



EUROPEAN  
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Community Research



**Robot Fleets for Highly Effective Agriculture  
and Forestry Management**  
NMP2-LA-2010-245986

**Agenda of the Scientific and Technical Meeting (Madrid-4)**

January 30-31, 2014

Madrid, Spain

Polytechnic University of Madrid - School of Industrial Engineers  
(UPM-EII)

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\*PU – Public, PP – Restricted to other programme participants (including the Commission Services), RE – Restricted to a group specified by the consortium (including the Commission Services), CO – Confidential, only for members of the consortium (including the Commission Services).

\*\*R – Report, P – Prototype, D – Demonstrator, O – Other.



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AGRICULTURAL, FOOD AND  
FORESTRY SYSTEMS



BLUEBOTICS  
Mobile Robots at your Service



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**Thursday, January 30, 2014**  
**Getting together at 08:45 am**

**Meeting place:** Polytechnic University of Madrid - School of Industrial Engineers  
 c/ José Gutiérrez Abascal, 2.  
 28006 – Madrid

*(See pictures at the end of this document)*

**09:00 am Trip to CSIC-CAR/ICA by bus**

**WELCOME AND MEETING OBJECTIVES (CSIC-CAR)**

09:45-10:15	<b>Welcome by the host (UPM-EII)</b>	Antonio Barrientos (UPM-EII)
	<b>Meeting objectives</b>	Pablo Gonzalez-de-Santos (CSIC-CAR)
	<b>Introduction to demos</b>	Cesar Fernandez-Quintanilla (CSIC-ICA) Pablo Gonzalez-de-Santos (CSIC-CAR)

**DEMONSTRATION ON WHEAT CROPS (CSIC-ICA)**

	<i>The aim is to make a real demo on a real wheat crop (The final demo will be on faked wheat). This demo is to be considered as a rehearsal of the final demo</i>	
10:15–10:25	<i>(A 10-minute walk to the wheat field at CSIC-ICA)</i>	
10:25–11:15	<b>Aerial mission and weed detection</b> <i>The objective is to show the PTA and the consortium how the aerial fleet and the perception system work. As the analysis of the whole field takes long, a reduced mission will be conducted. It can be divided into the following activities:</i> <ul style="list-style-type: none"> <li>• Short aerial mission taking images of a small area</li> <li>• Image mosaicking and analysis</li> <li>• Measurement/assessment of the remote perception system</li> </ul>	AR, IRSTE, UPM-EII, CSIC-IAS, CY, CSIC-ICA, CSIC-CAR
11:15–12:00	<b>GMU-implement mission in wheat</b> <i>The objectives are to check how the Mission Manager/GUI and the boom sprayer work (for that we will use the whole field) as well as to show the PTA and the consortium the results. Activities:</i> <ul style="list-style-type: none"> <li>• Mission with the GMU-3 carrying the boom sprayer along the whole field, The mission will be based on the information provided by an aerial mission performed the day before and fully computed (it takes several hours)(30 min)</li> <li>• Measurement/assessment of the boom sprayer (15 min)</li> </ul>	SAP, BL, FTW, CNH, CSIC-ICA, CSIC-CAR
Around 11:00	Non-stop-demo coffee on the field	
12:00–12:30	<b>Fleet mission in wheat</b> <i>The objective is to show the PTA and the consortium the whole system and perform a preliminary assessment</i> <ul style="list-style-type: none"> <li>• Three GMUs performing a mission computed by the Mission Manager. GMU-1 and 2 will fake the process; GMU-3 will perform real treatment (15 min)</li> <li>• Measurement/assessment of the fleet performance (15 m)</li> </ul>	SAP, BL, FTW, CNH, CSIC-ICA, CSIC-CAR
12:30–13:00	<b>Demo on the safety system and assessment</b> <i>The objective is to show the PTA and the consortium how the safety system works.</i>	CNH, UPM-EIA, CogVis, CSIC-CAR

	<ul style="list-style-type: none"> <li>• Laser</li> <li>• Obstacle detection system</li> <li>• GMU safety system</li> </ul>	
13:00–14:15	<b>Lunch at Buffalo Grill (close to CSIC-CAR main entrance)</b>	UPM-EII
14:15–15:00	<b>Visit to the field for final demonstrations</b>	CSIC-ICA
15:00–15:45	<b>Trip back to Madrid (UPM-EII)</b>	

**SCIENTIFIC AND TECHNICAL MEETING (UPM-EII)**

Polytechnic University of Madrid - School of Industrial Engineers  
*(Universidad Politécnica de Madrid – Escuela Técnica Superior de Ingenieros Industriales)*  
 c/ José Gutiérrez Abascal, 2.  
 28006 – Madrid  
*(See pictures at the end of this document)*  
 Room C

**ASSESSMENT OF THE DEMO**

**Working Groups**

15:45-17:15 (non-stop coffee served around 16:30)	<ul style="list-style-type: none"> <li>• <b>Working groups to evaluate the demo.</b>  <i>WP leaders should organize the discussion, reach conclusions and make agreements on the demo in wheat regarding their WP in charge. These agreements are to be presented by the WP leaders in the WP technical session (Activities carried out in WPs) on Friday</i></li> </ul>	WP leaders
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**SCIENTIFIC AND TECHNICAL MEETING**

**Activities carried out in WPs**

17:15-17:45	<b>WP4 –Actuation system</b>	Andrea Peruzzi (UP)
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**SOCIAL EVENT AND DINNER**

20:30	Dinner Restaurant: L'abbraccio Address: Capitan Haya, 51, Madrid <a href="http://www.labbraccio.com/contacto.html">http://www.labbraccio.com/contacto.html</a>	UPM-EII
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**Friday, January 31, 2014**  
 Polytechnic University of Madrid - School of Industrial Engineers  
 (Universidad Politécnica de Madrid – Escuela Técnica Superior de Ingenieros Industriales)  
 c/ José Gutiérrez Abascal, 2.  
 28006 – Madrid

**SCIENTIFIC AND TECHNICAL MEETING**  
**Activities carried out in WPs (Cont')**

*The objectives are*

1. *To describe the work carried out in the last period (August-2013-January-2014)*
2. *To evaluate the demo, identify problems and propose actions*
3. *To organize the activities till the final demo*

*This session is to be organized and chaired by the WP leaders who can ask any partner involved to participate with presentations*

09:00-09:30	<b>WP2 &amp; WP7</b>	Angela Riberiro (CSIC-CAR) & Stefania Pedrazzi (CY)
09:30-10:00	<b>WP3</b>	Gilles Rabatel (IRS)
10:00-10:30	<b>WP5</b>	Benoit Debilde (CNH)

10:30-11:00     **Coffee break**

11:00-11:15	<b>WP6</b>	Slobodanka Tomic (FTW)
11:15-11:40	<b>WP9</b>	Manuel Perez-Ruiz (SAP) Constantino Valero (UPM-EIA) Manuel Perez-Ruiz (SAP)

11:40-12:15	<b>Review to the work plan and WP8</b>	P. Gonzalez-de-Santos (CSIC-CAR)
12:15-12:25	<b>Organization of next meeting</b>	Cesar Fernandez-Quintanilla (CSIC-ICA)

**GENERAL ASSEMBLY**

12:25-12:30	Agreement on passing MS4 – Prototype of the whole fleet	Beneficiary representatives
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12:30 – 13:30     **Lunch and end of meeting**



UPM EII main entrance

