Workshop Smart Inspectors: Unmanned Aerial Systems for Environmental Monitoring

Date: Friday October 25, 2013, from 9:30 till 16:00
Location: Gaia building, Campus Wageningen University, Wageningen, The Netherlands
Contact: Lammert Kooistra (Lammert.kooistra@wur.nl) or Bastian Hoffmann (Bastian.Hoffmann@hochschule-rhein-waal.de)

To support environmental management there is increasing need for timely, accurate and detailed information on our land. Within the project Smart Inspectors (http://smartinspectors.net), a network of seven organizations from research and industry, we are investigating the opportunities to use Unmanned Aerial Systems (UAS) for environmental monitoring. The project started in March 2012 and will last for 2.5 years.

Now that Smart Inspectors is already one year on its way, we would like to present our progress to the broader UAS community and discuss with potential users their requirements for UAS services in the field of precision agriculture and crop monitoring, habitat mapping, water quality assessment and mapping of erosion and land degradation.

Therefore we would like to invite you to participate in the experts and users workshop where we will present our progress and experiences. In addition, we have invited experts who will give more background on the current status of UAS related to user requirement assessment, legislation and the preparation of an operational UAS service. The program below gives an overview of speakers and topics covered.

Participation to the workshop is without costs. For registration, send an email to Bastian Hoffmann (Bastian.Hoffmann@hochschule-rhein-waal.de) stating your name, organization, and email-address. Deadline for registration is October 18, 2013.

We hope to welcome you in Wageningen!

Rolf Becker (project coordinator, Hochschule Rhein-Waal) and Lammert Kooistra (Wageningen University)
Program workshop Smart Inspectors, Friday October 25, 2013

9:00    Walk in with coffee
9:30    Opening workshop
9:40    Overview Smart Inspectors project (Rolf Becker, Hochschule Rhein-Waal)

**Session sensors, platforms and processing**
10:00  Development of lightweight hyperspectral sensing systems for UAS (Juha Suolamainen, Wageningen University)
10:20  Development of radar systems for UAS (Tobias Klein, IMST)
10:40  Digital Surface Models from VHR ortho-images using Structure for Motion techniques (Niels Anders, Wageningen University)
11:00  Coffee

**Session UAS applications and legislation for UAS**
11:15  UAS applications in agriculture (Petra van Vliet, BLLG and Clara Berendonk, Haus Riswick)
11:35  UAS applications for soil degradation assessment (Manuel Seeger, University of Trier and Saskia Keesstra, Wageningen University)
11:55  UAS applications for environmental monitoring (Hochschule Rhein-Waal)
12:15  UAS regulations: current status and development (Koen Meuleman, VITO)
12:40  Lunch with demonstrations

**Session user requirements**
13:30  User requirements for UAS (Tamme van der Wal, Aerovsion)
13:50  UAS applications for habitat monitoring (Sander Mucher, Alterra)
14:10  Experiences from an operational UAS service (Rob van Heeswijk, Ecoflight)
14:30  Coffee

**Session UAS network building**
15:00  Towards an UAS knowledge Network (Rolf Becker, Hochschule Rhein-Waal and Lammert Kooistra, Wageningen University)
15:20  Discussion on priorities and perspectives for an UAS knowledge Network
16:00  Closure of workshop and drinks
Route information

Location of workshop:
Meeting room Gaia1
Wageningen Campus
Droevendaalsesteeg 3
Building 101
6708 PB Wageningen