

# WP4 PERIODIC REPORT

**Grant Agreement number: 250072**

**Project acronym: ISENSE**

**Project title: Integrated Quantum Sensors**

**Funding Scheme: STREP (ICT-FET-Open)**

**Date of latest version of Annex I against which the assessment will be made: 4. March 2011**

**Periodic report:**                    1<sup>st</sup>     2<sup>nd</sup>     3<sup>rd</sup>     4<sup>th</sup>

**Period covered:**                    from 1. July 2012 to 30. June 2013

**Name, title and organisation of the scientific representative of the project's coordinator<sup>1</sup>:**

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<sup>1</sup> Usually the contact person of the coordinator as specified in Art. 8.1. of the grant agreement

<sup>2</sup> The home page of the website should contain the generic European flag and the FP7 logo which are available in electronic format at the Europa website (logo of the European flag: [http://europa.eu/abc/symbols/emblem/index\\_en.htm](http://europa.eu/abc/symbols/emblem/index_en.htm) ; logo of the 7th FP: [http://ec.europa.eu/research/fp7/index\\_en.cfm?pg=logos](http://ec.europa.eu/research/fp7/index_en.cfm?pg=logos)). The area of activity of the project should also be mentioned.

## WP 4 - Dissemination

Work package leader: LUH

### Introduction

The objectives of this work package are:

- Dissemination of the project results to partners outside the consortium
- To make the scientific, professional and general public aware of the iSense project and its plans, results and potential benefits that can be derived from S&T achievements
- To attract additional RTD funds in order to make the iSense consortium operational and prosperous after the end of the project.

The work package is organised in seven tasks, which are listed in the table below.

Task-Nr.	Task	Task Leader
4.1	Communication tools	LUH
4.2	iSense film	LUH
4.3	Outreach campaigns and education	LUH
4.4	Contribution to portfolio and concertation activities at FET-Open level	BHAM
4.5	Marketing	LUH
4.6	Sensor deployment	BHAM
4.7	Use and dissemination of foreground	BHAM

### Summary of progress towards objectives and details for each task;

#### Task 4.1

- *Public web page (months 1-48)*
- *Internal web page (months 1-48)*

Completed, maintenance & updates ongoing

#### Task 4.2

- *iSense Film (month 24-36)*

The Film will be produced with a Hanover-based film contractor, who is travelling to BHAM and UNOTT to do interviews during the annual meeting and to film the apparatus in the labs. The contractor will also film footage in Hannover in the Institute of Quantum Optics and the Institute für Erdmessung. Also, a low cost portable camera will be sent to the other partners to add additional material. The preliminary outline for the film is as follows:

- Introduction: Geodetic applications of gravity sensing
- Visualisation of the principles of atom interferometry
- Introduction to the iSense project and role of the partners
- Impact of the iSense achievements so far
- Development of key technologies within iSense
- Vision for future quantum sensors

The film will be presented to the public in December 2013, while we aim to make first sequences available for the iSense presentation on the ICT conference in Vilnius (see Task 4.4).

In addition we aim to develop an educational Youtube film about the scientific background of atom interferometry, led by BHAM/UNOTT via their contact to the Sixty Symbols maker Brady Haran. The negotiations about this film are currently under way.

#### **Task 4.3**

##### **- Outreach campaigns (months 1-48)**

The well-established contact to the geodetic community will be covered by interviews with scientists and laboratory footage from the Institut für Erdmessung, situated in Hanover. In addition results are continuously published in international refereed journals, which are listed at the iSense web page.

#### **Task 4.4**

##### **- Contribution to portfolio and concertation activities at FET-Open level (months 1-48)**

We have made an exhibition stand application for the ICT 2013 - Create, Connect, Grow, in Vilnius on 6-8 November, 2013 to showcase the iSense apparatus and the vision behind it. We have received confirmation that this application was successful.

#### **Task 4.5**

##### **- Marketing (month 24-48)**

A Marketing Task Group has been established and takes care of strategic decisions such as film script and presentation strategies. Members: (E. Rasel, M. Popp, K. Bongs, P. Krüger).

#### **Task 4.7**

##### **- Use and dissemination of foreground (months 1-48)**

This will be covered by the Marketing Task Group.

#### **Clearly significant results**

See publications in section 5

#### **Deviations from Annex I and their impact on other tasks, available resources and planning**

NA

#### **Reasons for failing to achieve critical objectives and/or not being on schedule and explain the impact on other tasks as well as on available resources**

The delivery of the iSense Film (Milestone 7) has been delayed by 5 months in order to be able to include footage on the iSense apparatus. This delay is mainly a consequence of delays in atom chip and laser system delivery as well as the polarisation issues in the integrated fibre optic system, which are now solved. There is no impact on other tasks expected.

#### **Statement on the use of resources, highlighting and explaining deviations between actual and planned person-months per work package and per beneficiary in Annex 1**

The resources are in general agreement with Annex-I