

SensorART

A remote controlled Sensorized ARTificial heart enabling patients empowerment and new therapy approaches

INTRODUCTION

SensorART aims to provide a set of technologies for heart assistance, supporting patients with chronic heart failure, treated at home without renouncing to access high medical expertise, and healthcare professionals, keeping under control the performance of cardiovascular implanted Ventricular Assist Devices (VAD) by tele-control services.

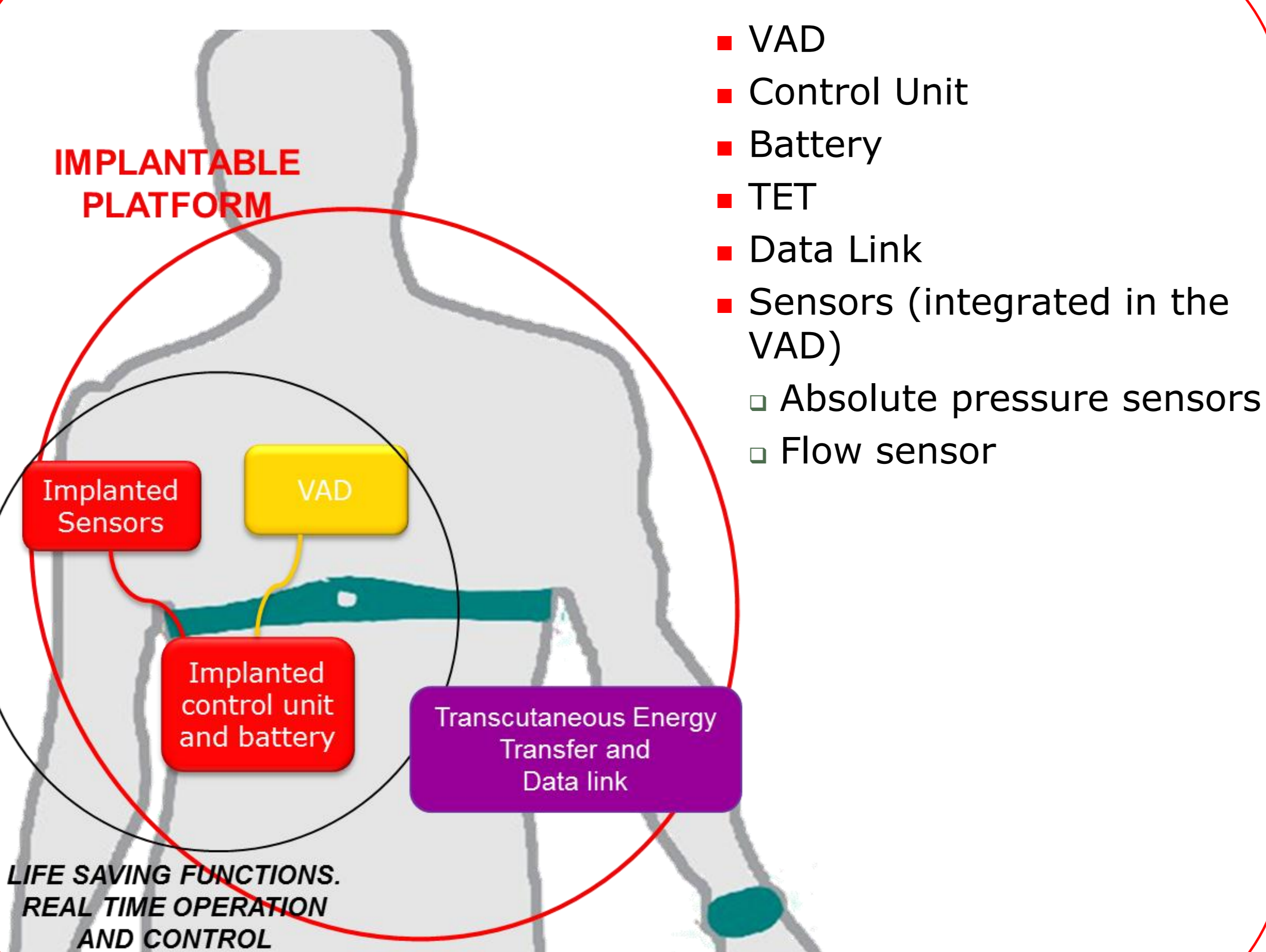
With these objectives, three different platforms will be developed: Implantable, Wearable and Point of care.

The implantable platform is VAD-dependent and is strictly related to an Auto Regulation Unit, which will be responsible for the data acquisition and management, the VAD setting and monitoring and the data transmission to patient and specialist interfaces.

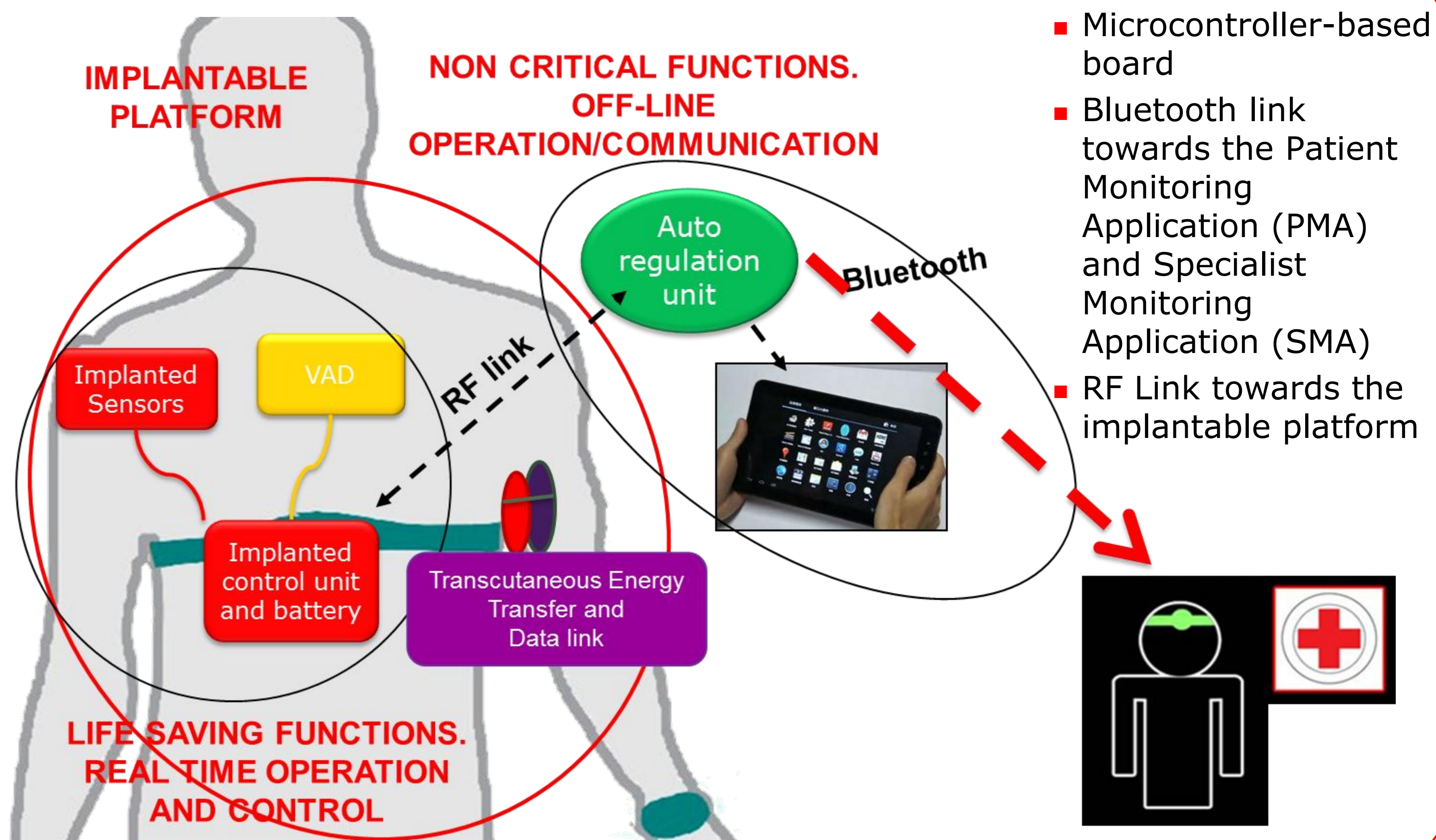
The wearable platform will be VAD-independent, with the purpose to acquire as many physiological parameters as possible to collect information about patient status and to support the specialist. Additional data will be acquired by the Point of Care platform, which has the potential to be a valuable tool for collecting data about inflammatory biomarkers.

N°	Partner	Country	Type
1	Consiglio nazionale delle Ricerche	IT	Research Centre
2	Scuola Superiore Sant'Anna Pisa Laboratorio Crim	IT	University
3	Katholieke Universiteit Leuven	BE	University
4	Niguarda Ca' Granda Hospital	IT	Public Hospital
5	Implemental Systems	ES	SME
6	Foundation for research and technology Hellas	EL	Research Centre
7	CircuLite GmbH	DE	SME
8	Université Claude Bernard Lyon 1	FR	University
9	Dataseel Bilgi Sistemleri A.S.	TR	Large Enterprise
10	Institute of biocybernetics and biomedical engineering - Polish Academy of Sciences	PL	Research Centre
11	Velti SA	EL	SME
12	Intrarom S.A.	RO	Large Enterprise
13	Em-tec GmbH	DE	SME
EA	TWINS	Japan	University

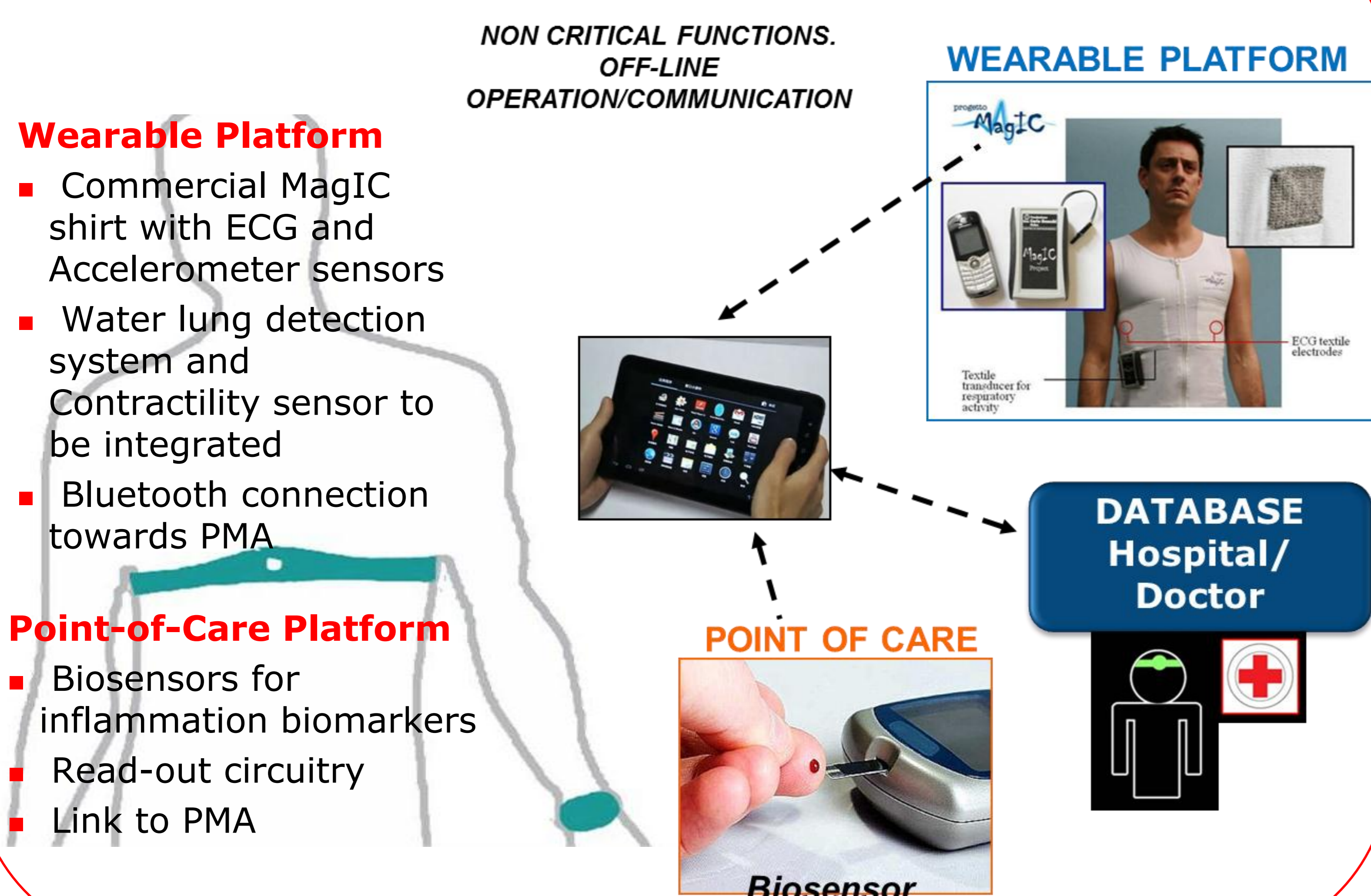
IMPLANTABLE PLATFORM



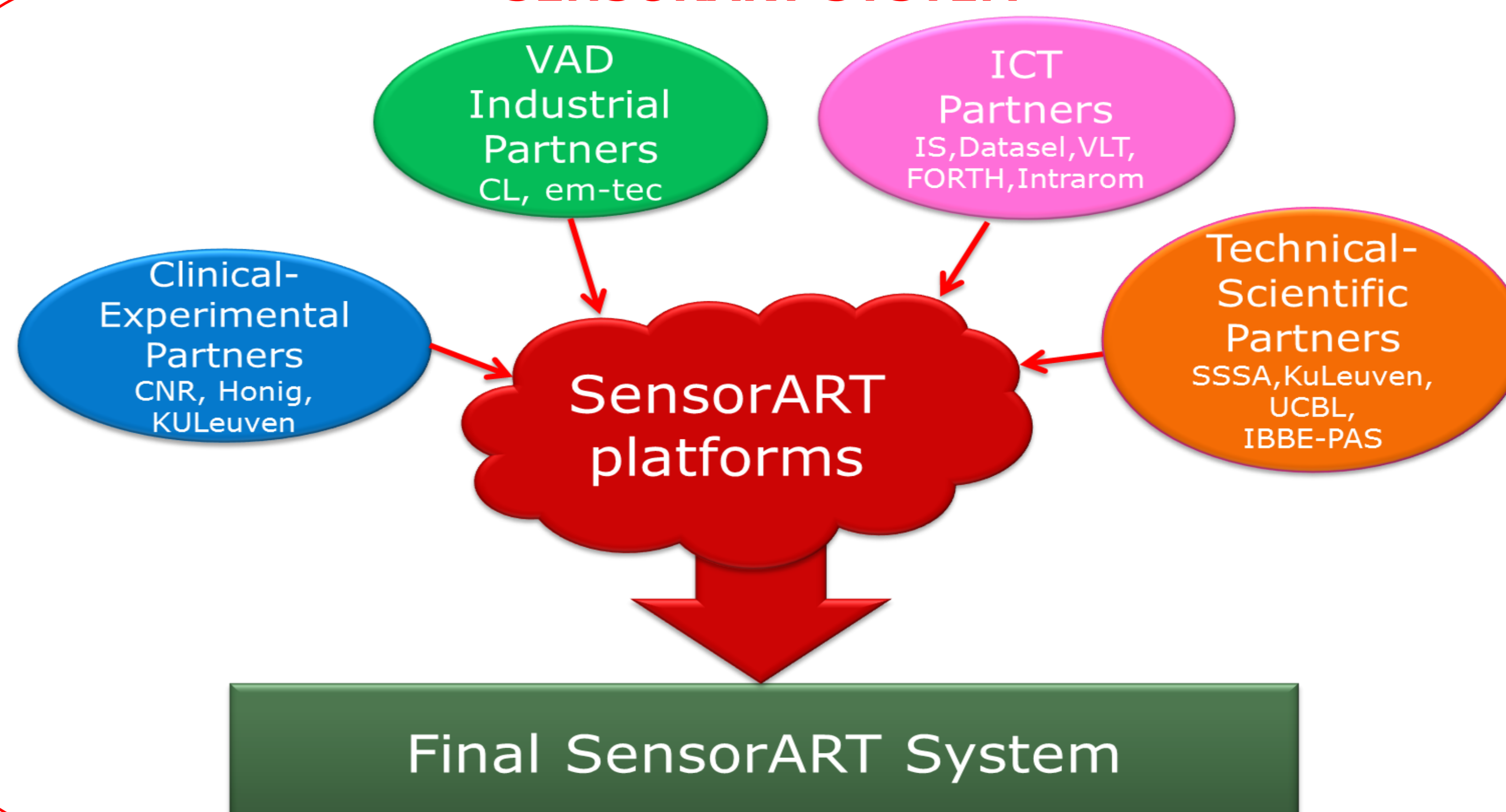
AUTO REGULATION UNIT ARU



WEARABLE and POINT OF CARE PLATFORMS



SENSORART SYSTEM



GENERAL INFORMATION

Starting date: 01/03/2010
Duration in months: 48
Call (part) identifier: FP7-ICT-2009-4
Budget: 8,500.000.00 €
Coordinator: IFC-CNR