# Risk factors in the elaboration and implementation of projects within the Hungary – Romania Cross Border Cooperation Programme 2007–2013

#### GEORGIA DUMITRESCU

In this paper we will present the risk factors in the elaboration and implementation of projects within the Hungary – Romania Cross Border Cooperation Programme 2007 – 2013 (HU-RO CBC). We will analyze the risk that may occur both in the realization of the financing dossier as in the implementation of a cross-border project. After a brief presentation of the HU-RO CBC Programme 2007 – 2013 in terms of beneficiaries, priority axes, financial allocation, we will try to find answers to the following questions: What is a risk?, Which are the risks that a project manager will have to face in order to elaborate and implement a cross border project?, What is the probability that this risk may appear?, How this risks may affect the success of the project?, Which are the actions/strategies for the mitigation of the effects caused by the potential risks?

The HU-RO CBC Programme covers the eligible border area from the South-Eastern and the Eastern part of Hungary and the North-Western and the Western part of Romania: four counties in Hungary (Békés, Csongrád, Hajdú-Bihar, Szabolcs-Szatmár-Bereg) and four counties in Romania (Arad, Bihor, Hunedoara, Timis). The applicants should act in partnership with their cross-border partner organisations, involving at least one Hungarian and one Romanian partner for the eligible programme area. The purpose is to improve the competitiveness and attractiveness of the border area and to cultivate all the opportunities offered by the cross border cooperation. This general objective will be accomplished through two priority axis and a large number of key areas of interventions. The two priority axes are: to improve the key conditions of joint, sustainable development of the cooperation area (cross-border transport, communication and environmental protection) and to strengthen social and economic cohesion of the border area (cooperation in the fields of business, research technology and development, education, health care and risk management).

Considering both the importance of the cross border area development as the total available community funding of 51 million EUR for the present call (August 29, 2011 – January 31, 2012) we have to encourage and sustain any initiative to access this funds. For this reason and in order to have successful projects it is relevant to consider risk management as an integral part of project management.

Keywords: HU-RO Cross Border Cooperation Programme 2007–2013, projects with european financing, project management, risk, project risk management

#### 1. Introduction

The purpose of this paper is to understand which the risk factors and the major strategies are to counteract the occurrence of risks in the different stages of a cross border project. Projects are unique and uniqueness means entering unknown fields. For this reason and in order to have successful cross border projects it is relevant to consider risk management as an integral part of project management.

In the second paragraph of the Project Management within Hungary – Romania Cross border cooperation Programme 2007–2013 we first make a brief presentation of the evolution of the Cross Border Cooperation Programme from its beginning in 1996 until the actual programming period of 2007–2013. We highlighted the major differences between this programming period and the previous ones. In this paragraph we give the definition of

"project" and "project management", and we also tried to analyse the main stages of the Project Life Cycle in the cross border projects.

The second paragraph ends with the project management contraints in order to open the next paragraph of the Project Risk Management within Cross border projects. The third paragraph starts with the definition of risks and their classification. We presented the definition for project risk management and the steps of risk management planning. The paragraph ends with the analyse of risk factors and risk responses in the two main stages of a cross border project development: Project Preparation Stage and Project Implementation Stage. The hypothetical assumptions proposed in this paper are the premises for further research. We intent to elaborate a questionnaire with the main risk factors that can appear during the project preparation and the implementation, like the ones identified in this paper. On the basis of the questionnaire responses we will develop a study regarding the suitable actions to counteract the appearance of risk factors and the best practice in cross border projects risk assessment.

# 2. Project management within the Hungary – Romania cross border cooperation programme 2007–2013

#### 2.1. Evolution of the Cross border Cooperation Programme

Poland and Hungary Aid for the Reconstruction of Economy Programme – PHARE was created in 1989 to help the national economic reconstructions of Poland and Hungary. Since 1990 this Programme was extended to other countries of Central and Eastern Europe, in order to sustain their efforts in becoming European Union member states. The Hungary – Romania PHARE Cross Border Cooperation Programme – HU-RO PHARE CBC is part of the PHARE Programme.

HU-RO PHARE CBC started in 1996 with the purpose of extending the cooperation between two candidate countries in a border region. In the period of 1996–2003, from EU Phare CBC fund, 34 million EUR have been allocated for CBC projects to be implemented on the Hungarian side of the border and 28 million EUR for the Romanian side<sup>1</sup>.

The next step in the cross border co-operation was the implementation of the Crossborder Co-operation Programme 2004–2006; the programme had a budget of nearly 32 million EUR for Hungary (INTERREG, and nearly 20 million EUR for Romania (PHARE CBC), including national co-financing<sup>2</sup>.

The actions encouraged were in the fields of entrepreneurship, improving joint management of natural resources, supporting links between urban and rural areas, improving access to transport and communication networks, developing joint use of infrastructure, administrative cooperation and capacity building, employment, community interaction, cultural and social affairs.

In the actual programming period of 2007–2013, in order to accomplish the main purpose of the Cross Border Cooperation and the improvement of competitiveness and attractiveness of the border area, we have two priority axes:

- To improve the key conditions of joint, sustainable development of the cooperation area (improvement of cross-border transport, communication and environmental protection),
- to strengthen the social and the economic cohesion of the border area (cooperation in the fields of business, research technology and development, education, health care and risk management).

<sup>&</sup>lt;sup>1</sup> http://huro-cbc.eu/en/overview [Accessed 29 October 2011]

<sup>&</sup>lt;sup>2</sup> http://huro-cbc.eu/en/overview [Accessed 29 October 2011]

## 2.2. Actual Programming Period of HU-RO CBC 2007–2013

The Hungarian-Romanian border region clearly manifests the development gaps between the two countries. While Hungary had the GDP of 9,700 Euros per capita, the figure for Romania was approximately 5,500 Euros<sup>3</sup> in 2010. The eligible area of the Programme is the border area from the South-Eastern and the Eastern part of Hungary and the North-Western and Western part of Romania: four counties in Hungary (Békés, Csongrád, Hajdú-Bihar, Szabolcs-Szatmár-Bereg) and four counties in Romania (Arad, Bihor, Hunedoara, Timis).



Figure 1. Cross border eligible area

Source: HU-RO CBC 2007–2013 website: www.huro-cbc.eu

The number of inhabitants exceeds 4 million, half of which lives on the Romanian side, the other half on the Hungarian side. The eight NUTS-3 level counties exhibit fairly similar economic and social situation in general<sup>4</sup>. The total length of the state border is 448 km, out of which 415,8 km is terrestrial and 32,2 km is fluvial border (on the Mures-, the Cris- and the Somes rivers).

The main issues of this area are:

- weak development of the Small and Medium Enterprises sector,
- limited level of the research and development activity,
- road infrastructure with problems from the point of view of the accessibility of small rural settlements, especially in the immediate proximity of the state borders,
- public utilities with serious problems in Romania, while in Hungary most of the utilities are up to modern standards,
- lack of broadband Internet access is a problem in the small settlements on both sides of the border.
- unemployment causes problems in the society, primarily in the rural areas.

The programme is financed from the European Regional Development Fund (ERDF), completed by the state co-financing of the two Member States taking part in the programme, i.e. Hungary and Romania<sup>5</sup>.

http://en.wikipedia.org/wiki/Economy\_of\_the\_European\_Union, [Accessed 29 October 2011]

<sup>5</sup> http://huro-cbc.eu/en/funding, [Accessed 29 October 2011]

Hungary Romania Cross-border Co-operation Programme 2007-2013: 03 March 2008, http://www.mdrl.ro/ documente/coop\_teritoriala/granite\_interne/hu\_ro/doc/programareeng.pdf

For the Hungarian partners, the volume of the grant will be the maximum 95% of the total eligible costs and 98% in the case of the Romanian applicants, totalling both the ERDF and the state co-financing. The Hungarian applicants are requested to bring a minimum of 5% as their own contribution, and the Romanian applicants to bring the minimum of 2% as their own contribution from the total eligible costs of the project<sup>6</sup>. The overall allocation of the programme is approximately 248 million EUR, allocated between the two priorities of the programme.

Applicants must act in partnership with their cross-border partner organisations, involving at least one Hungarian and one Romanian partner for the eligible programme area. All partnerships, as a minimum, must comprise a Lead Partner organisation/institution and a Cross-Border Partner organisation/institution. Each Project Partner has to meet individually the eligibility criteria. Only non-profit legal persons can apply for financing and become Lead Partners or Partners.

Two types of projects are financed by the Programme using two different application procedures:

- For small projects the "One-step procedure" will be applied; the calls for proposals are launched and open for a given period of time. Applicants will submit their detailed Application Form (AF) with all listed annexes and supporting documents attached. Full applications are evaluated against the selection criteria published with the specific Call for Proposals and presented to the Joint Steering Committee to take its decision about the co-financing. Rejected applications can be submitted only in the framework of a new Call for Proposals.
- For large-scale investment projects, where the administrative and financial efforts needed for developing a project are much higher, the "Two-step procedure" will be applied. It consists of two separate steps: the submission of Concept Notes (applicants describe the concept of their project idea in the given format) and the submission of full applications (only the applicants whose Concept Notes were selected are asked to prepare the detailed project).

From previous programming periods in HU-RO CBC 2007–2013, new elements were introduced:

- Joint projects,
- Lead Partner principle,
- Partners' responsibility.

Joint projects means development and elaboration of joint projects; Mirror and individual projects were removed, Joint budget of the project, Joint implementation, Joint project management, Joint financing.

The second element introduced was the Lead Partner principle. The Lead Partner is delegated by the partners and the signs of the Community funding subsidy contract.

The Lead Partner is responsible for the:

- overall project coordination and its efficient implementation,
- preparation of the Project Progress Reports (technical and financial report) and the preparation of the application for ERDF reimbursement,
- reception of the ERDF amount and its transfer towards the partners,

\_

<sup>&</sup>lt;sup>6</sup> http://huro-cbc.eu/en/funding, [Accessed 29 October 2011]

Partners' responsibility means that each partner is responsible for:

- assuring the implementation of the assumed activities in accordance with the approved timeframe and quality;
- efficient cooperation with the Lead Partner and other Partners;
- signature of the Partnership Agreement and that of the State Co-financing Contract and respecting the obligations that follow from these;
- preparation of the Partner Progress Reports;
- supporting the activity of the Lead Partner.

#### 2.3. Project management

The word "project" comes from Latin projectum - "to throw something up." In English project is "something that comes before anything is done". A project, by definition, is a temporary activity with a starting date, specific goals and conditions, defined responsibilities, a budget, a planning, a fixed end date and multiple parties involved.

Project Life Cycle serves to define the beginning and the end of a project. In this case, in the cross border projects, we can identify three stages of the project life cycle:

- Project preparation stage: identifying the problems, establishing the project objectives (that must be compatible with the main purpose of the programme or the objective of the priority axes); verification of eligibility conditions, cross-border partner finding (which in turn must meet eligibility criteria); preparation and submission of the financing application; processing the financing application (administrative compliance and eligibility check, content and quality assessment, final stage of the assessment and decision-making); signing of financing contract to be the Lead Partner (community funding subsidy contract);
- Project implementation stage: organizing the project team in order to start the project activities; monthly meetings with the mixed project team in order to monitor the activities which fall within the responsibility of each partner; carrying out project activities; submission of the Project Progress Reports (technical and financial reports) and the application for ERDF reimbursement;
- Project post-implementation stage: evaluation the systematic assessment of the degree of fulfilment: the objectives, the effectiveness of funds used, the utility, the impact of the project; follow up of the project results following project closure.

For the large-scale investment projects where the two-step procedure is applied, we have an additional step, the preparation of the Conceptual Note.

Project management is the discipline of planning, organizing and managing resources to achieve specific goals<sup>7</sup>. The complexity of a project is given by the number of tasks assumed to be met, the number and the intensity of constraints arising during its deployment.

Traditionally these constraints have been listed as "scope", "time" and "cost". These are also referred to as the "project management triangle" where each side represents a constraint. One side of the triangle cannot be changed without affecting the others. Scope is the project purpose that has to fit within the HU-RO CBC objective. Time is the duration that is needed to complete all the associated project work (calendar days, months, and years). Cost includes all the resources required to carry out the project – the people and the equipment that does the

\_

<sup>&</sup>lt;sup>7</sup> http://en.wikipedia.org/wiki/Project\_management [Accessed 29 October 2011]

<sup>8</sup> http://office.microsoft.com/en-us/project-help/a-short-course-in-project-management-HA010235482.aspx [Accessed 30 October 2011]

work, the materials they use and all of the other events and issues that require money or someone's attention in a project.

This traditional "project management triangle" was replaced by the latest version of the Project Management Body of Knowledge (PMBOK) of the Project Management Institute (PMI) with an infinite number of constraints. PMBOK (4<sup>th</sup> Edition) offered an evolved model based on the triple constraint with 6 factors to be monitored and managed: schedule, scope, budget, risk, resources and quality.

For this reasons, in order to manage projects successfully it is necessary to have integrated project management based on processes in nine knowledge areas<sup>9</sup>:

- Project Integration Management
- Project Scope Management
- Project Time Management
- Project Cost Management
- Project Quality Management
- Project Human Resource Management
- Project Communications Management
- Project Risk Management
- Project Procurement Management

In the following we will analyse the Project Risk Management within the cross border projects.

## 3. Project risk management mithin cross border cooperation projects

## 3.1. Definition and risk classification

The Webster's Dictionary define the risk as the possibility that something bad or unpleasant (such as an injury or a loss) will happen. The risk is an event that is uncertain but possible, its origin stands in uncertainty, it is harmful and its effects cannot be removed. From all the definitions two are the common elements of the risk concept: uncertainty and loss.

The first classification of risks is based on their size, degree of knowledge and inherence:

- more or less known,
- more or less serious.
- easier or harder to avoid.

In another words we can classify risks in 10:

- known-unknown ones something we know that exists but we do not know when it will happen and how severe the consequences will be;
- unknown-unknown ones something which has never happened before and thus cannot be anticipated, neither qualitatively nor quantitatively.

The second classification is based on their mode of occurrence (Walewski-Gibson 2003):

- pure - the consequences of accidental events that cannot be predicted (hurricanes, earthquakes, fires, floods, wars, attacks, etc.);

<sup>&</sup>lt;sup>9</sup> Project Management Institute 2008:A guide to the Project Management, Body of Knowledge (PMBOK GUIDE) Fourth Edition.

<sup>10</sup> http://consultingforum.becota.org/?page\_id=192, [Accessed 27 October 2011]

speculative – that are related to decisions being taken within a company or investment
in a project, events with a high probability of occurrence and relying heavily on a
number of external factors that influence these processes.

Risk is a combination of probability of a negative event and its consequences and impact.

The probability of materialization of the risk is the possibility or eventuality that risks will materialize. It represents a measure of the possibility that a risk may appear, that it will be determined qualitatively or quantitatively when the nature of the risk and the available information will permit such a calculation. Impact is the consequences of the results (objectives), if the risk would materialize. If the risk is a threat, the consequences of the results are negative and if the risk is an opportunity, the consequences of the results are positive.

Risk is present in all projects whatever the nature of their tasks is, the technology on which they are based is, or the environment in which they are undertaken is. As a project is larger and involves construction works (road infrastructure works, etc.) we will have even more risks. For most of the large scale investment projects, different participants are responsible for and control the various stages of the project life cycle. In many cases, the project owner is largely responsible for program analysis, a third party is often hired to manage and control design and engineering to meet the initial constraints set by the owner, and a contractor is hired to construct the project, who turns the results over to the owner for operations or production.

In each stage of the project life cycle risks could emerge. So we could assign the risks in three broad categories:

- risks in the preparation of the financing application stage,
- risks in project implementation, from the signing of the community funding subsidy contract until it has submitted the last request for reimbursement,
- post-implementation risks.

A myriad of risk and risk-related definitions are applied in cross border projects, and no standard definitions or procedures exist for what constitutes a risk assessment. On the next pages we will identify and analyse the cross border project risks. Understanding the relationships between risk management and project stages can be a difficult task.

#### 3.2. Risk Factors and Risk Management Plan

All projects involve risks. Project Risk Management includes the processes of project conducting risk management planning, identification, analysis, response planning and control on a project<sup>11</sup>. This process includes the maximizing of the probability and the consequences of positive events, and the minimizing of the probability of adverse events to projects objectives.

We can highlight four steps of the risk management planning:

- Risk identification which risks will affect the project.
- Risk analysis (qualitative and quantititative) has the purpose of performing a
  qualitative analysis of the risks in order to make a prioritisation of the effects on project
  objectives and also to measure the probability and the consequences of risks and
  estimating the implications for project objectives,
- Risk Response Planning helps to find the procedure and the actions to reduce threats to the project objectives,

<sup>&</sup>lt;sup>11</sup> Project Management Institute 2008: A guide to the Project Management, Body of Knowledge (PMBOK GUIDE) Fourth Edition.

 Risk Monitoring and Control – tracks the identified risks, monitors the residual risks and identifies the new risks – ensuring the execution of risk plans and evaluating their effectiveness in reducing risk; it is an ongoing process for the life of the project.

Risk identification – In this stage we have to identify and name the risks. The best way to find all the possible risks are project team brainstormings, the elaboration of questionnaires, surveys with list of standard risks, workshops and risk meetings, the examination of similar projects in the past. Risk identification occurs in each stage of the lifecycle of the project, as we will see later in this article.

Risk Analysis – Risk Analysis is qualitative and quantitiative. Qualitative Risk Analysis assesses the impact and the likelihood of the identified risks and develops prioritized lists of these risks for further analysis or direct mitigation<sup>12</sup>. Qualitative Risk Analysis is an initial review of the risks and it fits perfect for smaller projects. Due to the fact that we need to quantify the risks, we need to determine their two dimensions: probability and impact. It is very useful to use a matrix, like the one in the Figure 2 that will make a prioritizations of the risks.

High (probability): more likely than not to happen.
High (impact): Substantial impact on cost, schedule, or technical. Substantial action required to alleviate issue.

Low (probability): less likely than not to happen.
Low (impact): Minimal impact on cost, schedule, or technical. Normal management

Figure 2. Qualitative Risk Analysis

Source: Project Management Online Guide, www.wsdot.wa.got/projects/projectMgmt/Process

As we can see in Figure 2, the probability that a risk will occur is represented on one axis of the chart – and the impact of the risk, if it occurs, on the other. This will give us the clear view of the priority that we have to give each risk.

The corners of the chart have these characteristics:

oversight is sufficient.

- in the bottom left corner with Low impact/Low probability Risks with low level and you can often ignore them;
- in the top left corner with Low impact/High probability Moderate risk importance if these things happen, you can cope with them and move on. However, you should try to reduce the likelihood that they will occur;
- in the bottom right corner with High impact/Low probability ("Black swans") Risks of high importance if they do occur, but they are very unlikely to happen. For these, however, you should do what you can to reduce the impact they will have if they do occur, and you should have contingency plans in place just in case they do;
- in the top right corner with High impact/High probability Risks are of critical importance. These are your top priorities and are the risks that you must pay close attention to.

Quantitative Risk Analysis measures the probability and the consequences of risks and estimates the implications for project objectives. "The project team must examine each critical item and predict its possible extreme values considering all risks, including compounding effects. It is important to understand that the range, as considered in this method, is not the expected accuracy of each item. This is a key issue. Risk analysis is not an analysis of

Probability

<sup>&</sup>lt;sup>12</sup> Project Risk Management 2010: Guidance for WSDOT Projects, Washington State Department of Transportation, July http://www.wsdot.wa.gov/publications/fulltext/cevp/ProjectRiskManagement.pdf. [Accessed 29 October 2011]

estimate accuracy. Accuracy is dependent upon estimate deliverables and estimate maturity." (AACE International – The Authority for Total Cost Management)<sup>13</sup>.

Risk Response Planning – is the procedure that takes action in response to identified risks. According to their priority, for every type of risk we have different strategies that we can embrace:

- Accept the risk with low impact and low probability. The risk might be so small the effort to do anything is not worthwhile.
- Transfer the risk with low impact and high probability. Make someone else responsible.
   Perhaps a subcontractor can be made responsible for a particularly risky part of the project.
- Mitigate the risk with high impact and low probability. Risk mitigation implies a reduction in the probability and/or impact of an adverse risk event to an acceptable threshold<sup>14</sup>.
- Avoid the risk with high impact and high probability. Change project management plan
  to eliminate a threat, to isolate project objectives from the impact of the risk, or to relax
  the project objective that is in jeopardy, such as extending schedule or reducing scope<sup>15</sup>.

If the risk represents an opportunity and not a threat, the strategies to put in action are: exploit, share and enhance.

Transfer Avoid Probability (share) (exploit) High impact and high probability risks require aggressive Mitigate responses (threats should Accept Enhance) be avoided and opportunities exploited if possible). Low High Impact

Figure 3. Risk Response Planning

Source: Project Risk Management, Guidance for WSDOT Projects, Washington State Department of Transportation, July 2010

Risk Monitoring and Control – final step. After we have implemented response actions, we must track and continually monitor risks to identify any change in their status. We have to record the effectiveness of our actions and any changes to the project risk profile.

#### 3.3. Risk factors and Risks Assessment in cross border project stages

In the next tables we present the hypothetical risk factors in the 2 major stages of a cross border project development: Project Preparation Stage and Project Implementation Stage. The Steps in Risk Assessment are: Risk Identification, Risk Qualitative Analysis and Risk Response. This assumptions are based on my seven years experience in European Union funding project implementation.

AACE International 2008: The Authority for Total Cost Management. Recommended Practice No. 41R-08, Risk Analysis and Contingency Determination Using Range Estimating TCM Framework: 7.6 – Risk Management June 25.
 Project Management Institute 2008: A guide to the Project Management, Body of Knowledge (PMBOK GUIDE) Fourth

<sup>14</sup> Project Management Institute 2008: A guide to the Project Management, Body of Knowledge (PMBOK GUIDE) Fourtl Edition.

<sup>15</sup> Project Management Institute 2008: A guide to the Project Management, Body of Knowledge (PMBOK GUIDE) Fourth Edition.

Table 1. Risks Assessment in cross border project's preparation stage (Steps of Risk Management Planning)

Risks Factors in the project preparation stage	Risk Identification	Risk Analysis (impact / probability)	Risk Response Actions to counteract the appearance of risk factors
Eligibility risks	The Lead Partner and the partner institutions are not eligible under the program/action (e.g. The lead partner or the partners do not have their seats or a regional/local branch registered in the eligible area of the programme)	High impact/low probability	Risk mitigation Carefully reading the documentation available at the launch of each call for proposals. The Lead partner may address the Joint Technical Secretariat or the Info Points guidance and confront/compare the information on the conformity of their project idea with the Programme objective Participation at events designed for helping the potential applicants to better understand the programme and work efficiently for developing their projects, like, info days, workshops, Partner search and Lead Partner/Lead Applicant forums. Consultation with the programme website.
	Project objectives are not compatible with those of the HU-RO CBC.  Lack of a partner on the other side of the border.	High impact/low probability High impact/ medium probability	
	The criteria required for cross-border projects: cross border character, cross border impact are not observed.	High impact/low probability	
	The project did not respect at least two of the four joint criteria listed as joint development, joint staffing, financing and implementation.	High impact/low probability	
	The target group is not eligible for cross-border program.	High impact/low probability	
	Activities under the project are spread over a period greater than that provided in the Guidelines for Applicants.	High impact/low probability	
Financial Risks	- The budget does not fall within the limits set by the Program; - Underestimation of the budget, due to the omission of activities; - non-observance of the eligible categories of costs;	High impact/ medium probability	Risk mitigation Carefully reading the documentation available at the launch of each call for proposals.
Risks related to project preparation team	Joint preparation project team has communication problems.	Critical risk – high impact/ high probability of occurrence	Avoid the risk Meetings with the joint project team.
	Issues related to insufficient qualification of project team members.	High impact/low probability	Risk mitigation Selection of project team members based on skills and knowledge; Capacity building;
	Poor knowledge of English; it is given that the application form must be prepared in English.	High impact/low probability	Risk mitigation Selection of project team members based on English knowledge;
	Failure to comply with duties established by the project manager for each of the partner institutions.	High impact/low probability	Risk mitigation Establish a plan to achieve file work on funding, and responsibilities of each team member; (PR.: What does 'file work on'refer to?
	The project team has a low degree of homogeneity, generating conflicts that are difficult to manage.	High impact/low probability	Risk mitigation Conflict resolution management; Team building;
Risks due to mismanagement	The project manager has insufficient skills to manage the elaboration of the financing application.	High impact/low probability	Risk mitigation Proper selection of project manager;
Risks due to corruption	Imposing the project manager or the members of the project teams according to their political or social connections instead of their expertise.	High impact/ medium probability of occurrence	Risk mitigation Respect of high standards of professional, social and management ethics. This factor certainly leads to project failure.

Source: own construction

Table 2. Risks Assessment in cross border project's implementation stage (Steps of Risk Management Planning)

Risks Factors in project's implementation stage	Risk Identification	Risk Analysis (impact / probability)	Risk Response Actions to counteract the appearance of risk factors
Technical Risks	- Low interest among the target groups (PR.: or within the target group) for the project results; -Low impact of the communication activities among the target groups; -Delays in carrying out activities of one or more partners in the Partnership; - Failure to comply with its obligations under the Partnership;	High impact/low probability	Risk mitigation Elaboration of promotional materials in order to increase interest among the target group. Project team will initiate notification to reorganize activities calendar. Approval of the Managing Authority
Financial Risks	- Project financing is not assured;  - Budget changes;  - Delays in receiving the Reimbursement funds, due to long bureaucratic procedures;	Critical risk High impact/high probability	Avoid the risk Risk that can be avoided by providing necessary funds in the budgets of the two partners. The costs must be estimated using existing data in the market at the time of writing the application, in Euros, taking into account the estimates of exchange rate
Risks generated by the project implementation team	<ul> <li>Inefficient communication and problems during the information exchange;</li> <li>Inefficient information or lack of information regarding the project implementation;</li> <li>Change of personnel in the implementation team;</li> </ul>	Critical risk – high impact/ high probability of occurrence	Avoid the risk  The risks are under control thanks to a good organizational framework that is established at the first meeting of the implementation team.  Project team meetings on a regular basis;
Risks due to mismanagement	<ul> <li>The project manager is unable to effectively manage the conflicts in the Partnership or the crisis occurred within the project.</li> <li>Delay in the submission of the Project Progress Reports and the applications for Reimbursement;</li> </ul>	Critical risk – high impact/ high probability of occurrence	Avoid the risk This risk will not influence the results of the project if we have a proper selection of project manager in the project preparation stage.
Risk due to public procurement procedures	- Delay in the public procurement procedures; - Bad quality of services/ equipment offered; - Subcontractors do not meet the set deadlines;	High impact/medium probability	Risk mitigation Risks are kept under control due to terms of references that specifies exactly the desired quality of service or desired quality of the equipment.  Project team will initiate notification to reorganize activities calendar.
Risk due to corruption	Corruption related to the Public Procurement Procedure, award of public procurement contracts based on preferential criteria and not on the basis of quality and efficiency;	High impact/medium probability	Risk mitigation  This factor will lead to project failure, due to bad quality of services offered by the subcontractors, the equipment or achievement of poor quality work.  Transparency in organizing the Public Procurement Procedure;

Source: own construction

## 4. Conclusions

"A man who travels a lot was concerned about the possibility of a bomb on board his plane. He determined the probability of this, found it to be low, but not low enough for him; so now, he always travels with a bomb in his suitcase. He reasons that the probability of two bombs being on board would be infinitesimal" (*Paulos* 1988).

The conclusions of this paper are that risk management is an important project management process. A myriad of risk and risk-related definitions are applied to cross border projects, and no standard definitions or procedures exist for what constitutes a risk assessment.

Understanding the relationships between risk management and project stages is a very difficult task. In this paper we launched some assumptions regarding the connection between risk factors that may occur in the project development and the projects stages. This analysis was elaborated strictly in the cross border projects, but it can be extended to all the international projects, whether the project is implemented by a public institution or by a private one.

We illustrate the risks that may emerge during the project preparation, classified in: eligibility risks, financial risks, risks related to project preparation team, risks due to mismanagement, risks due to corruption.

During the implementation stage the risks that may occur are: technical risks, financial risks, risks generated by the project implementation team, risks due to mismanagement, risk due to public procurement procedures, risks due to corruption. Once risks have been identified, followed by their qualitative analysis and ending the risk assessment with the risk response proposition.

The paper will have a further development because the hypothetical assumptions proposed in this paper are the premises for further research. We intent to elaborate a questionnaire with the main risk factors that can appear during the project initiation and implementation, like the ones in Table 1. and 2. This questionnaire will be presented to several experts and consultants that have implemented international projects with the main purpose to develop a study regarding the suitable actions to counteract the appearance of risk factors and the best practice in risk assessment.

## References

AACE International 2008: The Authority for Total Cost Management. Recommended Practice No. 41R-08, Risk Analysis and Contingency Determination Using Range Estimating TCM Framework: 7.6 – Risk Management June 25.

Hungary – Romania Cross-border Co-operation Programme 2007–2013: 03 March 2008, http://www.mdrl.ro/\_documente/coop\_teritoriala/granite\_interne/hu\_ro/doc/programare eng.pdf [Accessed 29 October 2011]

Hungary – Romania Cross-border Co-operation Programme 2007–2013: Applicant's Handbook for Project Generation And Development, 5th Call for proposals HURO/1101, http://www.huro-

cbc.eu/ro/solicitari\_de\_propuneri/uro1101\_solicitare\_de\_propuneri\_\_proiecte\_de\_infras tructura /62 [Accessed 12 November 2011]

http://huro-cbc.eu/en/overview [Accessed 29 October 2011]

http://huro-cbc.eu/en/funding [Accessed 29 October 2011]

http://en.wikipedia.org/wiki/Economy of the European Union [Accessed 29 October 2011]

http://en.wikipedia.org/wiki/Project management [Accessed 29 October 2011]

http://consultingforum.becota.org/?page id=192 [Accessed 27 November 2011]

http://office.microsoft.com/en-us/project-help/a-short-course-in-project-management-HA010235482.aspx [Accessed 30 October 2011]

Paulos, J. A. 1988: *Innumeracy: Mathematical illiteracy and its consequences*. New York, NY: Hill and Wang.

- Project Implementation Handbook of the Hungary Romania Cross-border Co-operation Programme 2007- 2013, http://www.huro-cbc.eu/en/download/project\_implementation [Accessed 12 November 2011]
- Project Management Institute 2008: A guide to the Project Management, Body of Knowledge (PMBOK GUIDE) Fourth Edition.
- Project Risk Management 2010: Guidance for WSDOT Projects, Washington State Department of Transportation, July, http://www.wsdot.wa.gov/publications/fulltext/cevp/ProjectRiskManagement.pdf, http://huro-cbc.eu/en [Accessed 29 October 2011]
- Walewski, J. Gibson, G. E. 2003: *International Project Risk Assessment: Methods, Procedures, and Critical Factors*. Report of the Center Construction Industry Studies The University of Texas, 2003, http://www.ce.utexas.edu/org/ccis/a\_ccis\_report\_31.pdf, [Accessed 30 October 2011]