

PROJECT MANAGEMENT PLAN

Deliverable 6.1, Version 2.0



This project receives funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 776642



Λ.	1 1£	ho	rs	•
\neg	ա	I IV.	0.11	

Luis Jordá, Manuel Regueiro (IGME Geological Survey of Spain).

Project coordination

Manuel Regueiro and Luis Jordá

Spanish Geological Survey. Instituto Geológico y Minero de España- IGME

Calle Rios Rosas 23, 28003, Madrid, Spain

Phone: +34 - 913495700

www.igme.es

Manuscript completed in April, 2018.

ACKNOWLEDGEMENT & DISCLAIMER

This publication is part of a project that has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 689527.

This publication reflects only the author's view. Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use that might be made of the information contained in this publication.

Reproduction and translation for non-commercial purposes are authorized, provided the source is acknowledged and the publisher is given prior notice and sent a copy.



	Lead beneficiary:	IGME	
	Other beneficiaries:		
	Due date:	30 April 2018	
	Nature:	R	
	Diffusion	PU	
Revision history	Author/ Verified	Delivery date	Summary of changes
Version 1.0	Luis Jorda and Paula Adanez / Manuel Regueiro	18/04/2018	Draft for partner review
Version 2.0	Luis Jorda and Manuel Regueiro	27/04/2018	Uploaded to ECAS
Version 3.0			



Intermin project partners

Instituto Geológico y Minero de España	INSTITUTO GEOLÓGICO Y MINERO DE ESPAÑA	IGME	ES
*** *EUROGEOSURVEYS ** ** ** * * * * * * * * * * * * * *	EUROGEOSURVEYS	EGS	BE
[©] brgm	BUREAU DE RECHERCHES GEOLOGIQUES ET MINIERES	BRGM	FR
ASGMI Asociación de Servicios de Geología y Mineria Iberoamericanos	ASOCIACIÓN DE SERVICIOS DE GEOLOGÍA Y MINERÍA IBEROAMERICANOS	ASGMI	ES
LPRC RESEARCH	LA PALMA RESEARCH CENTRE FOR FUTURE STUDIES SL	LPRC	ES
	UNIVERSIDAD POLITECNICA DE MADRID	UPM	ES
	FEDERATION EUROPEENNE DES GEOLOGUES	EFG	FR
MONTAN UNIVERSITÄT	MONTANUNIVERSITAT LEOBEN	MUL	AT
CCOP A STATE OF THE PARTY OF TH	COORDINATING COMMITTEE FOR GEOSCIENCE PROGRAMMES IN EAST AND SOUTHEAST ASIA	ССОР	TH
american geosciences institute connecting earth, science, and people	AMERICAN GEOLOGICAL INSTITUTE	AGI	US
THE UNIVERSITY OF QUEENSLAND AUSTRALIA	THE UNIVERSITY OF QUEENSLAND	UQ	AU
YES (Network	YOUNG EARTH SCIENTISTS NETWORK	YES	BE
TAN SIDOS	SVERIGES GEOLOGISKA UNDERSOKNING	SGU	SE



SUMMARY

1.	. 1	NTRODUCTION: INTERMIN	. 1
2	. (CONTENT AND SCOPE	. 1
3.	. (CONSORTIUM MANAGEMENT	. 1
	3.1	structure of the consortium management	2
	3.2	Preparation of the consortium agreement	4
	3.3	internal communication and decision structures	4
	3.4	oversight and quality control of WP implementation	5
	3.5	anticipating risks and resolving conflicts	5
	3.6	Representation of the project	6
4		APPENDIX 1: UPDATED GANTT DIAGRAM	1



1. INTRODUCTION: INTERMIN

The H2020-Project INTERMIN has started in February 2018 and will last a total of 36 months. Its goal is to create a feasible, long-lasting international network of technical and vocational training centres for mineral raw materials' professionals. Specific objectives of the project are to develop common metrics and reference points for quality assurance and recognition of training and to create a comprehensive competency model for employment across the primary and secondary raw materials sector. INTERMIN activities include:

- a) To develop an international qualification framework for technical and vocational training programs on mineral raw materials' topics, based on present and future requirements by employers.
- b) To foster joint international training programs by a merger of competences and scope of existing training programmes.
- c) To optimise future interaction and collaboration in Europe and internationally.

The project activities require contact with people as well the collection, analysis, treatment and storage of primary data (data collected by the Consortium involved in INTERMIN) and secondary data (data collected by others and published or publically available). INTERMIN also includes the development of a repository, which consists of a database of documents used and generated by the project.

2. CONTENT AND SCOPE

This plan will cover project consortium management (preparation of the consortium agreement, internal communication and decision structures, oversight and quality control of WP implementation, anticipating risks and resolving conflicts) and representation of the project towards external stakeholders (including the establishment of efficient communication and reporting structures, project documentation and timely submission of deliverables).

3. CONSORTIUM MANAGEMENT



3.1 STRUCTURE OF THE CONSORTIUM MANAGEMENT

The Intermin governance structure is developed in chapter 3.2 "Management structure and procedures" in the Grant Agreement as well as in section 6 "Governance structure in the Consortium Agreement" (confidential internal document).

- General Assembly as the ultimate decision-making body of the consortium. Consists of one representative of each of the 13 consortium partners.
- Management Committee as the supervisory body for the execution of the Project which shall report to and be accountable to the General Assembly. The Management Committee, as oultined in the Annex I of the EC-GA is integrated by the Project Manager and a responsible from each of the Work Package leaders.
- The Coordinator is the legal entity acting as the intermediary between the Parties and the Funding Authority. The Coordinator shall, in addition to its responsibilities as a Party, perform the tasks assigned to it as described in the Grant Agreement and this Consortium Agreement.

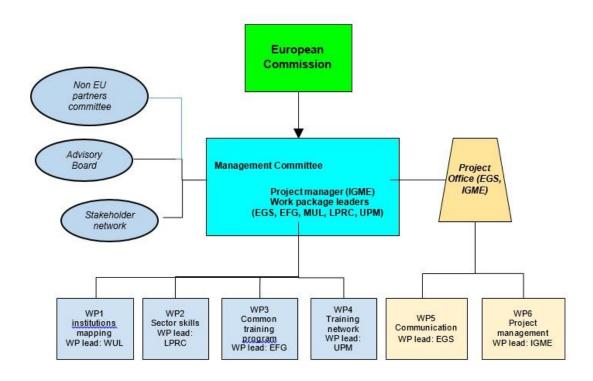


Figure 1: Management structure of Intermin

The INTERMIN project includes 13 partners and 6 third parties (under the umbrella of EGS and EFG) from various countries within the EU and around the world. They will develop 6 interrelated work packages with coordination and public oriented activities during a period of 3 years (36 months). There will be 5 meetings, 4 in Europe and 1 in Latin Amerca.



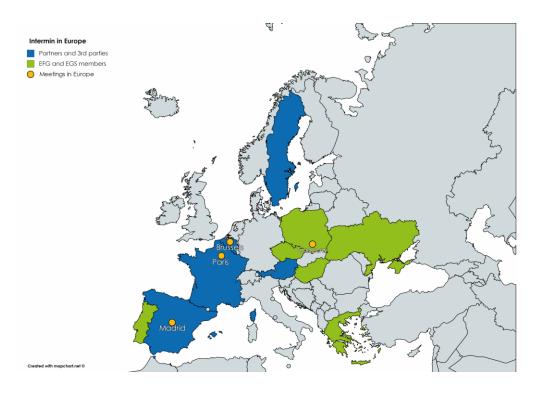


Figure 2: intermin in UE. Partners, 3rd parties and meetings

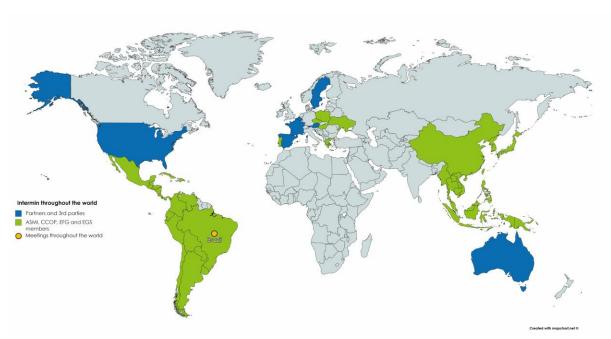


Figure 3: intermin in the world. Partners, 3rd parties and meetings



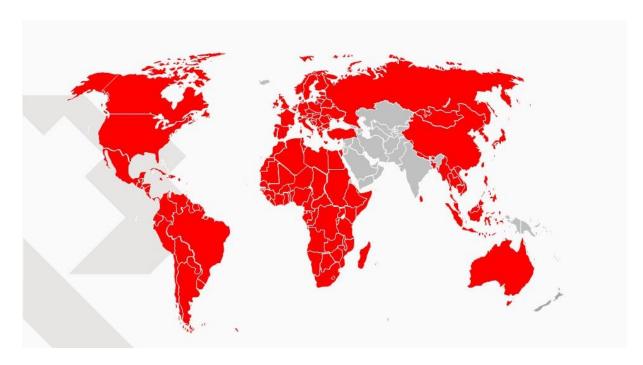


Figure 4: Intermin global coverage: a global audience of approximately 550.000 porfessionals from 5 continents

3.2 PREPARATION OF THE CONSORTIUM AGREEMENT

IGME as reponsible of WP 6 (Project Management) has prepared the Consortium Agreement that has been shareed and discussed during the weeks previous to the Kick Off Meeting and signed by all members (partners). The purpose of the Consortium Agreement is to specify with respect to the Project, the relationship among the Parties, in particular concerning the organisation of the work between the Parties, the management of the Project and the rights and obligations of the Parties concerning inter alia liability, Access Rights and dispute resolution.

The Consortium Agreement shall continue in full force and effect until complete fulfilment of all obligations undertaken by the Parties under the Grant Agreement and under this Consortium Agreement.

3.3 INTERNAL COMMUNICATION AND DECISION STRUCTURES

In order to facilitate the works of the Management Committee a second "virtual" office will be created between IGME (WP6 Management) and EGS (WP5 Communication). This system will



take advantage of the EGS physical office in Brussels and also the virtual call systems used in the EGS projects partnerships.

The management Committee will have monthly conference calls and will meet during the established workshops and face to face consortium meetings to review progress and discuss the following management issues:

- project status and progress;
- review deliverables and work packages;
- participants performance;
- exploitation and dissemination;
- budget spending.

Decisions will be taken on a majority vote concept: each participant will have one vote with the Project Manager having a cast vote in the event of a draw.

3.4 OVERSIGHT AND QUALITY CONTROL OF WP IMPLEMENTATION

The project will be coordinated by the Project Manager (IGME) and seconded by the work package leaders. The management structure (see Figure 1) will guarantee the correct execution of the whole project and timescale while providing the highest quality results adapted to the available budget.

The work package leaders will be responsible for the successful completion of their work packages. WP leaders will manage the different task and task leaders as well as the correct implementation of the deliverables and the milestones involved in their WP (if any). They will support the Project Manager to achieve the overall project objectives and their tasks.

3.5 ANTICIPATING RISKS AND RESOLVING CONFLICTS

INTERMIN will be undertaken with a clear understanding of potential risks using appropriate contingency procedures. The management structure that has been designed is stable and adequate to face arousing problems because, although it has several leaders, all interact to each other and towards the PM (Project Manager). Periodic virtual and presential meetings and strongly interconnected mail communication will facilitate the early detection of organizational



or internal problems among consortium members, reporting to the horizontal and/or vertical structure. The technical problems can be faced as the consortium integrates different teams that can share knowledge and technical procedures.

Conflicts within the Consortium will be solved in a in a consensual and friendly way. In the event that a responsible Consortium Body identifies a breach by a Party of its obligations under this Consortium Agreement or the Grant Agreement, the Coordinator or, if the Coordinator is in breach of its obligations, the Party appointed by the General Assembly, will give formal notice to such Party requiring that such breach will be remedied. If such breach is substantial and is not remedied within the stablished period or is not capable of remedy, the General Assembly may decide to declare the Party to be a Defaulting Party and to decide on the consequences thereof which may include termination of its participation (breaches are developed in point 4.2 in the C.A.).

3.6 REPRESENTATION OF THE PROJECT

The Coordinator (IGME – WP6) is the intermediary between the Parties / Intermin and the Funding Authority. All the members of the consortium can represent the project towards external stakeholders. In order to establish an efficient and fluent communication (avoiding repetitive contacts) ir is recomended to share contacts and attendance at events with the partners during monthy conference calls. The coordinator has developed a simple spreadsheet to include sumposia, workshops and any events planned and will share this information with the Project Officer. The Coordinator, through its Project manager and team is aware of:

- reporting structures
- project documentation
- timely submission of deliverables.

3.7 GANTT DIAGRAM

The Project Manager will use an updated Gantt diagram (see appendix 1) to tackle the previous issues. The Gantt chart was presented in the proposal as a management tool, and has now been updated with the exact months in which the project is developed. This diagram is the guide document for a visual and simple way to know what tasks are being developed and what are the



deliverables and milestones that are in progress or near at a given moment of the project (given month). The unit of measure of time in this case is the month. The diagram is a graphic tool whose objective is to expose the expected dedication time to each task or activity over a given total time. These task - time bars are intimately related to the time - work dediication sheets and will be the basis for the person - month calculation of the economic management of the Project. This diagram allows to see which WP has activity at a given moment and the relationship of tasks with deliverables and milestones. This tool also allows to visualize critical paths and bottlenecks in the project and with this to establish in advance actions aimed at the adequate management of time and personnel allocated to the work and estimated percentages of progress.



4. APPENDIX 1: UPDATED GANTT DIAGRAM

WP ID Task ID Deliverable	Work Package Tittle	leader	Start / month	End / month	feb-18	abr-18	may-18	jul-18	ago-18 sep-18	oct-18 nov-18	dic-18	ene-19 feb-19	mar-19	abr-19 may-19	jun-19	ago-19	sep-19 oct-19	nov-19 dic-19	ene-20 feb-20	mar-20 abr-20	may-20 jun-20	ago-20	sep-20 oct-20	nov-20 dic-20	ene-21	
					1 2	2 3	4 5	5 6	7 8	9 10	11 1	12 13	14	15 16	17 1	8 19 2	0 21	22 23 2	24 25	26 27	28 29 3	0 31	32 33	34 35	36	
WP1	Worldwide mapping of educational-research programs (Atlases)	MUL	1	12									\Box	+	$\parallel \parallel$	+	+	$\dashv \dashv$	\dashv	\dashv	+	+		\vdash		
T1.1	Scoping	IGME	1	5																						
T1.2	Mapping	MUL	2	12							L	\ v	1S2													
D1.1	Skills catalogue for the raw materials sector	IGME		5	-	-	D	1.1	_			Ш.	Щ	-		-				\dashv		+	- -			
D1.2 D1.3	Database process manual Global repository of training programs and networks	MUL		12 12	+			+				-	1.2	+		++	+	$\dashv \vdash$		+	+	++		-		
WP2	Raw materials sector skills, gaps and needs (Gaps)	LPRC	6	20	1							ر ب	1.2						-			++				
T2.1	Assessment of employers' needs	LPRC	6	20																		\Box				
T2.2	Develop a competency model for the raw materials sector	BRGM	12	20																						
D2.1	Report on skills gaps	LPRC		18				_					Ш			D2.1				_		44				
D2.2	Integrated competency model for employment across the raw materials sector	LPRC		18	-	-		4			\blacksquare		1	-	ľ	2.2	Щ			-	\perp	++				
D2.3 WP3	Roadmap on skills provisioning for the raw materials sector Towards enhanced training programmes (Response)	LPRC EFG	10	20 36	+	-	-	+	-								2.3									
T3.1	Definition of reference points and best training practices	EFG	10	16				+						1												
T3.2	Driving knowledge transfer and adaptation of existing training programmes practices	BRGM	14	28	1			j																		
T3.3	Advancing joint international technical and vocational training programmes	EFG	22	36							П		П			\prod	П					П				
D3.1	International qualification framework for the raw materials sector	EFG		16	44	Ш	Щ	$\downarrow \downarrow$			Ш		Щ	DS	.1		\prod	\Box	$\perp \mid \cdot \mid$	\prod		\prod				
D3.2	Report on tailored metrics and reference points	EFG		18	4-4-	+		+		-	\vdash		+		C	3.2	\dashv				!	+	-		+	
D3.3 D3.4	Best practice guidelines for training in the raw materials sector Action Plan to close skill gaps and enhance existing education and training programmes	EFG EFG		28 28	++	+	Н	+		-	\vdash		₩	+	\vdash	₩	+	+	\dashv		D3.3	+	- -		+	
D3.4 D3.5	Joint training programmes for the raw materials sector	EFG		36	++	+	\vdash	+	-		H	-	++	+	$\mid + \mid$	++	+	$\dashv \dashv$	$\dashv \dashv$	\dashv	D3.4	++	- -	-	D3.5	
WP4	Developing a international network oF training centers (Leverage)	UPM	12	36			Н	\top																		
T4.1	Mission design & positioning	EFG	12	20																						
T4.2	Creating and implementing the Network infrastructure	UPM	12	28				1					Ш	_					1		MS3					
T4.3	Setting up and launching the network	EGS	20	36		-		+						+		•	,					+			1	
D4.1 D4.2	Strategic Plan of the international Network Sustainability Plan of the international Network	UPM		20 24	+			+			\vdash		++	+	\vdash		04.1		↓	\dashv		++	-		+	
D4.2 D4.3	Online Educational platform for the raw materials sector	UPM		28	++			+			H		++	-	\vdash	+			D4.2	\dashv	D4.3	++				
D4.4	Cooperation agreements	UPM		36							m		П	+		\parallel	\top	\forall				$\forall \exists$			D4.4	
WP5	Communication and dissemination (Exploitation)	EGS	1	36																						
T5.1	Developing the communication strategy	EGS	1	3	4	-4										44						44				
T5.2	Dissemination support services	EGS	1	36	-			+					-	-			-					++				
T5.3 D5.1	Fostering communication Communication Plan	EGS EGS	20	36 3	+	╫	05.1	+		-	\vdash		\mathbb{H}	+	\vdash	++		$\dashv \dashv$				++			H	
D5.1	Hub and spoke website	EGS		5	+			D5.	,					+		+		+				+			\parallel	
D5.3	Collection of communication materials	EGS		36				Ī	_		H		\Box		$\parallel \parallel$	T	\top			$\exists \exists$		$\dagger \dagger$		D5	.3	
D5.4	Networking Map	EGS		36																				D!	5.4	
WP6	Project Management	IGME	1	36																						
T6.1 T6.2	General Project management - Coordination of project activities	IGME	1	36 36				-			\vdash				-	-						+				
T6.3	Coordination with EU Commission and periodic reporting Management of Advisory Board	IGME	1	36							\vdash		+-+	-		+	++					++		MS4	Λ	
T6.4	Project Meetings coordination	IGME	1	36	\M	S1					H											++		10134	T	
D6.1	Project Management plan	IGME		3		¥	D 6.1																			
D6.2	Procedures on Ethics Requirements and Data Management plan	IGME	3	36			D	6.2.			Ш		Ш	Ш	Ц			Ш				$\perp \downarrow$				
D6.3	Interim Management Report	IGME		15	+	+	\vdash	+	_	_	\vdash	_	$\dashv \dashv$	[†] D 6	.3.	$+\!+$	\dashv	\dashv	\dashv	- -		+	- -	-	+	
D6.4 D6.5	Interim Management Report Final Project Report - summary of the results of the project and achievements against planned	IGME IGME		27 36	++	+	\vdash	+	-	-	\vdash		₩	+	\vdash	++	+	$\dashv \dashv$	++	D	6.4.	+		D (+	
20.3	MILESTONES	TOWE		Δ					_		\Box		\Box	+	$\parallel \parallel$	++	+	$\dashv \dashv$		\dashv		$\forall \exists$, D).5	
MS 1	Kick-off meeting			1	H	+	\vdash	+	-		\vdash	_	H	+	\vdash	+	+	+	+	\dashv	+	+	+		\vdash	
MS 2	Global repository			12		$\dagger \dagger$	$\parallel \parallel$	+			Ħ	-	$\dagger \dagger$	+	$ \uparrow $	$\dagger \dagger$	$\forall \forall$	$\dashv \uparrow$	$\dashv \dashv$	\dashv	++	$\dagger \dagger$				
MS 3	Online Educational platform for the raw materials sector			28											I	Ш										
MS 4	Project successfully completed			36	1		Щ	Ш			П		П		П			Ш			Ш					
	reporting periods						\vdash	+			\vdash		H	+	\vdash	+	+	\dashv		\dashv	+	+			+	
1	reporting periods			18		$\forall \exists$	H	+	_	\dashv	\forall		$\forall \exists$	+				++	$\dashv \dashv$	$\dashv \dashv$	+	$\forall \exists$	$\dashv \dashv$		\neg	
2				36		\parallel	П	\top			Ħ		П		T		1	\forall		$\dashv \uparrow$	\top	\prod				
	MEETINGS			Δ																						
ID	Name	Locatio	on	Month							П		П		m	TT		\Box		\sqcap	\top					
MT 1	Kick-off meeting	Brussels		1		+	H	+	+	-	H		$\forall \exists$	+	\vdash	++	+	++	+	$\dashv \dashv$	+	+	+		\vdash	
MT 2	Virtual meeting	-	nference	6				Ħ	_		\prod		\prod			力										
MT 3	Phisical meeting	Madrid		12									Ш			П	П					П				
MT 4	Phisical meeting	Brazil		23	11			\perp	_		Щ	_	Щ			44	44		4	41			4	_		
MT 5	Phisical meeting	Cracow		30	-	+	\vdash	+		-	\vdash		\mathbb{H}	+	$\vdash \vdash$	+	\dashv	\dashv	- -	\dashv	- -		-		-	
MT 6 MT 7	Phisical meeting Final project meeting	Paris Brussels		33 36	++	+	\vdash	+	-		H	-	H	+	\vdash	++	+	+	+	\dashv	++	+				
/	i mai project meeting	5. 033613		30	1 2	2 3	4 5	6	7 8	9 10	11 1	2 13	14	15 16	17 1	8 19 2	0 21	22 23 2	24 25	26 27	28 29 3	0 31	32 33	34 35	36	
											_	_			_		_									