# FP7 2013 Cooperation Work Programme Theme 6: Environment (Including Climate Change)



# Novel indicators for identifying critical INFRAstructure at RISK from Natural Hazards

### **Deliverable D1.3**

# **Meetings of the Steering Committee**



<b>Primary Author</b>	Mark Tucker/Roughan & O' Donovan Limited (ROD)		
WP	1		
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<u>Project Coordinator:</u> Professor Eugene O' Brien

Roughan & O' Donovan Limited

eugene.obrien@rod.ie

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#### **Partners:**

Roughan & O'Donovan



Roughan & O' Donovan Limited, Ireland

Eidgenössische Technische Hochschule Zürich

Swiss Federal Institute of Technology Zurich

Eidgenössische Technische Hochschule Zürich, Switzerland.





Dragados SA, Spain.

Gavin and Doherty Geosolutions Ltd., Ireland.

probabilistic solutions consult and training

 $\label{lem:consult} \mbox{Probabilistic Solutions Consult and Training BV, Netherlands}.$ 

CSIC

Agencia Estatal Consejo Superior de Investigaciones Científicas,

Spain.



University College London, United Kingdom.



PSJ, Netherlands.



Stiftelsen SINTEF, Norway.



Ritchey Consulting AB, Sweden.



Innevation

University of Southampton (IT Innovation Centre), United

Kingdom.

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### **Executive Summary**

This report describes in brief the meetings of the INFRARISK Steering Committee that have taken place since the beginning of the project. As a result of the large number of meetings that have taken place since the beginning of the project, at which there has been Work Package Leaders in attendance, the interactions between members of the steering committee have generally taken place during non specific steering committee meetings. Meeting minutes, which provided a formal record of discussions, were produced.

# **Table of Contents**

1.0		INTRODUCTION		
1	L. <b>1</b>	Project Concept		5
2.0		THE STEERING COMMITTEE		6
2	2.1	The Ro	ole of the Steering Committee	6
2	2.2	.2 Members of the Steering Committee		
3.0	.0 MEETINGS		NGS	8
3	3.1	Introd	uction	8
3	3.2	Meetii	ngs	8
	3.:	2.1	Kick Off Meeting	8
	3.:	2.2	WP Leader/Models Workshop	9
	3.:	2.3	GMA Meetings No.1	9
	3.:	2.4	GMA Meetings No.2	.10
	3.:	2.5	Six Month Progress Meeting	.11
4.0	CONCLUSION		LUSION	12

#### 1.0 INTRODUCTION

#### 1.1 Project Concept

The INFRARISK project (novel indicators for identifying critical **INFRA**structure at **RISK** from natural hazards) is a European Union funded 7th Framework project under the 2013 'Environmental (Including Climate Change)' work programme. The project commenced on the 1st October 2013 and is due for completion on the 30th September 2016.

The research focus of INFRARISK is centred around developing reliable stress tests on European Critical Infrastructure (CI), using integrated modelling tools for decision-support to establish the resilience of European CI to rare low frequency extreme events and to aid decision making in the long term regarding robust infrastructure development and protection of existing infrastructure. To this end, an operational analysis framework will be developed through robust risk and uncertainty modelling that considers not only the impact of individual hazards on specific infrastructure systems but the coupled interdependencies of critical infrastructure, climate change, cascading hazards, cascading effects and time dependent vulnerability. Practical software tools and benchmark guidelines will be developed that support European infrastructure managers in assessing the probability of occurrence of extreme rare events and assessing the vulnerability of critical infrastructure, arming them with the necessary tools to develop robust mitigation and response strategies.

#### 2.0 THE STEERING COMMITTEE

#### 2.1 The Role of the Steering Committee

The Steering Committee, as illustrated in Figure 2.1, oversees the technical Work packages, interacts with the Advisory Board and provides a direct link between the Coordinators Management Team and the Work Packages (WP).

The Project Coordinator and the Steering Committee comprise the decision making level. This Committee is responsible for the scientific management of INFRARISK. The flow of communication is achieved through the membership of all WP leaders on the Steering committee, with the Project Coordinator communicating directly with the commission.

Specifically, the responsibilities of the Steering Committee include the following;

- oversee all administrative project management decisions;
- liaise with the project partners in the development and adoption of a Consortium Agreement;
- ensure the technical and scientific quality of the work;
- define procedures for project publications, approval of publications, press related and other concerted actions;
- ensure the compliance of the project with practical industrial and technical constraints;
- validate intermediate and final reports and approve of the technical parts of the web site;
- Interact with the Advisory Board;
- Handle intellectual property rights management and decisions regarding interpretations of the roles and regulations stated in the Consortium Agreement.

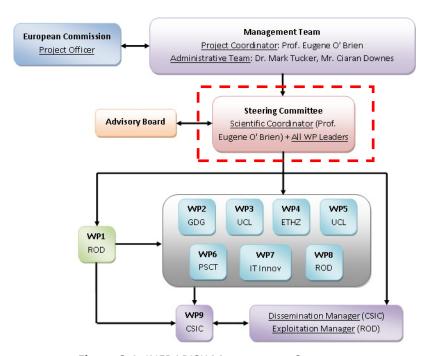


Figure 2.1: INFRARISK Management Structure

#### 2.2 Members of the Steering Committee

Membership of the Steering Committee comprises the Project Coordinator and the WP leaders.

Specifically, Prof. O' Brien (ROD) will act as Chairman of Executive Board, Convene meetings, set agendas, and in his role as WP1 leader will report on technical and financial progress. Dr. Mark Tucker (ROD) will act as Secretary for the Steering Committee, responsible for reporting and communications.

The remaining work package leaders Dr. Ken Gavin (Gavin Doherty Geo - WP2), Dr. Dina D'Ayala (UCL - WP3), Prof. Bryan Adey (ETH Zurich - WP4), Prof. Tao Cheng (UCL - WP5), Dr. Pieter Van Gelder (PSCT - WP6), Dr. Zoheir Sabeur (IT Innovation - WP7), Prof. Alan O' Connor (ROD - WP8) and Dr. Maria-Jose Jimenez (CSIC - WP9) will oversee their individual work packages and report to the committee on technical and financial matters and progress.

#### 3.0 MEETINGS

#### 3.1 Introduction

Since the beginning of the project a number of INFRARISK meetings have taken place (both face to face and video/tele conferencing). While these meetings have not specifically been organised as Steering committee meetings, it was considered more practical to have interaction between the Steering Committee members at the same time as other pre-arrranged meetings, particularly where the steering committee members were present. The efficiency of this approach was proved during the first set of meetings and will continue to be used. The following section outlines briefly the meetings that have occurred at which the Steering Committee were present and discussed adminstrativean d technical aspects of the INFRARISK project.

#### 3.2 Meetings

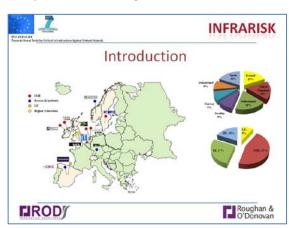
#### 3.2.1 Kick Off Meeting

Date: 3<sup>rd</sup>-4<sup>th</sup> October 2013 (Month 1)

Location: Roughan & O' Donovan Limited, Dublin, Ireland

Meeting Type: Face-to-Face

**Overview:** All eleven members of the consortium were represented, and the meeting provided each partner with the opportunity to meet other partners and discuss the INFRARISK project. PowerPoint presentations were given by the relevant personnel on both the administrative and technical aspects of the project. Meeting minutes, which provided a formal record of discussions and actions agreed, were produced. See Figure 3.1 for selected screen shots and consortium images.



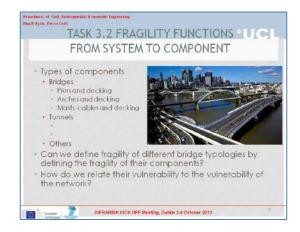




Figure 3.1: Kick Off Meeting

#### 3.2.2 WP Leader/Models Workshop

Date: 12<sup>th</sup> November 2013 (Month 2)

Location: University College London, London, UK

Meeting Type: Face-to-Face

**Overview:** The workshop was attended by representatives from the seven WP leaders, ROD, GDG, UCL (x 2), ETHZ, IT Innov and CSIC. The purpose of the workshop was to discuss the technical aspects of the modelling requirements of each work package and to discuss the means by which data and information could be transferred between the work packages in a seamless and transparent manner. General progress and administrative aspects were also discussed. Refer to Figure 3.2 for selected screen shots from presentations made on the day.

(Note: the logo was subsequently amended)



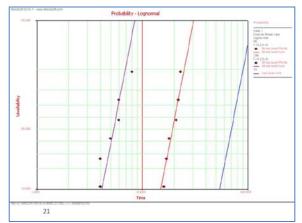


Figure 3.2: WP Leader Meeting

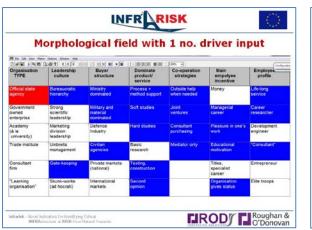
#### 3.2.3 GMA Meetings No.1

Date: 2<sup>nd</sup>-3<sup>rd</sup> December 2013 (Month 3)

Location: Roughan & O' Donovan Limited, Dublin, Ireland

Meeting Type: Face-to-Face

Overview: The workshop was hosted by Ritchey Consulting AB and attended by a representative from each of the work package leaders. The primary purpose and goal of this morphological modelling workshop was to organise structured discussions among project participants and to develop among the project participants a common conceptual framework (and terminology) for the project's total problem space; to discuss and make recommendations about the bounding of this problem space (e.g. as concerns types of events, hazards, infrastructure elements, networks and consequences of disruptions); and to make an initial hypothesis about how this information can potentially be used to structure the overarching methodology to be developed in WP4 concerning inputs, throughputs and outputs. In this first meeting an initial focus question was proposed, the problem space was parameterised with respect to this focus question and a parameter analysis was conducted to determine how the different parameters are related to one another as concerns mutual influence. Refer to Figure 3.3 for selected screen shots from presentations made on the day. While the meeting was primarily focused on the GMA, the Steering Committee also used this meeting to further discuss the progress and the next steps of the project.



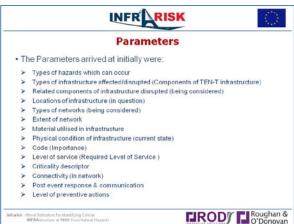


Figure 3.3: GMA Meeting No.1

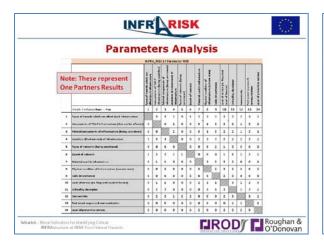
#### 3.2.4 GMA Meetings No.2

Date: 26<sup>th</sup>-27<sup>th</sup> February 2014 (Month 5)

Location: Roughan & O' Donovan Limited, Dublin, Ireland

Meeting Type: Face-to-Face

**Overview:** The workshop was a continuation of the process commenced in the first GMA workshop in December 2013 and sought to clarify the relevant input and output variables, examine the mutual influence between these variables in more detail, specify value ranges for the variables, develop a linked configuration space based on judgments about the mutual (internal) consistency of the combined set of variables (in order to determine the nature and scope of the outcome space) and to develop a preliminary 'conceptual framework' (or meta-model) for an operative input-output model. Refer to Figure 3.4 for selected screen shots from presentations made on the day. Similar to GMA meeting No.1, while the primary focus of this meeting was a particular task in a particular work package, the Steering Committee also used this meeting to further discuss the progress and the next steps of the project.



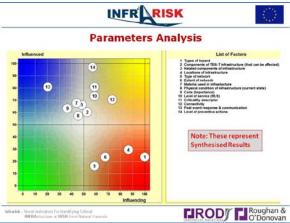


Figure 3.4: GMA Meeting No.2

#### 3.2.5 Six Month Progress Meeting

Date: 26<sup>th</sup>-27<sup>th</sup> March 2014 (Month 6)

Location: University College London, London, UK

Meeting Type: Face-to-Face

**Overview:** This meeting was attended by representatives from all eleven consortium partners. The purpose of the meeting was to assess the project progress and discuss the various administrative and technical issues which arose in the first few months of the project. WP leaders presented an update on their progress and this was followed by open discussions among all partners on the material presented. Refer to Figure 3.5 for selected screen shots from presentations made on the day.



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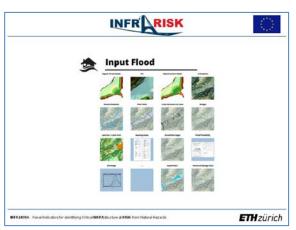




Figure 3.5: Six Month Progress Meeting

SpaceTimeLab

#### 4.0 CONCLUSION

This report provides a brief overview of meetings that have taken place where steering committee members have been present and discussed various administrative and technical aspects of the INFRARISK project. In total, five such meetings have taken place in Month 1, Month 2, Month 3, Month 5 and Month 6. The entire consortium will be holding a further meeting in Zurich at the end of Month 9 and the next progress meeting is due to take place in the Netherlands at the end of October 2014, Month 13. The Steering Committee will be represented at both these meetings.