For each indicator, the target will be defined, and at a different column the realized quantity will be noted. The evaluation of the related activity will result from the following three constituents:

Realization: The realization factor can take the value of 1 and 0 (according to the accomplishment of the relevant activity).

Rating: The rating factor can take the values from 0 to 5, and results from the quality of the output, the duration and the cost of the relevant activity (compared to the foreseen ones).

Weightiness: The weight factor indicates the importance of the relevant activity (compared to the other activities of the same tasks, as well as to the activities of the whole Project).

For the evaluation of each activity, the above mentioned factors have to be multiplied. The overall assessment of the Project results as a sum of separate products. The factor ranges were selected properly, so as the excellent implementation of the Project to be rated with 100 and the worst with 0. The actual overall grade of the Project is given out as a percentage of the theoretically perfect score.

The deliverable was successfully completed by the CB with the contribution of all ABs. The tool was continuously applied by the Coordination Office during the project in order to track the progress of the activities and recognize delays or miss-estimations.

<u>Purpose</u>: The purpose of the deliverable was the continuous evaluation of the project's progress and technical completion as well as the early determination of potential deviations or inconsistencies and designation of proper support and corrective actions.

<u>Evaluation</u>: The deliverable was accepted by the project partners and considered as a useful tool that efficiently served the purpose of its formulation. The deliverable was assessed by the CO's quality auditor in the framework of every internal audit.

<u>Value-added</u>: The Monitoring and Evaluation System appears to be appropriate for the implementation of any European project by international consortiums.

<u>Dissemination</u>: The monitoring and evaluation system was communicated by the CB to the project partners and the responsible EU desk officers.

Coordination Meetings

<u>Description</u>: Seven coordination meetings were realized. The CMs were hosted by the CB in Thessaloniki (February 2013), by AB1 in Oxford (May 2013), by AB2 in Bucharest (September 2013), by AB3 in Lisbon (January 2014), by AB5 in Seville (May 2014), and by AB4 in Kassel (September 2014). The final coordination meeting was combined with the final conference in Thessaloniki (December 2014).

The outputs of each CM were the agenda, the list of participants, the presentations, the minutes of the meeting and a number of photos.

All CMs were realised with the presence of all partners. No absences were ever reported. The project status in each participating country, the completed actions, and the accomplished targets, the schedule of forthcoming events and activities as well as project management issues were analyzed during the CMs. These events were opportunities for the accomplishment of high level know-how and experience exchange as well as settlement of cooperation and project management issues.

<u>Purpose</u>: The purpose of the CMs was to establish smooth and direct communication lines among the project partners, indicate potential problems and solve them well in advance.

<u>Evaluation</u>: The coordination meetings were always perceived as successful. The success was attributed to the fact that a. there was always sufficient representation of each project partner; b. their results had always a positive impact on the technical, financial and administrative progress of the project; c. they were excellent opportunities for experience and know-how exchange among the participants. The deliverable was assessed by the CO's quality auditor in the framework of the respective internal audits.

<u>Value-added</u>: The direct monitoring of the project via organizing one CM almost every four months appears as appropriate for the implementation of any European project by international partnerships of the same or even bigger number of partners. Additionally, as already stated above, the CMs were organised in such a way so as to endeavour the harmonization of the participating countries on civil protection issues.

<u>Dissemination</u>: The outputs of the CMs were communicated by the CB to the project partners and the responsible EU desk officers. They were also published on the FLOOD CBA website. They are also attached to the final report.

Reports to the EC

<u>Description</u>: Two progress reports and one final report were prepared by the CB and were submitted to the project EU desk officers. The 1st progress report covered an 8-month period, the 2nd progress report covered a 16-month period while the final report covers the whole duration of the project. The reports followed the relevant specifications and templates of the Grant Agreement. The deliverables that were completed by the time of submission of the progress reports were attached to them.

<u>Purpose</u>: The purpose of the reports was to meet the requirements of the Grant Agreement and to provide proper reporting to the European Commission.

<u>Evaluation</u>: The progress reports and the final report were submitted in time according to the deadlines set by the Grant Agreement. They included all necessary information so as to give in a precise and inclusive way the progress of the project, the main outcomes, the occurred problems and the future activities. The deliverables were assessed by the CO's quality auditor in the framework of the 3rd and 6th internal audits.

<u>Value-added</u>: The reports were the direct way of providing information on the project evolution to the EC.

<u>Dissemination</u>: The progress reports were communicated by the LP to the project partners and the responsible EU desk officer. The final report is expected to be published on the DG-ECHO website after its approval by the Commission.

Quality Handbook

<u>Description</u>: The Flood CBA Quality Handbook defined the structure of the Flood CBA Quality Management, the tasks and responsibilities of the involved personnel, the procedures and guidelines which were applied by the project partners.

The CB prepared and delivered to all project partners, the project Quality Handbook. The Handbook was by the project Working Group during the 2nd CM, in Oxford. This Quality Handbook was under review on a constant basis, during the project lifetime.

<u>Purpose</u>: The development and implementation of the project Quality Handbook was to ensure high standards of quality for all the actions implemented, the results and the deliverables produced, during the project lifetime.

<u>Evaluation</u>: The Quality Handbook was evaluated as a coherent document that respected the AF and Grant Agreement specifications as well as the partnership's decisions from the 1st CM. Being a Handbook it is easy to follow, containing mainly tables regarding the partners' responsibilities and descriptions of the Deliverables, Objectives and involved Processes. The deliverable was assessed by the CO's quality auditor in the framework of the 1st internal audit.

<u>Value-added</u>: The Quality Handbook is part of a Quality Management and Assurance System in the pattern of ISO9001/2008 Management System. This applied Quality Management and Assurance System is an innovative tool in the management and coordination of projects and can be easily adopted in the framework of any kind of European programmes and partnerships.

<u>Dissemination</u>: Draft versions of the Quality Handbook were circulated among the project partners before its finalisation during the 2nd CM. The final version was forwarded to the EC desk officers and it is also attached to the final report. Since the document concerns internal procedures it was not published on the project website.

Quality Reports

<u>Description</u>: An interim and a final quality report were compiled in the middle and at the end of the project duration respectively. The Quality Reports contained the results of the implemented internal audits that were realised every 3 months from the beginning until the end of the project.

The Quality Reports were prepared by an external Quality Auditor appointed by the CB, who also conducted the internal audits.

<u>Purpose</u>: The purpose of the Quality Reports was to depict the results from the implementation of the quality management and assurance measures developed for FLOOD CBA project. The Quality Reports was an important feedback mainly to the compilation of the Final Report of the project.

<u>Evaluation</u>: The Quality Reports were approved by the CB after being prepared by the contracted Quality Auditor. Their contents were checked against the findings of the internal audits, the table of the corrective – preventive actions, and the contents of the Quality Handbook. The deliverable was assessed by the CO's quality auditor in the framework of the 5th and 8th internal audits.

<u>Value-added</u>: The Quality Reports are part of a Quality Management and Assurance System in the pattern of ISO9001/2008 Management System. This applied Quality Management and Assurance System is an innovative tool in the management and coordination of projects and can be easily adopted in the framework of any kind of European programmes and partnerships.

<u>Dissemination</u>: The Quality Reports were circulated among the project partners. The findings of the internal audits were announced during the CMs. The Quality Reports were also forwarded to the EC

desk officers and are now attached to the final report. Since the documents concerns internal procedures it was not published on the project website.

5.2 Task B: Building the Stakeholders Capacity

Deliverables:

- Information Exchange Network
- Collection of Background Information
- Consultation Plan
- Stakeholders' Questionnaire for the consultation process
- Report on Stakeholders' views

Information Exchange Network

<u>Description</u>: The Information Exchange Network of the FLOOD CBA project was established at the early stages of the project. The members of the Network would be the identified national stakeholders in each participating country that are directly involved in flood risk management decision making. In order to identify the stakeholders a questionnaire was elaborated and distributed among all FLOOD CBA partners, who were responsible of collecting the information in their respective countries /regions. The information was compiled in a single, common database so it could be updated or modified during the project running.

The FLOOD CBA Network database contained the following information for each identified stakeholder: the stakeholders' name, the institutional nature (e.g. Public Administration, Private Sector, NGO), the level of action/scale (e.g. national, regional), the competences and responsibilities regarding Flood Risk Management, the use or absence of CBA, the willingness to collaborate with the FLOOD CBA Project, and the contact details of each institution.

Six national/regional networks and 86 stakeholders were identified and became part of the network. These included mostly Public Administrations, such as Ministries, Agencies of Environment, Water Management Departments, Civil Protection Agencies, Emergency/Response/Preparedness Units, Hydraulic and Civil Engineering Bodies, and Urban and Land Planning Departments among others. Private sector was also represented by consultants and hydroelectric companies.

<u>Purpose</u>: The goal of this deliverable was to identify the key stakeholders – related to Flood Risk Management in each FLOOD CBA participating country and to establish solid regional/national networks that would be operative through the whole project.

<u>Evaluation</u>: The structure of the established Network was evaluated as concise and operative. The descriptive information gathered for the development of the Network database (e.g. level of action, competences, and willingness to participate in the project or contact details) was of inestimable value to characterize stakeholders as well as to target the potential collaborators for the FLOOD CBA Project. As expected, the national/regional networks were active through the whole running of the project. The deliverable was assessed by the CO's quality auditor in the framework of the internal audits of the 1st year.

<u>Value-added</u>: The creation of an Information Exchange Network is an approach that has already been applied successfully within the framework of other European projects. It considered of great importance to involve stakeholders into the implementation of various initiatives from the early beginning of a project. The created FLOOD CBA Network of stakeholders has the potential to expand its capacity to future projects, as it has already been foreseen by the project work plan, through the Capitalisation Activities and the creation of the FLOOD CBA Forum (Task E).

<u>Dissemination</u>: The list of members of the IEN was circulated among the project partners and was also forwarded to the EU desk officer. The involved stakeholders were continually updated about the progress of the FLOOD CBA project and they also took active part to various activities such as the informative workshops, the training seminars and the consultation process.

Collection of Background Information

<u>Description</u>: The Collection of Background Information consisted in a series of reports produced by the partners containing information about the use of CBA in each country/region, including legal and methodological aspects. Each partner was responsible for compiling the information using official, reliable sources in their respective countries.

The analysis of the background information in each country was structured around five important themes: i) Implementation framework of CBA applied to Flood Risk Management Measures; ii) CBA modelling; iii) Stakeholders' involvement; iv) Limitation of existing approaches and use of alternative approaches; v) Case studies and good practices; and vi) Available support structures and links with other schemes.

The analysis of the results allowed clarifying the official use of CBA for Flood Risk Management in each participating country. First of all, results clearly showed that there are important differences among countries concerning the existing legal framework for Flood Risk Management, the type and number of responsible institutions involved, as well as the level of cross agencies coordination and integration. Results also indicated that there are regulations regarding Flood Risk Management in almost all the project participating countries, most of them deriving from the EU Floods Directive 2007/60/EC. On the other hand most of the countries lack official guidelines to apply CBA for Flood Risk Management. The

application of CBA Flood Risk Management was highly diverse across countries, ranging from being a common, institutionalised practice to the total absence of the use of this method.

Regarding the involvement of public participation, results showed most of the countries incorporate such processes in Flood Risk Management, although the degree of involvement was different in each situation. All the collected information was very useful to establish the general picture regarding the development and practice of Flood Risk Management in each country and to elaborate a Consultation Plan that could be applied in all the participating countries despite their different backgrounds and FRM traditions.

<u>Purpose</u>: The purpose of this activity was to assess the baseline conditions in each participating country concerning the applied CBA and MCA practices in relation to flood risk management.

<u>Evaluation</u>: The activity of the collection of background information was successfully completed. Input to the assessment questionnaire was provided by all partners. Based on the given feedback a clear picture on the baseline conditions in each country was formulated. The deliverable was assessed by the CO's quality auditor in the framework of the 2nd internal audit.

<u>Added value</u>: Based on the results of this activity the approach of each partner towards the national stakeholders and the realisation of the following activities were accordingly designed. The findings of this assessment pointed out the necessity of knowledge transfer on CBA and MCA practices from the countries of high expertise to the countries less familiar with the CBA and MCA implementation.

<u>Dissemination</u>: The assessment questionnaire was disseminated among the partners. The findings were presented during the CM in Bucharest. The questionnaire and results were communicated to the EU desk officers and were also presented to the FLOOD CB stakeholders during the national informative workshops. The results were also announced in the framework of the FLOOD CBA presentation in Rome at the WGF meeting in October 2014. The completed questionnaires are attached to the final report.

Consultation Plan

<u>Description</u>: The Consultation Plan was developed in the framework of the Action B3 "Assessment of the stakeholders' views". It was a document specifically designed to allow collecting a wide range of opinions from stakeholders and the awareness of their needs. Besides, it was a mean of sharing experiences and views from very different stakeholders that are affected by the CBA in different forms and levels. In the frame of the Consultation Plan, a common questionnaire was designed and distributed among all the FLOOD CBA partners. The questionnaire was translated to each of the languages of the FLOOD CBA participating countries and allowed to create the final Report on stakeholders' views.

Some of the topics included in the Consultation Plan are: the views of stakeholders about the use of CBA in each partner country an how this is implemented; how can CBA contribute to improve quality of life of the local population; the perception of environmental losses caused by flooding; future vision of other issues that can guide the understanding of perceptions at local or regional scales.

In particular the stakeholders were consulted on the following topics: Usefulness of CBA; Most controversial issues about CBA; Aspects that need further improvement / clarification; Gaps that need to be fulfilled; What is and should be in future the role of stakeholders in the implementation process?

At the end of the implementation of the Consultation Plan it was possible to understand:

- The variety of uses of CBA methodologies;
- Possible controversial issues;
- Topics that are missing;
- Stakeholders' involvement in the implementation process.

<u>Purpose</u>: The Consultation Plan will played an important role as a coordination tool in collecting information that was used by all project partners, being an excellent way to engage stakeholders in the process, following up the review of the background information.

<u>Evaluation</u>: The deliverable was developed according to the requirements of the AF. It covered all necessary aspects that allowed the project partners to implement the assessment procedure effectively used to increase stakeholders' knowledge and enable them to make more informed contributions and decisions. The deliverable was assessed by the CO's quality auditor in the framework of the 1st, 2nd and 4th internal audits.

<u>Added-Value</u>: The Consultation Plan allowed the trust building between the project partners and the stakeholders and the development of a common vision on the issues at stake. It was a solid guide for the working teams of the partners to implement the consultation action in a common way to all stakeholders and regulate the procedure according to a common prototype which has duplication potential to similar actions in the future.

<u>Dissemination</u>: The draft version of the deliverable was presented by AB3 and AB4 to the rest of the partners during the CM in Oxford. The partners agreed on the contents and the final version was uploaded on the project website. The deliverable was attached to 2nd Progress Report of the project and is also attached to the final report.

Stakeholders' Questionnaire for the consultation process and Report on Stakeholders' views

<u>Description</u>: The Report on stakeholders' views was the final deliverable under Task B. It helped to understand the very different realities of the application of CBA as well as the diverse demands and limitations that exist in each context. This deliverable was the result of the interaction among all actions of Task B. The report on the Stakeholders' Views was developed based on the Consultation Plan as described above.

A common questionnaire was designed by AB3 and AB5 and distributed among all the FLOOD CBA partners. The questionnaire was translated to each of the languages of the FLOOD CBA participating countries and allowed to create the final Report on stakeholders" views.

On the one hand, the Questionnaire contained thirty multiple-choice and open questions divided in four categories: i) Main methodologies applied to Flood Risk Management; ii) Controversial issues and/or aspects that need further clarification; iii) Gaps in the implementation of CBA regarding Flood Risk Management; and iv) Stakeholders' involvement in the elaboration and/or implementation of Flood Risk Management plans.

On the other hand, the Report on stakeholders' views presented five different sections of contents: i) an introduction to guide the reader though the document, ii) an overview of the use of CBA in different EU socioeconomic environments, iii) a section with the results of the questionnaire, which constituted the bulk of the report iv) a conclusions chapter and v) an annex with the questionnaire used in the consultation.

Thirty eight stakeholders (i.e. national and regional administrations, public agencies, etc.) from the six participating countries completed the questionnaire. Although their answers did not show the official view in these countries, the information collected represented a very valuable resource to understand the different views and perceptions of CBA and Flood Risk Management in different EU socioeconomic contexts.

The analysis of the results indicated that CBA was the best known among the stakeholders (40% respondents), followed my MCA (34% respondents) and finally Cost: Effectiveness Analysis (19% respondents). Moreover most stakeholders considered that CBA was a reasonably good method to be applied in Flood Risk Management. Regarding the effect of the Floods EU Directive, most of the respondents (over 80%) consider that it has assisted/is assisting to the practice of FRM in their countries, although opinions about the real effect of the Directive at present varied greatly among countries. On the other hand, most stakeholders (about 70%) consider that not enough efforts are being done in Flood Risk Management in their respective countries or regions; in this sense, prevention was definitely considered key area for a better Flood Risk Management context.

Furthermore, in order to improve the current Flood Risk Management situation, CBA was cited together with a variety of different complementary/alternative methodologies and tools (i.e. Multi Criteria Analysis). All these results, together with many other valuable conclusions, helped to better understand the differences across countries both in Flood Risk Management and the use of CBA and also created a starting point to design the rest of the deliverables of the project in a stakeholders 'needs oriented and useful way.

<u>Purpose</u>: The core objective of the consultation process and the consequent report was to receive the stakeholders' comments and requirements regarding the content and the information provided by the Cost/ Benefit analysis of the Flood Prevention Measures

<u>Evaluation</u>: The consultation process that was realized via the use of the stakeholders' questionnaire succeeded to raise the awareness of the policy makers and key stakeholders; implement an efficient method for the assessment of the stakeholders' needs; investigate in depth the stakeholders' requirements on the cost benefit analysis of flood prevention measures. The deliverable was assessed by the CO's quality auditor in the framework of the 2nd, 3rd and 4th internal audits.

<u>Added-Value</u>: Based on the results of the consultation process, the partners developed accordingly the deliverables of Task C as well as the training material and training seminars under Task D. Future projects ideas may also originate from the outcomes of this process and the relevant report on stakeholders' views.

<u>Dissemination</u>: The questionnaire was developed by AB3 and AB5. After its approval be the FLOOD CBA consortium it was disseminated to the project stakeholders and uploaded on the website available to be answered by spontaneous users as well. The questionnaire was delivered to the EU desk officer with the 2nd progress report. The report on stakeholders' views is also available on the website and it is attached to the final report.

5.3 Task C: Improving the Process of Knowledge

Deliverables:

- Common Characterization Framework
- Knowledge Base Platform
- Cost Benefit Analysis Guidelines
- Multi Criteria Analysis Guidelines

Common Characterization Framework

<u>Description</u>: The framework has been developed iteratively, beginning with features identified in the Stakeholders' Views and Needs Report and targeting the various approaches that are currently considered or used for the economic appraisal of flood risk management measures.

The categories within the framework include the following:

- Typology of measures included in flood management plans
- Identification of flood prevention measures
- Typology of costs linked with the implementation of flood prevention measures
- Typology of benefits generated by the implementation of flood prevention measures
- Classification of potential damages to be considered (direct, indirect, tangible and intangible flood impacts)
- The issue of the assignment of values to items of Cost Benefit Analysis
- The issue of the incorporation of factors that are not fully taken into account in the economic analysis

<u>Purpose</u>: The purpose of the deliverable was to create a characterization framework of Cost Benefit Analysis features that would provide a common terminology and would be used to achieve a better understanding of the state of the method, its distinguishing capabilities and its leading-edge functionality.

<u>Evaluation</u>: The Common Characterisation Framework was successfully developed in line with the AF specifications in terms of structure and targeted results. A wide range of literature sources was used for the compilation of the deliverable.

<u>Value-added</u>: The contents of the deliverable were transferred as input to the Knowledge Base Platform and also provided a solid base for the development of the CBA guidelines. Furthermore it is a standalone and easy to follow handbook that introduces CBA to the beginners in a user-friendly way. The deliverable was assessed by the CO's quality auditor in the framework of the 3rd and 5th internal audits.

<u>Dissemination</u>: The Common Characterization Framework has been presented in various dissemination events, such as the national workshops, the training seminars, and the final conference as well as to the events organised by other consortia such as the WGF. The deliverable is uploaded on the project website and is also attached to the final report.

Knowledge Base Platform

<u>Description</u>: The FLOOD CBA Knowledge Base Platform structure was created by the CB. The contents were developed gradually with the contribution of all project partners. All interested users may have access to the Knowledge Base. However, only registered users are allowed to enter their input and comment on the existing contents. The contents of the Knowledge Base refer to a broad range of both CBA and MCA. It is a combined electronic library and case studies matrix for topics such as:

- EU policy, National legal and regulatory framework
- Conceptual elements of Flood Prevention Cost Benefit and Multi Criteria Analysis
- Definition and classification of benefits and costs
- Flood risk mapping
- Data needs and sources for evaluating the benefits and costs in monetary terms
- Categories of flood risk management measures
- Techniques for adjusting the future prices of costs and benefits to present values
- Case studies
- Relevant Projects

Six key buttons for a quick introduction to CBA have been added as well as a simplified tool for Cost: Benefit calculations and useful tips for the CBA implementation process.

The users of the Knowledge Base Platform can find a number of useful tools that may facilitate them in the course of a CBA study:

- The simplified tool for Cost: Benefit analysis calculations allows the user to enter facts regarding residential and nonresidential properties and consequent costs of damages for various periods of floods. These facts combined with the cost of potential flood risk management schemes lead to instant results based on core online calculations.
- The interactive FLOOD CBA geomap where various severe flooding incidents around Europe are presented with short descriptions and photographs. It is an electronic map on which data is arranged geographically. The system consists of dynamic information, focused on a Google map that contains the locations of data. The map moves either by the user or automatically to include the locations chosen by the user. The data concerns various flood incidents, case studies of flood risk management,

photos, videos, etc. around Europe with the potential of being extended at worldwide level. The Knowledge Base Platform is a dynamic tool that is continually updated and will stay active after the completion of the project. Users may visit the Platform by following the link: http://www.floodcba.eu/main/?page_id=7340&lang=en

The Flood CBA matrixes with residential and non residential flood vs depth data for short and long duration floods. The residential data is considered as total damage per property for five types of residential properties: Detached, Semidetached, Terrace, Bungalow and Flat. The nonresidential data refers to damage per square meter.

<u>Purpose</u>: This IT infrastructure ensures the interactive networking and the intelligent engagement of key actors and stakeholders and provides the proper framework for the continuous advance in the process of knowledge transfer and co-creation.

Evaluation: The FLOODCBA Knowledge Base Platform was successfully completed in terms of structure and content development. It is an IT tool easily reachable via which any interested party may acquire or record, manage and disseminate easily and effectively valuable information regarding CBA and MCA Flood Risk Management. The Platform was evaluated with regard to its structure, operation and contents by the IEN members as well as other spontaneous users. The evaluation was conducted via an on-line questionnaire which was developed in the framework of the Action D2. The project stakeholders were invited to answer this on-line questionnaire. The results led to the enrichment of the Platform's contents. The deliverable was assessed by the CO's quality auditor in the framework of the 4th, 5th and 6th internal audits.

<u>Value-Added</u>: The Knowledge Base Platform contributes to the enhancement of information exchange between stakeholders and other interested bodies in European level. All project partners provided information to the various fields of the Knowledge Base, while other European and international competent bodies were also invited to add their work. This tool is a live field of experience and knowledge exchange that may generate new ideas and new co-operations for the implementation of future ventures.

<u>Dissemination</u>: The Knowledge Base Platform is accessible via the project website, <u>www.floodcba.eu</u>. The Platform was presented in every occasion where the FLOOD CBA project was introduced to the project stakeholders. The Platform was presented in more detail during the realized training seminars of Action D1.

CBA and MCA Guidelines

<u>Description</u>: Part of the overall project has been devoted to the creation of the necessary Support Tools that would facilitate the design and undertaking of the appraisal process of the flood prevention measures. Two separate Guidelines have been compiled and issued.

The first Guideline refers to the implementation of Cost Benefit Analysis. The Cost Benefit Analysis Guideline therefore offers a step by step ""how to do it"" commentary on the various items to be assessed in the context of a cost: benefit appraisal. It uses the common terminology adopted in the course of the Common Framework and provides connections to the knowledge base platform for further detail or investigation on areas where the assessment is not straightforward and consensus is still lacking.

The second Guideline entails the presentation of assessment methods other than the CBA. These approaches (principally Multi Criteria Analysis) are particularly relevant in cases where the effects of different options can be assessed, but where it is difficult to value them in monetary terms. They can also be applied in cases where only part of the benefits of a flood risk management measure can be captured in monetary terms, and where it is expected that the non-monetised effects will be significant for the results of the analysis.

Cost: Benefit considerations can be included as one (albeit central) criterion of a Multi Criteria Analysis, but at the same time complemented by other, nonmonetary factors. The guideline contains a description of the theory behind Multi Criteria Analysis, and an analysis of both the ideal approach and more pragmatic alternatives. This is followed by two chapters which discuss assessment of recreation benefits of flood risk management schemes, and environmental benefits/costs of the same interventions. In addition, there is a chapter on the human "intangible" impacts of flooding, to be built into a Multi Criteria Analysis framework.

Both Guidelines were developed within the project by AB1 and tested at a number of meetings of users of CBA in the countries represented by consortium members. The project partners translated the Guidelines in their languages so as to facilitate their use by national stakeholders and so multiply their impact.

Purpose: The CBA and MCA Guidelines are necessary Support Tools that facilitate:

- the design and implementation of appraisals of different flood risk management measures,
- the decision making process in the area of flood risk management.

<u>Evaluation</u>: The CBA and MCA Guidelines were successfully developed in line with the specifications of the AF. The desirable result, i.e the development of useful tools that may serve as reliable and integrated references to policy makers in the framework of assessing flood prevention measures was accomplished. The guidelines were presented in a series of dissemination events and they were evaluated as useful modules by the project stakeholders. The deliverables were assessed by the CO's quality auditor in the framework of the 5th and 6th internal audits.

<u>Value-added</u>: The contents of the deliverables were transferred as input to the Knowledge Base Platform and also provided a solid base for the development of the FLOOD CBA training material. Furthermore, both guidelines are user-friendly and easy to follow handbooks that introduce the CBA and MCA implementation practices to potential users.

<u>Dissemination</u>: The CBA and MCA Guidelines has been presented in various dissemination events, such as the national workshops, the training seminars, and the final conference as well as to the events organised by other consortia such as the WGF. The deliverables were translated in all partners' languages, printed in hard copies and disseminated to the project's stakeholders. All versions are uploaded on the project website and are also attached to the final report.

5.4 Task D. Implementation of Pilot Activities

Deliverables:

- Training Seminars
- On line questionnaire on the operation of the FLOOD CBA Platform
- Results of answered questionnaires
- FLOOD CBA Helpline Centre
- Report of improvements for the operation of the Knowledge Base Platform

Training Seminars

<u>Description</u>: After the completion of the FLOOD CBA Support Tools and the development of the Knowledge Base Platform, the project partners initialised a participatory procedure in order to raise the awareness of policy makers and other interested stakeholders as well as to facilitate the further improvement of the developed FLOOD CBA products.

Based on the contents of the Knowledge Base Platform and the two Guidelines, CBA and MCA, practical educational material was developed, offering specific information on the issue of implementing CBA projects. More specifically, the training material included the following modules:

I. General

- Introduction and CBA terminology in Flood Risk management
- Legal and regulatory framework in the Flood CBA participating countries
- Scope and outcomes

II. Methodology of CBA in Flood Risk Management

- Costs
- Benefits
- Analysis of cost and benefits

III. Data Management

Data Management

The training material was produced in the English language and it was translated in all partners' languages. Each FLOOD CBA partner realised training sessions addressed to the members of the national clusters. 160 stakeholders had the opportunity to attend these sessions and be trained on the main aspects of CBA in flood risk management.

The LP organised a training seminar in Kavala, on the 25th of September 2014, on the Cost – Benefit analysis features and methodologies as introduced by the FLOOD CBA project. The seminar was attended by 14 stakeholders comprising mainly representatives from the Water Directorates and Directorate of Civil Protection of the Decentralised Administration of Macedonia and Thrace.

A training session was held by AB1 on June 12th 2014, located in Birmingham. It was a one day course, attracting some 25 participants from a range of organisations including local authorities, consulting engineers and central government agency representatives. In addition, there were two representatives from private companies, and one from a Non-Governmental Organisation.

On September 3, 2014 AB2 the Romanian stakeholders training seminar on the CBA features and methodologies as introduced by the FLOOD CBA project. The seminar was attended by 30 representatives of the competent authorities for flood risk management (Ministry of Agriculture and Rural Development, Ministry of Environment and Climate Change – Department for Water, Forests and Fisheries, Arges— Vedea Water Basin Directorate, Bucharest Emergency Situations Inspectorate, Pitesti Water Management System, Bucharest Hydrological Station, Hydrological Forecasts, Hydrologic and Hydrogeologic Services) and different stakeholders., experts in feasibility studies (SC HIDROELECTRICA SA, SC URBAN PROIECT SA), researchers, hydrologists. A second seminar was organized back to back with the Stakeholders' Workshop, 10.11.2014, where the knowledge data base was presented and questions followed about different material and presentations, most of them referring the Flood Directive implementation, for risk estimation methods. It was a large audience of 54 participants.

On the 30th of October 2014, AB3 realized the Portuguese stakeholders' training seminar on the Cost – Benefit analysis features and methodologies as introduced by the FLOOD CBA project. The event was attended by 12 stakeholders comprising representatives from the Municipally of Lisbon and Amadora,

Portuguese Environment Agency and National Authority for Civil Protection. Also there were 2 foreign researchers that demonstrate the interest in attending and 11 PhD students from a course about Natural Hazards and representative of the CIRAC Project, "Maps of Floods and Risk in Climate Change Scenarios".

The training of the German stakeholders, realized by AB4, had to be held as in house-training because in practice it was impossible to find a date in common for all stakeholders. Therefore from July 2014 on three separate trainings were held:

- September 24, 2014: Wiesbaden, Hessisches Ministerium für Umwelt, Klimaschutz, Landwirtschaft und Verbraucherschutz (HMUKLV)
- November 11, 2014: Schwalmstadt-Treysa, Betriebsräume des Wasserverbandes Schwalm
- November 18, 2014: Homberg (Efze), Betriebsräume der Unger Ingenieure GmbH

The seminars were attended by a total of 9 stakeholders.

AB5 organized 5 Seminars between October 15th and November 19th 2014 to present the Cost – Benefit Analysis tools and resources of the FLOOD CBA project to the Spanish stakeholders. These seminars took place during 2014 on the following dates and places:

- October 15th: University Pablo de Olavide.
- October 20th: Civil Protection Service of the Regional Ministry of Justice and Internal Affairs and Andalusian Emergencies Group (GREA).
- October 21st: Civil Protection Delegation of the Spanish Government.
- November 18th: Guadalquivir Hydrographic Basin Confederation, of the Spanish Ministry of Environment.
- November 19th: Andalusian Regional Ministry of Environment and Agency of Environment and Water.

The events were attended by a total of 20 stakeholders.

<u>Purpose</u>: The purpose of the training seminars was a. the promotion of the technical aspects of the FLOOD CBA Knowledge Base Platform and Support Guidelines; b. The awareness raising of the decision makers and stakeholders; c. the discussion and exchange of experiences among persons involved in flood risk management and prevention measures.

<u>Evaluation</u>: All project partners succeeded in realising the training activity at national level at the presence of targeted stakeholders, members of the FLOOD CBA Network. The consortium achieved

the target of training at least 60 stakeholders in all participating countries. The deliverables were assessed by the CO's quality auditor in the framework of the 6th, 5th and 8th internal audits.

<u>Value-added</u>: Via the training seminars, the FLOOD CBA project succeeded in providing the competent authorities with practical guidelines and instructions in applying CBA in flood risk management. These guidelines and instructions could eventually come into force in the future in order to enhance the regional/ national decision making with regard to the flood prevention measures. Additionally, the training seminars were exploited in favour of the evaluation of the Knowledge Base Platform since all partners invited their trainees on-spot to answer the on-line questionnaire thus succeeding a wider participation in the evaluation process. Finally, the training seminars approach is an advanced method of raising the stakeholders' awareness and multiplying the project's impact.

<u>Dissemination</u>: The training material was prepared by AB4 and presented to the rest of the partners during the CM in Seville. The final version was formulated by the integration of the partners' comments and recommendations. The training material in all partners' languages is uploaded on the project website. In view of the seminars' realisation the partners sent relevant invitations to the targeted stakeholders. The results of the seminars are presented on the FLOOD CBA website.

On line questionnaire on the operation of the FLOOD CBA Platform and Results of answered questionnaires

<u>Description</u>: An online evaluation questionnaire was created and disseminated among the FLOOD CBA stakeholders and other potential users. The goal of the questionnaire was to evaluate and fine-tune the proposed FLOOD-CBA Knowledge Base Platform and the respective support material. The questionnaire assesses the following thematic areas:

- a) the structure integrity and ease of use, of the proposed IT platform,
- b) the completeness of the contents in each separate module of the Knowledge Base,
- the complementarities of the different elements of the whole system (Knowledge Base and Support Tools)

The on-line questionnaire is documented in (http://www.floodcba.eu/main/?page_id=8308&lang=en).

The questionnaire's results helped in the initialization of the participatory mechanism that would raise the awareness of policy makers and other interested stakeholders. It would facilitate the further improvement of the developed Cost Benefit Analysis tools of flood prevention measures.

The consortium received 42answers to the on-line questionnaire. Most of the respondents to the online-questionnaire like probably most of the participants in training seminars are working in public administrations. The rest of respondents are originated in NGOs, research and universities including students. The level of work in accordance to spatial scaling reaches almost equally from local via

regional to national levels. The international plus the hydrological basin level reached the same values. It has to be kept in mind that in this question multiple answers were possible. The final question on the initial contact of the respondents to the FLOOD CBA project emphasizes the importance of direct and personal contacts between stakeholders since three quarters of respondents learned about the project by this way.

The acceptance of the Knowledge Base Platform is clearly shown by the answers. Most of the users are originated in the public sector, on all levels of spatial scales and is very interested in practical information like case studies or other examples. The development in the field of CBA and MCA is not anticipated to be very rapid otherwise the platforms visit would be expected more often than once to three times a year. Furthermore the type of initial contact with the project and the knowledge base platform show the importance of personal communication between the stakeholders on the topic of flood risk management.

For the further development of the FLOOD-CBA Knowledge Base Platform there is a demand for additional practical information on CBA as well as MCA among the stakeholders in flood risk management.

<u>Purpose</u>: The purpose of the deliverables was the evaluation and fine – tuning of the proposed FLOOD CBA platform and the respective support material. This process helped the partners to identify potential deficiencies of the IT tool both in operational and contents aspects.

<u>Evaluation</u>: The FLOOD CBA exercise test was implemented successfully via the on-line questionnaire. This was depicted by the satisfying number of stakeholders who contributed to the evaluation of the IT Platform and the useful results that led to the improvement of the Knowledge Base Platform. The questionnaire itself was appraised by the partners as including well aimed and to the point questions. On the other side, the stakeholders found it an easy to follow questionnaire without excessive requirements but well structured. The deliverable was assessed by the CO's quality auditor in the framework of the 6th internal audit.

<u>Value-added</u>: The developed questionnaire is a tool that can be easily adopted and used in the framework of the evaluation process of other IT Platforms. Additionally the stakeholders' answers helped the consortium to identify the system's deficiencies and move on to an improvement of the initial contents and the addition of more interactive applications.

<u>Dissemination</u>: The on-line questionnaire and the consequent report of results were developed by AB4. The partners revised the products before their finalisation. The questionnaire is documented in http://www.floodcba.eu/main/?page_id=8308&lang=en. The results of the received answers were presented at the FLOOD CBA final conference. The report of results is uploaded to the project website and also attached to the final report.

FLOOD CBA Helpline Centre

<u>Description</u>: The FLOOD CBA Helpline Centre provides services to any questions and requests set by individuals involved in CBA and MCA analysis of flood risk management. The Helpline Centre was established by the consortium towards the end of the project in order to operate on a pilot basis for a period of 5 months before the end of the project. The users may come in contact with the Helpline Centre via the special form provided on the project website. All questions/ requests are assessed by the FLOOD CBA consortium as well as by the experts of the FLOOD CBA Network. The answers to the requests are given free of charge. The requests that cannot be answered based on the contents of the Knowledge Base will be forwarded to experts of the FLOOD – CBA Network, who will be asked to contribute their expertise to the centre, for final answer. Those answers will be further used for the upgrading of the Knowledge Base contents.

<u>Purpose</u>: The FLOOD CBA Helpline Centre is the unit that provides technical support to individuals that apply CBA and MCA studies in flood risk management. Additionally,

<u>Evaluation</u>: The FLOOD CBA Helpline Centre is an effective and direct way of communication between the FLOOD CBA Network with the users of the IT Platform. The input received serves as feedback to the participatory procedure for the optimisation of the IT Platform. The deliverable was assessed by the CO's quality auditor in the framework of the 7th and 8th internal audits.

<u>Added-Value</u>: The FLOOD CBA Helpline Centre is part of the capitalisation activities plan, since the consortium will maintain its operation for 5 years after the end of the project.

<u>Dissemination</u>: The operation of the Helpline Centre and the services that it provides were presented at the project's final conference. The Helpline Centre operates on-line and will stay active for 5 years after the end of the project.

Report of improvements for the operation of the Knowledge Base Platform

<u>Description</u>: This report contains the improvements that were decided regarding the operation, contents and structure of the FLOOD CBA Knowledge Base Platform. The report was based on the following elements:

- a) the remarks of the stakeholders who participated in the consultation process of Action D.2.
- b) the partners' key stakeholders experimenting and testing the FLOOD CBA deliverables
- c) the individuals feedback received via the Help Line Centre.

The general comments, requests and recommendations were assessed by the partnership .The partners finally decide on the corrective interventions that should be taken in order to optimize the operation of all discrete elements of the FLOOD – CBA platform.

<u>Purpose</u>: The report depicts the necessary interventions for the optimisation of the Knowledge Base Platform based on the stakeholders' feedback.

<u>Evaluation</u>: The discussion regarding the proposed improvements of the Knowledge Base Platform took place during the final coordination meeting in Thessaloniki. Based on the outcome of the discussion the relevant report was compiled by the CO and it was approved by the project partners. The deliverable was assessed by the CO's quality auditor in the framework of the 7th and 8th internal audits.

<u>Added-Value</u>: The improvements described in the report were realized towards the end of the project thus upgrading the Knowledge Base Platform into a more coherent, integrated and interactive tool that will continue to operate for five years more after the completion of the project.

<u>Dissemination</u>: The report was disseminated among the project partners and it is also attached to the final report.

5.5 Task E. Information, Dissemination and Capitalization Actions

Deliverables:

- Communication and Dissemination Handbook
- Project's website
- Informative workshops
- Publications
- Articles, press entries and e-Newsletters
- Booklet of the project achievements
- Final Conference
- Capitalization plan and Exploitation Agreement
- FLOOD CBA Portal and FLOOD CBA Forum

Communication and Dissemination Handbook

<u>Description</u>: The Communication and Dissemination Handbook was created by AB2 in the beginning of the project and was adopted by the partnership. The Handbook described in detail the activities, participants' roles and measures applied during the project for the effective dissemination and visibility

of the project identity, progress and results. The target groups were also defined as well as regulations for editing the FLOOD CBA outputs. The Handbook was created in English.

<u>Purpose</u>: The purpose of the deliverable was to create a "corporate identity" and a common communication strategy on behalf of the project in order to maximise the impact of the outcomes of the project.

<u>Evaluation</u>: The partnership qualified the deliverable as concise and accurate since it described thoroughly the dissemination tasks that should be realised. No declinations compared to the approved AF were indicated. The deliverable was assessed by the CO's quality auditor in the framework of the 1st internal audit.

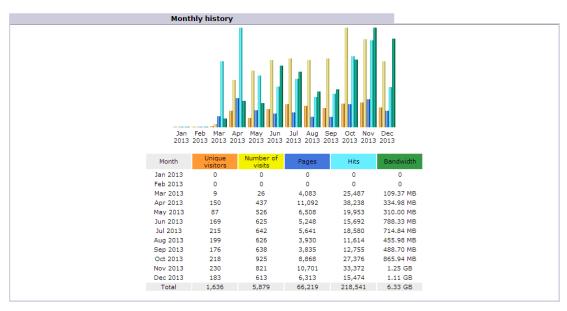
<u>Value-added</u>: The structure and context of the Communication and Dissemination Handbook can be applied as a template for future projects which involve soft dissemination activities within the European territory.

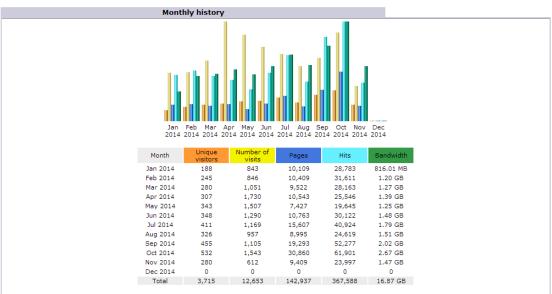
<u>Dissemination</u>: The Communication and Dissemination Handbook was circulated among the project partners and was communicated to the responsible EU desk officer.

Project web site

<u>Description</u>: The project website, <u>www.floodcba.eu</u>, was launched (in English) in the beginning of the project containing information on aspects like: project description, objectives and outputs, deliverables, partners' profile, contact details, announcement of meetings, workshops, seminars and conferences, deliverables, photos, links to other relevant projects, contact details, etc. The FLOOD CBA Knowledge Base Platform was linked to the website. The website also hosts the link to the FLOOD CBA Help Line Centre. The users can register themselves in order to become members of the FLOOD CBA Peer to Peer Network thus having the opportunity, a. to receive the e-Newsletters and b. to have the possibility to add comments and provide knowledge on the FLOOD CBA Platform.

More than 18.000 visits were realized during the life of the project, 2013 – 2014 and more than 5.000 unique visitors were counted.





The website was maintained up-to-date in the course of the project and will stay active for 5 years after its completion.

<u>Purpose</u>: The purpose of the project website was to disseminate and promote to all related bodies and target groups, at EU and international level, the concept, methodology and results of the project.

<u>Evaluation</u>: The website illustrates precisely the project's identity. It operates in a user friendly environment while the core data is achievable through various paths. The deliverable was assessed by the CO's quality auditor in the framework of the 1st and 8th internal audit.

<u>Value-added</u>: The website is a substantial tool which promotes not only the FLOOD CBA project but also the DG ECHO and the European Union. The website will stay active after the completion of the FLOOD CBA activities and will support the operation of

A. the Help Line Center

- b. the Flood CBA Portal
- c. the Flood CBA Forum

<u>Dissemination</u>: The website was available without any restrictions to the broad public. Its operation was presented in each one of the project's events – coordination meetings, informative workshops, final conference – while the web link appeared on all dissemination material in the framework of the project. Finally, links to the FLOOD CBA website were present on the websites of the project partners.

Organisation of Informative Workshops and participation to national and international events

<u>Description</u>: During the project the partners organised informative workshops and took part in a series of other events for the dissemination of FLOOD CBA activities and outputs.

- 1. **Athens, 18-21/4/2013.** Promotion of FLOOD CBA at the 6th International Exhibition ECOTEC of Environmental Technologies;
- Oxford, 15/4/2013. Presentation of FLOOD CBA at the Conference "Changing Extremes in Hydrology" of the British Hydrological Society; Instead of organizing a unique event for FLOOD CBA at the early stages of the project it was considered more efficient to join another event and thus to achieve a broader impact.
- 3. **Thessaloniki, 14/6/2013.** The LP presented the FLOOD CBA project at the RIVERALERT project workshop. RIVERALERT is an Interreg Greece Bulgaria project leaded by the Decentralized Administration of Central Macedonia and Thrace. Instead of organizing a unique event for FLOOD CBA at the early stages of the project it was considered more efficient to join another event and thus to achieve a broader impact. Indeed the project was presented at a group of 87 people.
- 4. **Budapest, June 2013.** Promotion of FLOOD CBA at the Stakeholders" EUSDR meeting;
- 5. **Noordwig, June 2013.** Flood CBA was presented by AB2 as a follow-up Danube FLOOD RISK Project know-how capitalization in the framework of Water Task Force meeting;
- 6. **Brussels, 4/7/2013**. Promotion of FLOOD CBA by AB2 at the International workshop on Forecasting rainfall induced hazards at European Scale, organized in Brussels in the framework of the EU Civil Protection project HAREN (Hazard Assessment based on Rainfall European Nowcasts).:
- 7. **Bucharest, 24/9/2013.** Annual Conference of INGHA. A workshop for the Romanian stakeholders was organized as a back-to-back event by AB2, presenting Flood CBA results. The project partners' presentation papers were included in the Conference's Proceedings (CD); the event was attended by 114 participants.

- 8. **Brussels, 16/10/2013.** Presentation of FLOOD CBA during the "WG F and STAR-FLOOD Objectives, Measures and Prioritisation Workshop";
- 9. **Évora, October 2013.** A presentation to disseminate the project was made on the National Congress of Geography by AB3;
- 10. **London, 12/11/2013.** The structure of the proposed FLOOD-CBA 'Knowledge Platform' was discussed at a meeting at the Royal Society in London on the 12th November 2013. The 25 delegates to this meeting included those from local authorities and the National Flood Forum, an organisation bringing together Flood Action Groups from local flood-affected communities from up and down the country. Feedback from this meeting and other consultations organised by the FLOOD-CBA consortium will be used to improve the 'Knowledge Platform' by making it more "user-friendly".
- 11. **Lisbon, 21/1/2014.** A "FLOOD-CBA seminar" was realized by AB3, with a broad audience of 30 people, including all FLOOD CBA Portuguese stakeholders. During the seminar the project and first findings were presented. Additionally the Portuguese stakeholders made a brief presentation about their role in the process of Flood Risk management. Finally a public discussion took place in order to clarify the pros and cons of the project in Portugal.
- 12. Valencia, 6 -7/3/2014. AB5 promoted FLOOD-CBA in a MED Project (COASTGAP) in which UPO is also partner, during the 2ndSteering Committee meeting. From this promotion, the members of the FACECOAST Cluster (which gathers several projects on coastal issues that exchange know-how and experiences on coastal management, sharing, improving and spreading in this way the knowledge at MED scale) have expressed their interest in including FLOOD-CBA in the cluster.
- 13. **Dublin, 18- 19/4/2014.** Presentation of FLOOD CBA by representative of the DG Environment at the meeting of WG F in Dublin.
- 14. **Seville, 20/5/2014.** AB5 organised an open workshop for the Spanish stakeholders in the University Pablo de Olavide in Seville. The workshop was organized as a back to back event with the 5th CM of the FLOOD CBA project. The workshop was attended by a group of 31 people.
- 15. **Montpellier, 13/6/2014.** AB5 presented FLOOD CBA in the framework of the International Conference of the COASTGAP and MEDSANCOAST Projects: "Coastal governance and adaptation policies in the Mediterranean".
- 16. **Kassel, 9/9/2014.** AB4 realized an open workshop for the German stakeholders in Kassel University. The workshop was organized as a back to back event with the 6th CM of the FLOOD CBA project. The workshop was attended by a group of 19 persons.

- 17. **São Paulo**, **16/9/2014**. AB4 presented the results of FLOOD CBA in the 6th International Conference on Flood Management (ICFM6) in São Paulo, Brazil.
- 18. **Seville, 29/9/2014.** AB5 promoted FLOOD-CBA project at the 'Researchers' Night' in Seville. The Researchers' Night is a European science project sponsored by the European Commission under the Marie-Curie Sktodowska actions of the Horizon 2020 and it takes place simultaneously in more than 300 cities in 29 European countries since 2005. The event managed to gather more than 1,000 scientists and reached more than 50,000 citizens in Andalusia. The FLOOD-CBA project was presented at the main square of Seville where thousands of by passers had access to important research in the "European Corner", a showcase of different EU Projects where researchers and citizens could interact.
- 19. **Rome, 9-10/10/ 2014.** The CO presented in Rome presented the Flood CBA Knowledge Base Platform and all project results to the EU Flood Working Group meeting in Rome.
- 20. **Arad, 15-16/10/2014.** AB2 presented the project in the course of the ECOMEDIU exhibition in Arad. More than 200 stakeholders visited the INHGA stand and took materials and information about Flood CBA Project and the Knowledge Platform.
- 21. **Bucharest 10/11/2014.** AB2 presented the project in a Workshop with stakeholders involved in Flood CBA and MCA
- 22. **Guimarães**, **November 2014.** AB3 presented the FLOOD CBA project and it's results in the framework of the XIV Iberian Colloquium of Geography. Materials were also disseminated

The justification for the above events is photos, lists of participants, presentations, minutes and dissemination - informative material. The material is available on the project website.

<u>Purpose</u>: The purpose of the informative workshops was to introduce the FLOOD CBA project to a broad range of national and EU stakeholders and create the necessary networking conditions for the establishment and enlargement of the FLOOD CBA network.

<u>Evaluation</u>: Through the above activities the project consortium succeeded to pass the FLOOD CBA message to more than 1500 people across Europe. Moreover, the consortium took advantage of these events so as to build strong relations with the national stakeholders who supported a series of other activities within the project. Finally, these dissemination events were excellent occasions for further networking and establishment new co-operations. The events that were dedicated to the FLOOD CBA project were assessed by the CO quality auditor during the internal audits. The deliverables were assessed by the CO's quality auditor in the framework of all internal audits.

<u>Value-added</u>: The informative workshops and international events provided the opportunity for the establishment of co-operation bonds between the project partners and the different flood risk

management bodies that might turn into fruitful co-operations under the future initiatives of the FLOOD CBA Forum ECU concerning new European funds.

<u>Dissemination</u>: The above events were announced on the project website. The relevant material such as photos and presentations is also uploaded. Special reference to these events was also made in the projects e-Newsletters.

Publications

Description:

- The FLOODCBA logo was created by the CO and approved by the Steering Committee. The logo appears on every deliverable and output of the project.
- 6 informative leaflets were issued and printed in English, Greek, Romanian, Portuguese,
 German and Spanish. 3000 copies of the leaflets were printed and disseminated to the various events where the project was presented.
- The final versions of the two Guidelines (created under Action C3) were translated and printed by all partners. 700 books were issued and disseminated to the partners' national stakeholders during the training seminars and the final conference as well.
- Folders, notepads, budgets, pens, posters, banners and supportive material of the various dissemination events (Coordination Meetings, informative workshops, training seminars, and final conference) were produced by the project partners.
- The Booklet of the Project Achievements was produced in 200 copies by LP. The copies were all in English and were disseminated during the final conference.

<u>Purpose</u>: The purpose of the deliverables was in line with the general purpose of Task E, i.e. to disseminate and promote to all related bodies and target groups, at national and EU level, the concept, methodology and results of the FLOOD CBA project.

<u>Evaluation</u>: The produced dissemination deliverables were in accordance to the specifications of the FLOOD CBA Communication and Dissemination Handbook as well as the specifications of the European Commission. Their quality was appraised as excellent in terms of context, editing and dissemination impact. Through the implementation of the above mentioned dissemination methodology, the FLOOD CBA partnership managed to communicate the project's identity, the purpose, objectives and results to a wide range of stakeholders. The deliverables were assessed by the CO quality auditor during the internal audits. The deliverables were assessed by the CO's quality auditor in the framework of the 4th, 5th, 7th, and 8th internal audits.

<u>Value-added</u>: The activities that were realised for the promotion of the FLOOD CBA project could be a well applied methodology for dissemination purposes of future projects. The produced informative material is available by the FLOOD CBA Forum to all interested parties even after the completion of the project.

<u>Dissemination</u>: The various publications were disseminated to national and other EU stakeholders in the framework of various events, such as conferences, workshops, seminars, and exhibitions. The material is available on the project website.

Articles, press entries, e-Newsletters

Description:

- April 13, 2013. One entry in "eco-NEWS" a Greek e-magazine dealing with Ecology, Environment and Innovation issues;
- September 2013. Proceedings of the national "Water Resources Management Under Climatic and Anthropogenic Changes" conference in Bucharest:
 - ✓ Vasiliki PAPADOPOLOU, Mary-Jeanne ADLER, 2013, Flood CBA Project Objectives;
 - ✓ Vasile PINTILIE, Mary-Jeanne ADLER, Flood CBA Project for ranking flood protection measures- Best practice in Romania-WATMAN Project; (the full paper was also published in Hidrotehnica Journal No 1/2014, page 3-15)
 - ✓ Edmund PENNING-ROWSELL, Flood CBA Project for ranking flood protection measures- Best practice in UK;
 - ✓ Fatima NAVAS et al., 2013, Review on the use of Cost-Benefit Analysis for flood risk management: FLOOD-CBA Project Stakeholders Consultation Process
 - ✓ Ion PASOI, Mary-Jeanne ADLER, 2013, Considerations regarding the methods of economic efficiency in structuring national hydrological network Flood CBA Project for ranking flood protection measures.
- October 2013. One page entry in Government Gazette magazine September 2014, half page entry in Regional Review magazine. Both issues were disseminated in Brussels EU Open Days in 2013 and 2014 respectively. Both issues were very well received among the 6,000 (per year) regional and municipal delegates attending Europe's largest and most important regional policy conference over four days.

- November 2013. One entry dedicated to FLOOD CBA in the magazine of the British Hydrological Society entitled "circulation".
- June 2014. Abstracts of the RIVERALERT conference. One entry related to the presentation of FLOOD CBA project by the CO within the framework of the conference.
- June 6, 2014. Pablo de Olavide University Press. Press release about the FLOOD-CBA Seminar held in Seville on May, 20th 2014. Link
- May 2014, EFAS Bulletin. Article about the collaboration between EFAS members (Andalusia Env. Ministry) and FLOOD-CBA Project (see page 2 of the <u>EFAS Bulletin</u>)
- September 2014. Abstracts of the ICFM6, Sao Paulo Brazil. One entry for FLOOD CBA project as presented by AB4 in the conference. Träbing, K., Theobald, S., 2014: Consideration of costs and benefits in Flood Risk Management. PAP014363
- November 2014.Guadalquivir River Hydrographic Basin Website. Article about the FLOOD-CBA Seminar to the Guadalquivir Hydrographic Basin Confederation (CHG). <u>Link</u>
- November 2014. Blog del Agua. New about the FLOOD-CBA Seminar to the Guadalquivir Hydrographic Basin Confederation (CHG) <u>Link</u>
- November 2014. 20 minutos/ Europa Press. New about the FLOOD-CBA Seminar to the Guadaluivir Hydrographic Basin Confederation (CHG). Link
- November 2014. Abstracts of the "Adaptation to climate change, from source to river basin"
 Conference in Bucharest.
 - ✓ Adler M-J, T. Georgescu, L. Frimescu, S. Nastasa, Al Moldoveanu, I Pasoi, 2014, Flood CBA- Platformaa de informare pentru evaluarea costurilor si beneficiilor masurilor de prevenire a inundatiilor/Flood CBA Knowledge Platform for Assessing the Costs and Benefits of Flood Prevention Measures, ISBN 978-973-O-17800-6.
 - ✓ November 2014. Abstracts of the "Adaptation to climate change, from source to river basin" Conference in Bucharest. Adler M-J., O. Islam, 2014, Strategia de comunicare pentru proiectul Danube Floodrisk – o poveste despre protectia împotriva inundatiilor/Communication Strategy for the Danube Floodrisk Project – A Flood Protection Story, ISBN 978-973-O-17800-6.
- January 2015. One page article in the circulation of the Technical Chamber of Greece dedicated to the project activities and the final conference.

- Five e-Newsletters were disseminated to the project's stakeholders and the registered users of the website.
- ✓ 1st Newsletter, July 2013
- ✓ 2nd Newsletter, Sept 2013
- ✓ 3rd Newsletter, Feb 2014
- ✓ 4th Newsletter, July 2014
- ✓ 5th Newsletter, Oct 2014

<u>Purpose</u>: The purpose of the deliverables was in line with the general purpose of Task E, i.e. to disseminate and promote to all related bodies and target groups, at EU and international level, the concept, methodology and results of the FLOOD CBA project.

<u>Evaluation</u>: The produced articles and press releases overcame the initial expectations as described in the FLOOD CBA Communication and Dissemination Handbook.

All partners exploited every opportunity they had in the two years of the project duration and produced a vast number of publications dedicated to FLOOD CBA and



managed to communicate the project's identity, the purpose, objectives and results to a wide range of stakeholders.

The initially foreseen number of Newsletters was 4. The consortium produced one more while the 6th Newsletter dedicated to the final conference was circulated after the end of the project. The

deliverables were assessed by the CO's quality auditor in the framework of the 4th, 5th, and 8th internal audits.

<u>Value-added</u>: The long list of publications was an excellent tool to multiply the impact of the FLOOD CBA project and reach out for potential stakeholders and users of the Knowledge Base Platform that were not directly involved in the various activities and events.

<u>Dissemination</u>: The publications were hosted in web-based or hard copy circulations. The Newsletters were disseminated electronically and were also published on the project's website.

Booklet of the project achievements

<u>Description</u>: The CO with the contribution of all Tasks' leaders created a booklet which consists of the following parts:

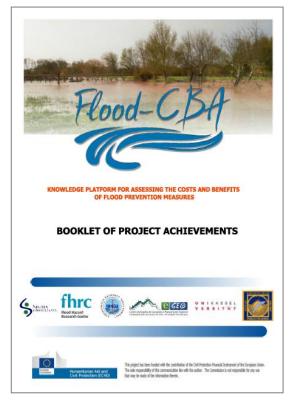
- The FLOOD CBA Partnership
- The FLOOD CBA project
- Building the stakeholders' capacity
- Improving the process of knowledge
- Implementation of pilot activities
- Dissemination activities
- Capitalisation activities
- Contact information

The Booklet was developed in English. 200 copies were printing and disseminated to the participants of the final conference.

Purpose: The purpose of the deliverable was in

line with the general purpose of Task E, i.e. to disseminate and promote to all related bodies and target groups, at EU and international level, the concept, methodology and results of the project.

<u>Evaluation</u>: An initial version was circulated among the partners for evaluation. The final version was approved by all partners in terms of content and design. The final editing and printing were of high quality. The deliverable was assessed by the CO's quality auditor in the framework of the 8th internal audit. The deliverable was assessed by the CO's quality auditor in the framework of the 8th internal audit.



<u>Value-added</u>: The Booklet of the project's achievements is the final dissemination output of FLOOD CBA which presents in coherent and integrated way the results and outcomes of the project. It is a standalone product that may be reproduced in the future promoting the project and partnership in various networks and events. Furthermore, its template may well be applied for the production of dissemination material in future projects.

<u>Dissemination</u>: The Booklet of the project's achievements was distributed to the participants of the final conference. Batch of copies were also given to the project partners in order to disseminate them to their national stakeholders. Finally, the deliverable was uploaded to the FLOOD CBA website. The deliverable is attached to the final report.

Final Conference

<u>Description</u>: The final conference of the project took place on the 3rd of December 2014 in Thessaloniki at the Makedonia Palace Hotel. The event was hosted by SIGMA Consultants.

Mr. Christos Mamarikas, Decentralised Administration of Macedonia and Thrace Civil Protection Directorate and Mr. Vasilis Lekidis, Technical Chamber of Greece, Department of Central Macedonia and Natural Disasters Committee provided the oppening speachs, remarking the importance of the Flood CBA Project for further flood protection measures prioritization in Greece and at the EU level.

The project partners presented the experience in Cost-Benefit Analysis (CBA) and Multi Criteria Decision Analysis (MCDA) at the national level and the knowledge data base including good practices for prioritization of the flood prevention measures in the context of different socio-economic environments within the EU.

An introduction to the FLOOD CBA Follow up activities was presented by the LP – Sigma Consulting representative – Vasiliki Papadopoulou, the project manager. As examples of future synergies with FLOOD CBA, three relevant projects were presented by invited speakers:

- Dr. Vasileios Pisinaras, Democritus University of Thrace presented The Mare NostrumProject,
- Prof. Konstantinos Papatheodorou, Democritus University of Thrace, presented The SciNetNatHaz Project and"
- Col. Radu Cristian and Col. Duduc Benone, Romanian Civil Protection Authority presented the RORISK, a new project for multiple risk management in Romania.

Aspects of national flood risk management plans and implementation of the Floods Directive were included in the third session, where experienced speackers presented their experience in FRMP:

- Mr. Matthias Löw, Hessian Ministry of the Environment, Climate Protection, Agriculture and Consumer Protection, Flood Risk Management in Hessen,
- Ms Claudia Brandao, The Portuguese Agency for the Environment, "Stateof implementation of the directive on the assessment and management of flood risk, 2007/60/EC,
- Mrs. Mercedes García Padilla, The Regional Ministry of Environment and Territorial Planning of Andalusia, "The European Floods Awareness System, EFAS: the experience of the Hydrological Data Collection Centre"
- Mr Konstantinos Chouvardas and Mr Christos Papapostolou, Civil Protection Directorate of East Macedonia and Thrace Region, Damage assessment and evaluation of important flood incidents. Evros example.
- Mr. George Kampas, Water Directorate of East Macedonia and Thrace. The implementation of Directive 2007/60/EC: Evros, a study case.

The conference closed with a discussion and general conclusions.

The event was attended by 60 people. The Booklet of the Project Achievements, leaflets as well as the CBA and MCA Good Practice Guides were disseminated to the attendees of the event.

<u>Purpose</u>: The purpose of this final event was in line with the general purpose of Task E, i.e. to disseminate and promote to all related bodies and target groups, at national and EU level, the concept, methodology and results of the project.

<u>Evaluation</u>: The final conference was a successful event. The success of the event is depicted on the satisfying number of the participating stakeholders and the important contribution of the invited speakers from the majority of the participating countries. The event was assessed by the CO's quality auditor in the framework of the last internal audit. The deliverable was assessed by the CO's quality auditor in the framework of the 8th internal audit.

<u>Value-Added</u>: The final conference had an important impact on the national stakeholders as it intrigued their interest for adapting and put into practice the tools and proposed practices of the project. The event was also an excellent opportunity where ideas for future collaboration and synergies were born.

<u>Dissemination</u>: The outputs of the final conference were uploaded on the FLOOD CBA website. A Newsletter was circulated after the end of the project. A relevant article was included in the January issue of the Technical Chamber of Greece magazine. The material for the justification of the event is attached to the final report.

Capitalization plan and Exploitation Agreement

<u>Description</u>: The main goal of the Capitalisation Plan is to serve as an on-going, concise work plan for setting out the main capitalisation aspects of the FLOOD CBA project and to establish suitable actions to make FLOOD CBA a successful and sustainable project.

Generally, it is based on the communication and capitalisation strategy elaborated by the FLOOD CBA consortium adopting the most appropriate dissemination and capitalisation tools and channels elaborated so far in order to exploit the results achieved during the project implementation.

The document serves as an agenda for future opportunities and possibilities for increasing the targeted stakeholders' awareness towards the results of the project. The FLOOD CBA capitalisation strategy focuses on the following objectives:

- to promote the project's contents, developments and results;
- to look for cooperation with decision making bodies and organizations, identifying specific channels for dissemination and follow up activities;
- to expand the stakeholders' network interested in exploiting FLOOD CBA results, thus encouraging interactions and synergies;
- to successfully transfer the results to appropriate decision-makers to achieve their sustainable promotion and support;
- to harmonize the capitalisation activities of the partners for a more efficient and effective communication. To coordinate all levels and types of capitalisation of the knowledge produced by the project;
- to plan specific capitalisation activities after the project lifetime.

The Capitalisation Plan indicates:

- ✓ Stakeholders' targeted groups
- ✓ Types of dissemination and capitalisation activities;
- ✓ Means/Instruments that will be used;
- Calendar of capitalisation activities.

The document also identifies the exploitable results of the project in terms of products, experiences and European cooperation and describes the strategy to exploit these products at European, national and regional levels. The Capitalisation Plan addresses both mainstreaming and multiplication initiatives. The mainstreaming initiatives will take advantage of the participation of the project's partners to existing

networks and links to decision makers, public authorities and the academic community, while the multiplication initiatives exploit the established FLOOD CBA Network. The monitoring of the Capitalisation activities will follow an approach similar to the monitoring of the main FLOOD CBA activities.

The Capitalisation Plan is accompanied by an Exploitation Agreement which was created in order to facilitate and oversee the exploitation activities of the FLOOD CBA project. The Exploitation Agreement has the form of a letter of intent which is commonly agreed and signed by the FLOOD CBA partners. The context of this agreement defines a set of arrangements regarding a program of future activities and initiatives for the exploitation of FLOOD CBA results. These activities will be carried out by the project partners according to their mission, convenience, interest, resources and in full compliance with their institutional constraints.

<u>Purpose</u>: The Capitalisation Plan and the Exploitation Agreement are tools that facilitate the capitalisation of the project results and the sustainability of the project outcomes.

<u>Evaluation</u>: The deliverables are in line with the discussions that took place among the project partners during the final coordination meeting in Thessaloniki. The legal representatives of all partners signed the Exploitation Agreement. Both deliverables were assessed by the CO's quality auditor in the framework of the final internal audit. The deliverables were assessed by the CO's quality auditor in the framework of the 8th internal audit.

<u>Value-Added:</u> The approach towards the capitalisation of the FLOOD CBA results as proposed through the Capitalisation Plan and the Exploitation Agreement is adoptable to any future project. They also create the strong perspective that not only the results of the project but also the partnership will be active in the future for at least five years after the 31st of December 2014.

<u>Dissemination:</u> The deliverables were developed by the CO and circulated among the project partners. They are uploaded on the project website. They are both attached to the final report.

FLOOD CBA Portal and FLOOD CBA Forum

<u>Description</u>: The Knowledge Base Platform was advanced into a more interactive and dynamic environment, the FLOOD CBA portal. The operation of the FLOOD CBA portal certifies the continuous interactive communication of project partners with existing and new stakeholders, networks and further dissemination of project's results. The FLOOD CBA Portal is going to be continuously updated for at least 5 years after the project's completion, disseminating high quality of information and acquired knowledge. The project website will remain active as a part of the FLOOD CBA portal for the next 5 years as well.

In order to continue and maintain active new contacts and collaborations, the project partners established the FLOOD CBA Forum which is responsible for the provision of future coordination and technical support actions after the project conclusion. The aims of the Forum are: i) the coordination on items like know how and experience exchange, research and technology transfer etc. ii) the expansion of the cooperation in other geographical areas iii) the entering into new joined collaborations and projects. The members of the local clusters as well as other European stakeholders are invited to join the FLOOD CBA Forum. The Forum operates via the FLOOD CBA portal

<u>Purpose</u>: The purpose of the establishment of the FLOOD CBA portal and Forum is to provide a focal point for European bodies interested to undertake initiatives and to improve their competences in flood risk management and civil protection. They are also tools that facilitate the capitalisation of the project results and the sustainability of the project outcomes.

<u>Evaluation:</u> The deliverables were assessed by the CO's quality auditor in the framework of the 8th internal audit.

<u>Value-Added</u>: The approach towards the capitalisation of the FLOOD CBA results as proposed through the FLOOD CBA portal and the FLOOD CBA Forum is adoptable to any future project. They also create the strong perspective that not only the results of the project but also the partnership will be active in the future for at least five years after the 31st of December 2014.

<u>Dissemination</u>: The establishment of these structures were announced during the various events of the project's last semester and a special emphasis was given during the final conference in Thessaloniki.

http://www.floodcba.eu/main/?page_id=7340&lang=en

http://www.floodcba.eu/main/?page_id=8537&lang=en

6 EVALUATION OF THE TECHNICAL RESULTS AND DELIVERABLES

In this section of the report, project's lessons learnt will be presented, together with conclusions and recommendations.

6.1 General lessons learnt

The general lessons learnt are identified in the aspects of Management, Communication and Technical results of the project as follows:

Project Management

- Maintain a clear management structure and decision making process. The roles, responsibilities and contributions of each project partner should be thoroughly defined, and periodically updated.
- Setting a realistic timetable: The project coordinators should make adequate provision in their
 planning for the time required to evaluate options, make decisions and take action to achieve
 the project's objectives. Allowance should also be made for the effect of unforeseen risks and
 obstacles, which inevitably arise in such projects.
- 3. Ensure precise allocation of the budget per expenses' category. Margins should be foreseen at personnel costs, in the case that the realization of an action deliverable requires more time and effort.
- 4. During the project planning phase investigate and understand the communication structures and channels. Ensure you know how the project will interact with the key actors and target groups and the kind of impact that will have on them.
- 5. Be clear on the objectives and the target groups. Define measurable targets and tangible performance indicators.
- 6. Ensure that all the project participants have a certain capacity in terms of human resources, premises and equipment.
- 7. Monitor outputs carefully. Use a strong, clearly defined monitoring system tool. The Project Coordinator should apply an efficient project management tool as an integral part of the project cycle.
- 8. Establish a Quality Management and Assurance system for the continuous monitoring of the project activities and deliverables. Appoint an external quality auditor for the monitoring of the proper implementation of each Task through frequent internal audits (on a 3-month basis).

9. Create of a timetable where the progress of the corrective and preventive actions as indicated by the quality auditor will be depicted. This tool shall preventive the consortium from serious deviations and delays from the initial work plan.

Communication and Dissemination

- 10. Ensure strong communication with the Project's Desk Officer for the early identification and direct solving of any queries or misinterpretations.
- 11. Create and support communication and effective relationships between partners and stakeholders. Ensure good communication as to their roles and responsibilities.
- 12. Use meetings as the main source of information sharing among partners. One co-ordination meeting at least every four to six months is a necessity for multinational projects.
- 13. Create local national EU networks at the early stage of the project. The members of the networks will be the core recipients of the project outcomes and will contribute to the successful implementation of the project activities such as participation processes, workshops and training seminars.
- 14. Effective dissemination often means iterative follow up and support. This possibility should always be taken into consideration, especially at the early stages of the project.
- 15. Use a multi targeted strategy to disseminate information and wherever possible translate the deliverables in the national languages of the project partners.
- 16. Update the project's website regularly, with all new deliverables and information.
- 17. Dissemination of frequent e-Newsletters to the members of the national/ EU stakeholders and registered users of the project website.

Technical Results

- 18. Cost Benefit Analysis is well known among the majority of stakeholders. Most of them consider that CBA is a reasonably good method to be applied in FRM. However they consider CBA is currently not taken into account to evaluate different flood risk management measures in their countries. CBA is neither incorporated in FRM plans in some of the FLOOD-participating countries. The perception of most of the stakeholders is that CBA could improve current flood risk management in their respective countries or regions.
- 19. There are FRM Plans in almost all the participating countries, although the legislation behind these FRM Plans varies considerably among countries: from European directive to regional

norms. Also the reasons that have led or will lead to the creation of FRM Plans varied significantly among countries, being the EU Directive the most cited reason. The perception of the helpfulness of the existing FRM plans is highly different across countries; only the stakeholders from UK, Germany and Romania are satisfied with their current FRM plans.

- 20. Most stakeholders consider that not enough efforts are being done in FRM in their respective countries or regions (except for UK). Moreover prevention is considered key area of improvement for a better flood risk management context. To improve the current FRM situation, CBA is cited together with a variety of different complementary/alternative methodologies and tools (i.e. multicriteria analysis). Most of the stakeholders consider FRM is a key issue in their respective institutions and they believe working in the prevention field is as important as improving emergency-response actions.
- 21. The EU Directive on the assessment and management of flood risks is well-known among stakeholders and most of them consider it has assisted/is assisting to the practice of FRM in their countries. However opinions about the real effect of the directive at present varies greatly among countries, with British and German stakeholders pointing out "no effect at all", while Greek and Spanish stakeholders considering the directive has had a "very positive effect" already. The perception about the level of compliance of existing FRM Plans with the European deadlines is very diverse among countries.
- 22. There have been some participatory experiences in FRM in all FLOOD CBA countries, although the nature and scale of these experiences is very diverse. In addition most stakeholders consider there should be a greater participation or public involvement regarding FRM in their countries. Although some of them underline that current participative channels are good and yet they are being under-used by the public, which could be identified as a barrier to a successful inclusive participatory
- 23. The levels of a stakeholders' engagement plan should:
 - i) provide the stakeholders with balanced and objective information to assist them in understanding the problem, alternatives, solutions, etc.
 - ii) obtain stakeholder feedback on analysis, alternatives, decisions, etc.
 - iii) work directly with the stakeholders throughout the process to ensure that their concerns, views and opinions are taken into consideration
 - iv) collaborate with the stakeholders in every aspect of the decision making including the development of alternatives and the identification of the preferred solution,

- 24. The preliminary assessment of baseline conditions of a region is a key aspect for the development and implementation of an integrated CBA or MCA in any flood risk management plan. The lack of available information is a substantial obstacle that needs to be overcome.
- 25. Flood risk assessment is a core element for the effective implementation of a CBA or MCA study. The spatial planning and climate change should be considered in the framework of a flood risk assessment. The implemented standards should be based on cost-benefit analysis and life safety analysis.
- 26. For the further development of the FLOOD-CBA Knowledge Base Platform there is a demand for additional practical information on CBA as well as MCA among the stakeholders in flood risk management.
- 27. Capacity building activities of key stakeholders should be realized at a regular basis in order to keep them updated with the latest legislation and international experience. These activities may include the creation and distribution of Support Tools, like the FLOOD CBA Guidelines, informative workshops and training seminars.
- 28. In case of trans-boundary river basins, concrete regional flood risk management plans, including flood hazard maps and flood risk maps are of vital importance for further cross border cooperation.

6.2 Strengths

The strengths of the technical results and deliverables of the FLOOD CBA project include the following items:

- Development and operation of the peer to peer Network at European level, as well as the FLOOD CBA Forum. Future international co-operations in strategic projects may originate from these structures.
- Involvement of high skilled experts in the working groups of the FLOOD CBA project partners and exploitation of their knowledge, experiences and networks in the elaboration of the project deliverables, meetings and events.
- Development of the knowledge base platform which concentrates the substantial elements of CBA and MCA, case studies, guidelines, useful tools for the implementation of CBA, flood risk maps, legislation, and relevant projects.
- O Upgrade of the Knowledge Base Platform to a Knowledge Portal with more interactive applications. Being a "wiki", the Knowledge Portal will keep on being edited in the post project period by any user who is registered to the system. The users are able to upload new material

- on the existing categories, propose new knowledge categories, add comments to the existing contents, get alerts whenever their chosen pages are being updated, etc.
- The two Guidelines on CBA and MCA which are stand-alone "How to do it" manuals that provide a step by step guidance in the procedure of flood risk management schemes' appraisal.
- The training material on the FLOOD CBA support tools that facilitated the realisation of the training seminars and the structured intermediate questions that allowed in depth discussions with the stakeholders thus leading to substantial results.
- Translation of the Guidelines and the training material in the national languages of the project partners, thus achieving a wider impact and multiplying the opportunities to disseminate the project findings and tools to a broader range of events at national level.
- Creation and operation of a website which gathers all the outputs of the project, provides frequent informing on all latest news and upcoming events, and gives the opportunity for easy access to the Knowledge Portal and communication with the FLOOD CBA Help Line Centre.
- The applied evaluation procedure based on the stakeholders' feedback which was gathered via different channels, i.e. on line questionnaire, seminars, interviews, thus giving the process a more objective character and leading to reliable findings.
- Achievement of all the deliverables and project objectives according to the approved timetable
 of the AF and to a level of high quality, as was described in detail in Chapter 5.
- The substantial collaboration of the partners (Associated Beneficiaries) with the Lead Partner and the successful implementation of their obligations according to the Grant Agreement and Partnership Agreements.
- Exploitation of a wide range of events by the partners in the course of the project achieving to disseminate the project results to a large number of stakeholders.
- The Exploitation Agreement signed by all project partners that depicts the willingness of the
 partners to support the capitalisation activities for the sustainability and further transfer of
 project results as described in the FLOOD CBA Capitalisation Plan.

6.3 Possible challenges and/or improvements to be tackled through further action

The following challenges have been identified and mainly concern the sustainability of the FLOOD CBA outputs:

- Maintain the operation of the FLOOD CBA website for at least five years after the completion of the project. The operation of the website will be the CO's responsibility. The challenge would be not only to maintain the operation but also to update the context of the website frequently with topics and news alerts of events relevant to the FLOOD CBA issues.
- Continuous update of the Knowledge Portal with legislation, best practices, articles, etc and expansion of the registered users. The maintenance of the Knowledge Platform is appointed to the CO with the support of the rest of the project partners.
- Maintain the coherence and strengthen the FLOOD CBA Network. The regular revision of the Network's structure is of major importance in order to keep it alive and promote civil protection initiatives and policy proposals through its members. The FLOOD CBA Forum is responsible for the management and co-ordination of the Network.
- Claim new grants for the implementation of follow up activities. These activities could either transfer the impact of the project outputs to other regions of the FLOOD CBA participating countries or continue the efforts of the involved regions to improve the quality of their prevention, preparedness and emergency response structures against flood incidents.

Additionally as reported by the FLOOD CBA stakeholders at the stage of the assessment of their views (Action B3), the Cost Benefit Analysis still faces a wide variety of challenges, among them, such as:

- o Inclusion of real and complex social and economic interactions for flood risk management at local level.
- Adequate inclusion of environmental aspects.
- Improvement of the link with land/spatial planning.
- Integration of other comprehensive methodologies as Multi-criteria Analysis.
- Inclusion of more typologies of participants to enrich the debate.

6.4 Recommendations to stakeholders, partners, authorities in charge, National and EU Institutions

The FLOOD CBA project team has indicated the following recommendations which are mainly addressed to the national authorities in charge as well as to the National and EU institutions.

- Joint development of flood risk management plans at interregional and cross border basis for the integrated management of river basins.
- Establishment of the stakeholders' consultation process as a standard process in the framework of planning, developing, assessing and reviewing regional strategies.

- O Undertake initiatives for the continuation of the efforts towards the capacity building and awareness raising of the local and regional authorities through pilot exercises and trainings dedicated to civil protection practices and implementation of emergency response plans.
- Raising the awareness of the citizens potentially affected by floods and assess their "willingness to pay" for the protection and maintenance of flood prone areas especially in the case of cultural and recreational sites.
- Promote the use of FLOOD CBA Support Tools Knowledge Portal, Guidelines and Training Material- by the staff members and experts who are involved in flood RISK management at regional or national level. The FLOOD CBA support tools are comprehensive and provide easy references to world applied techniques.
- Promote FLOOD CBA website, <u>www.floodcba.eu</u>. The website includes the whole deliverables' package of the project that could be exploited as a template or reproduced in the framework of civil protection, flood and water management projects of other European regions.
- There are many EU projects which run simultaneously and concern flood risk management.
 The outcomes of these projects should be joined together under a common data base in order to enforce the impact of their results and cover the gaps of data availability.
- Exploit the knowledge and experience that was gained during the FLOOD CBA project in the framework of the Flood Directive (2007/60/EC) implementation.

7 FOLLOW-UP

7.1 Comparison between initial and current follow up measures

The FLOOD CBA consortium developed the Capitalisation Plan, a document where the capitalisation strategy of the project for the sustainability and further transfer of the project outcomes, is described. The Capitalisation Plan, includes a number of follow up measures *which are in line with what was initially foreseen* for increasing the targeted stakeholders' awareness towards the results of the project. The FLOOD CBA capitalisation strategy focuses on the following objectives:

- to promote the project's contents, developments and results;
- to look for cooperation with decision making bodies and organizations, identifying specific channels for dissemination and follow up activities;
- to expand the stakeholders' network interested in exploiting FLOOD-CBA results, thus
 encouraging interactions and synergies;
- to successfully transfer the results to appropriate decision-makers to achieve their sustainable promotion and support;
- to harmonize the capitalisation activities of the partners for a more efficient and effective communication. To coordinate all levels and types of capitalisation of the knowledge produced by the project;
- to plan specific capitalisation activities after the project lifetime.

The implementation of the FLOOD CBA capitalisation by the project consortium strategy is a five step process:

- Step 1 Defining a clear expression of the project's aims and objectives
- Step 2 Identification of the target audience
- Step 3 Identification of the FLOOD CBA products to be capitalised
- Step 4 Establishment of Capitalisation instruments
- Step 5 Description of Capitalisation channels

According to the Capitalisation Plan the realised follow up measures are as follows:

FLOOD CBA Portal

The Knowledge Base Platform is advanced into a more interactive and dynamic environment, the FLOOD CBA portal. The operation of the FLOOD CBA portal certifies the continuous interactive communication of project partners with existing and new stakeholders, networks and further dissemination of project's results.

The development and operation of the portal site includes the following functions:

- a) Search and Navigation function that enables users to query both structured (knowledge database) and selected unstructured content (i.e. documents, proposals uploaded in the portal by other citizens) by keywords. Special attention is given to this function in order the portal users to trace not only the appropriate information they are searching but also receive proposals for additional relevant information which may be available through the portal or in another e-link.
- b) Personalization functions for the delivery of appropriate information to different portal users. The personalization function is designed in such way that each user gets the information which is specifically tailored to his needs. Different types of personalization modules are checked, i.e. personalization of navigation (i.e shortcuts to specific information) or personalization of data/content.
- c) A notification function (push technology) is included in the portal function. Therefore each user is be able to receive updated or reviewed information automatically on the issues he has previously determined. Thus, each user has the opportunity to subscribe to active civil protection information sources and continuously be informed. In the portal structure there is also be a designated area where individuals are able to post their ideas, practices and experiences.

The FLOOD CBA Portal is going to be continuously updated, disseminating high quality of information and acquired knowledge for at least five years after the end of the project.

FLOOD CBA Forum

In order to continue and maintain active any emerged new contacts and collaborations, the project partners established the FLOOD CBA Forum which is responsible for the provision of future coordination and technical support actions after the project conclusion. The aims of the FLOOD CBA Forum are: i) the coordination on items like know how and experience exchange, research and technology transfer etc. ii) the expansion of the cooperation in other geographical areas iii) the entering into new joined collaborations and projects.

The founding members of the FLOOD CBA Forum are the project partners as well as the members of the FLOOD CBA stakeholders' Network and the registered users of the FLOOD CBA website and

Knowledge Base Platform. The Forum is leaded by the CO – SIGMA Consultants. The members of the local clusters as well as other European stakeholders are invited to join the Forum.

The FLOOD CBA Forum will stay active for at least five years after the project ending.

FLOOD CBA Helpline Centre

A special Unit, the FLOOD CBA Help Line Centre, is established at the premises of CO – SIGMA Consultants. The HelpLine Centre provides support services to the questions and requests set by individuals dealing with the economic appraisal of flood risk management.

The Help Line Centre will operate for a period of 5 years after the project ends. Individual users will be able to contact the Help Line Centre electronically, or by filling a written request. The answers to the requests will be given free of charge either electronically or in written. Requests that cannot be answered based on the contents of the Knowledge Base will be forwarded to experts of the FLOOD CBA Network, who will be asked to contribute their expertise to the centre, for final answer.

FLOOD CBA Publications

The consortium of the project has produced a number of publications available to the broad public either in hard copy or in electronic form on the website.

These publications are the following:

- Project leaflet available in all participating countries languages
- CBA Guideline available in all participating countries languages
- MCA Guideline available in all participating countries languages
- FLOOD CBA Booklet of achievements available in the English language

FLOOD CBA Exploitation Agreement

An Exploitation Agreement was set up in order to facilitate and oversee the exploitation activities of the FLOOD CBA project. The Exploitation Agreement has the form of a letter of intent which will be commonly agreed and signed by the FLOOD CBA partners. The context of this agreement sets of arrangements regarding a program of future activities and initiatives for the exploitation of FLOOD CBA results. These activities will be carried out by the project partners according to their mission, convenience, interest, resources and in full compliance with their institutional constraints.

Additionally the Exploitation Agreement provides information regarding the maintenance of the FLOOD CBA Portal and Knowledge Base Platform system like:

Methods proposed to develop the system

- Functional areas of responsibility for supplying technical and administrative data in support of the system
- Methods of collecting, processing, and reporting data in support of the system
- Milestones in the evolution of the system

Website

The web-site, www.floodcba.eu, was launched in English in the beginning of the project containing information on aspects like: project description and objectives, partners profile, contact details, calendar of events, announcement of meetings, workshops, and presentation of results, links to other relevant EU projects, and a direct link to the FLOOD CBA Knowledge Base Platform.

The project website will stay active for five year after the closure of the project as part of the FLOOD CBA Portal. The capitalisation activities and results will be published on the website. All partners will maintain the links to floodcba.eu website on the websites of their organizations and on the websites of joining clusters as long as floodcba.eu stays active.

7.2 Additional follow-up approaches

Additional follow-up approaches include the following:

Participation to other events

All project partners will exploit any appearing occasion, at internal, regional, national or international level, like workshops, conferences and exhibitions, where the FLOOD CBA results could be presented and the relevant publications could be disseminated.

Such indicative events, in 2015, where FLOOD CBA could be promoted are the following:

- 4th European Water Conference, Brussels, 23–24 March 2015.
- Open seminar of SciNetNatHaz project in Greece
- VIII Conference on Coastal Geomorphology 2015 in Marbella, 3-5 June 2015
- X Congress of Portuguese Geography 9-12 September 2015

The FLOOD CBA consortium sets a target of participating at 5 events during the forthcoming 5 years.

New projects and collaborations

The FLOOD CBA consortium will seek to proceed with the preparation of new project proposals as an attempt to achieve the capitalisation of the FLOOD CBA results through their transferability to new

thematic areas and the expansion of their impact to other EU regions. A tempting initiative also concerns the further development of the created deliverables and the broadening of their contents.

The project partners may collaborate together as the original consortium but may also look for new collaborations as part of other consortiums. The targeted proposals may seek for funding either to the next Civil Protection Financial instrument call or to any other EU opportunity with a relevant priority.

An indicative example that has already been discussed within the framework of the FLOOD CBA consortium concerns a project specially dedicated to the MCA flood risk management techniques, since MCA is a very complicated and demanding methodology that requires a more in depth study in order to produce a standard procedure of approach.

A second proposal may focus on a number of pilot implementation of CBA and MCA at specific areas of study based on the preliminary flood risk maps of the EU countries and in line with the on-going flood risk management plans.

The target set under this capitalisation channel category is that at least one follow up project will be attempted by the FLOOD CBA project partners either in the form of the original team or as beneficiaries of new consortiums with other potential partners stemming from the FLOOD CBA portal.

Synergies with other networks

The FLOOD CBA network will join other existing EU clusters in the course of new collaborations and funding opportunities.

FLOOD CBA has already joined the FACECOAST cluster. FACECOAST cluster ("Face the challenge of climate change in the med coastal zones") started its activities in January 2012, and currently includes more than 80 partners (see the partnership). It aims to gather and capitalize the contributions of the European projects which dealt with the matter of the coastal defense against natural and anthropogenic risks (erosion, flooding, salt water intrusion, subsidence, etc.) in the frame of the adaptation policy to climate change (sea level rise, strengthening of extreme phenomena, etc.) and sustainable development.

FLOOD CBA has also joined the European Network for Transfer and Exploitation of EU Project Results "E.N.T.E.R." which is Europe's largest network for transfer and exploitation of project results, http://www.enter-network.eu/ that provides a number of benefits in terms of

- Partners' search for potential collaboration
- Sharing ideas and developments in the members' news section
- Promoting activities in the <u>events calendar</u>

- Disseminating any EU funded project with the Email Alert System targeted to members who
 are interested in the same target groups and sectors of activities
- Participating in <u>dissemination conferences</u> organised by the network
- Publishing articles about the projects in the European Magazine "Focus Europe"
- Collecting documentation of dissemination activities
- Receiving information on selected calls for proposals and events in the network newsletter
- Keep up to date with information from the European Commission, different departments and funding programmes in the EU News section
- Following the network activities on the network's Facebook page.

Within the next five years the FLOOD CBA network will attempt to join at least one more Cluster of other relevant EU funded project/ projects.

Furthermore, FLOOD CBA will maintain the communication channels that have been established in the course of the project with the EU Working Group for Floods. In this concept FLOOD CBA consortium will promote the final results to the Group's members and will seek to present the final results to the next WGF's meeting.

Engaging new stakeholders

Based on the outcomes of the training seminars and the final conference, the project partners will revise the structure of the FLOOD CBA Network as it was initially established. As a follow up activity, the project consortium will try to engage new stakeholders and motivate them to become active members of the FLOOD CBA portal. The FLOOD CBA Forum will foster any new collaboration under the umbrella of the FLOOD CBA capitalisation activities. A list of the targeted authorities/ organisations that may become members of the project Network is presented below,

- Representatives from the private sector such as engineering and consulting companies
- The Technical Chamber of Greece
- The Region of Central Macedonia / Directorates of Technical Works
- The Region of East Macedonia and Thrace / Directorates of Technical Works
- The General Directorate of Water. Subdirectorate of Public Hidraulic Domain. Spanish Ministry of Ariculture, Water and Environment

- The General Directorate of Planning and Management of the Public Hydraulic Domain.
 Andalusian Ministry of Land Planning and Environment
- The Regional Commission for the Development and coordination of Lisbon and Tejo Valley region.
- The Institute for Nature Conservation and Forests

The FLOOD CBA consortium sets a target of raising the current number of the FLOOD CBA Network members by 15%.

Training Activities

The majority of the FLOOD CBA consortium consists of academic institutions. The members of the project's working group are active lectures who may have the possibility to integrate part of the developed FLOOD CBA training material into their lectures with regard to hazards management. The Middlesex University (UK) and the University of Kassel (GE) already apply this procedure and intent to maintain it even afterwards. The FCSH already uses the outputs of the project in Master course of Terrestrial Management.

Social Media

The Social Media, such as LinkedIn and FACEBOOK can provide an opportunity of wide visibility of FLOOD CBA results to the broad public. The CO – SIGMA Consultants will create the project profile which will be disseminated via at least one social media channel and will be linked to the project website.

Articles and press releases

All FLOOD CBA partners will prepare at least one article concerning the results and potential future activities of the project. This article may be published at the local or national press, in the partners' organisations circulations, on the partners' websites, on on-line magazines, etc.

Additionally any further dissemination activity, such as presentations in relevant events, will be announced with respective press releases.

Final report and Layman's report

At the end of the project a final report will be prepared by the CO – SIGMA Consultants with the contribution of all project partners and submitted to the EC/Civil Protection Unit. As soon as the final report is approved by the funding authority it will be disseminated to a number of selected EU directorates and organizations, such as the following:

- DG Environment
- EU Working Group for Floods

The FLOOD CBA final report will be received by all organizations listed above. A layman's report, in English language, containing the project's initiatives and achievements will be edited by the consortium, sent to the EC and published on the project's website.