# Ideas MELting pot for TIC and Health science for Citizens in small communities (MELTIC)

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## D1.3. Halfway Report (M8)

October, 2020

This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement (GA) No 741527 and runs from May 2017 to October 2021.

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## 1. Version control

| | | | |
|---|---|---|---|
| Work package no.: | WP1 | Work package title: | Project Management and Data Management Plan |
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# 2. Summary

## 2.1. General Objective of MELTIC

The aim of the project is to produce useful information in Health and ICT research and methods to reinforce Open Science and its principles, in special with ethics, governance, open access, public engagement and education to improve the quality of life of European citizens in small communities. The aim is to support initiatives that bring together these different stakeholder groups in innovative and exciting ways, with the goal of making research activities in the ICT and Health sciences and biomedicine more open, transparent, accessible, relevant and impactful for research and society.

The objective is to generate, through co-creation methodologies, suitable ideas for research in ICT and health, and in topics such as self-learning, false information discrimination and addiction prevention (ludopathy to games and gambling). The leading issue is how to use ICTs to transform our small communities into more human environments, rather than just more high-tech places, and to understand that "smartness" should be people-friendly. The structure of the project introduces the importance of comprehensive and trans-disciplinary development. A theoretical approach and framework will be proposed. These will help us to better understand (potential) interactions, and both are at the centre of this discussion.

## 2.2. Specific Objectives

MELTIC will bring together different stakeholders to share their interests and values and generate new ideas, concepts, products or projects. In co-creative projects, all groups are involved and have influence throughout the project lifecycle: from planning to implementation to dissemination. There are a wide variety of stakeholders who are interested and can be involved in research activities. These include: government, educators, charities, civil societies, patient groups and the general public.

- In the case of the MELTIC project, the objective is to engage a selected short proactive group of stakeholders. It will be done throughout the analysis of context to be done in WP2. We will identify topics and players of interest within the wide group.
- We will define a short list of potential participants with the adequate combination of representation of end and intermediate users of healthcare resources, services, technologies and research and proactive profiles. The stakeholders group to participate in the co-creation event will be a maximum of 5 people from the four EU participant countries (Spain, Portugal, Italy and Romania). This group will deliver the project results to a wider range of around 100 stakeholders in each of the four EU participant countries.
- The communication plan will be based in the following channels: dissemination throughout partners website and its social networks (Facebook, twitter, linkedin and youtube), delivery of project results in project website and academy web spaces as Research gate and Academia

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- In relation with the co-creation process, it will be based on a way to (1) obtaining contributions by customers, (2) selecting the best of these contributions, and (3) incorporating these selected contributions into products, processes, or services.
- Technological proposal for implementation is based on existing knowledge and experience about the interactions of ICT, public spaces and health in three different ways:
    - The use of ICT devices in public spaces (phoning, texting, wi-fi, gaming),
    - The ICT as information transport media (internet, newsletter),
- ICT as a tool for social and health reporting and planning (e-planning) - this includes the possibilities the ICT offers for connecting people in small communities (enhancing participation).

Outreach and dissemination will produce a model for cooperation among rural and friendly cities actors and researchers, and a vademecum of 100 ideas for TIC & Health science.

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## 3. Objectives of the document

This document presents a report in which the state of development of the MELTIC project is shown. The objectives in the proposal and the status of these initially planned objectives are presented, as well as the modifications of the methodology and the work plan on the projected ones and their justification.

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# 4. Modifications of the methodology and work plan on those projected and their justification

The main modification of the work plan has been due to the pandemic declared in March in Europe that has conditioned the jobs and lives of all. As may be imagined, MELTIC has also been affected. The WP2 and WP3 work packages could be developed in time and are available on the project's web platform.

## 4.1. Extension of the project duration

The financing project, ORION, accepted the request for a three-month extension, leaving the schedule as follows:

| | | | Mz | Ap | My | Jn | Jl | Ag | Sp | Oc | Nv | Dc | Jn | Fb | Mz | Ap | My |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Duration | M1 | M2 | M3 | M4 | M5 | M6 | M7 | M8 | M9 | M10 | M11 | M12 | M13 | M14 | M15 |
| **Work Packa** | **Title** | | | | | | | | | | | | | | | | |
| **WP1** | **Project Management and Data Management Plan** | **15 M** | | | | | | | | | | | | | | | |
| **WP2** | **Analysis of ICTs state of the art** | **3M** | | | | D2 | | | | | | | | | | | |
| **WP3** | **Stakeholder analysis and context description for co-creation process** | **4M** | | | | D3 | | | | | | | | | | | |
| **WP4** | **Technological proposal for implementation** | **15 M** | | | | | | | | | | | | | | | |
| T4 | Technological proposal (DXP) | | | | | | | | | | | | | D4 | | | D.4 |
| **WP5** | **Co-Creation experience in ICT in Health and Biomedicine Rresea** | **12M** | | | | | | | | | | | | | | | |
| T5.1 | Workshop in definition of concepts, topics to be treated and cocreati | **3M** | | | | | | | | | | | | | | | |
| T5.2 | Cocreation workshop about ICT in Health and Biomedicie Research | **3M** | | | | | | | | | | | | | | | |
| T5.3 | Analysis of results of Cocreation Workshop | **3M** | | | | | | | | | | | | D5.1 | | | |
| T5.4 | Ellaboration of conclusions for ICT in Health and Biomedicine Resear | **3M** | | | | | | | | | | | | D5.2 | | | |
| **WP6** | **Outreach and dissemination** | **12 M** | | | | | | | | | | | | | | | |
| T6.1 | Dissemination plan | | | | | | | D6.1 | | | | | | | | | D6.1 |
| T6.2 | MELTIC partners' websites and social media channels | | | | | | | | | | | | | D6.2 | | | D6.2 |

## 4.2. New budget distribution.

Another important modification has been in relation to the distribution of budget and expenditure items.
The main difference is in the distribution of the budget dedicated to travel. Due to travel limitations due to the pandemic, most of that budget has been allocated to other tasks.
- Dissemination tasks will be carried out in the form of audiovisual material that was not planned.

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- The technological proposal will be expanded and a Digital eXperience Technological (DXT) will be prepared.

This modification approved by funders is shown in the following Table 2.

| ISCIIII | Cost (€) | Justification |
|---|---|---|
| **Travel** | 2,500 | Travel for PI |
| **Other Goods and services** | | |
| **-Consumables** | 300 | Consumables WP1 to 7. |
| **-Communication** | 3,387.50 | Publication in Open Access. WP6: Dissemination and communication. |
| | 2,000 | Revision and translation for position paper and articles. |
| **-Co-creation Facilitator** | 14,995 | Development exercise through the Design Thinking methodology. With the collaboration of Manual Thinking, experts in DT methodology. WP5/T5.2. |
| **-Catering** | 2,200 | Coffee breaks and lunch for assistants in different dissemination actions. |
| **-Dissemination** | 3,480 | Video about the MELTIC Project. |
| | 4,500 | Editing and printing Vademecum. |
| | 2,892.50 | Demonstrator (of the technological proposal). |
| **TOTAL Other Goods and Services** | 31,287.50 | |
| **TOTAL** | 33,787.50 | |

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## 4.3. Stakeholders Modifications

In June 2020, MELTIC developed and set up an online discussion group with the aim of identifying a first set of lessons that need to be taken into account when considering dialogue with stakeholders. We can observe that most of the Stakeholders are in some way involved in the area of interest, ICT in Health and Biomedicine. In addition, they have different levels of participation in communities and technologies.
Some interests have lost relevance (addiction prevention as ludopathy to games and gambling), others have been increased (technological platforms) and new ones have also emerged as a consequence of the pandemic state (digital divide). Great interest expressed has been the intensive use and dependence on technological solutions in this pandemic situation, but it is anticipated that some ways of working, for example non-face-to-face work, will remain with us even after the pandemic.

However, the results of the WP3 about stakeholders, some of them that were interested, have varied over time due to the pandemic, some have abandoned the project, and new ones have been incorporated. The final balance is good, or even better than initially expected and Table 1 are presented.

Table 1. Stakeholders

| Country | Stakeholder (profile) | Topic of interest | Name & surname | Occupation | Position | Organization |
|---|---|---|---|---|---|---|
| Spain | Parents and patients | Down syndrome patients | Daniel Morell | Project manager and technical assistant | Parents | Individual case study |
| Spain | health and sports | | Rafael González Ruiz | | President | Almonte Municipality |
| Spain | Social intervention | | Rocío Moreno Domínguez | Trainer of volunteers | President | La Palma del Condado Municipality |
| Spain | Psychologist, patient coach | Autism TDH | Margarita Moreno | Technical assistant to patients | Expert / Psychology | Therapeutic Association |
| Spain | Support Organization for the elderly | Technologies for the elderly | Andrés Dochao | Public Servant | Project Manager | Association of La Palma del Condado Friendly City |
| Romania | Patients with chronic diseases | IT Technologies & compulsive gambling in rural areas & compulsive gambling prevention & Diabetics | Gheorghe Duță | Retired engineer | Employee | LAG Timis Torontal Barzava Association |
| Romania | Parents, health workers, professors | Sex education among teenagers | Oana Gârba | Non-governmental association | Employee | LAG Timis Torontal Barzava Association |
| Romania | Improving life of chronic patients using digital healthcare (for | Digital transformation in healthcare (Telemedicine) | Larisssa Duță | Pharmacist | Medical device specialist | Pharma industry |

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| Country | Stakeholder (profile) | Topic of interest | Name & surname | Occupation | Position | Organization |
|---|---|---|---|---|---|---|
| | example, supervision of chronic patients through mobile app, Smart watches) | | | | | |
| Romania | Patients | Rural Access to the Healthcare system | Oana Lazar | Chemical Engineer | Manager Medical Devices | Pharma industry |
| Romania | Parents, health workers, professors | Knowledge, attitude and perception of sex education among teenagers | Tania Gabor | Student | Medical Student (last year) | Victor Babes University of Medicine and Pharmacy Timisoara |
| Portugal | Political decisión maker | Rural Access to Healthcare; Community health; Occupational health | Élia Quintas | Responsible for the health sector | Deputy Mayor | Municipality of Reguengos de Monsaraz |
| Portugal | Community | Local development | Esmeralda Lucena | Food engineer | Secretary on the City Council | Municipality of Reguengos de Monsaraz |
| Portugal | Humanitarian Organization | Community Health System | Nuno Rosmaninho | Psychologist, Director | Regional Delegate of the Portuguese Red Cross | Red Cross |
| Portugal | Family Doctor in the REMO – Family Health Unit | Community health | Carla Martins | Intern of General and Family Medicine | Intern doctor | REMO - Family Health Unit |
| Portugal | Educational Community (Whole school) | Health Education | Elsa Reis | Teacher | Health Educatinal Coordinator | School of Reguengos de Monsaraz |
| Italy | Municipality of Mirabello | TELE-MEDICINE in rural Areas | Angelo Miniello | Public Body | Mayor | Municipality of Mirabello |
| Italy | Molise regional Assembly | TELE-MEDICINE in rural Areas | Roberto D'Amico | Public Body | Consultant | Molise Regional Assembly |
| Spain | students | Professor | Coral Hernández | University | Professor | Universidad Complutense (Madrid) |
| Spain | students | Professor | José Antonio | University | Professor | Universidad Complutense (Madrid) |
| Spain | Technology for wellbeing | Engineer | Joaquín Pitu | Technology | Engineer | NGO La Piluka |
| Spain | users | Engineer | Pablo Marina | Technology | Research | Instituto de Salud Carlos III |
| Spain | Patiens/citizens | Nurse | Esmeralda Santacruz Salas | University | Professor | Universidad Castilla la Mancha |
| Spain | Patients/citizens | Healthcare | Elvira Casado | Research | Research | Instituto de Salud Carlos III |
| | Patients/Users | ICT for healthcare | Mª José de Tena | Research | Research | Instituto de Salud Carlos III |

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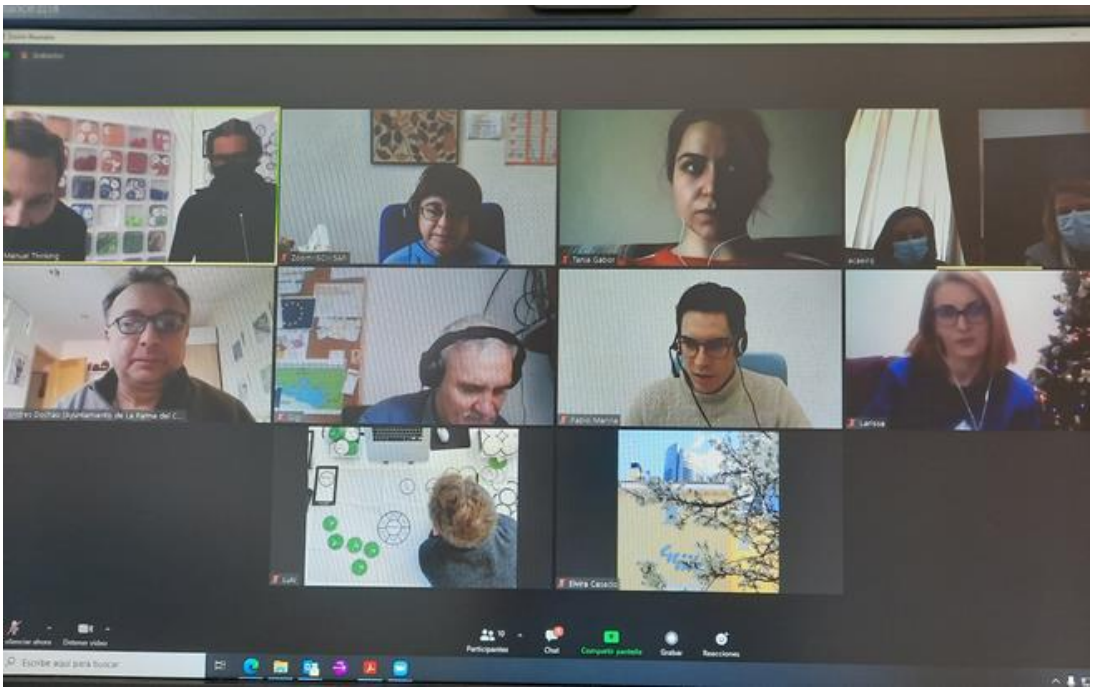
## 4.4. Co-creations workshops moved to semi-virtual form

The WP5 that was the core of this project has been greatly modified. The planned initial implementation of three face-to-face workshops has had to be moved to a semi-virtual form, partially carried out by videoconference. The adaptation to the change in format has resulted in a delay in obtaining the final result of this WP.



## 4.5. Delay and extension of the Technological platform

The delayed co-creation workshop and results also represent a delay in the technological WP4 proposal.

The foreseen study in MELTIC linked with practitioners contributions will also allow to identify potential impacts of new ideas for research as well as to know opportunities and risks that have not yet been systematically compared, discussed and evaluated. The consequences of this relationship are not yet fully investigated. Due the fast development in technologies and their application, there is a permanent need to monitor and support the work of ICT researchers, urban designers and social agents.

This technological proposal will be a Digital Experience Platform (DXP - Digital eXperience Platform) that provides content management capabilities and easy integration with devices and various sources through "headless" technologies. We will develop a technological proposal to support and encourage sociospatial interaction of citizens in small communities.

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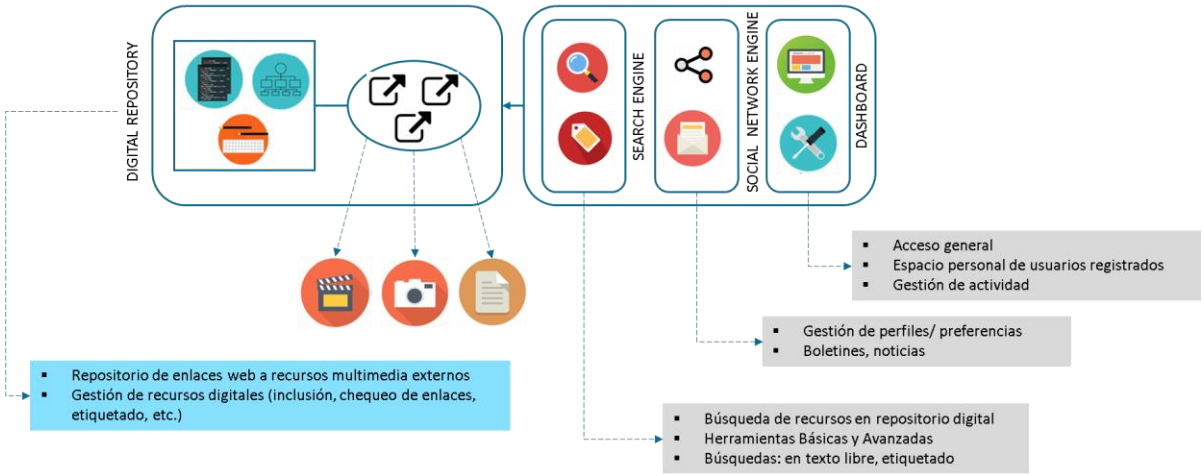
**MELTIC PLATFORM**

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# 5. Specific objectives achieved

## 5.1. Realization of the MELTIC web platform

https://www.isciii.es/QuienesSomos/CentrosPropios/UITES/Paginas/ProyectosdeInvestigacion.aspx

Content:

1. Home
2. Consortium
3. Working Packages
4. Output
5. Newsletters and Events
6. Contact us


## 5.2. Deliverables

- D2 Literature review

A **review of the state of art** technologies used in projects, activities and initiatives was developed focusing on:

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a) Aspects of interaction among users, ICT and social behavior
b) Spatial analyses, planning methodologies and public involvement
c) On-line gaming

This research identified relevant studies which exemplify the penetration of ICT in social and healthcare environments in real workflows. After reviewing the different studies, it could be stated that ICT in social and healthcare settings will play a key role in fostering ubiquitous and proactive health and healthcare services in the future.

- D3 Analysis of stakeholders and context

This research identifies stakeholders interested in how the innovative use of smart technologies can transform public spaces in small communities into people-friendly humane environments, promoting interactions and communication between isolated and disperse communities. They coincide in that ICT in social and healthcare settings will play a key role in fostering ubiquitous and proactive health oversight and health care services in the future.

MELTIC project is bringing together stakeholders from Italy, Spain, Portugal and Romania to share their interests and values, generating new ideas, concepts, products or projects.

Usually, in co-creative projects, all groups are involved and indeed continue to have an influence throughout the project's lifespan: in planning, implementation and dissemination. There exists a wide variety of stakeholders who are interested in research activities, and this will lead to relevant contributions in the procedures and scope of the scientific research. This will also provide the opportunity to incorporate contributions in the design of products, processes, or services such as online websites or applications.

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## 6. Another considerations about WP5

Originally conceived as a face to face encounter, the Meltic Workshop brings various European municipalities together to look for health and wellbeing related solutions for small and isolated communities.

Due to the Covid-19 situation, the workshop has shifted to a virtual environment. In order to maintain a hands-on approach, the Manual Thinking tools have been used, based on a format of maps and labels on which the participants have been invited to visualize their thoughts and ideas.

A customized work-process has been designed and prepared on the tools, which will be sent out to each region. The work procedure will be supported and guided through online video meetings. The results will be presented in a dossier.

Although we would have loved to meet everybody, the workshop offers a great chance to work together long distance, saving many flights and consequent amounts of CO2 emissions.

After an instructive virtual workshop, the local municipalities will start to work with the prepared materials that will be sent to each region. In these workshops, each municipality is looking for health related problem areas, opportunities and solutions for their region. Their findings will be organized by means of maps.


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## 7. Conclusions

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WP2 and WP3 have been little affected by the pandemic in which we find ourselves. However, subsequent work has been influenced. The extension for 3 months in which the project is going to be developed will be an important help in achieving the objectives presented. Modifications to the initially defined program are not expected to excessively affect the development of the project, and the results we hope will be of great interest for the study of the usefulness of Information and Communication Technologies in improving health and well-being in small communities.

The redistribution of the budget will mean an improvement in the results, allowing to deepen the WP4, which was not originally planned.

The experience gained by conducting the WP5 workshops in a semi-remote-web way will allow to gain experience on remote teamwork, which means optimization of travel and time consumption.

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