

OUTPUT FACT SHEET

Tools

Version 2

Project index number and acronym	CE1581 niCE-life
Output number and title	Output O.T2.3 - Advanced GPS-based tracking
Responsible partner (PP name and number)	ISRAA PP7
Project website	https://www.interreg-central.eu/Content.Node/niCE-life.html
Delivery date	31/12/2020

Summary description of the key features of the tool (developed and/or implemented) and of its transnational added value

The joint activity with the partners within WPT2 led to the identification and development of a solution called Advanced GPS-based tracking tool, able, through multiple functionalities, to provide support to three main targets, respectively senior citizens, caregivers and elderly care institutions. The main challenge addressed by this tool is to ensure a higher level of safety and a better quality of life for senior citizens, in particular for those affected by some forms of cognitive decline. The tool proposed by the wpt2 team is characterised by two main components, one hardware and one software. The first one is a bracelet designed for an elderly target, characterised by a high level of usability and by the presence of different functionalities such as: - GPS tracking; - Geofencing; - Indoor tracking; - SOS button; - Fall Alarm; - Heartbeat; - Sleep monitoring. The second one is a monitoring platform able to collect data from the device, to analyse them and to develop inputs, connecting the elderly with their relatives and the care institution.

The proposed tool has been developed from a solution identified on the market following the work carried out under the deliverable D.T1.3.1. With the support of PP2, the main functionalities and the most effective ways of exploiting data were identified in order to offer the most effective and innovative support to the Citizen participating in the Project.

As far as the transnational added value of the solution is concerned, it is to be found in the ability to use a tool able to respond to the needs of senior citizens affected by cognitive decline. This issue is in fact common to all geographical areas included in the perimeter of the Interreg Central Europe programme. But not only that, also the care model developed together with the solution can be extremely useful to all European organisations interested in adopting solutions of this kind.

Finally, as regards the validation of the effectiveness of the Advanced GPS-based tracking tool, a first test with a single user was carried out during December 2020, with positive results. During 2021, the solution will also be implemented during the pilot site foreseen by the Project.

NUTS region(s) where the tool has been developed and/or implemented (relevant NUTS level)

The European regions where the solution has been developed are:

- Treviso, (ITH34 NUTS level 3)
- Brno, (South-Moravian Region, CZ064 NUTS level 3)

The tool was implemented in Treviso, (ITH34 NUTS level 3)

Expected impact and benefits of the tool for the concerned territories and target groups

The main effect of the implementation of this tool is the change in the way care institutions can support older people and their caregivers by adopting a specific digital tool which will have to be integrated with services. As far as the main targets are concerned, the main benefits are:

- 1) Seniors. Achievement of a higher level of security related to a better quality of life linked to the possibility to live more time in autonomy at home;
- 2) Caregivers. Through the use of the monitoring platform, the family member will be able to support his/her relative and get feedback on his/her health conditions, reducing stress levels.

3) Care institutions. Possibility to support a larger number of people thanks to the integration of the technological solution in services for elderly people.

Finally, regarding the uptake at policy or institutional level, the solution stands out for its great potential. Moreover, also due to covid19 pandemic this tool will allow to support senior citizens more effectively. In the course of the niCE-life project the solution will be presented in dissemination events and relevant stakeholder, like public authorities and Regions. We expect impact in the Target groups approx.3 local public authorities, 1 regional authority, one NGO and 30 general public in near future.

As regards the impact of Output O.T2.3 - “Advanced GPS-based tracking tool” at territorial level, some considerations should be made. The technological solution and the related care model will be implemented mainly in the Municipality of Treviso (ITH34 NUTS level 3) and in some neighbouring Municipalities (Municipality of Casier, Municipality of Silea, Municipality of Carbonera, and Municipalities of Quinto di Treviso and Morgano) all located in Veneto Region. In addition to the Veneto Region, as responsible for policies to the elderly support, Municipalities and Nursing Homes will benefit from the developed solution to support a greater number of senior citizens with this innovative service. The impact will primarily concern home care services for frail elderly people who have problems of cognitive decline.

Sustainability of the tool and its transferability to other territories and stakeholders

Sustainability and transferability of the solution are two elements that have guided the team's work, in view of the numerous tools developed by European projects in this field that have not been applied after the end of funding. The Advanced GPS-based tracking tool will be further tested during the pilot site. This will allow the organisation to understand how the solution can generate new services that will be offered to citizens after the end of the funding. In this sense, apart from the technology, the element that will have a large degree of replicability will be the model for care and training, which will be a model for other organisations that want to implement similar services.

Through linguistic adaptation, the solution could also be used in other contexts, due to its ease of use and high level of adaptability to different contexts.

The most important lesson learned in this phase of the project is the fundamental value of involving end users, such as elderly people and informal carers. Through their involvement, the characteristics that will guarantee this solution to bring an effective and measurable change were identified.

References to relevant deliverables and web-links If applicable, pictures or images to be provided as annex

The main relevant project deliverables are reports related to the BUT tool development activity in WP2, namely:

D.T2.1.1 Intelligent monitoring tool - System specification, D.T2.1.2 Coordination meeting, D.T2.1.3 Intelligent monitoring tool - Design and adjustment of the platform, D.T2.1.4 Intelligent monitoring tool - Testing of the monitoring tool in cooperation with local neurologist (CEITEC), D.T2.1.5 Intelligent monitoring tool - Testing of the Prototype and Finalization of the Tool. The tool is deployed at:

<https://linda.utko.feec.vutbr.cz/>

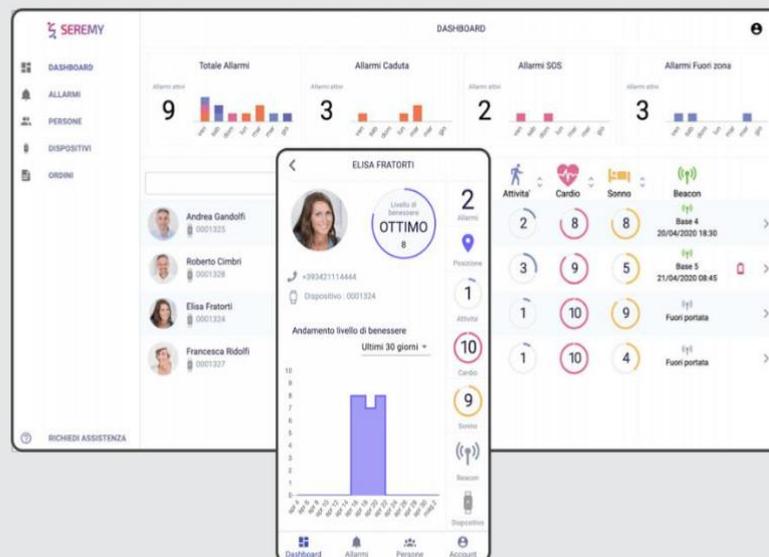
The main deliverables that enabled the output to be achieved are the following:

- Deliverable DT.2.3.2
- Deliverable DT.2.3.3
- Deliverable DT.2.3.4
- deliverable D.T1.3.1

They can be downloaded from the project website: <https://www.interreg-central.eu/Content.Node/niCE-life.html>

For the understanding of the characteristics of the output it may be useful to share some images:

1) MONITORING PLATFORM



2) BRACELET FOT GPS TRACKING

