



## WP 1: Project Coordination, Standardisation and Methodology

D1.3

### Risk Management Plan

Status: Draft

Draft: 2

10/12/2019



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 788503.

## About RRING

The overall project aim is to bring Responsible Research and Innovation (RRI) into the linked up global world to promote mutual learning and collaboration in RRI. This will be achieved by the formation of the global RRING community network and by the development and mobilisation of a global Open Access RRI knowledge base. RRING will align RRI to the Sustainable Development Goals (SDGs) as a global common denominator.

The RRING project acknowledges that each region of the world is advancing its own agenda on RRI. Therefore, RRING will not be producing a Global RRI framework or strategy that is meant to be enforced in a top-down manner. Rather, increased coherence and convergence will be achieved via a bottom-up approach, learning from best practices in RRI globally and from linkages, via the new RRING community, to develop the RRI linked-up world.

### Six Objectives of RRING

**Objective 1:** Promote a linked up global world of RRI by creating the global RRING community network, thereby enabling mutual learning, collaboration, mobilisation of RRI concepts.

**Objective 2:** Mobilise, promote and disseminate a global open access knowledge base of RRI based on the State of the Art (SoA) and comparative analysis across the key geographies, all stakeholders and sectors. It will cover key platforms, spaces and players, role and influence of stakeholders, drivers and policies for R&I, regulation in public, private sectors and nation states and international organizations.

**Objective 3:** Align RRI to the UN Sustainable Development Goals (SDGs) to provide a global common denominator for advancement of RRI, and address Grand Challenges globally.

**Objective 4:** Determine the competitive advantages of RRI and also understand how and where RRI is perceived as a barrier and/ or disadvantage.

**Objective 5:** Create high level RRI strategy recommendations for the seven geographic zones, trial RRI best practice learning in 2 EU case studies.

**Objective 6:** Promote inclusive engagement of civil society and researchers.



## Document Information

<b>Title</b>	Risk Management Plan	
<b>Distribution</b>	Public	
<b>Document Reference</b>	RRING-D 1.3_RMP_2080829	
<b>Deliverable Leader</b>	Gordon Dalton	UCC
<b>Contributing Authors</b>	Lukas Fochler	UCC
	Jasmin Schomakers	UCC
	[Type name]	[Choose organisation]
	[Type name]	[Choose organisation]
	[Type name]	[Choose organisation]

## Revision History

Rev.	Date	Description	Prepared by (Name & Org.)	Approved By (Work-Package Leader)	Status (Draft/Final)
01	28.8.2018		PM	SC	Draft

## Acknowledgement

The work described in this publication has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 788503.

## Legal Disclaimer

The views expressed, and responsibility for the content of this publication, lie solely with the authors. The European Commission is not liable for any use that may be made of the information contained herein. This work may rely on data from sources external to the RRING project Consortium. Members of the Consortium do not accept liability for loss or damage suffered by any third party as a result of errors or inaccuracies in such data. The information in this document is provided "as is" and no guarantee or warranty is given that the information is fit for any particular purpose. The user thereof uses the information at its sole risk and neither the European Commission nor any member of the RRING Consortium is liable for any use that may be made of the information.



## Executive Summary

Risk management is an ongoing process that continues through the life of a project. It includes processes for risk management planning, identification, analysis, monitoring and control. Many of these processes are updated throughout the project lifecycle as new risks can be identified at any time. It's the objective of risk management to decrease the probability and impact of events adverse to the project.

The identification of risks was started before the project was initiated, and the number of risks may increase as the project matures through the lifecycle. When a risk is identified, it's first assessed to ascertain the probability of occurring, the degree of impact to the schedule, scope, cost, and quality, and then prioritized. Risk events may impact only one or while others may impact the project in multiple impact categories. The probability of occurrence, number of categories impacted and the degree (high, medium, low) to which they impact the project will be the basis for assigning the risk priority. All identifiable risks will be entered into a risk register, and documented as a risk statement.

Identifying and documenting events that pose a risk to the outcome of a project is the first step. It is equally important to monitor all risks on a scheduled basis by a risk management team, and reported on in the project status report.

This risk management plan should be used as a reference by the project coordinator, the project manager and all project partners about how to identify and address risks in a timely manner.



## Contents

### Contents

WP 1: Project Coordination, Standardisation and Methodology .....	1
Risk Management Plan .....	1
About RRING .....	2
Document Information .....	3
Revision History .....	3
Acknowledgement .....	3
Legal Disclaimer .....	3
Executive Summary .....	4
Contents .....	5
1. Introduction .....	6
1.1. Scope .....	6
1.2. Purpose.....	6
2. Risk Management Procedure .....	6
2.1. Risk Identification.....	6
2.2. Risk Responsibilities and Roles.....	6
2.3. Risk Analysis .....	7
2.3.1. Qualitative Risk Analysis .....	7
2.3.2. Quantitative Risk Analysis.....	8
2.4. Risk Response .....	8
2.5. Risk Mitigation.....	8
Deliverables Risk Mitigation .....	9
2.6. Tracking and Reporting .....	9
2.7. Processes to address immediate unforeseen risks .....	9
2.8. Critical risks for implementation.....	10
References .....	12



## 1. Introduction

### 1.1. Scope

This Plan describes the risk management organization and processes that will be used during the RRING Project. Since risk management is a vital task in many organisations worldwide we largely based this document on two published risk management reports<sup>1,2</sup>.

### 1.2. Purpose

The purpose of the risk management process is to identify and analyse the effects of uncertainties on the RRING Project, in order that action can be taken to minimize the consequences of any undesired event that may jeopardize the success of the programme. The purpose of this plan is to establish a framework of working practices, which will enable all risks associated with the RRING Project to be identified, monitored and controlled during the life of the program.

## 2. Risk Management Procedure

### 2.1. Risk Identification

The project manager (PM) working with the project team will ensure that risks are actively identified, analyzed, and managed throughout the life of the project. Risks will be identified as early as possible in the project so as to minimize their impact. The steps for accomplishing this are outlined in the following sections. The PM will serve as the risk manager for this project.

Throughout all phases of the project, a specific topic of discussion will be risk identification. The intent is to instruct the project team in the need for risk awareness, identification, documentation and communication.

Risk awareness requires that every project team member be aware of what constitutes a risk to the project, and being sensitive to specific events or factors that could potentially impact the project in a positive or negative way.

Risk identification consists of determining which risks are likely to affect the project and documenting the characteristics of each.

It is the PM's responsibility to assist the project team and other stakeholders with risk identification, and to document the known and potential risks in the risk register. Updates to the risk register will occur as risk factors change. Risk management will be a topic of discussion during the regularly scheduled project meetings.

The project team will discuss any new risk factors or events, and these will be reviewed with the PM.

### 2.2. Risk Responsibilities and Roles

The responsibility for managing risk is shared amongst all project members.

Risk Identification: All project members

Risk Assessment: PM, Project Coordinator (PC), Steering Committee (SC)

Risk Response Options Identification: All project members

Risk Response Approval: SC

Risk Response Management: PM

Risk Reporting: PM



## 2.3. Risk Analysis

All risks identified will be assessed to identify the range of possible project outcomes. Qualification will be used to determine which risks are the top risks to pursue and respond to and which risks can be ignored.

### 2.3.1. Qualitative Risk Analysis

The probability and impact of occurrence for each identified risk will be assessed by the project manager, with input from the project team using the following approach:

#### Probability

Low Probability or Impact=1; Medium Probability or Impact=2; High Probability or Impact=3  
Probability and Impact are multiplied together to give overall Risk

Table 1. Risk Exposure Rating

Risk Exposure Rating	Description	Color Code
Very High	Unacceptable. Major disruption likely; different approach required; priority management attention required	Purple
High	Risk that has the potential to greatly impact project cost, project schedule or performance	Red
Medium	Some disruption; different approach may be required; additional management attention may be needed	Yellow
Low	Minimum impact; minimum oversight needed to ensure risk remains low	Green

Table 2. Risk Matrix

Impact	3			
	2			
	1			
		1	2	3
	Probability			

Risks that fall within the PURPLE, RED and YELLOW zones will have risk response planning which may include both risk mitigation and a risk contingency plan.



### 2.3.2. Quantitative Risk Analysis

Analysis of risk events that have been prioritized using the qualitative risk analysis process and their effect on project activities will be estimated, a numerical rating is applied to each risk based on quantitative analysis, and then documented in this section of the risk management plan.

## 2.4. Risk Response

Each major risk (those falling in the Purple, Red & Yellow zones) will be assigned to a Risk Owner for monitoring and controlling purposes to ensure that the risk will not “fall through the cracks”.

For each major risk, one of the following approaches will be selected to address it:

- **Risk Avoidance:** Make changes to the project plan to eliminate the risk or to protect the project objectives from its impact by eliminating the cause. An example is a change in scope, change in technical approach, or the addition of resources to avoid or eliminate the risk.
- **Risk Transference:** Transfer responsibility and ownership of the risk to an outside resource or organization. An example is contracting out a specialized technical component when the Project Team lacks the skills.
- **Risk Acceptance:** Acknowledge the existence of the risk and accept its consequences if it occurs. An example is the acceptance of schedule or cost overrun and developing a contingency plan to execute if the risk occurs.
- **Risk Mitigation (Controlling):** Incorporate the ongoing monitoring and handling of risks throughout the life of the project to reduce the impact or probability of the risk. These mechanisms involve the use of reviews, possibly adding milestones, and development of counter measures and cost estimates. Introducing new processes or procedures to lessen the probability of producing a product that will not work or will not be accepted by users is a good example of risk mitigation.

For each risk that will be mitigated, the Project Team will identify ways to prevent the risk from occurring or reduce its impact or probability of occurring. This may include prototyping, adding tasks to the project schedule, adding resources, etc. Any secondary risks that result from risk mitigation response will be documented and follow the risk management protocol as the primary risks.

For each major risk that is to be mitigated or that is accepted, a course of action will be outlined in the event that the risk does materialize in order to minimize its impact.

## 2.5. Risk Mitigation

Risk mitigation involves two steps:

- Identifying the various activities, or steps, to reduce the probability and/or impact of an adverse risk.
- Creation of a Contingency Plan to deal with the risk should it occur.

Taking early steps to reduce the probability of an adverse risk occurring may be more effective and less costly than repairing the damage after a risk has occurred. However, some risk mitigation options may simply be too costly in time or money to consider.

Mitigation activities will be documented in the Risk Register, and reviewed on a regular basis. They include:

- Identification of potential failure points for each risk mitigation solution.
- For each failure point, document the event that would raise a “flag” indicating that the event or factor has occurred or reached a critical condition.
- For each failure point, provide alternatives for correcting the failure.



## Deliverables Risk Mitigation

In the event that a WP leader does not deliver on time or fails to deliver a deliverable, refer to the project initiation document (RRING\_D1.1\_20180807) and to the quality assurance document (RRING\_D1.2\_Quality Assurance Plan\_20180808) for risk mitigation measures concerning deliverables.

### 2.6. Tracking and Reporting

As project activities are conducted and completed, risk factors and events will be monitored to determine if in fact trigger events have occurred that would indicate the risk is now a reality.

Based on trigger events that have been documented during the risk analysis and mitigation processes, the project team or PM will have the authority to enact contingency plans as deemed appropriate. Day to day risk mitigation activities will be enacted and directed by the PM.

Contingency plans that once approved and initiated will be added to the project work plan and be tracked and reported along with all of the other project activities.

Risk management is an ongoing activity that will continue throughout the life of the project. This process includes continued activities of risk identification, risk assessment, planning for newly identified risks, monitoring trigger conditions and contingency plans, and risk reporting on a regular basis. Project status reporting contains a section on risk management, where new risks are presented along with any status changes of existing risks. Some risk attributes, such as probability and impact, could change during the life of a project and this should be reported as well.

### 2.7. Processes to address immediate unforeseen risks

The individual identifying the risk will immediately notify the PM (Fig. 1). The PM will assess the risk situation. If required, the PM will identify a mitigation strategy, and assign resources as necessary. The PM will document the risk factor and the mitigating strategy. If, however, the PM cannot address the problem, the PC will have to mitigate it and the SC has to approve the action. If the PC cannot mitigate, the SC has to. If all parties fail to mitigate the problem, the project officer has to be notified within one month of the risk being identified.

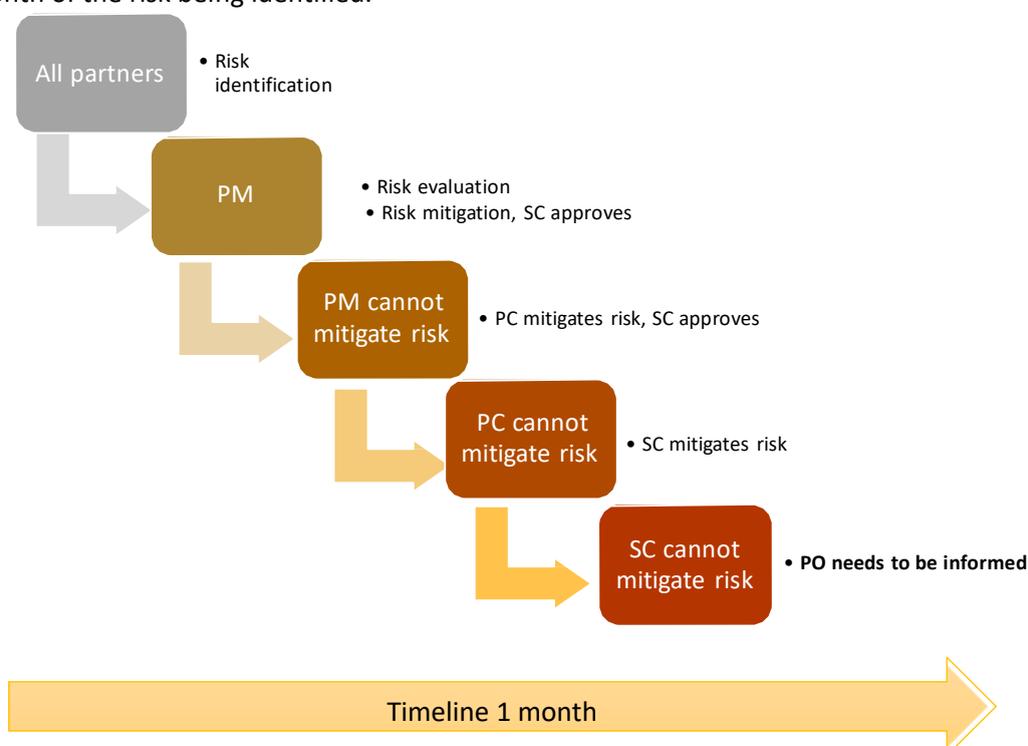


Fig.1: Risk reporting and mitigation processes





## 2.8. Critical risks for implementation

Table 3. Critical risks for implementation – Risk register

Low risk=Green 1-2; Medium Risk =Yellow 3-4; High Risk=Red 5-6; Very High Risk= Purple 7-9

								Mid term review of risks						
N	Obj	Description of risk (level of likelihood = LoL)	Lol	Impa	Ris	WP	Proposed RiskMitigation Measures Post mitigation Low/Medium/High)	Assesat GAof Final Ri sk	Technical risks	Timing Risks	Cost risks	Asses at mid term	Reassessed Final Risk	
1	Obj 1	Low membership uptake to RRING Community	Med	High	6	3,4, 5,7	Extensive partner experience in network building (UCC coordinating MARIBE www.maribe.eu, ICoRSA, UNESCO and association networks). WP7 has clear implementation plans covering mobilisation and promotion of the RRING Community to gain members. WP3, 4 and 6 will promote RRING membership from the outset when conducting case studies, surveys and consultations, engaging with all stakeholders.	3	Medium/high risk. WP7 is running 6 months behind time. There are some doubts that T7.3 leader CNR will be able to lead business model. T7.4 estimates it-will have 4000 contacts globally from which to select a wide and balanced range of stakeholders for the community	T7.4 on time to finish M24	No cost risk	5	4	
2	Obj 1	RRING community is not sustainable, post project	Med	High	6	7	Extensive partner experience in successful perpetual networks ICoRSA,	3	UNESCO is onboard to support the technical running of the RRING	Timing is for the end of the project. No risk	No cost risk	3	3	



						UNESCO, ESG/Future earth. WP7 has clear tasks on identifying best of breed real world networks. UNESCO will oversee the network post RRING, providing mentoring & support, for first year. (LoS)		community one year post project. T7.3 will create a business model for the long-term long-term operations of the community					
3	Obj 2	Improper database management and lack of sustainability	Med	High	6	1	Extensive partner experience in databases (UCC coordinating MARIBE <a href="http://www.maribe.eu">www.maribe.eu</a> , UNESCO, WU). UNESCO will be overseeing the perpetual maintenance of the database (Go-Spin). (LoS)	3	UNESCO is committed to using their platform GoSpin and will provide the support for the technical adaptation of the platform and the technical support one year post project.	The task is one year behind time. However deliverable is forecast to be ready on time	Sufficient subcontract funds have been provided to ensure GoSpin adaptation is completed	4	3
4	Obj 2	Limited access to information for SoA, and knowledge database	Low	High	3	3	Scientific coordinator, UNESCO, and RRING Partners, have ready access to information and contacts as well as their own RRI projects. Will have full internet access, project management software, and access to Scientific publications.	2	WP3 T#3.2. partners struggled to get access to information in non EU areas. The WP will rely on new data from the surveys and interviews.	T3.2 is on-time	The costs claimed by partners are in proportion to the work completed.	3	3
5	Obj 2	Dissemination and knowledge transfer will not reach users or be taken-up, adopted, exploited.	Med	High	6	2, 4, 6, 7	Extensive partner experience in dissemination (UCC coordinating MARIBE <a href="http://www.maribe.eu">www.maribe.eu</a> , I CoRSA, UNESCO and association networks). Use	2	The RRING project manager departed in July. WP2 therefore suffered a drop in-dissemination activity. However the Twitter remains	P2 will see the major effort in Dissemination-. The new project manager will start in December 2019. The transfer of knowledge will be via	Costs are in budget	5	4



						of the knowledge base will be trialled and activity measured. Vitae partner will deliver training in use of the knowledge database increasing dissemination.		active, and partners are attending sufficient conferences. P2 will see the Glocalworkshops, public forums and school visits	the GoSpindatabase which is on time for completions				
6	Obj 2	RRI data collected will be in many languages	Med	High	6	All	All partners speak fluent English. Requested information will be translated into English before being sent to Consortium.	1	WP3 have invested in addressing this risk by translating the survey into 17 languages, and back translated for consistency. Interviews were conducted in-native languages and translated.	On-time	Cost for translations is within budget	1	1
7	Obj 2	Mobilisation of stakeholders to workshops, finalise Comparison analysis	Med	High	6	3,4	Workshops will be held in the most convenient city locations for the topic inspected and the relevant stakeholders. Social media will be used for better engagement. Limited travel accommodation costs provided.	2	UNESCO and Vitae are in charge of this task T4.4. Preparations are almost complete for the final range of Glocals. Attendance assured due to: - UNESCO contacts with local organisers. - Events times to coincide with a major local RRI related event.	The timing of the Glocals will be tight, but WP4 are confident that they will fit within the times frame of WP4 analysis and Deliverable delivery	The budget for glocals is within budget	3	3



8	Obj 2	Delivery of outputs from the workshops	Low	Low	1	3, 4	All RRING partners have extensive experience in hosting workshops. In particular - Vitae, ICoRSA, UNESCO, UCC (coordinating H2020 Maribe). Project communicators, subcontracted global media.	1	T4.4 not started the global events, no new foreseen risk anticipated.	Timing is ok	The cost is within budget	2	1
9	Obj 3	Difficulty in aligning RRI with SDGs	Low	Med	3	4,6	SDGs are already discussed at EC level, and are planned to be fundamental to all future SwafSscalls. All RRING partners experienced in RRI and 11 partners in SDGs, see Table 3.3.1.e	2	UNESCO has finalised plans for the methods to align SDGs with RRI in T3.4, and are on plan to conduct the process in T4.5	Timing is slightly delayed. WP6 should receive Recommendations from WP4 on time	The cost is within budget	3	3
10	Obj 4	RRI provides no competitive advantage	Low	Med	3	5	Research published by partner WU, already indicates that RRI is competitively advantageous.	2	WP5 has completed T5.2, State of the art of competitive advantage of RRI with some interviews. Results are positive so far that it does provide advantage	The timing of T5.2 fits well into T5.4, and with deliverable completion in 2020. Slight risk that D5.1 will be delayed	The cost is within budget	3	3
11	Obj 5	RRI recommendations will not be listened to	High	High	9	4,5,6	UNESCO as partner and ICSU as Advisory Board will ensure global audience. Key contacts with all stakeholders will be established during the project.	3	T6.2 not due till year 3 of project and not deemed a risk.	Timing is ok	The cost is within budget	4	3
12	Obj 5	RRI will not be suitable globally	Med	Med	4	6	RRING's Aaim states that it does not intend to produce a top-down global framework for RRI. RRING will bring together RRI	2	T6.2 not due till year 3 of project and not deemed a risk.	Timing is ok	The cost is within budget	4	3



						stakeholders to discuss and share RRI knowledge leading to learning.							
13	Obj 6	RRING will not succeed in inclusive engagement	Med	Med	4	All	RRING has partners from key RRI inclusive projects: HSRW, CPN, DCU, Fraun. Researchers will be involved and consulted -for the first time in a major RRI project, via ICoRSA and Vitae. Adequate budget is set aside for civil society to attend workshops and contribute to case studies. Key contacts will be secured early in the project. RRING develops an outreach plan, in consultation with i.a. experts from the gender Committee sub-committee to implement activities which promote inclusive engagement.	2	P2 will conduct the: -Glocals - Public forums - school visits Major effort will be made to have significant public engagement.	Timing is ok	The cost is within budget	4	3
14	Obj 1-6	Workpackage leader cannot fulfil his/her task	Low	Med	3	All	Another partner who has the means can replace the Workpackage leader. If that is not possible, RRING has to find a new consortium partner.	2	Major risk to the project in year 1:- -WP3: leadership changed 2 times, but is now under the strong leadership of ICoRSA under Eric Jensen. For WP7 ICoR A did not have the	-Wp3 is now on time under the amendment - WP7 could be delayed in delivering the network model.	The amendment has approved budget transfers to enable WP3 new leadership. WP7 leadership was taken on by UCC at no extra cost	5	4



								budget and staff at the beginning of the project to properly lead, and UCC took over.				
15	Partner fails to (proactively) engage on their task(s) or communicate in due timewith Work Package or task leader	High	Med - High			At least one reminder sent, then at least 3 business days later a warning will be sent that resources may be reallocated if non-responsiveness persists. Finally, resources will be reallocated to other partners to get the work completed.		Partner engagement has been a problem in WP3,5,&7. WP3 new leadership has been very proactive in-engagement with all partners. WP3 will end with a SC review of partners, to determine if there is are outstanding tasks by a partner to complete	WP3 and WP7 delays are due mainly to partner delays. The new amendment timelines will now be successfully achieved.	To date, Partners have remained within their cost budgets. WP3 will end with a SC review of partners, to determine if partner cost budgets for WP3 are used	5	4
16	Partner completes work without getting it agreed by the relevant task and work package leaders		Med			If work does not align with needs, the person-months claimed will not be approved by the work package leader. Project coordinator to mediate. If no solution is reached, SC needs to intervene.		This risk has been a risk for WP3. The SC created the Scientific Review committee, to act as the review body for report review. The SRC will provide recommendation to the SC on how the SCC should deal with a partner	Timing of partner work has been the main reason for deliverable delay in WP3 & WP7. The amendment has approved deliverable extensions which are now realisable.	Partners have remained within the cost budgets. WP3 will end with a SC review of partners, to determine if partner cost budgets for WP are used	5	3
17	Deliverable delayed	High	Med - High		All	Process outlined in the risk plan. Project manager informs project officer.		The amendment has approved a range of Deliverable extensions which the project are is confident it will meet.	The new amendment ensures Timing of Deliverables is on time	The cost of the Deliverables is within budget	4	3



18	No usage of MS Team	Low	low	Low	All	Partner is asked to provide alternative Email to be used for MS Teams if he/she cannot access it with first Email provided. Project manager created a tutorial for MS Team to encourage better use (Dec 2018). Project manager will set up one-one chat, if deemed necessary to solve access/usage issue.	1	Technical challenges of MS Teams are being met	Timing is ok	Budget ok	3	2
19	Partner overspends budget					A new budget is drafted at the beginning of year 2. The new budget takes into account re-allocation of PM and tasks. Any overspending, however, needs to be agreed by the SC and buffered by another partner who under-spends the respective amount.		There has been no technical difficulties with the budget since amendment. The SC is actively reviewing partner performance and may recommend further reallocations	The timing of the amendment was excellent for the mid-term periodic report.	There have been no budget changes since the amendment. The SC is actively reviewing partner performance and may recommend further reallocations	4	3
20	Website fails to be the primary source of information and outreach.					UCC finds a qualified intern to address the issue of website management. If UCC fails to do this by M18, a professional service needs to be consulted to make full use of the website as communication and dissemination tool to promote the project's objectives.		Since the project manager departed in July, the website has fallen slightly behind in updates. The website is currently undergoing a review in November and will be updated in December	The website will be constantly reviewed from December onward, via the new project manager.	No budget problems	3	2
21	Partner leaves the consortium					The PO needs to be informed. An official letter of resignation is needed. The work can be taken over		The amendment has finalised the departure of 3 partners. 2 new	The amendment has dealt with partner departures in a timely way.	Departing partner budgets have been successfully	3	2



						by a present partner or a new qualified partner can be sought to join the consortium. An amendment and re-location of funds is needed.		partners have joined. It is not anticipated that there will be any further partner departures.		transferred to new partners.		
--	--	--	--	--	--	--	--	--	--	------------------------------	--	--

## References

<sup>1</sup>U.S. Department of Health and Human Services (n.d). Risk Management Plan. Available at <https://www.phe.gov/about/amcg/contracts/Documents/risk-management.pdf> (31.07.2018)

<sup>2</sup>Georgia Technology Authority (n.d). Risk Management Plan. Available at : [https://gta.georgia.gov/sites/gta.georgia.gov/files/related\\_files/document/Risk-Management-Plan-Template.docx](https://gta.georgia.gov/sites/gta.georgia.gov/files/related_files/document/Risk-Management-Plan-Template.docx) (31.07.2018)