



## ANNUAL PROGRESS & FINANCIAL REPORT

*Please send this report ELECTRONICALLY to the Central Management Unit (CMU) as well as a copy to the National Contact Persons (NCPs) of the coordinator and project partners*

*The coordinator of the project must submit this report within 60 calendar days after the end of each calendar year, on behalf of the consortium.*

*If you have any additional question,  
please contact the AAL CMU at [CMU@aal-europe.eu](mailto:CMU@aal-europe.eu),  
or your NCP (see details on [www.aal-europe.eu/aal-ncp](http://www.aal-europe.eu/aal-ncp))*

<b>Report date</b>	28/02/2015
<b>Reported period</b>	This report covers the period from 01/01/2014 to 31/12/2014
<b>Report No.</b>	<b>second</b> annual report of the project

<b>PROJECT</b>	
<b>Project full title</b>	HEalthy Life support through COMprehensive Tracking of individual and Environmental Behaviors
<b>Project acronym</b>	HELICOPTER
<b>Project No.</b>	AAL-2012-5-150
<b>Project Website</b>	http://www.helicopter-aal.eu/
<b>Project duration</b>	<ul style="list-style-type: none"> <li>•Starting date: 01/07/2013</li> <li>•Termination date: 30/06/2016</li> </ul>
<b>Coordinator's name and details</b>	Full name: Sandro Girolami E-mail address: sandro.girolami@meteda.it * Telephone number: +39 347 3572118 * <i>* Both e-mail address and tel. number must be provided.</i>

<b>PROJECT PARTNERS</b>			
No.	PARTNER ORGANISATION NAME	PARTNER ORG. ACRONYM	AAL NATIONAL FUNDING AGENCY
1	Me.Te.Da. S.r.l. (coord.)	METEDA	Ministry of Education, University and Research
2	Università degli Studi di Parma	UNIPR	Ministry of Education, University and Research
3	SC Vision Systems SRL	VSRO	UEFISCDI
4	University of Skövde	HIS	VINNOVA
5	Laboratorio delle Idee S.r.l.	LABIDEE	Ministry of Education, University and Research
6	Municipality of Skövde	SKOVDE	VINNOVA
7	Copenhagen Institute of Interaction Design	CIID	Danish Agency for Science, Technology and Innovation
8	Coöperatie Slimmer Leven 2020	SL2020	ZONMW
9	International Business School, Jönköping University	JIBS	VINNOVA
<i>Please add more lines if required</i>			

## 1. ADMINISTRATIVE PROJECT PROGRESS

*Report below any changes in administrative aspects of the project, excluding all financial aspects.*

CHANGE IN	No	YES	IF YES: REMARKS/EXPLANATIONS
Duration of the project	X		
Consortium composition	X		
Project staff members	X		
Other	X		

## 2. DELIVERABLES SUBMITTED AND MILESTONES ACHIEVED DURING THE REPORTED PERIOD

*Please list below the deliverables and milestones, using the same numbering as specified in the description of work.*

*In case of deviations from the description of work (work plan) regarding delivery dates, achievement of milestones or changes in planned outputs, please give details, and indicate whether and to whom (AAL NFA/NCP) the changes have been communicated.*

DELIVERABLE	DUE DATE	RESPONSIBLE PARTNER	DELIVERY DATE	REMARKS/EXPLANATIONS
D.1.1	28.02.2014	METEDA	28.02.2014	
D.1.2	31.12.2014	METEDA	31.12.2014	
D.2.1	31.12.2014	CIID	31.12.2014	
D.2.2	30.06.2014	CIID	30.06.2014	
D.3.1	31.12.2014	UNIPR	31.12.2014	
D.3.2	30.06.2014	UNIPR	30.06.2014	
D.4.1	28.02.2014	HIS	28.02.2014	
D.4.2	30.06.2014	HIS	30.06.2014	

<b>D.4.3</b>	31.10.2014	HIS	31.10.2014	
<b>D.5.1</b>	31.12.2014	SL2020	31.12.2014	

<b>MILESTONE</b>	<b>DUE DATE</b>	<b>RESPONSIBLE PARTNER</b>	<b>ACHIEVEMENT DATE</b>	<b>REMARKS/EXPLANATIONS</b>
<b>M.1.</b>	31.12.2014	CIID/UNIPR	31.12.2014	

### 3. SCIENTIFIC/TECHNICAL PROJECT PROGRESS TO DATE

*Please check appropriate box:*

The project  is in line with (or)  deviates from the valid description of work (version/date: )  
In the case of deviation, please explain how and why:

Provide a summary of developments since the last report, including:

- The performance of the project consortium
- Technical achievements
- End-user services

The project is currently at about midterm, and work carried out was consistent with the original workplan and schedule. Within 2014, a number of meaningful goals were achieved, which can be summarized as follow:

**Infrastructure:** work has been carried out in setting up the monitoring heterogeneous sensor network. A data structure has been defined, suitable for managing sensor data in an abstract, device-independent fashion, thus accounting for interoperability and openness. With respect to sensors, most attention was paid to the localization/identification issues, which are, of course, crucial when behavioral analysis come into play. All sensors can be paired to “identification” nodes, communicating with a wearable (thus unique) device. Also, a RF-based gateway technology has been developed.

**Models:** the core issue of the project is the management of knowledge needed to extract sensible inferences from sensor data patterns. To this purpose, much interaction developed between collaborating partners having medical and data science expertise. Based on this, a specific ontology was proposed and the concept of “automatic triage” was introduced: eight different diseases were selected, among those most diffused in the target elderly population, and specific strategies for the elicitation of “diagnostic suspicions”, based on daily life activity tracking, were devised. A set of tools, based on Bayesian Belief Network concepts, were implemented and some simulation and functional assessment was carried out.

**Users:** besides the automatic triage procedures, which look almost “silent” to the end-user, the project investigated further openings provided by the infrastructure, with specific aim at engagement and motivation of the elderly user in approaching Helicopter technology. Actual perspective end-users at pilot locations were interviewed and prompted, searching for service opportunities. Co-creation sessions were conducted involving several partners and some interaction concepts were developed.

**Pilots:** preliminary work was started, discussing main recruitment criteria and involving some users in the design phases discussed above.

In summary, the project outcomes are aligned with expectancies so far; no critical issue emerged and current activities are expected to lead to the experimentation phase in due time. Evaluation will then start, allowing for validating concepts and implementation technology and enabling design feedbacks and project refinements.

*How many consortium meetings were held during the period covered by this report?*

During the reporting period, the HELICOPTER Consortium held the following meetings:

- A general assembly was held in:
  1. Copenhagen, on May 7/8-9, 2014. The principal aims of the general assembly is verify the development of the project and to plan next months. Particularly attention was dedicated to the technical aspect of WP4 : domain's definition, tools and different option of modeling, validation.
  2. Brasov, on September 9-10, 2014. The principal aim of the meeting is planning to achieve next milestones, particularly to release a demonstrator kit, including hardware e software development, preliminary user interface implementation, user interaction and pilot planning, including service view and business model
- A Management Committee Meeting was held on January 13, 2015 through teleconferencing facilities. The aims of the meeting is planning logistic and technical aspect in order to the MTR and the annual report.

The above meetings fulfill the schedule defined in the proposal and the Consortium Agreement.

Besides such formal meetings, a number of subgroup meetings (either physical or virtual) were held, in order to proceed with technical developments.

#### 4. IMPACT AND AWARENESS ACTIVITIES

PLEASE INDICATE IF THE PROJECT WILL PRODUCE/ACHIEVE OR HAS PRODUCED/ACHIEVED ANYTHING OF SPECIAL INTEREST FOR THE AAL JP (E.G. A PROJECT EVENT, PRESS RELEASES, PUBLICATIONS, PATENTS, DEMONSTRATORS, ETC.).

Project participant responsible (indicate country)	Activity	Date	Medium and reference (press, event, newsletter, webpage, etc.)	Indicative coverage
3.VSRO, (RO)	Presentation of the HELICOPTER project at ALT Festival organized by ALT BRASOV - the Cluster for Innovation and Technology Brasov	22/11/2014	event	Regional coverage (32 attendees from education and business mediums)
UniPR (IT)	Presentation at EXPOSANITÀ (Health Exhibit) Bologna, IT	22/5/2014	<a href="http://www.senaf.it/convegni/nuovo_ambiente_bagnobrochure.pdf">http://www.senaf.it/convegni/nuovo_ambiente_bagnobrochure.pdf</a>	70 (Engineers, Architects)
UniPR (IT)	Presentation at R2B (Research to Business exhibit), Bologna, IT	5/6/2014	<a href="http://grafica.smau.it/pdf/2014/r2b/R2B2014_PROGRAMMA.pdf">http://grafica.smau.it/pdf/2014/r2b/R2B2014_PROGRAMMA.pdf</a>	50 (researchers, entrepreneurs)
UniPR (IT)	Seminar at "Giornata delle buone pratiche PROGES" (Best practice day), Parma, IT	29/5/2014	<a href="http://www.proges.it/news/news-cooperativa/giornata-delle-buone-pratiche.aspx">http://www.proges.it/news/news-cooperativa/giornata-delle-buone-pratiche.aspx</a>	40 (medical doctors, caregivers, elderly service providers)
UniPR (IT)	Presentation at ISG 2014 Conference , Taipei, TW	19/6/2014	Montaldo, F., Bianchi, V., De Munari, I., & Ciampolini, P. (2014). Detection of elderly activity by the wearable sensor MuSA. <i>Gerontechnology</i> , 13(2), 264.	150 (conference attendees)
UniPR (IT)	Presentation at FORITAAL 2014 (National AAL Forum) Catania, IT	4/9/2014	MUSA: Wearable Multi Sensor Assistant For Human Activity Recognition And Indoor. Localization. F. Montalto, C. Guerra, V. Bianchi, I. De Munari, P. Ciampolini. (in press, Springer)	90 (forum participants)

## 5. OTHER COMMENTS

Report below any other issue or comment (optional)

(your text here)

**DO NOT FORGET TO FORWARD ALL UPDATES OF OFFICIAL PROJECT DOCUMENTS (E.G. DESCRIPTION OF WORK, CONSORTIUM AGREEMENT, ETC.) TO THE AAL CENTRAL MANAGEMENT UNIT AND NCP OF THE COORDINATOR AND PROJECT PARTNERS.**

## 6. FINANCIAL REPORT

### PROJECT FINANCIAL DEVELOPMENT DURING THE REPORTING PERIOD

PARTNER ORG. ACRONYM	Actual cost of the project for the reporting period	Planned cost of the project for the reporting period	Actual effort in person/ months for the reporting period	Planned effort in person/ months for the reporting period	Remarks
1.METEDA	137.000	140.000	13 PM	13 PM	
2. UNIPR	69.438	N/A	13 PM	N/A	
3. VSRO	€ 46.039,12	€ 50.170,00	55 PM	46 PM	
4. HIS	€ 33.232,00	€ 11.490,00	3,24PM	2,28PM	Comp. for slow start + increased speed.
5. LABIDEE	€ 52.905,02	€ 107.500,00	16,5 PM	17,5 PM	
6. SKOVDE	€14.443,00	€15.791,00	4 PM	4 PM	EUR/SEK rate 8,9
7. CIID	€ 131.663 ,00	€ 148.584,00	12.9 PM	10 PM	EUR/DKK rate 7,45
8. SL2020	€ 32.978,97	€ 150.301	PM 17	PM 36	
9. JIBS	€ 24.729,70	€ 29.280	1,5 PM	2PM	Exchange rate 9,89 as of 150216
TOTAL	410.765,81				



PROJECT PAYMENTS DURING THE REPORTING PERIOD					
Partner Organisation Acronym	Funding requested (if applicable)	Date of request sending (if applicable)	Date of receiving the money	Time between request and receive (if applicable)	Remarks
1.METEDA	€.....	DD/MM/YYYY	DD/MM/YYYY	-----	
2. UNIPR	€.....	DD/MM/YYYY	DD/MM/YYYY	-----	
3. VSRO (EC)	€ 7.371,45	04/12/2013	05/03/2014	3 months	
3. VSRO (National grant)	€ 10.888,00	08/07/2014	01/08/2014	23 days	
3. VSRO (EC)	€ 8659.53	08/07/2014	14/11/2014	4 months	
3. VSRO (National grant)	€ 9.177,19	05/12/2014	16/12/2014	11 days	
4. HIS	€16.517,00	DD/MM/YYYY	25/4/2014, 12/6/2014, 19/11/2014		
5. LABIDEE	€.....	DD/MM/YYYY	DD/MM/YYYY	-----	
6. SKOVDE	€ 7.895,00	07/07/2014	22/08/2014		
6. SKOVDE		09/01/2015	22/01/2015		
7. CIID	23.697,00 €	03/09/2014	28/11/2014	Not Applicable	DKK 176,541 Exchange rate 7,45
8. SL2020	€.....	DD/MM/YYYY	DD/MM/YYYY	-----	No funding received as of yet.
9. JIBS	SEK225.000,00 €22.256,73	Not applicable	02-06-2014	Not applicable	Exchange rate 9,89 as of 150216
	SEK225.000,00 €22.256,73	Not applicable	08-28-2014	Not applicable	Exchange rate 9,89 as of 150216
TOTAL	€120.059,10	-----	-----	-----	-----

*If applicable, please differentiate between EC and national grant payments*

**ADDITIONAL INFORMATION**

**Please check appropriate box:**

**The financial progress of the project  is in line with (or)  deviates from the partner's Grant Agreements & Work Packages plans (personal efforts, other costs, etc)?**

***In case of deviation, please explain how and why:***

**Have you encountered or do you foresee any financial difficulties for the project realisation (e.g. payments, additional costs, other)?**

It is worth mentioning that, despite Italian partners have duly and promptly fulfilled all formal requirements, at the end of 2014 the contract with the National Agency (MIUR) was still to be signed. It has been eventually signed on February 16, 2015. No payments has been received yet.

In order to avoid jeopardizing the whole project, Italian partners provided their effort anyway. Nevertheless, such a situation clearly made the management of project activities much harder than needed.

**Do you want to make any other comments in relation to the financial aspects of the project?**