

# 1st Interim Meeting HERACLES

## Minutes of Meeting

**Date:** 7<sup>th</sup> -9<sup>th</sup> of November 2016  
**Location:** Heraklion  
**Authors:** P. Pouli (FORTH-IESL), N. Kampanis (FORTH-IACM),  
C. Demadis (UoC), V. Sythiakaki (Ephorate), A. Curulli (CNR), G.Padeletti (CNR)

### Agenda:

#### Day 1, 07 November 2016 – Location: Cultural Center of Heraklion

Time	Item	Title	Responsible
10:00- 14:00	1	<b>Inter-WP meeting on the development of the HERACLES platform</b>  <i>Initially FRAUNHOFER presented the structure of the HERACLES platform through a very detailed “ontology” describing the various facets and workflow; CH assets and sites, climate and weather events, Action, response and preparedness, monitoring and simulation of risks, materials, analysis and sensors, conservation and restoration actions, stakeholders and their roles, data.</i>  <i>In this session all partners discussed their point of view on how this platform can accommodate the needs of all partners and WPs while emphasis was given on issues related to: how the data will be handled, who will be in charge to give the data, how to connect the sensors with the platform .</i>	<b>J.Moßgraber (FRAUNHOFER)</b>
15:00-16:30	2	<i>Visit at the Archaeological Museum of Heraklion</i>	<b>E. Kavoulaki (Ephorate)</b>
18:00-19:00	3	<b>Welcome by local authorities and hosting Institutions in Heraklion:</b>  <ol style="list-style-type: none"><li>1. Dr. Gianandrea Garancini, Vice Mayor of Tourism, Municipality of Heraklion,</li><li>1. V. Sythiakaki on behalf of M. Andreadaki-Vlazaki, General Secretary of Culture of the Greek Ministry of Culture &amp; Sports,</li><li>2. Prof. S. Anastasiadis, director of IESL-FORTH, on behalf of FORTH,</li><li>3. Prof. C. Demadis, on behalf of University of Crete,</li><li>4. Regional Governor of Crete.</li></ol>	<b>N. Kampanis (FORTH-IACM), P. Pouli (FORTH-IESL), C. Demadis (UoC)</b>
19:00-19:30	4	<b>Introduction to the project HERACLES by the coordinator</b>	<b>G. Padeletti</b>
19:30	5	<i>Reception</i>	



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## Day 2, 08 November 2016 – Location: Venetian Sea-side fortress of Heraklion “Koule”

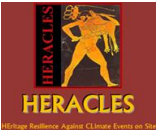
Time	Item	Title	Responsible
09:00-09:45	6	<i>Tour at the Venetian Sea-side fortress of Heraklion “Koule”</i>	V. Sythiakaki (Ephorate)
09:45-10:15	7	<b>Project management, progress and logistics (WP11)</b> <i>Description of organizational structure, work to do, presentation of WP deliverables (see enclosed pdf presentation)</i>	G. Padeletti (CNR)
10:15-11:15	8	<b>WP1 Working group meeting (Users’ needs/sites’ requirements, risks and vulnerability analysis and technologies survey)</b> <i>WP1 is ongoing and partners discussed on its progress and deliverables. D1.1 has been finalised while D1.2, D1.3 and D1.4 are in progress. The partners discussed on the definitions of end-user requirements and methodologies for evaluation of CC, as well on the survey on the state-of the art of related technologies (see enclosed pdf presentation)</i>	G. Alexandrakis (FORTH-IACM)
11:15-11:45	9	<i>Coffee break</i>	
11:45-12:45	10	<b>WP2 Working group meeting (Advanced modelling for vulnerability and risk evaluation)</b> <i>WP2 is ongoing and partners discussed on its progress and deliverables. All 4 deliverables are in progress. Partners discussed on the description of the models that will be implemented on HERACLES. The base of the discussion was the form of the models, as for different areas of expertise the term model difference. It was concluded that during HERACLES the term model will include all data processing that is needed in order to reach the goal. The methods that will be used in the HERACLES modelling include numerical modelling (climatic, hydrodynamic) index approaches (e.g. landslides vulnerability, coastal erosion) and algorithms. Moreover the specifics of the data needed for each model was discussed and also the form of the data that will be included in the platform. Also, in a closed WP2 meeting during a break, a more detailed technical meeting was scheduled in e-GEOS, Rome in the 24/11/2016. (see enclosed pdf presentation)</i>	A. Catucci (e-Geos)
12:45-13:45	11	<b>WP3 Working group meeting (Design/development of methodologies for wide area surveillance and site diagnosis and monitoring)</b> <i>WP3 is ongoing. All 7 deliverables are in progress. Partners discussed on what is expected to be the contribution of the available analytical and diagnostic</i>	G. Fornaro (CNR)



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*techniques for the purposes of this project with the aim to define and develop the related protocols to assure homogeneity(see enclosed pdf presentation)*

13:45-15:15	12	Lunch break	
15:15-16:15	13	<b>WP5 Working group meeting (HERACLES platform design)</b> <i>In continuation to the Inter-WP meeting of Monday 7<sup>th</sup> of November during this session on WP5 partners discussed further on the ontology that describes the platform and revised its updated version with emphasis to the type of data that will be uploaded and how it will be handled in each case (see enclosed pdf presentation).</i>	<b>J.Moßgraber (FRAUNHOFER)</b>
16:15-17:00	14	<b>WP10 Working group meeting (Impact, exploitation and business model)</b> <i>WP10 related to impact exploitation and business model is ongoing. Issues on Innovation management (in relation also to WP11.2) were also presented by e-Geos and discussed among the partners (see enclosed pdf presentation).</i>	<b>A. Catucci (e-geos)</b>
17:00-17:30	15	Coffee break	
17:30-18:15	16	<b>WP9 Working group meeting (Dissemination, communication, education &amp; training)</b> <i>-Dissemination and exploitation plan -The website of the project was presented. Partners discussed its upgrade and optimisation -The need of an effective communication tool between the partners of the different WPs was also discussed. -Discussion on how organise the following newsletters (size, thematic, number per year, etc): Newsletter no 2 will include a brief description of the archaeological site of Knossos and will be ready in Dec 2016 - Discussion on the educational activities: hypothesis of programming events to be organised in the framework of HERACLES (summer schools, joint events to International workshops and conferences etc.) It was proposed to have a workshop on spring 2017 in Perugia and another one on spring 2018 (together with the OPTO-CH series organised by IESL-FORTH) in Crete (to be confirmed) (see enclosed pdf presentation)</i>	<b>G. Kyriakidis (EMRS)</b>
18:15-19:15	17	<b>Steering Committee meeting</b> <i>-The coordinator informed the Partners about the possibility to receive a further amount of pre-financing of the project. -the coordinator informed the Partners about the event in Brussels the next Dec 7<sup>th</sup>, in which HERACLES will be presented together with other</i>	<b>G. Padeletti (CNR)</b>



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*projects funded for CH.*

*- the coordinator evidenced the need to uniform the reporting procedures: precise requests to the Partners (about costs and timesheet) and format to use will be send in December.*

*- the Coordinator informed the consortium on her discussion with the EU officer on the earthquakes threat and whether this issue should be dealt with within the HERACLES project. Everybody agreed that, earthquake activity is a common and very significant problem among the monuments to be studied in HERACLES. However, it is clear that in order to properly approach earthquake prognosis and damaging results it would necessitate a different design of the work activities and possibly adding new partners. It could object of a possible future up-grade.*

*-from the discussion the intention to promote an upgrade of HERACLES project arised.*

20:30

18

Dinner



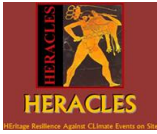
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**Day 3, 09 November 2016 – Location: FORTH- Main Amphitheatre**

[Bus transfer to Knossos- FORTH-Heraklion]

Time	Item	Title	Responsible
09:00-12:00	19	<b>Working visit to Knossos</b> <i>(refreshments at Knossos kiosk, transfer to FORTH)</i>	<b>E. Kavoulaki, and V. Sythiakaki (Ephorate)</b>
12:30-13:30	20	<i>Light Lunch- Coffee</i>	
13:30-14:00	21	<b>Welcome by the hosts:</b> <ul style="list-style-type: none"><li>• <b>prof. D. Anglos on behalf of FORTH,</b></li><li>• <b>D. Chaniotakis, Dean of the School of Sciences &amp; Engineering/UoC</b></li></ul>	<b>P. Pouli (FORTH-IESL)</b>
14:00-15:00	22 <i>(parallel sessions)</i>	<b>WP4 Working groups meeting</b> <b>(New materials and development and test lab for restoration &amp; remediation)</b> <i>WP4 is ongoing. Partners discussed on the need to define a protocol of the terminology on the materials in order to have a common language as well as to prepare a document (requested by UoC) describing the problems and the role of each partner in their confrontation. (see enclosed pdf presentation)</i> <b>WP6 Working groups meeting</b> <b>(HERACLES Platform implementation and integration)</b> <i>WP6 is ongoing. Partners discussed on the structure of the platform and the function based on a preliminary model which was presented. Also there was a discussion related to which procedures will be implemented within the platform and which be used to produce input results for the procedures that will be implemented within the platform.(see enclosed pdf presentation)</i>	<b>A. Curulli (CNR)</b>  <b>A. Ambrosetti (Leonardo)</b>
15:00-15:30	23	<b>Coffee break</b>	
15:30-16:15	24	<b>Preparation towards WP8</b> <b>(demonstrators and results analysis)</b> <i>WP8 will start on M12. THALES presented the proposed work plan and discussed the intention to start working before M12 . (see enclosed pdf presentation)</i>	<b>G. Lortal (THALES)</b>
16:15-16:45	25	<b>Preparation towards WP7</b> <b>(Risk management, maintenance, restoration, adaptation policies and procedures for end users)</b> <i>WP7 will start on M12. FORTH and TIEMS presented the proposed work plan and discussed on how the procedures to be developed in WP7 will be introduced to the platform (see enclosed pdf presentation)</i>	<b>P. Pouli (FORTH-IESL) and S. Knezic (TIEMS)</b>
17:00- 17:30	26	<b>Sum up and concluding remarks</b> <i>The coordinator thanked the Greek Partners for the perfect organisation of the HERACLES 1<sup>st</sup> Interim</i>	<b>G. Padeletti (CNR), P. Pouli (FORTH-IESL)</b>



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*Meeting and their hospitality. The following conclusions and next actions are reported, specifically:*

- *A reminder on the deliverables already uploaded on the EU portal and available to the HERACLES Partners was done [D1.1, D9.1, D9.2, D9.3, D9.20, D11.1, D11.2, D11.4] as well as reminder on the deliverables of the next 6 months [D1.2, D1.3, D1.4, D3.1, D3.2, D5.1, D5.3, D5.6, D5.8, D9.4, D9.21, D11.7].*
- *It has been evidenced the need of improving interactions among partners/activities. Clusters of discussion will be activated already in the next weeks, including the plan of diagnostic campaigns*
- *Improve the Project website and communication tools among the Partners*
- *Prepare a terminology referred to the different classes of materials (original, new, modified, etc..) in order to use a common language for different backgrounds.*
- *The users' requirements in terms of risks and related needs have to be completed (D1.1-D1.2)*
- *Decision on the preparation of Newsletter #2 (on Knossos)*
- *In order to verify the development of the project in terms of effort and cost, the coordinator will ask in the next weeks to provide her the situation of the Partners companies/Institutions on that, to control the on-going activities.*
- *In January the coordinator will organise a skype call with all the WP Leaders in order to verify if the identified criticalities have been solved.*
- *As a general remarks and recommendation was recommended to maintain the collaborative and effective attitude, absolutely essential for such multidisciplinary, complex and challenging project in order to reach the final common target.*

17:30-18:00 27

Visit to FORTH IESL laboratories



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## Participants:

No of Participants	Participant organization name	Country	Names
1	<b>(CNR) Consiglio Nazionale delle Ricerche</b>	IT	Giuseppina Padeletti
2			Antonella Curulli
3			Gianfranco Fornaro
4	<b>e-GEOS Spa</b>	IT	Antonella Catucci
5			Francesco Trillo
6	<b>Leonardo</b>	IT	Alessandro Ambrosetti
7	<b>Thales SA</b>	FR	Gaëlle Lortal
8			Sebastien Lejeune
9			Laurent Belmon
10	<b>Fraunhofer IOSB</b>	GE	Jurgen Mossgraber
11	<b>ARIA Technologies SA</b>	FR	Eva Marie Erikson
12			Anne-Sophie Senard
13			Gwendoline Lacressonnière
14	<b>SISTEMA GMBH</b>	AT	Marco Folegani
15	<b>CVR SRL</b>	IT	Anna Laura Pisello
16	<b>UniNova, Instituto de Desenvolvimento das Novas Tecnologias</b>	PT	Joao Pedro Veiga
17	<b>TIEMS, The International Emergency Management Society</b>	BE	Tom Robertson
18			Kare Harald Drager
19			Snjezana Knezic
20	<b>EMRS, the European Materials Research Society</b>	FR	Muriel Champeau
21		HE	George Kyriakidis
22	<b>Comune di Gubbio</b>	IT	Francesco Tosti
23	<b>Università degli studi di Perugia</b>	IT	Filippo Ubertini
24	<b>FORTH- IESL</b>	HE	Paraskevi Pouli
25			Kostas Hatzigiannakis
26			Demetrios Papazoglou
27			Kristalia Melessanaki
28			Demetrios Anglos
29			Panos Siozos
30			George Filippidis
31			Aggelos Philippidis
32			Athanasia Papanikolaou
33			Eleni Polychronaki



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No of Participants	Participant organization name	Country	Names
34	<b>FORTH-IACM</b>	HE	Nikolaos Kampanis
35			Giorgos Alexandrakis
36			George Kozyrakis
37			Constantine Manasakis
38			George Ghionis
39			Vasia Finikianaki
40			Efi Gaitani
41			Ioannis Nikiforakis
42	<b>UniCrete, Department of Chemistry</b>	HE	Kostas Demadis
43			Giannis Grammatikakis
44			Eirini Armakola
45	<b>Ephorate of Antiquities of Heraklion</b>	HE	Vassiliki Sythiakaki
46			Eliza Kavoulaki
47			Giorgos Tsimpoukis
48			Elpida Politaki
49			Kostas Patedakis
50			Aggeliki Psaroydaki
51			Ioanna Serpetsidaki
52			Eleni Kanaki
53			Maria Moulitanitaki
54			Katerina Georgali
55			Georgia Plaiti





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## ITEMS and Actions

Item	Presentation/Discussion/Action	Action-Items
#1	It has been evidenced the need of improving interactions among partners/activities. Clusters of discussion will be activated already in the next weeks, including the plan of diagnostic campaigns	#1.1, #1.2, #1.3, #1.4
#2	Need to improve the Project website and communication tools among the Partners	#2
#3	Need to prepare a terminology referred to the different classes of materials (original, new, modified, etc..) in order to use a common language for different backgrounds.	#3
#4	The users' requirements in terms of risks and related needs have to be completed (D1.1-D1.2)	#4
#5	Decision on the preparation of Newsletter N.2	#5
#6	In order to verify the development of the project in terms of effort and cost, the coordinator will ask in the next weeks to provide her the situation of the Partners companies/Institutions on that, to control the on-going activities	#6
#7	In January the coordinator will organise a skype call with all the WP Leaders in order to verify if the identified criticalities have been solved.	#7

## Summary of Action Items List

Item	Action Description	Resp.	Deadline
#1.1	To organise a skype call to discuss WP4 activities	A. Curulli (CNR)	By the end of Nov 2016
#1.2	To organise a 1 day meeting in Rome to discuss WP5 activities	J.Moßgraber (FRAUNHOFER)	By the end of Nov 2016
#1.3	To organise a 1 day meeting in Rome to discuss WP2 activities	Catucci A. (e-geos)	By the end of Nov 2016
#1.4	To organise a 1 day meeting in Rome to discuss WP3/WP4	G. Padeletti (CNR)	By the end of Nov / beginning of Dec 2016
#2	To provide/organize/develop the partners communication tool	G. Kyriakidis (EMRS)	By the end of 2016
#3	To diffuse the D1.1 in which terminology on risks/materials and other items is already present, as a starting point.	G. Padeletti (CNR)	By the end of Nov. 2016
#4	To complete the users' requirements in terms of risks and related needs (D1.2)	Curulli, Soldovieri, Fornaro, Grifoni (CNR)	By the end of January 2017
#5	To produce the 2 <sup>nd</sup> Newsletter of HERACLES with news on Knossos site included	M. Champeau (EMRS)	By the end of Dec 2016
#6	To ask to the Partners the development of the project in terms of effort and costs	G. Padeletti (CNR)	Beginning of Dec 2016



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#7

To organise a skype-meeting among WP leaders

G. Padeletti (CNR)

January 2017

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## Annex I

### List of Presentations

Item	Title	Speaker
	HERACLES Project Overview by the Coordinator	G. Padeletti (CNR)
	WP11. Management	G. Padeletti (CNR)
	WP1. Users' needs/sites' requirements, risks and vulnerability analysis and technologies survey	G. Alexandrakis (FORTH-IACM)
	WP2. Advanced modelling for vulnerability and risk evaluation	A. Catucci (e-geos)
	WP3. Design/development of methodologies for wide area surveillance and site diagnosis and monitoring	G. Fornaro (CNR)
	WP4. New materials and development and test lab for restoration & remediation	A. Curulli (CNR)
	WP5. HERACLES platform design	J. Mossgraber (FRAUNHOFER)
	WP6. HERACLES Platform implementation and integration	A. Ambrosetti (Leonardo)
	WP7. Risk management, maintenance, restoration, adaptation policies and procedures for end users	P. Pouli (FORTH-IESL)
	WP8. Demonstrators and results analysis	G. Lortal (THALES)
	WP9. Dissemination, communication, education & training	G. Kyriakidis, M Champeau (EMRS)
	WP10. Impact, exploitation and business model	A. Catucci (e-geos)