Tuesday, 5th Sept 2017, 14.00 – 15.30 and 16.00 – 17.30

The three main findings of the workshop:

1. **Standardisation in agriculture is a vital tool necessary to help farmers, food associations and other actors involved in agriculture to communicate, to optimise processes and to make agriculture sustainable.**

   Standardisation in agriculture as one of the main challenges that needs much more attention. There is no need of further standards. The current standards (e.g. INSPIRE, GEOSS, W3C, OGC and ISO) need to become interoperable and unambiguous in implementation. This will help to combine information from sensors, agriculture machinery and other sources in order to help the actors to make decisions such as how much fertiliser to use, when to irrigate and what crops to plant.

2. **It is necessary to secure the return of investment in Copernicus and other Earth observation (EO) programmes resulting in societal and economic benefits.**

   The Copernicus World Alliance is testing a multi-cloud solution that can handle the enormous amount of data coming from EO.

   The Belgian research institute VITO exploits large number of time series of earth observation data in support of agriculture and provides free access to EO data, services and tools for research purposes.

   Open Geospatial Consortium does a lot of standardisation efforts leading to better and easier development of apps for agriculture by using OGC web services, e.g. forest change detection.

3. **More cooperation between European research projects is needed.**

   There are too many projects and initiatives dealing with the same or very closely related things. More cooperation across the different projects and initiatives is necessary. Otherwise, vast majority of developed solutions and acquired data will not be used by larger audiences.

   An example of collaborative work is the FOODIE data model for agriculture based on the INSPIRE data specifications. The data model and supporting data were created by cooperation between FOODIE, SDI4Apps and OpenTransportNet projects and the results are currently maintained by Plan4all and other currently running projects including DataBio, NextGEOSS and SKIN.

   Another example of collaborative work is the winning project from the INSPIRE Hack 2017. The resulting application shows open land use map in 3D. This visualisation can combine data from other data sources. The application helps to visually analyse agriculture processes and yield potential in the field.