Deliverable D4.1

Feasibility Study

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Grant Agreement number:	**689476**
Project title:	**Recovering life wellbeing through pain self-management techniques involving ICTs**
Contractual delivery date:	**30/06/2018**
Actual delivery date:	**30/06/2018**
Author:	**SAS**
Contributors:	**ALL PARTNERS**
Version:	**V6**
Status:	**Final**

Abstract:

This document aims to describe Phase 1 execution and solution design. The document is divided in the following areas: the objective, the evaluation and the monitoring of the phase 1. Finally, the main results from the Feasibility Studies are presented.

Document control page:

Deliverable title:	Feasibility Study	
Contributing WP	WP4	
Author:	SAS	
Description:	This document aims to describe Phase 1 execution and solution design. The document is divided in the following areas: the objective, the evaluation and the monitoring of the phase 1. Finally, the main results from the Feasibility Studies are presented.	
Contributors:	RESAH, CCU and BravoSolution	
Format:	PDF	
Language:	English	
Creation date:	May 2018	
Version number:	V6	
Version date:	04/06/2018	
Rights:	Copyright © 2016, RELIEF Consortium	
Dissemination Level:		CO (confidential, only for members of the consortium)
	X	PU (public)
		PP (restricted to other programme participants)
		RE (restricted to a group specified by the consortium)
Type:	X	R (report)
		O (other)
		P (prototype)
		D (demonstrator)
Review Status:		Draft
		Working document
		Released
		WP Leader Accepted
		Lead Procurer accepted (when applicable)
		Accepted by the Project Coordinator
		Draft version to be revised by the RELIEF Consortium
Action requested:		for approval of the WP leader
		for approval of the Lead Procurer (when applicable)
		for approval of the Project Coordinator
	X	for approval of the Steering Committee
Reviewers:	Members from CCU and RESAH	

Document History:

Version	Date	Modified by	Comments
V1	25/05/2018	BRAVOSOLUTION	
V2	29/05/2018	RESAH AND CCU	
V3	30/05/2018	BRAVOSOLUTION	
V5	4/06/2018	SAS	
V6	8/06/2018	RESAH/SAS	

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1. Introduction

RELIEF aims to acquire **eHealth innovative solutions for chronic patient's pain self-management through the development of a joined Pre-Commercial Procurement process**. RELIEF is making use of the Pre-commercial Procurement (PCP) approach to develop technological solutions from early R&D stages to the development of a limited volume of products that will be tested in real operational conditions.

Chronic non-cancer pain of moderate to severe intensity occurs in 19% of adult Europeans, seriously affecting the quality of their social and working lives. Among these 19%, very few are managed by pain specialists and nearly half receive inadequate pain management. Although these vary between EU countries, overall chronic pain is a major health care problem in Europe that needs to be taken more seriously.

Pain is defined as being chronic when it persists past the normal time of healing. With chronic non-malignant pain, 3 months is the most convenient point of division between acute and chronic pain, but for research purposes 6 months will often be preferred. (Classification of chronic pain, Second edition, IASP).

Chronic pain is associated with many different diagnostic entities ranging from diseases like e.g. osteoarthritis, low-back pain and other muscular-skeletal conditions to neuropathic pain conditions like painful diabetic polyneuropathy and pain following a stroke or multiple sclerosis. Due to this, **treatment also varies from patient to patient and may include pharmacological treatments, neuromodulation, physiotherapy, multimodal rehabilitation**. Chronic pain may, in many instances, be a complex syndrome of pain, disability, fatigue and often further complicated by psycho-social impact. Due to the high prevalence and the bio-psycho-social impact of having chronic pain, the cost to society is high.

In fact, the **annual cost for the health care system is over €300bn in Europe** (1.5% - 3% of GDP). From an economic point of view, chronic pain generates costs in healthcare and leads to productivity loss.

Pain management is one of the most neglected aspects of health care; this failure to adequately address chronic pain is a major driver of its economic and social burden. **Inappropriate and ineffective management and treatment generates repetitive visits to primary care physicians, and referrals to specialists.**

Nowadays there are clinicians specialized in diagnosing and treating patients with chronic pain. However, **access to specialized pain clinics is not available to all**. Many major hospitals operate a chronic pain management service, but access depends on where patients live.

A recent IASP survey found that there are significant problems with waiting times and access to pain services, resulting in deterioration of patient's health. It is a clear fact that clinicians need to work with patients to identify the optimal therapy for each individual. **It is also critical that patients receive**

treatment as soon as possible, as evidence suggests that patients who wait 6 months for treatment experience deterioration in quality of life, psychological well-being and depression.

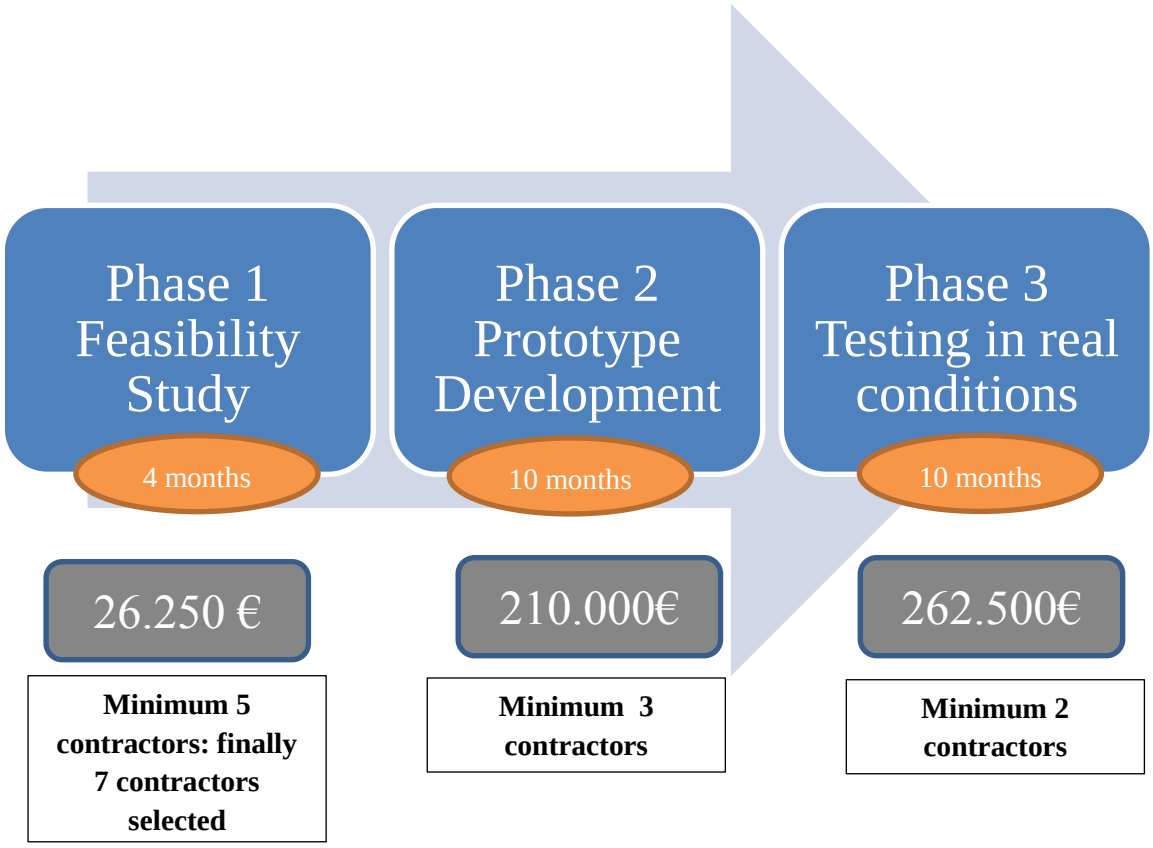
Therefore, enhancing the communication between clinicians and patients is vital for both, and this will lead to an optimal pain treatment and quality pain self-management support.

Patients with chronic illness need support, as well as information, to become effective managers of their own health. This is the same case for chronic pain patients. In order to meet these needs, it is essential for them to have information about their disease as well as the opportunity to take part in actively managing their own disease.

Overall, the scientific community is widely accepting ICTs as useful tools for chronic pain self-management. Healthcare providers can use eHealth to effectively expand their capacity and performance to meet increasing demand.

Therefore, RELIEF Pre-Commercial Procurement project is focused on R&D services to develop solutions that tackle the following challenge: **How could we improve self-management, empowerment and engagement in treatment, in chronic pain patients treated at Pain Units?**

The PCP is divided into three phases, and the total PCP purchase Budget is 1.890.000€ VAT excluded.



This document aims to analyze the results derived from Phase 1 execution. Monitoring process, the outcome from the monitoring process and the final result are presented in the following sections.

2. Objective

The main objective of Phase 1 is the **identification of innovative and cost-effective solutions which better tackle the challenge of the project.** Phase 1 is a feasibility study of the selected technologies and proposals, which aims to verify the technical, economic and organizational feasibility of each company's offer. The expected outcome from the participating companies is a report describing the results of the feasibility study and the conclusions to start the development activities in phase 2.

The feasibility study should evaluate the project potential for success. It's the instrument that has been used by the buyers group to determine whether the project should go ahead to the following phase.

After the publication of the RELIEF Call for Tender, and evaluating all the offers, the contractors selected to develop the feasibility study were the following:

CONTRACTOR	COUNTRY
TECH4CARE SRL	Italy, Sweden, United Kingdom, Spain
ARTICA TELEMEDICINA SL	Spain
IDI EIKON	Spain
FOUNDATION FOR RESEARCH AND TECHNOLOGY- HELLAS	Greece, Spain
LINKCARE HEALTH SERVICES	Spain
HEALTHCARECOCREATION	Germany, Estonia, Spain
GNOMON INFORMATICS SA	Greece

In general terms, the proposed offers submitted by the contractors meet the procurement need. Their solutions are focused on covering the defined challenges. It has been evident the way that solutions tried to address the problem in a holistic approach, which is key to our intentions.

No substantial problems should be mentioned as all contractors provided offers in line of the tender requirements. We could only indicate that contractors were not used to work with the concepts of virtual and actual prices.

Please, note that Deliverable D3.3. describes in detail the whole PCP Launch and Evaluation process.

Phase 1 implementation run smoothly without substantial incidences. Communication among contractors and the buyer's group was satisfactory. All Contractors were committed with the Phase 1 calendar, milestones and deliverables.

At the end of Phase 1, it came up an internal problem inside the PainBot Consortium (led by HealthCare CoCreation). This internal problem was escalated to the RELIEF Monitoring Team that was forced to ask for more clarifications and to organized an exceptional teleconference with the PainBot consortium to fully understand the situation and each of the consortium members' positions.

The 23rd of March, the Relief project and the PainBOT consortium attended a teleconference. Each member of the PainBOT consortium exposed their positions. One of them commented that due to

the internal situation occurred in the PainBot consortium they would not continue being part of the joint consortia. The rest of partners expressed their interest in continuing inside the Phase 2 evaluation process. After deep investigations in the PCP rules and legal aspects; and the assistance offered by the RELIEF Project Officer, who was also consulted; the RELIEF Buyers' Group concluded that no specific measure should be taken against the consortium. The conflict they had was internal and should be solved internally. In addition, a common agreement was found between the three partners during the online meeting organised by the RELIEF Buyers' Group. However, the RELIEF Buyers' Group, inspired by the Procurement Directive (2014/24), reserved the rights to request the Lead Contractor of the PainBOT consortium adopting corrective measures to remedy further occurrences of misbehavior in project management activities if this Tenderer was finally awarded for the Phase 2 implementation of the RELIEF PCP.

3. Phase 1 Execution.

Phase 1 started with a **Kick-off Meeting** organized in Cordoba the 28th of November 2017. The agenda of the meeting is presented below:

Agenda

TIME	ISSUE	SPEAKER
09.15 – 09.30	**Registration**	
09:30 – 09:40	**Welcome Speech**	BravoSolution
09:40 – 10:30	**RELIEF Phase 1 Presentation + Q&A**	SAS
10:30 – 11:15	**Monitoring Procedure + Q&A**	RESAH/CCU
11:15 – 11:45	***Coffee Break***	
11: 45 – 13:45	**Individual presentations of each buyer + Q&A (30 min presentation + 10 min questions for each buyer)**	SAS / CCU / RESAH
13:45 – 14:00	**Phase 2 Brief Description**	CCU
14:00 – 15:00	**LUNCH BREAK**	
15:00 – 18:45		

Bilateral presentations of each Contractor with the Buyer's Group (Individual presentation of the Contractor's team and overview of the Offer, specially Phase 1 planning).

All the contractors participated in the meeting except from Gnomon Informatics due to weather constraints. The buyer's group held an online meeting with Gnomon Informatics the 30th of November 2017.

During the Kick off meeting, the buyers group presented the Phase 1 main objective, the monitoring process, the communication rules during the execution of the phase, the meetings to be held and the milestones and deliverables to be achieved by the contractors.

Moreover, all the challenges were again reminded and the baseline for each one was presented to reinforce what the buyers group are aiming to achieved and improve.

Finally, the buyers group gave a brief presentation of each hospital including general data and details regarding the chronic pain unit.

During the afternoon session, the buyers group held bilateral meetings with each contractor to have a deeper understanding of each proposal and to share impressions about them. In the meetings, there were experts from all the profiles: clinician, IT expert, legal expert and project managers.

All Questions & Answers were collected in a document and circulated to all contractors in the days following the KoM.

Figure 1: Phase 1 - KoM (Córdoba 2017)

4. Phase 1 Calendar.

PHASE 1 CALENDAR	WEEK														
	1 27/11 2017	**2** 04/12 2017	**3** 11/12 2017	**4** 18/12 2017	**5** 25/12 2017	**6** 01/01 2018	**7** 08/01 2018	**8** 15/01 2018	**9** 22/01 2018	**10** 29/01 2018	**11** 05/02 2018	**12** 12/02 2018	**13** 19/02 2018	**14** 26/02 2018	**15** 05/03 2018
Start of Phase 1	27/11 2017														
Kick-Off Meeting (Cordobà)	28/11 2017														
Project Abstract to be delivered by each subcontractor		08/12 2017													
1st Intermediate Monitoring meeting (Online)				X											
Interim progress report to be delivered by each subcontractor						05/01 2018									
Feedback interim progress report by the Monitoring Committee							12/01 2018								
Deadline for the Contractors to **visit the 3 hospitals**								19/01 2018							
2nd Intermediate Monitoring meeting (Online)									X						
Phase 1 final report to be delivered by each subcontractor													20/02 2018		
Abstract of the main results achieved in Phase 1 to be delivered													20/02 2018		
Deadline to submit Call-off (offer) for Phase 2													20/02 2018		
End of Phase 1 Review meeting (Online)														22-23 02 2018	
Deadline to assess the Phase 1 final report Monitoring Committee															05/03 2018
Contractors are **notified if they have completed the Phase 1 successfully**															06/03 2018
END OF PHASE 1															06/03 2018

5. Phase 1 Monitoring.

An overview on how phase 1 of the RELIEF project has been managed between the Contractors and the Buyers group is now presented. It explains how the monitoring process has worked and provides information regarding the review of the progress at every stage of the process.

The Monitoring Process has been carried out respecting the following principles:

- **Independence**

  There is to be no interference with the appointed member performance of his/her monitoring function

- **Impartiality**

  Treat all bids equally and evaluate them impartially on their merits, irrespective of their origin or the identity of the applicants.

- **Objectivity**

  Evaluate each bid as submitted; meaning on its own merit, not it's potential if certain changes were to be made.

- **Accuracy**

  Make a judgment making use of the evaluation criteria defined in the Request for Tender and nothing else.

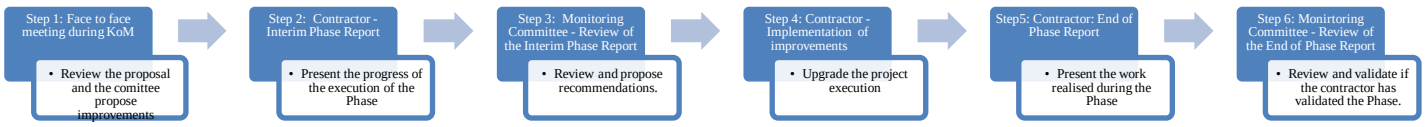
- **Consistency**

  Apply the same standard of judgment to all bids.

5.1. Monitoring Committee.

The Monitoring Committee is responsible for periodically review the progress against the expected outcomes for the phase. The aim of this process is to ensure that the objective of the phase 1 is accomplished and that the Contractors have fulfilled their contractual obligations.

The monitoring process has been carried out as described in the following scheme:



The Monitoring Committee is composed by 3 Monitoring Teams, one of each Buyer member of the Buyers Group. The Monitoring Team is composed by a Pain Expert, an IT Expert and a Project Manager. Each contractor has been assigned a Supervisor (Project Manager of each Monitoring Team) who has acted as the main contact person of the corresponding Contractor.

The main function of the Supervisors are:

- To act a as a contact link between the Contractor and his/her Monitoring Team.
- To inform the Contractor regarding information notices done by the Monitoring Committee.
- To answer potential questions /doubts from the Contractors on behalf of the Monitoring Committee.
- To monitor the progress of the contract performance.
- To organize and participate in regular meetings with the Contractor.

Member of the Monitoring Committee:

MONITORING TEAM	NAME	ROLE	SUPPLIERS MONITORED
Monitoring Team #1 SAS	Carmen González	Project Manager **SUPERVISOR**	Artica Telemedicina Gnomon Informatics Linkcare Health Services
	Inmaculada Herrador	Pain Expert	
	Jose Antonio Delgado	IT Expert	
Monitoring Team #2 CCU	Benny Eklund	Project Manager **SUPERVISOR**	Foundation for Research and Technology HELLAS IDI EIKON
	Rolf Karlsten	Pain Expert	
	Helene Selling	IT Expert	
Monitoring Team #3 RESAH	Louis Potel	Project Manager **SUPERVISOR**	Tech4Care HealthCare Cocreation
	Pr. Alain Serrie	Pain Expert	
	Patrice Garcia	IT Expert	

Preferred partners involved in the RELIEF tender execution have the following role:

- To act as punctual advisor in case of the Monitoring Committee.

5.2. Monitoring Process.

DELIVERABLES

During Phase 1 Contractors have prepared and delivered the following Deliverables:

I. **Project Abstract** ⇒ delivered the 8th December 2017.
II. **Interim Phase 1 Report** ⇒ delivered the 5th January 2018.
III. **End of Phase 1 Report** ⇒ delivered the 20th February 2018.

IV. **Abstract of the main Results Achieved** ⇒ delivered the 20th February 2018.

MILESTONES

I. **Kick-off Meeting Phase 1** ⇒ carried out in Cordoba the 28th of November 2017
II. **End of Phase 1 Review meeting** ⇒ carried out via online the 22nd and 23rd of February 2018 between the Contractors and the Monitoring Committee.

MEETINGS

During Phase 1 there has been carried out two intermediate monitoring meetings and an end of phase meeting via online between each Contractor and its Supervisor.

I. **1st Intermediate Monitoring meeting** held the week of Monday 18th December 2017.
II. **2nd Intermediate Monitoring meeting** held the week of Monday 22nd January 2018.
III. **End of Phase Meeting** held the 22nd and 23rd of February 2018.

The maximum duration for these meetings was two hours. Before these meetings, at least, one week in advance, Contractor sent via the electronic platform a document with the questions and issues to be discussed during the meetings. The Supervisor has been responsible for looking for the correct answer to this questions by checking with the rest of the members of the Monitoring Committee and the preferred partners when needed.

During the intermediate meetings, the Supervisors collected the feedback/feeling of the Contractor in a document called "RELIEF- Intermediate Monitoring Meeting Contractor Feedback Template" that offers a good overview of the situation of each Contractor.

During the End of Phase Meeting, Contractor presented the Feasibility Study developed during Phase 1 as well as the End of Phase Report.

BUYER'S DOCUMENTS:

Apart from the documents that contractors had to deliver, the members of the buyer's group had elaborated some important documents to help contractor in the execution of the Phase 1.

The 21st of February 2018, a Pilot Hospital Presentation Report was sent to all the contractor with very detailed information about the three hospitals. (Annex 1)

After the delivery of the Interim Phase 1 Report, the Monitoring Committee sent an Interim Monitoring Outcome Report.

At the end of the Phase 1, the Monitoring Committee sent the Final Monitoring Outcome Report.

5.3. Visit to buyer's premises.

All the contractors selected for Phase 1 had the obligation to visit the three buyer's premises in order to acquire a deep understanding of the operational boundary conditions governing the design of targeted solutions. The visits were carried out as follows:

CONTRACTOR	VISIT TO SAS	VISIT TO CCU	VISIT TO RESAH
Tech4Care	18/01/2018	09/01/2018	08/01/2018
Artica Telemedicina	18/12/2108	09/01/2018	15/01/2018
IDI EIKON	18/12/2018	11/01/2018	15/01/2018
Foundation for Research and Technology- Hellas	18/01/2018	11/01/2018	08/01/2018
Linkcare Health Services	18/12/2018	11/01/2018	15/01/2018
HealthCareCoCreation	18/01/2018	11/01/2018	15/01/2018
Gnomon Informatics SA	18/12/2018	11/01/2018	15/01/2018

General Agenda of the Visit to the buyer's premises:

TIME	SESSION	PARTICIPANT
9.00-9.05	Presentation of the program of the day	Head of the Pain Unit Contractors
9.05-9.30	Visit to the Pain Unit: commented visit of the hospital.	Head of the Pain Unit Professionals of the Pain Unit Contractors
9.30-10.15	Chronic Pain and Pain Unit Q&A Session	Head of the Pain Unit Contractors
10.15-11.00	Coffee-Break	
11.00-11.20	Presentation of IT Infrastructure	Head of the IT Department Contractors
11.20-12.00	IT Infrastructure Q&A Session	IT Department Contractors

5.4. Communication

The consortium defined a communication process to assure equal access to information among the contractors. The rules defined to organize the communication are the following:

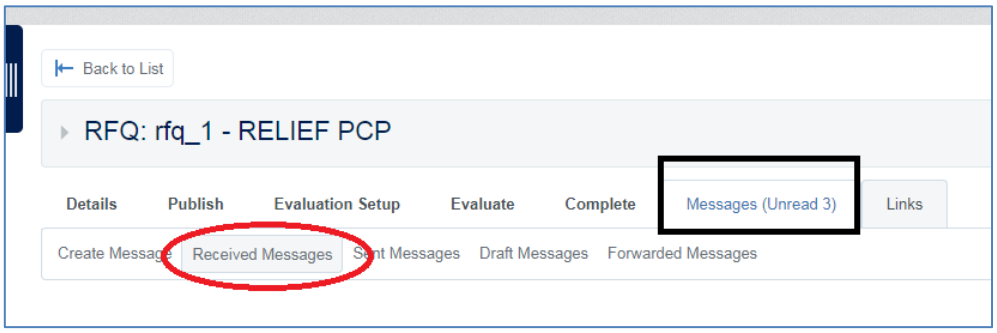
- All formal questions and requests from the project have been sent via message area of RELIEF eTendering platform The questions have been answered through the platform

- When any partner of the RELIEF project has received any request from individuals within the project, the partner sent the question to the Supervisor who was in charge of sending it to the Monitoring Committee.

Communication process:

1. The Supervisor receives a notification from the Platform to his e-mail address informing that a new question has been sent from one of his Contractor.

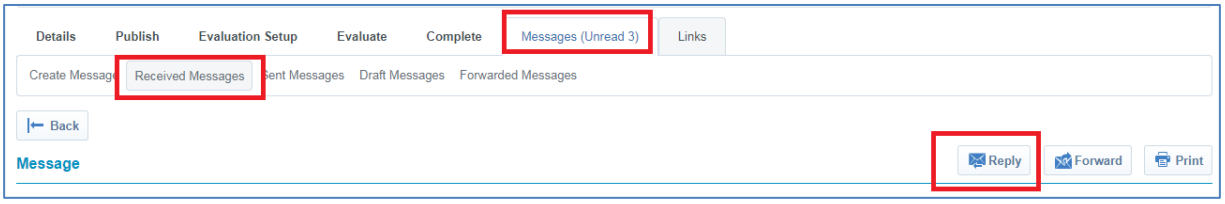
2. The Supervisor assigned to the specific Contractor enters into the Message Area of the Platform to check the message sent by the Contractor.



3. For the question/request easy to answer, the Supervisor directly provided the answer to the Contractor.
   For the questions which were more complex, the Supervisor discussed and prepared a draft answer with the members of his Monitoring Team. Then he proposed the drafted answer to the rest of the Monitoring Committee for comment, completion or validation.

4. All replies that involve an agreement has been validated by the whole Monitoring Team before answering the Contractor.

5. The Supervisor answered the Contractor in the message area of the platform by replying to the received message:



6. The Supervisor copy/paste the question and answer published in the consolidated Q&A Google Doc in an anonymized way.
7. Every 2 weeks, the latest version of the consolidated Q&A was extracted from the GDoc in a PDF format and sent to all the Contractors via the eTendering platform message area.

The Supervisor had four working days maximum to reply to the Contractor.

5.5. Assessment

During the monitoring of Phase 1, the Monitoring Committee had to evaluate two deliverables, the Interim Progress Report and the End of Phase 1 Report.

MONITORING ACTIVITIES	MINIMUM ELEMENTS TO EVALUATE	EVALUATION OPTION
Interim Progress Report	Project management activities implemented so far against the proposed methodology.	Very Good progress Good progress Acceptable progress Unsuccessful progress Unsatisfactory progress
	Activities implemented so far against the general objective of Phase 1 (realisation of a Feasibility Study).	
	Identification of deviations and contingency plans proposed	
	Quality of the first results achieved and presented	
	Plan until the following report (including Risk management)	
End of Phase 1 Report	Validity and conformity of the Deliverables and achievement of the Milestones (completed and delivered on time)	Very Good completion Good completion Acceptable completion Unsuccessful completion Unsatisfactory completion
	Project management activities implemented against the proposed methodology.	
	Identification of deviations and contingency plans	
	Quality of the results achieved regarding the Technical, Financial and Commercial feasibility of the solutions according the RELIEF objectives and Challenges	
	Implementation of the recommendations made in the IMOR	
	Quality of the innovative findings and research work	
	Allocation of the resources according to the proposed budget and respect of the budget	
	Approach proposed to conduct Phase 2	

	Oral presentation "End of Phase Report"	

The evaluation options for the Interim Progress Report is explained in the following table:

EVALUATION OPTIONS	MEANING
Very good progress	Contractor proposed solution and current achievements are aligned with the objectives of Phase 1 and no recommendations are required.
Good progress	Contractor proposed solution and current achievements are aligned with the objectives of Phase 1 but few recommendations are required.
Acceptable progress	Contractor proposed solution and current achievements are almost aligned with the objectives of Phase 1 and several recommendations are required.
Unsuccessful progress	Contractor proposed solution and current achievements reveal that the proposed technologies either do not go beyond the state of the art (not innovative – beyond solutions already existing on the market) or/and lack of technical and commercial feasibility. Many recommendations are required.
Unsatisfactory progress	Contractor proposed solution and current achievements do not comply with the contractual commitments and the RELIEF objectives. A Warning alert should be given to the Contractor indicating that important improvements/modifications should be implemented in the second part of the phase.

Payments corresponding to the Phase 1 are subject to the satisfactory completion of the deliverables and milestones of the Phase. Satisfactory completion in Phase 1 does not mean successful completion. Only the contractor that successfully completed Phase 1 are invited to present an offer for Phase 2.

The Monitoring Committee used one of the following evaluation options to assess the End of Phase Report:

EVALUATION OPTIONS	MEANING
Very good completion	All the Milestones have been successfully completed. R&D results meet the minimum functionality/performance requirements of the challenge description and are highly promising. All activities implemented so far against the initial plans and in line with the RELIEF objectives. All deviations identified and clear contingency plans created. All results planned achieved. The work delivered (Feasibility Study) is of a great quality and is a solid base for Phase 2.

Good completion	All the Milestones have been successfully completed. R&D results meet the minimum functionality/performance requirements of the challenge description and are very promising. Most activities implemented so far against the initial plans and in line with the RELIEF objectives. Most deviations identified and a good contingency plans created. Most results planned achieved. The work delivered (Feasibility Study) is of a good quality and is a good base for Phase 2.
Acceptable completion	All the Milestones have been successfully completed. R&D results meet the minimum functionality/performance requirements of the challenge description and are promising. Majority of the activities implemented so far against the initial plans and most of them are in line with the RELIEF objectives. Several deviations identified and an acceptable contingency plan created. Majority of the results planned achieved. The work delivered (Feasibility Study) is of an acceptable quality and is a quality enough base for Phase 2.
Unsuccessful completion	All the Milestones haven't been successfully completed and/or R&D results do not meet the minimum functionality/performance requirements of the challenge description and/or are not promising. Few activities implemented so far against the initial plans and approximately in line with the RELIEF objectives. Few deviations identified and an acceptable contingency plan created. Few of the results planned achieved. The work delivered (Feasibility Study) is of an unacceptable quality and is not a good base enough for Phase 2.
Unsatisfactory completion	All the Milestones haven't been successfully completed and/or R&D results do not meet the minimum functionality/performance requirements of the challenge description and/or are not promising. Almost no activities implemented so far against the initial plans and not in line with the RELIEF objectives. Deviations were not identified and a contingency plan wasn't planned. Almost none of the results planned achieved. The work delivered (Feasibility Study) is of unacceptable and is not a base for Phase 2.

6. Results.

The evaluations of the Interim Progress Report of Phase 1 were as follows:

CONTRACTOR	RESULT

Tech4Care	Very good progress
Artica Telemedicina	Very good progress
IDI EIKON	Very good progress
Foundation for Research and Technology- Hellas	Very good progress
Linkcare Health Services	Good progress
HealthCareCoCreation	Good progress
Gnomon Informatics SA	Acceptable progress

The Interim Monitoring Outcome Report can be consulted in Annex 2.

At the end of the phase 1, contractors sent the End of Phase Report (Deadline 20/02/2018) and made a presentation of the main results from Phase 1. With all these information, the Monitoring Committee drew up a Final Monitoring Outcome Report (Annex 3).

The main results of each contractor are now explained.

TECH4CARE:

- Evaluation conclusion: **Very good completion**
- General comments: The VR-RELIEF consortium demonstrated that they have achieved all the objectives of Phase 1 with the realisation of a well detailed Feasibility Study, containing a great research work concerning the Technical, Financial and Commercial Feasibility of their project/solution. All the Milestones and Deliverables have been delivered on time. The VR-RELIEF Consortium shows their capacity to develop an innovative solution which can address the RELIEF Challenges defined by the Buyers Group. Therefore, the VR-RELIEF consortium has successfully and satisfactory completed Phase 1 of the PCP. They are invited to submit an offer for Phase 2 and will received the payment for the work done in Phase 1 as indicated in the Specific Phase Contract of Phase 1.

ARTICA TELEMEDICINA:

- Evaluation conclusion: **Very good completion**
- General comments: Artica demonstrated that they have achieved all the objectives of Phase 1 with the realisation of a well detailed Feasibility Study, containing a good research work concerning the Technical, Financial and Commercial Feasibility of their solution. All the Milestones and Deliverables have been delivered on time. Artica shows its capacity to develop an innovative solution which can address RELIEF challenges defined by the Buyers Group. Therefore, Artica has successfully and satisfactory completed Phase 1 of the PCP. They are invited to submit an offer for Phase 2 and will received the payment for the work done in Phase 2 and indicated in the Specific Phase Contract of Phase 1.

IDI EIKON:

- Evaluation conclusion: **Acceptable completion**

- General comments: The work presented of IDI EIKON in Phase 1 is satisfying. Phase 1 has been managed properly, the activities have been carried out and new ones have been added to achieve the objectives. IDI EIKON complies with the work expected for phase 1. They present results regarding the technical, financial and commercial feasibility study. IDI EIKON have done progress and fulfilled the clinical challenge. The incorporation of a pain expert to the team reinforces the team. The technological deployment of the prototype is explained and describes how to implement the functionalities they propose. The report doesn't respect the maximum space/number of words and is rather difficult to grasp. Finally, IDI EIKON proposes a commercial and financial development that is positive.

FOUNDATION FOR RESEARCH AND TECHNOLOGY- HELLAS:

- Evaluation conclusion: **Good completion**
- General comments: The work presented in Phase 1 is satisfying. Phase 1 have been managed properly, the activities have been carried out and new ones have been added to achieve the objectives. Hellas comply with the duties expected for phase 1. They present promising results regarding the technical, financial and commercial feasibility study. Hellas have done progress and fulfilled the clinical challenge. The incorporation of a pain experts to the team reinforces the team. The technological deployment of the prototype is well explained and describe how to implement the functionalities they propose. Finally, Hellas proposes a commercial and financial development that is hopeful, but could be more described.

LINKCARE HEALTH SERVICES:

- Evaluation conclusion: **Acceptable completion**
- General comments: Based on the analysis of the Interim Progress Report, the Intermediate Monitoring Meetings, the End of Phase audition and so the End of Phase Report, the RELIEF Monitoring Committee assessed the work performed by Linkcare as "Acceptable completion". Linkcare demonstrated that they have achieved the majority of the objectives of Phase 1. However, the Financial and Commercial Feasibility study should be more detailed and further developed. Linkcare has detailed the functionalities for the challenge proposed and the Monitoring Committee consider that they clearly each challenge, but more innovation aspects should be highlighted. All the Milestones and Deliverables have been achieved.

HEALTHCARECOCREATION:

- Evaluation conclusion: **Good completion**
- General comments: Based on the analysis of the Interim Progress Report, the Intermediate Monitoring Meetings, the End of Phase audition and so the End of Phase Report, the RELIEF Monitoring Committee assessed the work performed by PainBOT consortium as "Good completion". The PainBOT consortium demonstrated that they have almost achieved all the

objectives of Phase 1 with the realisation of a well detailed Feasibility Study, containing a great research work concerning the Technical, Financial and Commercial Feasibility of their project/solution. All the Milestones and Deliverables have been delivered on time. The PainBOT Consortium shows their capacity to develop an innovative solution which can address the RELIEF Challenges defined by the Buyers Group.

GNOMON INFORMATICS SA:

- Evaluation conclusion: **Acceptable completion**
- General comments: Based on the analysis of the Interim Progress Report, the Intermediate Monitoring Meetings, the End of Phase audition and so the End of Phase Report, the RELIEF Monitoring Committee assessed the work performed by Gnomon as "Acceptable completion". Gnomon demonstrated that they have partially achieved the objectives of Phase 1, the Technical Feasibility study is not fully completed. On the other hand, Gnomon has presented a clear description of the business model, recommendation that has been addressed by the contractor. All the Milestones and Deliverables have been delivered on time even if it was not indicated in the End of Phase Report.

7. Conclusion.

In general terms, the proposed offers submitted by the contractors meet the procurement need. Their solutions are focused on covering the defined challenges. It has been evident the way that solutions tried to address the problem in a holistic approach, which is key to our intentions.

No substantial problems should be mentioned as all contractors provided offers in line of the tender requirements. We could only indicate that contractors were not used to work with the concepts of virtual and actual prices.

Phase 1 implementation run smoothly without substantial incidences. Communication among contractors and the buyer's group was satisfactory. All Contractors were committed with the Phase 1 calendar, milestones and deliverables. No deviation or problem was detected.

At the end of the Phase Completed Feasibility Studies were prepared with detailed description of the commercial, technical and financial viability of their solution ideas. It is important to mention that real challenge encountered during Phase 1 was to deeply analyse and understand the differences of the buyer's group environments.

In general terms, the RELIEF Buyer's Group reinforces their trust in PCP processes as a mechanism to improve the Public Health System and the services offered to the patients. RELIEF is particularly suitable because it addresses challenges not previously covered. For this reason, the potential impact of the innovative solutions on end-users should be important at the end of the project.

Finally, the innovative solutions which will be developed in the framework of the RELIEF PCP will highly contribute to digitalisation of the public healthcare sector, from the physician but also patient side. RELIEF objectives are in line with this actual trend but also with the new European legislation for the use medical patient data for medical research: RELIEF solutions should be one of the tool allowing these new investigations for the definition of new treatments.

As an estimation, the Buyer's Group is able to indicate the following improvement areas:

- Improvement of the quality and efficiency of the first (and the rest of) visits to the Chronic Pain Units.
- Improvement of the follow - up treatment efficiency
- Reduction of hospital readmissions (due to better follow-up treatment and early detection of alerts)
- Improvement of clinical appointments (better follow – up, less unnecessary visits)
- Reduction of treatment costs in Chronic Pain Units (reduced use of medications not displaying enough efficacy and more efficient treatment)
- Allow more personalised treatment and follow-up
- Facilitate exchanges between the clinicians and their patients
- Improvement of the adherence of the treatment by the patient

Lessons Learned:

1. A good monitoring process is critical to success. Rules for the contact and communication between the buyers and the contractors, but ensuring a continuous interaction.

2. The use of templates makes ease contractors work. It's an effort from the buyers group with high compensation.

3. A common understanding of the healthcare IT structure is very important and an added value to attract companies.

8. Annexes.

Please, see the following annexes:

- Pilot Hospitals Presentation

- Contractors Interim Monitoring Outcome Reports

- Contractors Final Monitoring Outcome Reports