

**AAL Project**  
**NITICS**  
**Networked InfraStructure for Innovative home Care Solutions**



**WP6: Business model design, dissemination, exploitation and commercialization**

**D6.2: Stakeholder management – Release 3 (M18 to M27)**

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## Executive Summary

This document elaborates involvement of stakeholders in the NITICS project. This document is structured in the following sections:

**Section 1: Introduction** - enumerates the objectives of this deliverable and gives an overview of the general NITICS Stakeholder management aspects addressed in this context.

**Section 2: Project overview** - gives an overview of the NITICS concept, its context and motivation that drives the work.

**Section 3: Activities** - presents activities undertaken within NITICS to involve stakeholders in the NITICS design and evaluation process.

**Section 3.1: Stakeholder management approach and methods** - covers approach methodology design with workflow and timeline and an international stakeholder list.

**Section 3.2: Stakeholder identification and recruitment** - reviews results on stakeholders' identification and stakeholders' recruitment.

**Section 3.3: Stakeholders consultations and engagement with stakeholders** - gives results on initial consultations and related activities and feedback through the Consultation paper

**Section 3.4: Visioning events with stakeholders** - presents visioning events organised by the project partners to harvest ideas by stakeholders in direct contacts at the visioning events.

**Section 3.5: Stakeholder feedback analysis approach** - The section reviews an approach on how responses from stakeholders, results of the feedback through the Consultation paper and visioning events were analysed

**Section 3.6: Stakeholder feedback analysis for the NITICS components** – evaluates responses from the stakeholders and presents results of the feedback analysis.

**Section 3.7: Mini survey on users' expectations in Bucharest** – presents results of a mini telephone survey made in M28-M29.

Two versions of the document (M6, M12) preceded this version. This one reflects the situation at the end of the NITICS project. This deliverable relates also to activities of WP2 and WP6. Consequently, stakeholders related activities are covered also by:

- D2.1 *Multi-national survey*
- D2.2. *End-user requirements and service concepts.*
- D4.1 – D4.5 related to testing of the NITICS solution modules where the end-user groups were involved
- D6.5 *Demonstrator sessions* that were focused on potential users.

The NITICS consortium also considers that dissemination activities are part of the stakeholders' related activities.

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## Abbreviations

AAL	Ambient Assisted Living
CMU	Central Management Unit
DoW	Description of Work
EC	European Commission
EU	European Union
GA	General Assembly
JP	Joint Programme
NITICS	Networked InfraStructure for Innovative home Care Solutions
PC	Project Coordinator
WPx	Work Package x (x=1-6)

# 1 Introduction

This deliverable *D6.2 Stakeholder management* is a living document that reports on the results of the work done in the NITICS project (Networked Infrastructure for Innovative home Care Solutions) with different key stakeholders that are involved in the area of new technologies for elderly people. Their continuous involvement is fundamental to the success of the project. The activities ran within *WP6 - Task 6.2 Stakeholder management* in which stakeholders' requirements were investigated.

Key stakeholders to be involved in exploiting the NITICS platform were recruited among technology providers, installation companies, technical installation companies, service providers, as well as organizations of care providers and of senior citizens.

Intermediate results of the project were discussed with a relevant stakeholder panel of actors. At least three sessions were planned to be organized internationally, while on a national level two sessions per year.

The document was enriched in its contents throughout of the project duration. The Task 6.2 and consequently also this deliverable D6.2 used results of other work packages (WPs) as an input stuff that was used at T6.2 activities.

## 2 Project overview

As detailed in [DoW], the Networked Infrastructure for Innovative home Care Solutions (NITICS) project addresses precisely the aspects that are related to the Ambient Assisted Living Joint Programme (AAL JP) Call 5 by designing and building an integrated, expandable and holistic platform that enables advanced ICT services including monitoring support to elderly persons in their home during their daily activities. NITICS platform also offers solutions for several services for people with disabilities (mobility handicap and cognitive disabilities). The NITICS project aims at providing ICT services that would enable them to extend the period of their independent living at home. The NITICS project partners believe that overcoming the well-recognized barriers in new technology deployment and acceptance is possible by developing and implementing services as well as by re-organising the ways in which care is provided to senior citizens. The idea behind is to accustom elderly people to new technologies in an organized environment in which specialized caregivers can aid them in getting familiar with the NITICS services. A successful implementation of this strategy may prove benefits of using NITICS in supporting everyday activities of elderly people and will encourage the elderly outside organized care system to use the services. Moreover, caregivers will also become familiar with the NITICS services and will be able to advice the direct users. In the design process NITICS will relate itself to the projects that have already addressed needs of elderly people by providing service platforms like AAL project A2E2, AGNES, ALADIN, AMCO, AMCOSOP, AWARE, BREATHE, Care@Home, CCE, Co-Living, EDLAH, ELF@Home, EMOTIONAL, ENTRANCE, HERA, HOMEdotOLD, HOPE, MEDIATE, PeerAssist, REMOTE, SilverGame, TOPIC, WeCare, 3<sup>rd</sup>-LIFE, [AAL\_Catalogue\_2013]. NITICS group will sought inspirations also from the results of FP5-FP7 projects e.g. Confident [Confident], Doc@Home [Doc@Home], EPI-MEDICS [EPI-MEDICS], HEARTS [HEARTS], HomeSweetHome [HomeSweetHome], IDEAS [IDEAS], IiE - ImPaCT in Europe [IiE - ImPaCT in Europe], RENEWING HeALTH [RENEWING HeALTH], Silc [Silc], SOPRANO [SOPRANO], Telecare [Telecare], TELEMEDICARE [TELEMEDICARE], HATICE [HATICE], which clearly address support for elderly people.

The aim of the NITICS project was also to develop an integrated platform that would enable implementation and deployment of mobility services for disabled people more quickly and more cost effectively, including many services that can keep their cognitive capability (at both physical capabilities affected by cognitive impairments and mental level) intact.

As highlighted in NITICS Description of Work [DoW], the NITICS dissemination strategy (including the stakeholder management) was envisaged at several complementary levels:

- **European level:** We have identified existing national and international events and checked with the organisers possibilities of carrying out piggy back activities at their events e.g. holding a workshop, distributing NITICS brochures, etc.. Dissemination on the European level ensures spreading of information at multinational level, way beyond the countries represented by the project partners.
- **National & regional level:** The goal was to attain national-wide awareness among the main stakeholders, including senior associations, governmental, and regional entities and individual targets among senior citizens. The governments and the regional authorities are important entities to disseminate NITICS results due to: a) their influence in decision making forums, policies and

programs; b) national visibility; c) possibility to act as mediators between the senior professionals and the recipients of their services. The main goal of dissemination for this group was to create awareness about the important role they can play in the extension of senior's independent living and maintaining their functional capacity over the life course. The senior professionals and their associations represent one of the NITICS target stakeholders together with non-profit organizations and medical institutions acting in this field. NITICS established contacts with these organizations and created a network which was used to attract larger number of representatives to NITICS national/regional workshops and local activities.

- **Project level:** Dissemination of information at project level ensured quality information exchange on the implementation progress, barriers and drivers, experiences, results and outcomes, gathered and identified in the preparation and implementation phases in the partner cities. It provided information to the Project Coordinating Group and WP Leaders and, with a closed information loop, feedback information on the on-going dissemination process. Therefore, regular dissemination meetings were held.

NITICS have involved stakeholders that are core in its eco-system. Although the main focus was on users and development of added-value services for them, this was possible only by involving relevant players from the eco systems, contributors, complementary as well as competitors that had a facilitating role at all project phases.

### 3 Activities

This section presents activities undertaken within NITICS to involve stakeholders in the NITICS design and evaluation process.

#### 3.1 Stakeholder management approach and methods

In the section a stakeholder management approach methodology is presented together with its workflow, timeline and international stakeholder list. So called *Consultation paper* was designed to gather written opinion and feedback from stakeholders through interviews and visioning events.

A **project environment analysis**, also referred to as “**stakeholder analysis**”, was a technique used to identify and assess the importance and impact of the project's stakeholders.

The following procedure was implemented:

- Identification of project environment (collection of stakeholders)
- Grouping according to social and technical/business aspects
- Evaluation of the project environment and detailed analysis of separate influencing variables
- Development of strategies and measures.

#### 3.2 Stakeholder identification and recruitment

The section reviews results on stakeholder identification and stakeholders recruitment. Benefits of using a stakeholder-based approach were:

- The opinion of the stakeholders is used to shape the NITICS project at an early stage. The continuous involvement of the stakeholder improves the quality of the project.
- The support from the involved stakeholders consists in more resources and competencies
- By early and frequently communication with stakeholders NITICS partners ensured that they understood the steps made in the fulfilment of the project processes and their status - we expected and got their active support when invited.
- Based on the stakeholders' experiences and interests we anticipated how other actors would accept and use the project services. We improved the project plans by actions that result in a win-win support to the project.
- The project environment analysis was a step to manage risk related activities.

### 3.2.1 Stakeholders recruitment

At the initiation of the project stakeholder recruitment was done using one of the following methods:

- Questionnaire technique: Identification of user requirements, problems, tasks, motivation of potential users. Which functions are needed frequently, which functions must be capable of being called up rapidly, how the application environment looks like, detection of non-functional requirement etc.
- Focus groups: identification of user requirements, problems, tasks, motivation of potential actors
- Brainstorming: identification of usability requirements
- Usability tests: evaluation of previous products or competitor products

Information was collected by:

- Questionnaires, interviews, contextual inquiries and by observation of users in the field study
- User participation in the analysis of the use context with focus groups and/or by brainstorming
- Evaluation of existing system (usability inspection, usability test)
- Verbal feedback from the target platform actors.

Within WP2, CITST recruited 61 primary users (elderly living independently at home) and 16 secondary users. They were questioned with a multinational survey aiming at specifying the NITICS platform and services. In addition to the primary and secondary users engaged in the WP2.1 survey, CITST has also recruited 8 stakeholders as part of the focus group to give feedback on the NITICS developments within WP2.2. The recruited stakeholders belonged to the following type of institutions: 1) mobile phone companies; 2) telecommunication network infrastructure; 3) software development and testing companies; and 4) medical and insurance companies. Most of the interviewed IT stakeholders were part of middle layer management or qualified medical personnel. In all cases the recruitment was done using CITST personal network.

## 3.3 Stakeholders consultations and engagement with stakeholders

This section gives results on initial consultations, related activities and feedback gathered with the *Consultation paper*.

### 3.3.1 Initial consultations and related activities

The target population of the NITICS project were elderly people living in their home environment. The project aimed at providing ICT services that would enable them to extend the period of their independent living at home. The NITICS project partners believe that overcoming the well-recognized barriers in new technology acceptance is possible by developing and implementing services as well as by re-organising the ways in which care is provided to senior citizens. The idea behind was to accustom elderly people to new technologies in an organized environment in which specialized caregivers can aid them in getting familiar with the NITICS services. A successful implementation of this strategy would proof benefits of using NITICS to support their everyday activities and would encourage them to use the services outside organized care system. Moreover, caregivers would, after becoming familiar with the NITICS services, be able to advice to the end-users of the NITICS solutions.

In Romania CITST engaged a significant number of elderly people living independently at home and also care providing organizations. Both would be directly involved as users of the services and would be able subsequently to benefit from the project outcomes. Elderly people, the main NITICS end-users, do not represent a homogeneous population group in comparison to health situations, personal needs, aspirations and living circumstances. Consequently, it was expected that the relevance of, and demand for NITICS-based services and support would vary substantially across the overall elderly population, and that particular subgroups might be more relevant for particular markets and/or types of service/products. An initial survey with 61 elderly in various Romanian communities achieved a prioritisation of the end-users needs which formed the basis of NITICS platform development. The extended presentation of the survey results was a part of the D2.1 deliverable.

Additionally, CITST initiated consultations with providers of elderly care: public and private suppliers of social and health care services to elderly people. Some 20 individual caregivers were interviewed to identify needs of elderly people that could be addressed by NITICS. CITST also established contacts with care organizations like Sf. Nectarie in Cluj Napoca. Teams there are interdisciplinary consisting of doctors, medical assistants, social workers, etc. Another organisation contacted by CITST was the Milly Senior Village in Bacau.

The corporate stakeholders engaged in the focus groups were interviewed in groups of 2-3 people. The involved stakeholders refused audio recording of the conversation to preserve their anonymity. CITST representative conducting the interviews took written notes of the discussions. Following a brief introduction to the NITICS project the participants were asked the following questions:

- What do you think about the NITICS aims and potential products?
- What kind of additional functionalities/ services should become a part of the NITICS platform?
- What do you think would be the most important NITICS service to elderly people?
- Do you have any elderly relatives who need home care? Do you think the assistant would help her/him to get around on daily basis? (why?/ why not?).
- Would you consider paying for such services for your relative? (ie. mother/ father/ grandparents);
- How much per month would you be willing to spend?

These questions were used to initiate discussions during which the participants were encouraged to express preferences, negotiate, disagree and agree. This kind of discussion proved to be a great opportunity to collect various opinions on the NITICS platform and subsequently on a Mock-up presentation of one of the NITICS services. The main idea of presenting a Mock-up interface was to elicit opinions on the interface of a given functionality. The Mock-up was presented to the participants on a computer screen or tabled and they were allowed to navigate it, to try various icons, to ask questions and give feedback.

The product idea was generally considered as very interesting although several of the participants, in particular those working in the IT sector, pointed out that similar solutions will soon reach the market as they are already announced by large players in the field. For example, Texas Instruments and iHealth are already commercializing their own line of wireless devices and corresponding management interfaces. In particular, iHealth has announced its entering on the Romanian market with a full line of Bluetooth health-monitoring devices for monitoring blood pressure, glucose level, segmental weight, oxygen levels, etc. offered at very competitive prices.

Regarding the evaluation of the idea and product, it was pointed out that it also has potential in monitoring children while at home alone. The home automation, reminders, indoor localization game and eventually even the fall detector can be very useful in this case. Additionally, such a system can be particularly useful for children having some chronic health conditions, like for example diabetes.

Finally, in order to make ICT supported services accessible to elderly potential users, health insurance companies should be addressed to accept NITICS services as a part of their coverage policy and to partially or fully reimburse costs for the services provision. We have therefore established initial contacts with such organizations.

### 3.4 Visioning events plan with stakeholders

This chapter presents visioning events organised by the project partners to harvest ideas by stakeholders in direct contacts at the visioning events.

As the stakeholders being involved in the visioning events were not a homogenous group, they were divided into three groups. Each of the group required different attention and specific communication methods. It was planned that events with stakeholders would gather opinion not only from individual users and their families, but also from healthcare institutions, companies etc. Moreover, we wanted blockers and opponents to take part at the stakeholder events. This approach guaranteed that the analysis involved many different opinions. In NITICS we distinguish the following type of stakeholders:

#### *Stakeholders I:*

Representatives of the stakeholder group I were frail people, mainly senior persons that had certain demands for social support and technology solutions. They shared their needs with their caregivers, social and healthcare workers and other members of their social network.

### Stakeholders II:

In the stakeholder group II there were experts and opinions makers (doctors, officials, businessmen/businesswomen) in the area of Ambient Assistant Living, healthcare (hospitals, care providers), user associations, NGOs, universities and others.

### Stakeholders III:

Members of the stakeholder group III were representatives of national authorities, local governments, business sector etc. Business sector was represented by companies and/or resellers.

**Table 1: The targeted stakeholders**

STAKEHOLDERS		
Stakeholder Group I	Stakeholder Group II	Stakeholder Group III
Elderly people Caregivers	User associations Universities Social and healthcare organizations Nursing homes	Companies Resellers

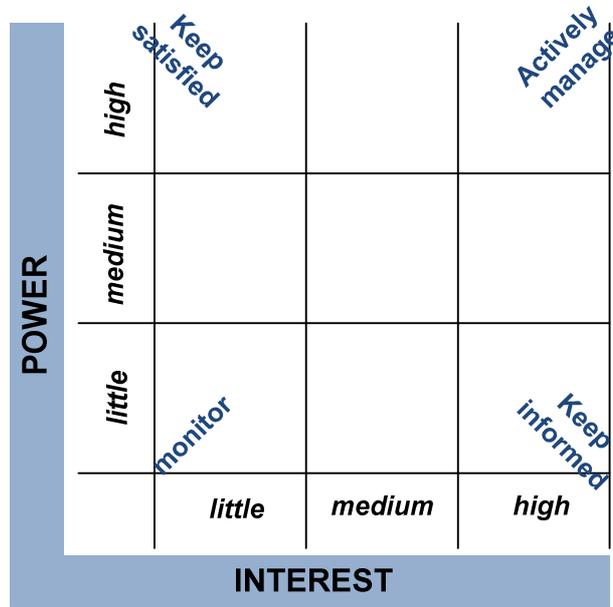
Communication to different market segments was done in a cohesive way to transmit a message of well-being and the desired benefits. The NITICS plan was presented in a segmented way in order to achieve identity and empathy.

Events organised during the stakeholders meetings are presented in Table 2. Pros (+) and contras (-) are indicated.

**Table 2: Planned events with the targeted stakeholders**

Event	Pro “+”	Against “-“
Workshops	Face to face contact; Immediate response; Motivate the audience to focus on a one thing/goal; Audio/video presentations	Small groups are more effective than big ones; Organising costs (room, lunch etc) Need to collect people in one place
Online workshops	Skype/Lync conferences; Documents distribution (SkyDrive); Questionnaires; Repeatable; Low costs	Only invited stakeholders
Conferences/professional shows such as Ted.com	Well-educated audience; Wide audience, New contacts	Costs (travel, accommodation, folders), A lot of work
Science festivals, exhibitions, competitions	Wide audience, Stay memorable, New contacts	Costs & Time (travel, accommodation, posters)

The analysis made after the events with stakeholder outlined real interests, some doubts and potentials that some companies had in the area addressed by NITICS. The analysis gave an overall picture of end-users expectations, identified potential conflicts of interests, and identified relationships between stakeholders. Results of the analysis are presented in a power/interest grid (Figure 1). A position of each person/group could change with time so the stakeholder power/interest matrix should be checked regularly.



**Figure 1: Assessment of potential impact of the NITICS system**

**The report**

With the surveys carried out in WP2 the consortium got some insight into the needs of interviewed elderly people and their caregivers as well as their points of view (see

Table 3). The data were used to compare the needs, expectations and possibilities that could offer the NITICS solution.

**Table 3: Expected outcomes of the survey on user needs and expectations**

Stakeholder group (Users)	What we have to know	What do we want to know
I (Elderly people)	Living costs, incomes	Readiness to pay
I (Elderly people)	ICT skills	How complicated the devices could be
I (Elderly people)	Health status	How often and what kind of help is required
I (Elderly people)	Relationship with family	Reaction time, medical experience/knowledge
I (Elderly people)	Socializing	With whom, for what
I (Caregivers)	Report from primary-users surveys	Opinion about the results
I (Caregivers)	Number of patients	The most common patients' problems
I (Caregivers)	Interested in NITICS	What is the most interesting, what is not necessary
II (all)		NITICS's weak and strong sides
II (all)		Possibilities to improve and develop in the future
II (all), III (all)	State-of-the-art of technology	Solutions on the horizon
II (all), III (all)	Current situation (reports, EUROSTAT)	Prediction for the next few years
III (all)		Competition
III (all)		Willingness to pay for NITICS based services
III (all)		Expectations from owners (patents, licences)
III (all)		Resellers outcomes related to NITICS, readiness to invest
III (all)		Markets
III (all)		Fashion

### 3.5 Stakeholder feedback analysis approach

The section reviews an approach on how responses from stakeholders, results of the feedback through the Consultation paper and visioning events were analysed.

Quality criteria were considered from a whole range of standpoints: from the user's perspective, from a maintenance perspective, etc. It should be defined different degrees of quality fulfilment and/or metrics which allow the relevant criterion to be assessed.

#### 3.5.1 Purpose

The purpose of the review was to continuously improve performance of the system based on a specific feedback from stakeholders. The consistent evaluation of errors detected in the reviews required additional measures to be introduced to avoid errors.

Motivation and objectives for reviews were:

- early detection and removal of errors;

- early detection and removal of problems and deviations from the plan.

### 3.5.2 Inputs

Principal inputs for analysing the stakeholder feedback were:

- Questionnaire
- Verbal feedback from the customer

Feedback was obtained on:

- Overall Satisfaction
- Project Management
- Quality of Service & Delivery
- Skills & Competences
- Collaboration / Communication
- Value for Money
- Comments

The following communication channels were used to obtain feedback from stakeholders:

- (Written) comments in the course of a customer satisfaction survey
- Face-to-face (or written) feedback to the NITICS project members
- Face-to-face (or written) feedback via the quality management actors or tools (e.g. in form of a Q-problem report)

Based on the stakeholders' feedback the corresponding measures were identified and initiated.

### 3.5.3 Review process

#### 3.5.3.1 Review methods

Reviews were conducted either at review meetings (session reviews or session technique reviews) or by working through comments obtained in writing (comment reviews or comment technique reviews). In both cases the review object was passed on to the review participants for examination few days before the review date (session date or deadline for submitting comments).

Irrespective of the method selected, each review was documented by a review report:

- To ensure that the author has eliminated potential errors.
- To ensure that all participants and persons informed have a document setting out experiences which can then be used for planning and executing further reviews.
- To ensure that the errors and the causes of errors can be analysed.
- In order to be able to assess the responses.

A review report consisted of the cover sheet complete with error statistics, error list and, if appropriate, an analysis report.

#### 3.5.3.2 Review phases

The review process - from planning to release - included the phases with the respective focus points as presented in Table 4.

**Table 4: Review phases**

Phase	Actions
Initiation	Review planning Preparation of review documents Invitation of participants
Preparation	Examination of the review object Preparation of review comments
Execution	Determining the review result Conducting the review session(s) (for session technique reviews) Evaluation of review comments by the author (for comment technique reviews)
Follow-up	Revision of the review object Examination and release of the review object Creation of review metrics

### 3.5.3.3 Review objects

Review objects (objects examined in a review given in Table 5) were part of development results. They included documents and plans as well as code sections, modules, user interface screen forms, web solutions or hardware results (e.g. layout, circuit diagram).

**Table 5: Review objects**

Review Object	Purpose
Documents/Plans	The main focus points of document reviews depend to a large extent on the type of documents being reviewed.
Code	Code reviews are intended to check the source code for possible weak points against the requirement documents already before software testing starts.
Model	Formal design models, as they are created in object-oriented software development, are checked for compliance with requirements documents and common design rules.
GUI	When reviewing a graphical user interface, it is not only the functionality, but in particular also its design and user-friendliness that need to be examined.
Web	As in the course of a GUI review, you not only need to evaluate functionality, design and user friendliness, but you must also pay special attention to the performance and complexity of the web structure when reviewing a web application.

### 3.5.3.4 Analysis of the stakeholders' satisfaction

With the stakeholder survey information was gathered on how the proposed services would be perceived by stakeholders and where potentials are for improvements.

When an average response to a particular question was ranked lower than "7" on the scale from 1 to 10, than potential reasons for low scoring were immediately analysed by the project manager and the low scoring were commented in written..

## 3.5.4 Outputs

Principal inputs for analysing stakeholder feedback were:

- Filled out questionnaires

- Associated statistics
- Action lists

### 3.6 Stakeholder feedback analyses for the NITICS components

The consortium partners themselves represented different type of stakeholders. Using their stakeholder's experience, all the NITICS partners were involved in the feedback analysis as described in section 3.5. They inspected and tested the modules functionalities. The review methods used comments, emails and documents covering the model, the code, the GUI and quality issues.

In the reported period the following modules were partially defined and implemented: core, services, skin, reports, web module, messages, log4j, file system, model module and database model, common, functional modules, and search module.

Principal NITICS functionalities implemented with the graphical user interfaces were:

- Login/Logout
- Search
- Alerts view
- Devices management
- Locations management
- Manufacturers management
- Reports (devices type percentage, devices location)
- Users management
- Load files with devices
- Full text search (with reindex - update of the entities' indexes automatically)
- Manual measurements (add data manually)
- Dashboard view reordering of the contained panels
- Push data gateway.

Logout and Search can be accessed by user all the time after authentication.

SIE plan to use some of the implemented NITICS components and modules within other industrial projects and research projects.

During the NITICS in-person meetings procedures for the following processes were set:

- Organization, preparation, management and follow-up of reviews
- Integration of review comments and statements
- Procedure of review sessions
- Management of current reviews
- Release processes.

All the procedures conform to the adequate Siemens procedures and NITICS project procedures defined in the D1.1: Internal Communication Infrastructures and D1.2: Quality Assurance Plan.

On 24<sup>th</sup> April 2014 SIE organised a virtual meeting (Skype) of all NITICS partners aiming at getting feedback on the first version of the NITICS platform interface. A working version of the platform was available prior the meeting to the NITICS partners. The test platform was provided by the project coordinator and the access was granted for partners as test users and contributors. Some partners provided their observations before the virtual meeting.

At the meeting SIE presented the state of NITICS platform and the partners expressed their comments and suggestions for the platform improvements. During the meeting ambiguities, errors and deficiencies found in contents and the form were pointed out and commented.

The following observations/comments were given:

- Highlight the selected tab (so the users know in which tab they are at one moment)
- Change in red the tab title when is open or to make it bold
- The dashboard is confusing and need further organizing
- Add different views for each user role, to limit panels' visibility
- Delete data from database and changed to the real (meaningful)
- Add the category or identity of devices
- The platform should make the difference between users after their roles
- *Alerts/caretaker* management titles should be bigger and coloured
- Hide the password at the register page
- Use a term "*carer*" instead of "*caregiver*"
- Take into account that for blood pressure there are two values measured from device, and to take into account the type of data send by device (can be double, integer but also Boolean (true/false))
- Correct the part when a device manufacturer is added. This is not directly visible in the *devices tab*. Now a user has to manually refresh (logout and after login) the programme to see it
- Export into "pdf" format is not working for manufacturer list
- Use a word "manufacturer" instead of "producer"
- Insert more representative pictures and less text, to make it easier for elderly to understand how platform is working
- Wait with translation into other languages until the graphical interface is simplified.

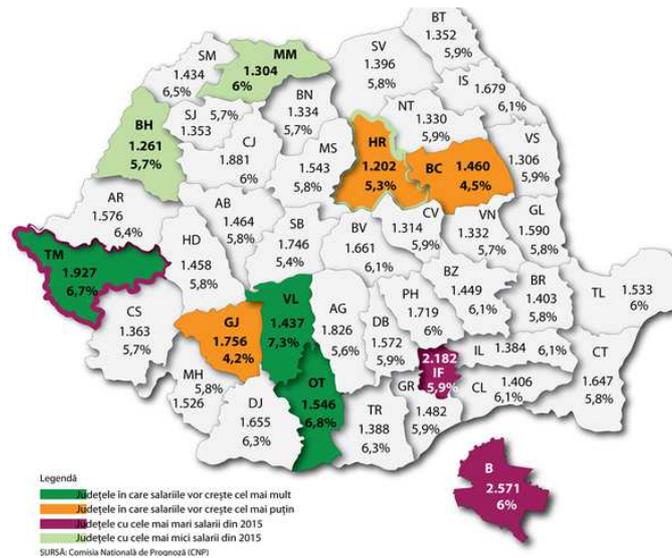
SIE took all the stakeholders' suggestions into account, and resolved bugs/errors for better NITICS platform performance. Partners were asked to send their justified review comments also in the future.

SIE updated the web application on server and informed the partners on improvements. The partners were asked again to verify and validate changes. Each new release of the SW was versioned. A change request list and the implemented changes were related to each version.

The NITICS partners acting as stakeholders confirmed that the implemented modules suited the architectural requirements of the D3.2 deliverable (*System architecture and test profiles*) and covered the uses cases described in D2.1 (*End-user requirements report*).

### 3.7 Mini survey on users' expectations in Bucharest

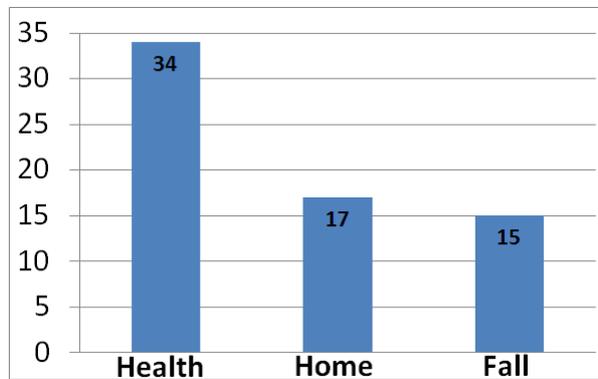
In M28-M29 CITST made a mini telephone survey in Bucharest, Romania involving 35 primary users. They were in the age group of potential NITICS end-users (65+). At introduction NITICS modules (health monitoring and interface with the caregivers, home monitoring, memo, alerts, fall detection) and corresponding services were briefly presented to them. After they were asked about their interest in such services, their willingness to pay for the services and an amount of money they would be willing to pay for that.



**Figure 2: Income distribution in 2015 in Romania and the foreseen perceptual increase**  
 (Source: [www.gandul.info](http://www.gandul.info)).

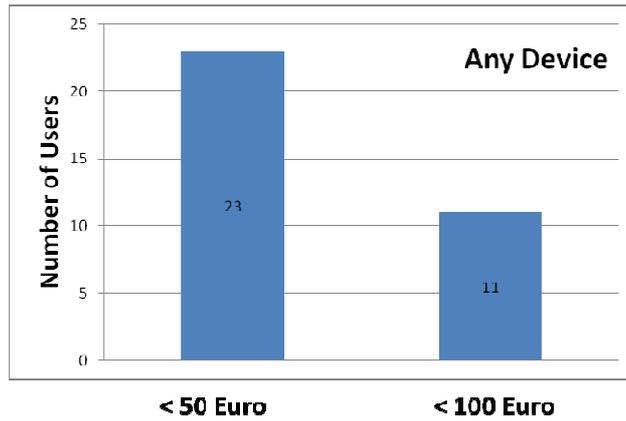
It is worth noticing that the prices that the users indicated can be considered the upper limit for the Romanian users as the highest income per capita is in Bucharest, the capital (see Figure 2).

All users were familiar with the devices and sensors integrated in the health monitoring module. However, most users have required additional information on other modules and in particular a fall detection technology. In the end, as can be seen in Figure 3, all users expressed interest for at least one of the NITICS modules.



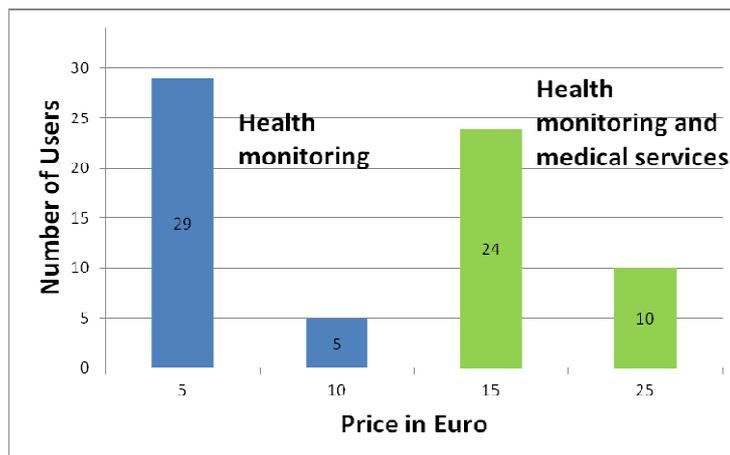
**Figure 3: Number of users who expressed their interest of the health, home and fall detection module.**

The survey revealed that the price which the primary end-users are willing to pay for the devices and sensors integrated in the health monitoring module should not exceed the price of an equivalent regular device which can be found on the market. Subsequently, they were interested to pay the equivalent of 50 € to 100 € for a blood pressure measuring device and 20-50 € for a glucometer and additionally for the consumables used in the glucose test. The rest of the devices included in the platform were less known to the users and therefore they did not offer any price estimate but mentioned that they would be willing to pay up to 100 € if the device is really needed for their health monitoring (see Figure 4). Not surprisingly, being a common practice in Romania, most users (94.1%, i.e. 32 out of 35) prefer to pay for the devices in several instalments.



**Figure 4: Number of users which would pay a maximum of 50 or 100 Euro per NITICS health monitoring device.**

Regarding the service costs, the interviewed primary users were more interested to pay for the health monitoring services than for the home monitoring services. They pointed out to be interested in health monitoring coupled with medical services in which a family doctor regularly checks and/or supervises their health parameters (see Figure 5).



**Figure 5: Price in Euro which the primary users are willing to pay for health monitoring.**

## 4 Conclusions

This document is the third iteration of the D6.2 “Regular reports on stakeholder concerns” that was expected to be updated on a regular basis at M6, M12, M18, M24 and M27 of the NITICS project. Due to the project extension it covers also the period M28-M31. Its objective was to investigate the stakeholder concerns in order to ensure that NITICS solution would find its road to the European market so enabling stakeholders that are interested in care platforms like the one produced by the NITICS project..

The following aspects were investigated:

- “Inclusion of results obtained from the corporate stakeholders engaged in the focus groups giving feedback on the NITICS services and implementation”, where from the performed interviews it was concluded that the product idea was generally considered as very interesting although several of the participants, in particular those working in the IT sector, highlighted that similar solutions will soon reach the market as they are already announced by large players in the field. Regarding the evaluation of the idea and product, it was pointed out that it also has potential in monitoring children while at home alone. The home automation, reminders, indoor localization game and eventually even the fall detector can be very useful in this case. Additionally, such a system can be particularly useful for children having some chronic health conditions, like for example diabetes.
- “Inclusion of the stakeholder feedback analyses for NITICS components”, where all the NITICS partners were involved in the planned feedback analysis. They have inspected and tested the NITICS platform modules functionalities. The review methods used have produced comments, emails and documents covering the model, the code, the GUI and related quality issues. The NITICS partners acting as stakeholders appreciated that the implemented modules satisfied the architectural requirements of the D3.2 deliverable “System architecture and test profiles” and covered the uses cases described in D2.1 “End-user requirements report”.

This deliverable relates also to activities of WP2 and WP6. Consequently, stakeholders related activities are covered also by::

- D2.1 *Multi-national survey*
- D2.2. *End-user requirements and service concepts.*
- D4.1 – D4.5 related to testing of the NITICS solution modules where the end-user groups were involved
- D6.5 *Demonstrator sessions* that were focused on potential users.

The NITICS consortium also considers that dissemination activities are part of the stakeholders’ related activities.

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## Document history

**Table 6: Document history**

Ref.	Title	Doc.-ID	Version	Date
[RD8]	Deliverable finalized.	NITICS_WP1_D6_2_P_RE_2v8.doc	2.8	30.11.2015
[RD8]	Deliverable last editing.	NITICS_WP1_D6_2_R_RE_2v7.doc	2.7	15.11.2015
[RD7]	Deliverable content harmonization	NITICS_WP1_D6_2_R_RE_2v6.doc	2.6	15.10.2015
[RD6]	Deliverable review.	NITICS_WP1_D6_2_R_RE_2v5.doc	2.5	10.09.2015
[RD5]	Inclusion of contributions of the consortium partners in the Deliverable fourth release.	NITICS_WP1_D6_2_R_RE_2v4.doc	2.4	10.08.2015
[RD4]	Editorial work: Contributions to the M18 version from EXYS, SSWK and CITST.	NITICS_WP1_D6_2_R_RE_2v3.doc	2.3	10.12.2014
[RD3]	Final revision of Deliverable third release (editor).	NITICS_WP1_D6_2_R_RE_2v2.doc	2.2	20.5.2014
[RD2]	Inclusion of contributions of the consortium partners to the deliverable third release.	NITICS_WP1_D6_2_R_RE_2v1.doc	2.1	10.05.2013
[RD1]	Initiation of Table of Content (ToC).	NITICS_WP6_D6_2_R_RE_2v0.doc	2.0	22.10.2013

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