

GUARDIAN

The social robot companion to support homecare nurses
GUARDIAN

D5.2 Dissemination plan

Project acronym:	GUARDIAN
AAL JP project number:	aal-2019-6-120-CP
Deliverable Id :	D5.2
Deliverable Name :	Dissemination plan
Status :	Final V1.0 (ongoing)
Dissemination Level :	Public
Due date of deliverable :	M6
Actual submission date :	M3
Author(s):	Henk Herman Nap
Lead partner for this deliverable :	Vilans
Contributing partners :	VIL

Versioning and contribution history

Version	Description	Comments
0.1	Vilans	Set out the first plan, based on previous dissemination plans of AAL projects
0.2	Vilans	Updated
0.5	Vilans	Updates with communication channels
1.0	Vilans	Updated/Check 2021

Deliverable process schedule

No	Process step	Responsible	Timing	Comments
0.1	First Draft	Vilans	M1	Henk Herman Nap – first plan
0.2	Update	Vilans	M3	Henk Herman Nap – updates with logos
0.5	Updates	Vilans	M6	Version with communication channels (HH Nap)
1.0	Updates	Vilans	M18	Updates in 2021 (HH Nap)
1.1	Iterative		End of 2021	

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EXECUTIVE SUMMARY

The dissemination plan presented in this report is conceived as a (iterative) guideline and a plan of actions for the dissemination activities performed in the context of the GUARDIAN project.

The plan contains a strategy to fulfil the dissemination-related objectives set in the Description of Work, namely to make the project results and the many activities that will be carried out during the project, widely known.

The main areas addressed by this deliverable are the definition of the GUARDIAN communication policy and the presentation of a suitable dissemination strategy, including a definition of the term dissemination and its interpretation for GUARDIAN. Therefore, the objectives of GUARDIAN dissemination and an overall approach are set.

Based on the document Description of Work (DoW) and WP5 work on business modelling (e.g., stakeholder analysis), target groups for dissemination in GUARDIAN are identified and the subjects and matters of dissemination are described. The management as well as the dissemination activities are defined and the partner roles are shown. As the resources dedicated to dissemination are restricted, cost-effective ways were chosen to achieve a maximum of publicity for the project and its results.

1. Introduction

1.1. Purpose of the document

The objective of this deliverable is to present an overall communications and dissemination strategy designed to provide a comprehensive framework for the diffusion of the project concept, ideas and results. It provides a clear understanding of the target groups and actions needed to approach them. The design of a well-elaborated dissemination plan will support the successful communication among identified stakeholders, passing to each of them a clear message with the expected benefits from the project, using a variety of dissemination methods tailored to the specific needs of the target audiences. Doing so, a win-win relationship will be established among the various stakeholders, providing significant added value to the project.

Furthermore, in this document the GUARDIAN dissemination activities and tools are described and how they need to be employed during the project life, so that the project and its results will be disseminated as widely and effectively as possible.

Main areas of focus are:

- Defining key messages;
- Establishing target audiences;
- Selecting appropriate modes of carrying the message.

The dissemination strategy will be constantly updated during the project lifetime. These needs emerged through the close interaction with the target groups as well as among the consortium partners themselves. This deliverable aims to assist the GUARDIAN consortium to generate an effective flow of information and publicity about the objectives and results of work.

1.2. Document structure

The present deliverable is divided in four parts (chapters):

The first part (*chapter 2*) is aimed to provide an overview of the **GUARDIAN dissemination concept** including background information about the project and its main objectives.

Communication Policy (*chapter 3*) presents the overall dissemination approach and clarifies which results can and should be made public and to whom those activities will be addressed in order to ensure the success of the dissemination strategy. This encompasses the identification of stakeholders and target groups who will benefit from the results of GUARDIAN. Emphasis is also placed on the identification of the dissemination matters/areas and gives an overview of the partner's intention to direct their dissemination efforts towards the identified matters. These matters will give an answer to the question which concrete input the stakeholders need. This chapter further defines the GUARDIAN dissemination management structure outlining the involved committees to be in charge of a suitable spread of results and assuring IPR consideration.

Dissemination Strategy (*chapter 4*) presents the project identity guidelines and explains which concrete dissemination tools and activities will be employed and performed so that the project and its results will be disseminated as widely and effectively as possible. Individual plans for each partner are also reported. This chapter concludes with an evaluation of the before mentioned dissemination activities by providing a set of quality check parameters.

The last part of the document (*chapter 5*) is a **collection of captured dissemination** activities. Chapter 5 will be updated in relation to the performed dissemination activities.

This document has to be considered internal use and all the information reported are restricted to the GUARDIAN partners and the Active and Assisted Living (AAL) Commission services. Part of this information may be disseminated with the consortium's permission.

1.3. Contribution of partners

All the partners of the GUARDIAN consortium will actively contribute to dissemination activities during the entire project duration, according to this Dissemination Plan. In particular, the following are the tasks assigned to the partners:

Vilans as responsible for the current deliverable, will review this document. ConnectedCare will run the project website with the contribution of Vilans. Vilans & ConnectedCare will prepare the diffusion material (i.e. a project description, a poster and brochures) for the

dissemination of the results to a larger audience. Vilans & ConnectedCare will also take care of the dissemination of the project results and activities through already existing social networks of partners and individuals in the consortium (e.g., Facebook and Twitter). Vilans will communicate the GUARDIAN advancements via its own communication platforms and those of GUARDIAN. Vilans has more than >500.000 visitors per month on its online platforms. As the coordinator of GUARDIAN, Vilans will give oral presentations at national and international conferences, fairs, radio and TV, and will do this iteratively with gaining insights and results. Furthermore, results will be published in academic and popular/newspapers to ensure maximum impact and wide dissemination across all stakeholder groups. Finally, Vilans will create a video for GUARDIAN for dissemination purposes (e.g., interview, technology, and scenario). Vilans already prepared dissemination images. Lastly, Vilans & ConnectedCare will provide the GUARDIAN images for the website and the other dissemination channels. Smart Robot Solutions (SRS) will disseminate GUARDIAN during shows and sales pitches and has a huge network in The Netherlands and abroad in (social) robotics. JEF s.r.l. will disseminate GUARDIAN using their various communication channels, such as the website (www.jef.it), and events that involve the company staff. JEF is involved at the regional level (Marche region) in many activities related to the AAL programme and it will use these occasions to disseminate the GUARDIAN project and results using leaflets and poster. JEF will also provide information to its employees about the process and results of the GUARDIAN project through the GUARDIAN posters and leaflets. JEF will share the results of the project in national and international journals and conferences. Eindhoven University of Technology will disseminate results via their web-site www.tue.nl and their online social network accounts to reach the technical interested public. In addition, the TU/e will disseminate results in academic papers and publications. The University of Geneva has a similar approach, as UNIVPM with a strong focus on high impact scientific publications. UNIVPM will also work on demo videos with INRCA and JEF. The Hospital University of Geneva (HUG) will also use its care/cure network and connections to TV and Radio stations to disseminate results and will also focus on academic publications. INRCA will arrange communication activities, taking advantage of the hospital facilities that allow immediate contact with elderly and their families.



Jessica Rochat is a specialist in human-machine interaction and works at Geneva University Hospitals (HUG). The Radio Télévision Suisse (RTS) interviewed her on August 18, 2020. Jessica: 'It's still not common for people to interact with a robot. That's why it's very important that we assess the needs of the end users: older people living at home.'

Jessica Rochat is also a PhD student in psychology and head of the Evalab team, at the Medical Information Sciences Division of HUG. The Evalab team focuses on conception, design and evaluation of health technology. Jessica: 'As one of the European partners, we are participating in the innovative Guardian project because there is still a lot of research to conduct regarding the likeability of robot-based solutions. This likeability is a key factor in

Furthermore, communication materials will be given to health professionals that work in the wards. These health professionals have been involved in WP2 project activities since the beginning of the project. Moreover, a permanent set up can also be arranged in the INRCA Casamica lab, in order to provide a Demo to the users or to the health professionals. In addition, INRCA will share the results and system capabilities in national and international conferences and peer reviewed journals in the field of ambient assisted living and social robotics. Zorggroep Noordwest-Veluwe (ZNWV) will disseminate results within the organization, via its' web-site and at national conferences on long-term care. They will also use their social media accounts for sharing project plans and results.

1.4. Baseline/Relation to previous and future version

The current deliverable is the baseline document for the dissemination activities and will be iteratively updated during the course of the project. Future versions of this document will be provided as part of each Periodic Activity Report to assist in the evaluation of project results.

1.5. Relations to other activities in the project

As shown in the project PERT diagram, dissemination is the outcome of all project activities. Activities started with project negotiations and will continue after the project is completed. Results from various tasks of the work packages will be disseminated, according to the strategy and process written in the current dissemination plan. This is reflected in the publication of public project deliverables and their upload onto the project website. In addition, the project and its goals will be an integral part of dissemination activities.

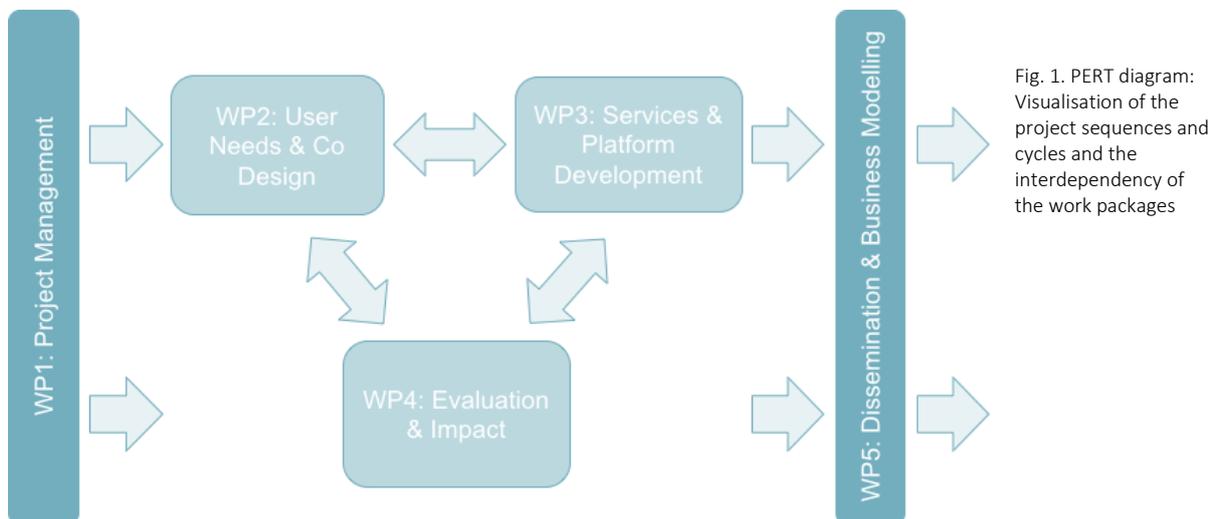


Fig. 1. PERT diagram: Visualisation of the project sequences and cycles and the interdependency of the work packages

2. GUARDIAN concept, objectives, and images

This section serves to remind us of the core ideas behind the project, the objectives we are bound to, and how these concepts and objects can be transformed into visualisations and branding strategies that contribute to dissemination.

2.1. GUARDIAN concept

The GUARDIAN concept is intended to ensure sustainability of care using a **senior friendly social robot** that can be accessed remotely by the nurse and informal carer. GUARDIAN **will provide information about the situation at home**, collected through human-robot dialogue and through sensing, to the (informal) carer through an online accessible interface connected to apps for the formal and informal caregivers. They can instruct the robot remotely to engage in dialogue, send a message that will be relayed by the robot, or the person in need of care can be contacted directly. The robot can support in keeping track of daily activities by means of an audio-video connection to the (in)formal carers and **automates routine tasks** like giving reminders to eat or drink or take medicine. As such it **provides daily structure** for the seniors. The benefit of a social robot – as shown by Eindhoven University of Technology partner in GUARDIAN - is that its physical presence is a natural focus of attention, and its human form is a natural platform for non-verbal communication. This enables the robot to interact using social cues and social rules, and it makes the robot **more persuasive and motivating than conventional methods**. The robot understands when someone is nearby and paying attention and engages in dialogue with the owners autonomously at appropriate times, in a socially intelligent way^{1,2} via a personalized human-robot interaction. The social skills enable the robot to remember past conversations and interactions, which is argued to be the key to long term interaction^{3,4}. Remembering past interactions with users enhances the ability for a robot to adapt to its user and contributes to personalization⁵ thereby **supporting user acceptance and trust among seniors**. It does not require computer-literacy and there is no risk of the user forgetting the device. GUARDIAN means a relief from nurse shortages and the opportunity to reduce the workload and relief stress of their personal, which may **reduce the risk of e.g. non-appearance and burn-out**. To foster both the optimal use and the acceptance among users, it will be ensured that the system is aligned with heterogeneous user needs and values, or that it anticipates on, and adapts to individual user needs, if necessary. To this end, the right conditions will be met ethically, morally, as well as legally.

To **maximize success and market fit**, GUARDIAN will be developed using an **iterative methodology** with **3 streams** – i.e. co-creation, ethics and business modelling – and special attention for their coherence. All stakeholders – i.e. homecare nurses, informal caregivers, frail seniors and care organizations, but also the developers of the technological solution – are

¹ Torta, E., Werner, F. et al. (2014a). Evaluation of a small socially-assistive humanoid robot in intelligent homes for the care of the elderly. *Journal of Intelligent & Robotic Systems*.

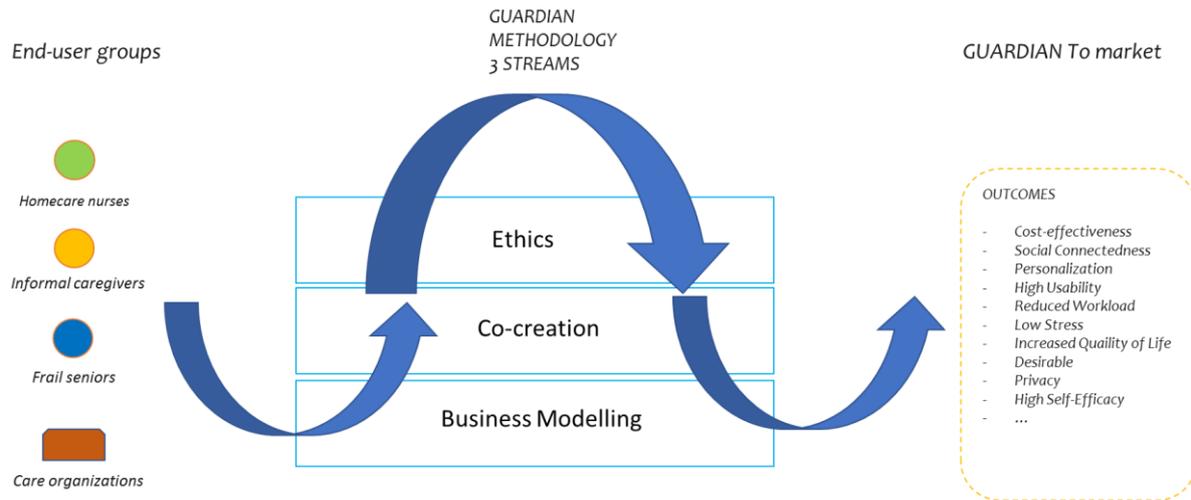
² Johnson, D.O., Cuijpers, R.H., Juola, et al. (2013a). Socially Assistive Robots: A comprehensive approach to extending independent living. *International Journal of Social Robotics*.

³ Kasap, Z., & Magnenat-Thalmann, N. (2010, September). Towards episodic memory-based long-term affective interaction with a human-like robot. In *RO-MAN, 2010 IEEE* (pp. 452-457). IEEE.

⁴ Leite, I., Martinho, C., & Paiva, A. (2013). Social robots for long-term interaction: a survey. *International Journal of Social Robotics*, 5(2), 291-308.

⁵ Castellano, G., Aylett, R., Dautenhahn, K., Paiva, A., McOwan, P. W., & Ho, S. (2008, October). Long-term affect sensitive and socially interactive companions. In *Proceedings of the 4th International Workshop on Human-Computer Conversation*.

involved in sessions focused on these streams and in pilots in all three participating countries.



2.2. GUARDIAN objectives

To be reached in year 1	To be reached in year 2	To be reached in year 3
Project website and social network accounts have been established (publicly accessible website by M6, weekly social media posts starting from M2).	Draft business plan/ exploitation plan ready (quantitative assessment = all partners agree on business foundation, M18).	Final business plan/ exploitation strategy ready (quantitative assessment = existing letter of intent ≥ 3 market partners by M36).
First co-creation phase and UX concept has been completed and positively evaluated by 5 UX experts and 3x4 end-users.	Second co-creation phase and usability of UX concept has been positively tested with end-users, and pilot tests have started in 3 countries.	Field trials in 3 countries have been completed (n=90), positive evaluation on – among others - co-effectiveness, reduced care burden, usability and acceptability from $>70\%$ of participants.
Set up and launch of iterative business modelling and ethical design focus groups with 3 primary, secondary and tertiary end-users per country (N = 27).	Second iterative business modelling and ethical design focus groups with 3 primary, secondary and tertiary end-users per country (N = 27).	Consolidated ethics framework for further upscaling GUARDIAN and input for ethical human-robot interaction design (M36).
Pilot test case scenarios launched in 3 user centers (the Netherlands, Italy, Switzerland).	Evaluation protocols for field trial finalized (M21).	End-users involved in the field trials want to proceed with the robot and recommend the solution to others (quant. assessment $>70\%$ of partic.) and cost-effectiveness is proven.
Technical realization of integrated platform (including robotics integration, social rules) (M12).	Integrated prototype updated based on feedback from usability test (M21).	Final prototype delivered based on feedback from field trials (M36).

Quantitative KPIs will also be assessed to measure the effect of GUARDIAN on formal/informal caregivers and seniors. Data and signals coming from the interaction between the formal/informal caregivers with the Guardian App (i.e. number of login, time spent on the app, etc.) will be used to estimate the effects of GUARDIAN on the user without the addition of any external devices. Also, the interaction between the senior and the robot will be analyzed to explicitly evaluate the mediating role and effects of GUARDIAN on the senior well-being. Next to the quantitative KPIs, GUARDIAN has defined the following qualitative KPIs:

- Presence of interdisciplinary expertise within the partnership (technological skills, methodological skills, and specific skills concerning support of end-users).
- User friendly, iterative demand driven (development of) technologies for end-users.
- Management actions aimed at the continuous monitoring of the project (risk management, change management, content management, and quality control management).
- First line of support, platform service available during regular office hours (8:30 – 17:00).
- Diversification of offered services for the end-users: communication, information, monitoring of life-style behaviour, learning assistance, connection with peers, service providers, and customers of business companies. End-users privacy ensured.
- Deliverables are subject to quality standards as specified in the Project Implementation Manual.

2.3. GUARDIAN challenges

The challenges addressed in this project can be summarized as follows:

(1) Homecare nurses suffer from a high workload as they have to care for a large number of clients. Much of their available time is spent on time-consuming routine tasks and check-ups. GUARDIAN provides professional nurses with ‘eyes and hands in the home of the person in need of care’ and saving an expected 20 minutes of care per end-user per day, which is 6.000 Euros per client per year.

(2) Informal caregivers experience high levels of stress and mental and physical fatigue as they worry about their loved ones and have difficulty finding a work-life balance due to the additional care tasks. GUARDIAN provides a helping hand and reduces stress and care burden of informal carers by keeping them informed and by easing communication between relatives.

(3) Frail seniors prefer to live in their own house for as long as possible. Informal caregivers and homecare nurses cannot be present 24/7. With GUARDIAN, the seniors have a companion that can take over tasks from caregivers, support at home with safety, reminders and contacts with others to improve the social connectedness and independency.

2.4. GUARDIAN images and branding

Excellent images and/or visualisations must be developed to communicate the concept and objectives of GUARDIAN. Several have been developed (August 2019): the project logo (further explained in Section 4), a potential trademark, and figures related to sensor network, sensor architecture and scenario (Figure 2). They are currently utilised and shown on the project webpage, on the project brochure, and they are used to disseminate the project on the social networks.



Figure 1: Guardian logos

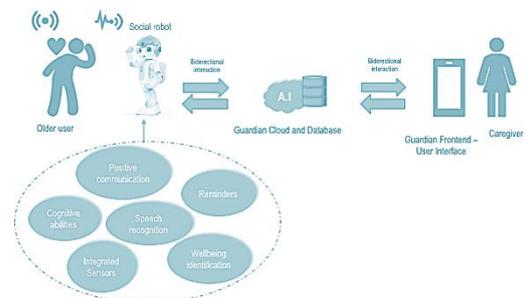
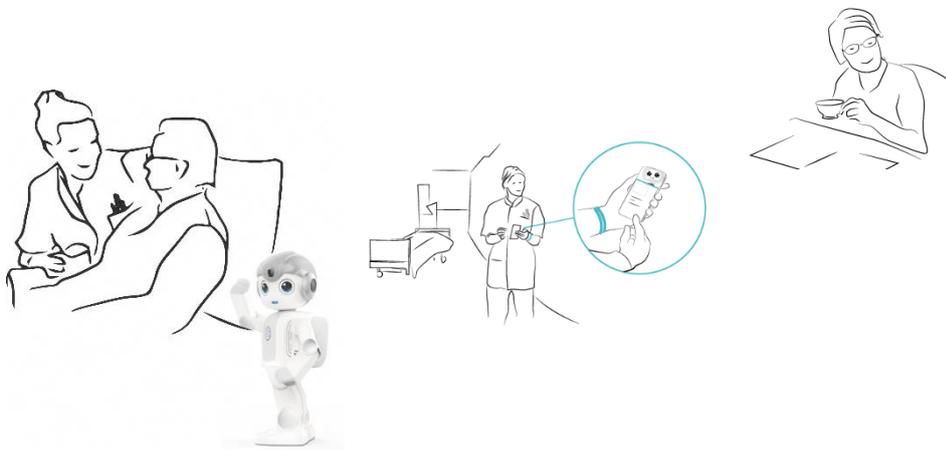


Figure 2. Some of the images and visualisations used to communicate the concept of GUARDIAN.

3. Communication Policy

3.1. Objectives and overall approach

The communication and dissemination strategy of GUARDIAN includes project relevant objectives of dissemination, defines an overall approach for the strategy, and describes the generic contents for dissemination.

The main objective of the communication and dissemination strategy is to realize a high impact of all project results on the end-users organizations, sensor system developers, owner/managers, etc. Through realising this strategy a widespread dissemination should be possible leading to an utilisation of the project's outcomes. A further objective, while communicating the GUARDIAN results to the target audiences, is the protection of intellectual property of the knowledge. This involves acting and mediating accordingly in case a conflict related to IPR and ownership of results should emerge within the consortium. Confidentiality issues will be treated according to the rules established in the Consortium agreement which was signed by each of the partners. Another objective is to liaise with key stakeholders and to form consensus in order to maximize reuse of the project outcomes. The dissemination strategy ensures that the project results are communicated to the target group in a manner appropriate to that target group. To a great extent, this enables the reuse and enhancement of the outcomes. To publicise the results of GUARDIAN is seen as a core activity within the project. The project's outputs will be presented and delivered to relevant internal and external target groups from end user organizations, ICT sector, health community, sensor network sector, research, and academia. The overall approach described in this chapter defines relevant steps for successful dissemination of the results during the term of the GUARDIAN project.

3.2. Key Messages

Considered to be a first priority when defining the communication policy, it is essential to establish key messages that will be communicated in the various publications according the purpose of dissemination and target audience. The key messages will be defined in terms that they will be understandable to each target group. These key messages will be included in all the project communications. Depending of each target group a more technical, commercial or political language can/will be chosen.

The GUARDIAN key messages, focus on the main objective of the project which is to develop the GUARDIAN system. These key messages are defined as follows:

- **Develop a useful and meaningful service** in co-design with human beings;
- GUARDIAN provides a helping hand and **reduces stress and care burden** of informal carers who are still part of the work force, by keeping them informed and by easing communication between relatives.
- With GUARDIAN, seniors have a companion that can **take over tasks from caregivers, support at home with safety, reminders and contacts with others to improve the social connectedness and independency.**

- **Enhance quality of life** of the informal carer and person with dementia;
- **Support communication and information** between formal and informal carers;
- GUARDIAN provides professional nurses with ‘**eyes and hands**’ in the home of the person in need of care’
- The technology and services used in GUARDIAN consist **of existing support robots**;
- GUARDIAN **creates new European cooperation** and is fully aware of the need for the European dimension, in particular in respect to creating a sustainable business model that can be applied across Europe;
- GUARDIAN **improves ability to be resilient** to the progress of the disease;
- GUARDIAN **raises the care capacity** by adding technological support to the primary care “responsibility” of formal and informal caregivers (remark to trigger professional care organizations);
- Prevention (second and third) and prediction are important focusses in GUARDIAN to **lower cost in the care for vulnerable elderly people**.

3.3. Dissemination Targets

The starting point of the development of a suitable dissemination plan is the identification of potential target groups of the project. Two main target groups are highlighted:

- general public
- relevant stakeholders

Dissemination through general public will be carried out by partners through the realization of a project video, a brochure, press release, knowledge sharing portal, and with the participation in conferences presenting project papers and results, etc.

Dissemination to relevant stakeholders has to be more accurate in order to satisfy the target’s stakes. In table 1, the stakeholders classification is reported and in the next section an analysis of possible target activity sectors is represented.

Table 1. Stakeholders Classification

Category	Target Group
End Users	Frail older adults
	Informal caregivers
End Users	User associations
	Caregivers’ associations
End Users	Professional carers

Enterprise and policymaker	Local authorities and national/regional public bodies
	European commission
	Insurances
Enterprise and policymaker	Manufacturers
	Suppliers
	System integrators
	Vendors
	Service providers
Scientific community	AAL community
	Researchers
	Civil society organisations

4. Dissemination Strategy

This document defines the dissemination strategy of the GUARDIAN project. At first a definition of the term “dissemination” will be given. The earliest recorded occurrence in the language could be found in Latin: disseminatus, past participle of disseminare, from dis- + seminare to sow, from semin-, semen seed [3]. Considering this, a synonym for the term “dissemination” is: to sow widely.

The European Commission defines dissemination as “a planned process of providing information on the quality, relevance and effectiveness of the results of programmes and initiatives to key actors. It occurs as and when the results of programmes and initiatives become available” [2].

The interpretation of “dissemination” for the GUARDIAN project is, that a large audience beyond the consortium should be aware of the project, reuse and refine the results and give input during the project term. To sow widely in the context of GUARDIAN means a systematic distribution of results and additional project information, in order to realise their full impact in the commercial world. This assures sustainability of the project and its outcomes.

The European Commission defines the dissemination plan:

“A plan for dissemination (and exploitation) indicates those activities that are going to be carried out during a project’s lifetime.”...” must contain activities to be carried out continuously until the project’s end (and possibly afterwards).” [1]

4.1. Graphic Identity Guideline

A solid and coherent graphic identity is the base for communicating towards the outside world. Consistent graphic identities allows to the target audience easily identify and recognize the GUARDIAN project. Therefore it is considered to be crucial that all materials distributed by the project partners carry the corporate identity.

The GUARDIAN team took into account the following principles in order to build a successful ‘brand’:

- Attractive, meaningful title for the project: Name of the project is essential. It will be the label, the brand that will be used in all communications. This name should catch people’s attention and communicate the central idea of the project. GUARDIAN means: a person (i.e. the robot) who guards, protects, or preserves. ‘GUARDIAN’ fulfils these requisites: easy to remember, meaningful communicating.
- Logo: The first step to create a graphic identity is to design an effective logotype.

4.1.1. GUARDIAN Logo

A variety of possible logo's have been designed, as shown in Figure 3. The logo on the right is the logo that was finally chosen by the consortium.

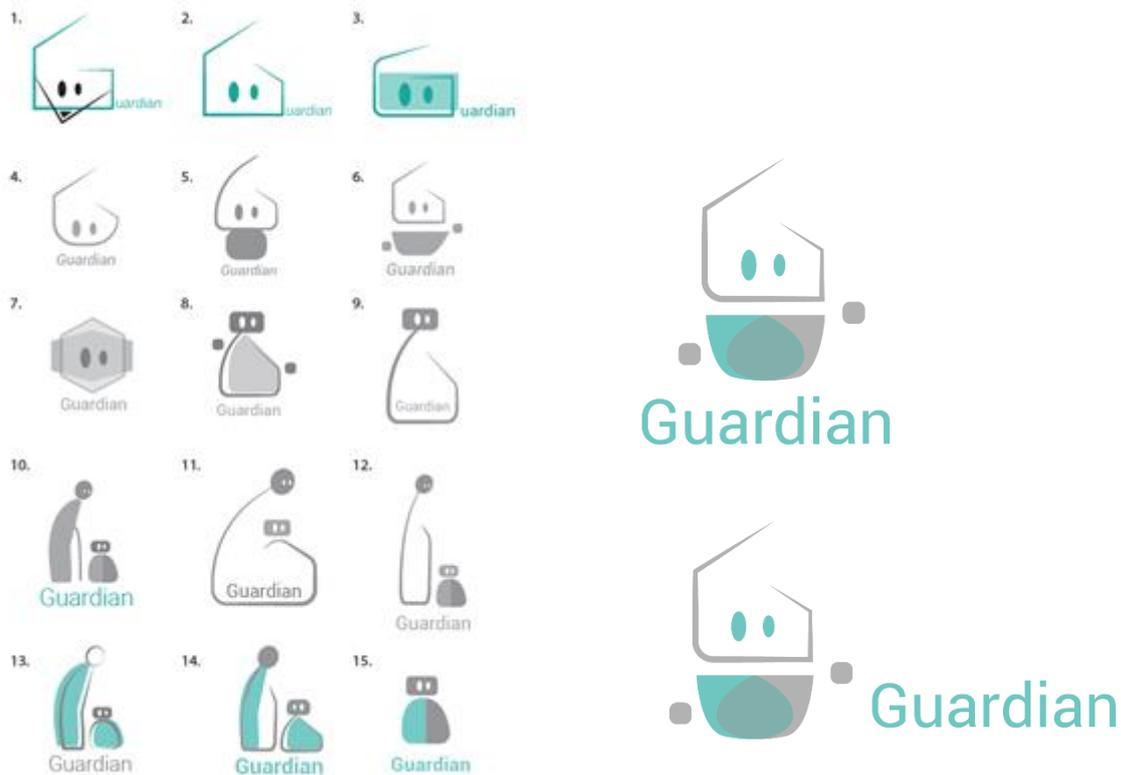


Figure 3: Guardian logos

4.1.2. Document template and language

Document templates

Templates for PowerPoint (PPT) presentations (excluding those that are to be created according to fixed format specifications, e.g., scientific papers) are created and uploaded to the GUARDIAN online Microsoft Teams repository. It enables uniform appearance, and ensures to provide basic information about the project.

Guardian: Social robots in long term care



Opportunity

- Independent living
- Silver economy
- Eco-systems approach
- Informal carers working live
- Work efficiency of formal carers

Partners

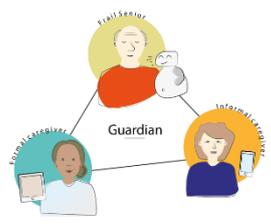
Participant organisation name	Country
Vilans	The Netherlands
ConnectedCare Smart robot solutions	The Netherlands
IEF	Italy
Eindhoven University of Technology	The Netherlands
University of Geneva	Switzerland
Hospital University of Geneva	Switzerland
Università Politecnica delle Marche	Italy
Gezorgteep hoordwest-veluwe	The Netherlands



Aim

The GUARDIAN project introduces a **social companion**, which aims to be of direct benefit for three groups of end-users.

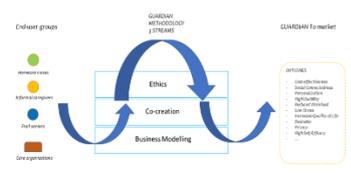
- (1) The GUARDIAN social robot will be the **eyes, ears and communicative channel** for **homecare nurses**. They can use the robot to support individual frail clients that also need attention when they are not there. Homecare nurses spend much of their time on time-consuming routine tasks/check-ups – GUARDIAN **enhances** work pleasure and reduces stress and workload.
- (2) **Informal caregivers** need their work and want to support their loved ones. They experience high levels of stress and mental and physical fatigue as they worry about them and have difficulties finding a work-life balance due to the additional care tasks. GUARDIAN provides a helping hand.
- (3) **Frail seniors** prefer to live in their own house for as long as possible. Informal caregivers and homecare nurses cannot be present 24/7. WITH GUARDIAN, the seniors have a companion that can take over tasks from caregivers, and **supports** them in prolonged independent living.



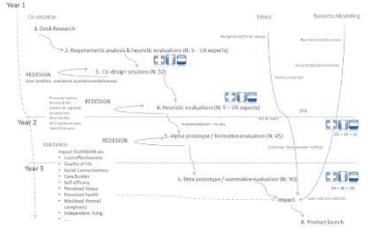
Iterative Design

The GUARDIAN project follows from the start a unique **iterative** design, research and development **methodology** with 3 streams, focusing on:

1. Co-creation & Personalization
2. Ethical and value-sensitive design
3. Business Modelling & Cost effectiveness



Methodology



Guardian: Main Functionalities

- **Social Companion** (dialogues, personality, identity)
- **Monitoring** (mental well-being, physical discomfort)
- **Coaching** (reminders, medication, food -> behaviour change)



Thank you



www.guardian-aal.eu

Figure 4. GUARDIAN template and standard presentation.

Languages

All products and documents of the project will be created in English. We will encourage interested parties to translate freely any public documents to any official European language. An electronic copy of translated document should be sent to the consortium and will be uploaded to the Documents part of the GUARDIAN website.

4.2. Dissemination Tools

4.2.1. Project Presentation

A GUARDIAN standard Project Presentation (see Figure 4) will be part of the different dissemination tools designed to support the GUARDIAN dissemination efforts. The presentation is to be used in all events and meetings where GUARDIAN results and activities are presented.

The GUARDIAN project PPT presentation provides a general project overview, background information, objectives, rationale, partners and first results. This presentation will be updated during the course of the project.

4.2.2. Poster

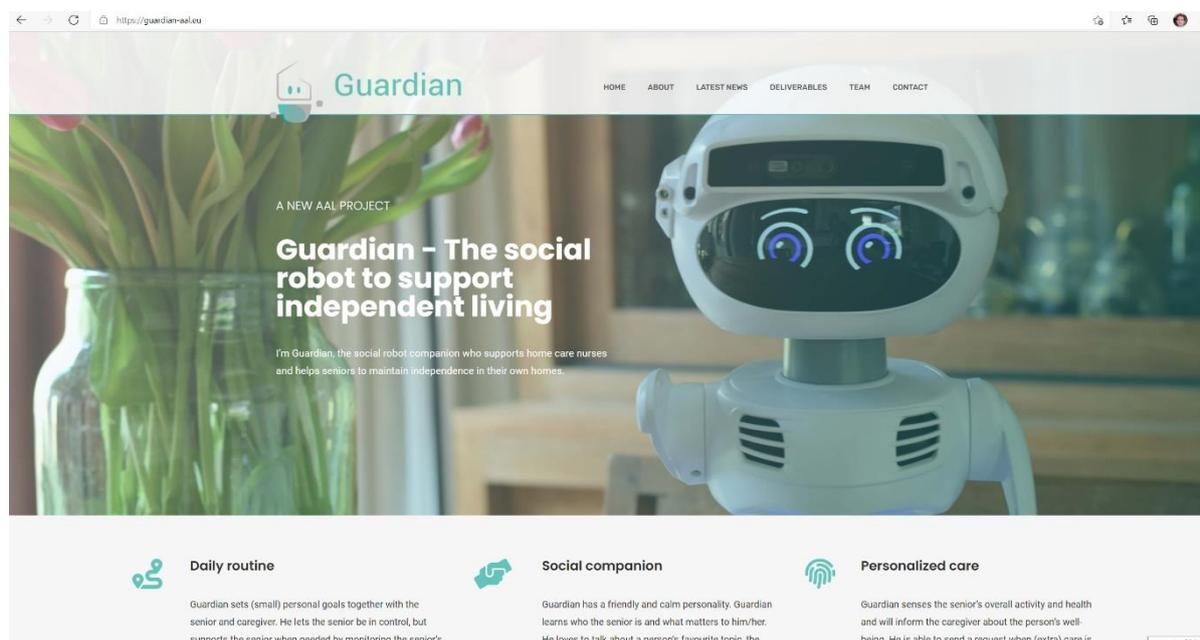
The main purpose of the poster is to catch the audience attention for offline conferences (which have not been available since the start of the project).

The GUARDIAN poster includes the following main items:

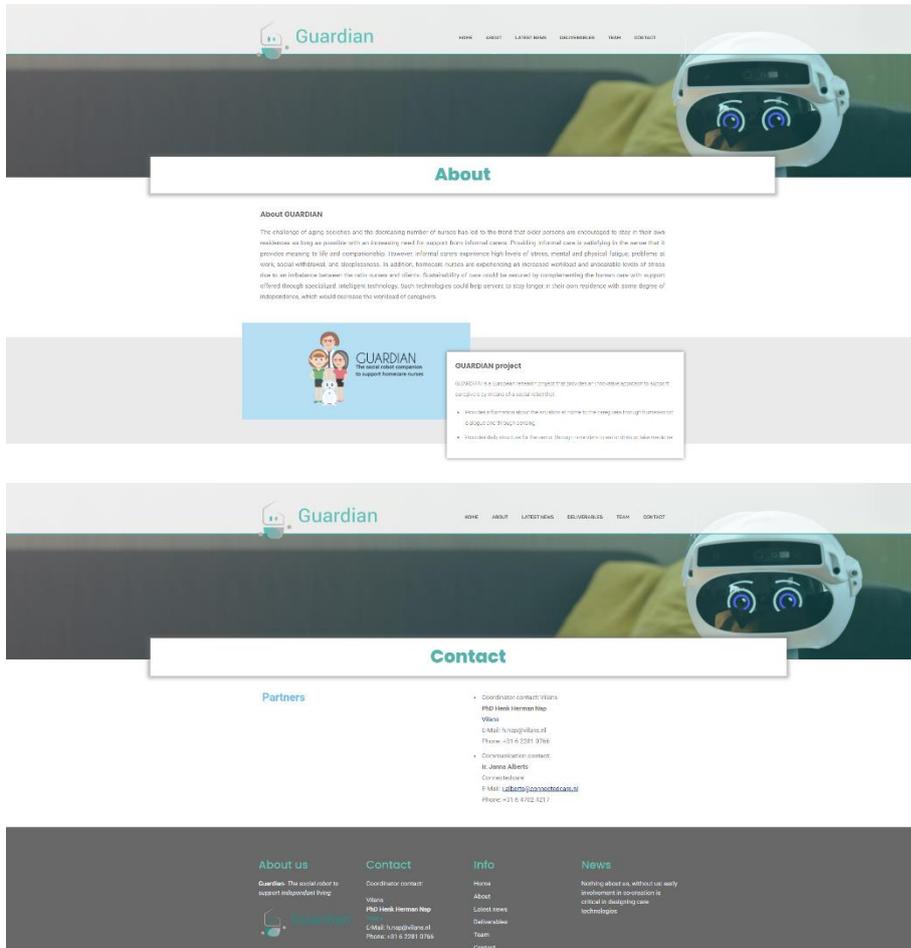
- brief description of the project;
- scientific objectives;
- technical objectives;
- list of partnerships and contacts.

This poster will be used in workshops, conferences and other events as a presentation of the project where the consortium partners participate or hold the event. It is complementary to the leaflets, since the latter provide more detailed information about GUARDIAN.

4.2.3. Website

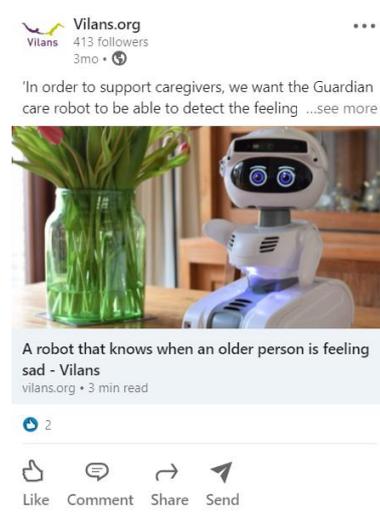


The website was ready in the first months of the project <https://guardian-aal.eu/> (deadline of the Deliverable D5.3, “Website of the project and social networks accounts”, M6).



4.2.4. Social Networks

GUARDIAN will disseminate the project results, news and information by existing social networks. Considering the use that people make of social network, the consortium decides to use existing Twitter & LinkedIn accounts to disseminate the project (see example below).



4.3. Dissemination Activities

Within this project extensive and wide dissemination activities will be carried out, particularly making use of social media, such as YouTube and LinkedIn. The solutions and benefits of GUARDIAN will be discussed extensively at scientific conferences, in scientific papers, in stakeholder meetings at regional and transnational level and in Internet forums and portals for large scale reaching the end-users. At this stage, it can be anticipated that the dissemination strategy of GUARDIAN will combine local and regional, national and international activities. A preliminary list from the GUARDIAN proposal and DoW of these activities is given below and see also 4.3.2:

Local and Regional activities

- Frequent coverage by local and regional media: newspapers, radio and television;
- Organisation or participation in seminars dedicated to rehabilitation, care robotics, big data, m-health, healthy ageing, silver economy, services to citizens, etc.;
- Preparation of short promotional videos for different use cases, different particular situations in each of the participating regions for regional promotion of the project concepts and results.

National

- Organisation of seminars and workshops dedicated to the GUARDIAN evaluations with the participation of industrial partners, health and social care professionals and managers, clients', caregivers' and professionals' associations;
- Participation in national events and fairs dedicated to care robotics, rehabilitation, big data, m-health, healthy ageing, silver economy, services to citizens, etc.;
- Articles in national newspapers and magazines for both the general public and the healthcare professionals and managers;
- National fairs such as for example Zorg & ICT (Utrecht, the Netherlands) and Health Valley (Nijmegen, the Netherlands).

International

- The AAL forum 2020, 2021 & 2022
- Attractive and user-friendly project website;
- High-profile interim workshop and final conference with participation of a panel of international experts and opinion leaders from outside the consortium;
- Participation in international events and fairs dedicated to care robotics, rehabilitation, big data, m-health, healthy ageing, silver economy, services to citizens, etc.;
- International fairs such as MEDICA (Düsseldorf) and the Salone di Mobile (Milano).

4.3.1. Direct Proactive Communications

All partners take part in and carry out dissemination activities and by this means contribute to draw maximum attention beyond the project's consortium. They represent the project when addressing external stakeholders from industry and academia. The respective selection of media or communication channels depends on the target group and desired dissemination activity (like create awareness or understanding). Therefore, bearing in mind the target audience, in view of each activity, the responsible partner will select the appropriate media type.

4.3.2. Publications

GUARDIAN partners will seek to disseminate the project results using different publications. Apart from scientific publications, project documents will be prepared for communication particularly during events, and press releases will be send out to relevant media in different countries.

Unique to GUARDIAN is that we organized blogs with interview per partner. See for an overview (updated to May 2021):



<https://www.vilans.org/item/easing-the-caregivers-burden-with-the-guardian-care-robot/>



Guardian is a three-year project that started on the 25th of February, 2020. Coordinator Dr. Henk Herman Nap and researcher Dirk Lukkien from Vilans, share an update and discuss the role of responsible innovation. 'We will innovate responsibly. Therefore it is essential to reflect and be constantly aware of the choices we make in the development process.'

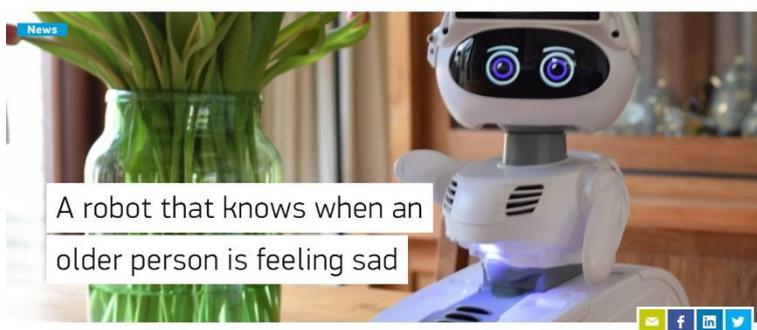
<https://www.vilans.org/item/guardian-enhancing-the-autonomy-of-older-people-respecting-privacy/>



The University Politecnica delle Marche (UNIVPM) in Italy is involved in, among others, the technological development of social robot Guardian. Researcher Sara Casaccia: 'In providing care services, a social robot like Guardian can limit the trips to hospital and the GP for older persons and their informal carers. This is beneficial in times of a pandemic'.

Casaccia: 'Guardian can be the eyes and ears of the older person in providing information about him to carers. The aim of UNIVPM is to develop different skills and functionalities of the robot. We are working on sensors "on board" or integrated into the robot. So that the robot can identify where the older person is in the room and interact with the user. This means less worrying for the informal caregiver who will receive information, for instance,

<https://www.vilans.org/item/a-social-robot-can-be-of-great-use-in-times-of-a-pandemic/>



'In order to support caregivers, we want the Guardian care robot to be able to detect the feelings of an older person', says Alexandre de Masi, PhD Student of the University of Geneva who is involved in the research. 'With Artificial Intelligence (AI) the robot will improve the interpretation of emotions over time.'

His grandparents will turn ninety in a couple of years and are a strong motivation for his work. De Masi: 'It would be wonderful if they can live in their home as long as possible. As involved researchers, we all have to ask ourselves this question: "How can I help my parents or grandparents in the future?"

<https://www.vilans.org/item/a-robot-that-knows-when-an-older-person-is-feeling-sad/>

GUARDIAN partners will publish the results (according to the IPR protection strategy) in the scientific literature, dedicated journals and magazines in the field of AAL, gerontechnology,

domotics, robotics, etc. Moreover, results will also be published in the GUARDIAN newsletters and on the GUARDIAN website. Project documents and posters will be prepared for communication purposes, in particular for events (e.g., conferences, workshops and seminars).

Scientific Publications

Table 2. Scientific Publications

Target Journals	description	Research area
Gerontechnology Journal	Study on technology to support/aid the aging society	Robotics, AAL, Gaming
Journal of Social Robotics	Journal focussed on social robots to interact and support humans	Robotics
The Gerontologist	Study on ageing, STS studies, ethics on AI, gerontech	Gerontology/Gerontechnology wide
International Journal of Technology and Human Interaction (IJTHI)	Study on HTI, including robotics	HTI
BMJ Open	Special issues on Gerontech	Gerontech
...		

GUARDIAN consortium will define the list of Journals iteratively during the project phases.

Press Releases

In order to undertake a successful and efficient external written communication strategy with interested parties and to increase the public awareness and attention regarding the project, press releases will be sent periodically to relevant media in each country. A baseline press release will be available on the project webpage and/or via Vilans.org.

All GUARDIAN press releases should contain the following minimum information:

- Title: Relevant to the topic of the release;
- Project overview: Mentioning the name of the project, the fact that it is an AAL project co-financed by the European Commission and from the National Ministries, and that a consortium of nine partners are working together;
- A link to the project webpage for further information;
- Content: Well-structured text. The most important information should be at the beginning of the text. Divide the information into paragraphs under subtitles and provide as complementary information as possible (e.g., photographs, diagrams, tables and information about the partners).

Availability of project public deliverables

Table 3 shows the project public deliverables. Effort was made to maximise this list.

Table 3. Public Deliverables

Del. n°	Deliverable name	WP n°	Type of deliverable	Dissemination level	Delivery date (project month)
D2.1	User Involvement Plan	2	R	PU	5
D2.2	Ethics/gender and Data Protection Compliance Protocol	2	R	PU	5
D2.3	Users' requirements report	2	R	PU	6
D2.6	Mock-up evaluation report	2	R	PU	12
D4.1	Evaluation instrument report	4	R	PU	16
D4.2	GUARDIAN Usability report	4	R	PU	18
D4.3	Alpha Pilot test report	4	R	PU	28
D4.4	Beta Pilot test report	4	R	PU	34
D5.1	Project presentation and project leaflet	5	R	PU	4
D5.2	Dissemination plan	5	R	PU	6
D5.3	Website of the project and social networks accounts	5	R	PU	36
D5.5	Dissemination report	5	R	PU	36

4.3.3. Conferences, Exhibitions, and Events

The AAL spaces are rapidly growing and changing. As best possible, GUARDIAN will aim to understand which events have a high-impact and which events we should become strategically aligned to. Within its first few months, GUARDIAN has already been invited to several events and activities.

Table 4. Conferences, exhibitions, and events

Gerontechnology Trondheim 2020
Gerontechnology South-Korea 2022
CHI 2021/2022
AAL Forum 2020/2021
JAIN Challenge NL 2021
Nieuwe Generatie Ouderenzorg Utrecht 2020/2021
CareTech 2021
World JAIN Challenge 2022
CES 2022 USA
International Conference on Social Robotics 2022 Prague

This list is not complete. The consortium will participate to several conferences for all the three years of the projects to present the results. In this moment, this is the list of the next conferences where GUARDIAN partners will participate.

5. Conclusion

This deliverable has presented the overall (and running) dissemination plan to be applied for the GUARDIAN project. This Awareness and Dissemination plan is the basis of a widespread dissemination of the overall picture and the results of GUARDIAN, also beyond the project's end. This plan will function as a guide for the consortium partners and at the same time will provide common tools that require the participation of all. Based on the objectives for dissemination and the generic dissemination activities creating awareness, understanding and action, the defined dissemination activities are aimed to enhance public awareness and ensure the involvement of targeted stakeholders in order to raise awareness of the work, activities and outcomes of the GUARDIAN project. Besides, the activities to be carried out provide information to the scientific community and disseminate the mere existence of the project to the research stakeholders. The GUARDIAN partners will use a variety of dissemination tools/activities to reach all audiences. These include among others attend conferences, events, workshops, website, leaflets, publish articles and papers, send press releases, present the project's via virtual or mobile demonstrators etc. Our stance regarding dissemination is that an effective dissemination plan should be "dynamic" in its nature, meaning that it is subject to changes based on newly available data. In this respect, further opportunities will be explored and measures will be taken by all consortium members to collaborate in other activities and disseminate know-how. This way the GUARDIAN dissemination plan is considered a constantly evolving process which comprises the update of the project's activities, the gathering of publishable results from the rest of the partners, and any other important activities reinforcing the efforts to disseminate the project's outcomes.

References

1. European Commission, DG Education and Culture: Dissemination and exploitation of results, Glossary of terms. July 2006. (http://ec.europa.eu/dgs/education_culture/valorisation/glossary_en.html)