European current and future IoT activities in Smart Agriculture

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Digital Technologies driving the sector

- **IoT Large Scale Pilot (IoF2020)**
  Real demonstrations in the agri sector – 19 Use Cases
  Promotes interoperability and integration of information flow

- **BIODATA**
  funded via the Big Data Value Association
  Addresses data for agri. applications

- **euROBOTICS**
  Agri Food Lighthouse Project

- **EIP-AGRI**
  funded by MSs through Rural Development Programmes
  Focus Group on Precision Farming

- **CEMA, AEF**
  Agricultural Industry electronics Foundation (ISOBUS)

- **Copa-Cogeca**
  contribution to the code of conduct on sharing data

- **AIOTI**
  WG6 Smart farming and food security

- **Global Open data for Agriculture and Nutrition (GODAN)**
  400 partners from national governments, NGOs and private sector

- **Netfarming, a subsidiary of AGRAVIS**
  German co-operative has developed an application for its members

- **Commercial platforms**
  - **365FarmNet** – linking together applications and services of different providers
  - **MyJohnDeere** – access to agri machinery data
  - **PLM Connect** Farm Management Information and Decision System
Farmers at the center of collecting and processing of data

- **Lack of interoperability**
- **Existing data flows are not exploited**
- **Links with co-operatives at the regional level**
- **Different Requirements (size & needs of the farms)**

- Plug-and-play freedom
  Farmers easily shift to use other platforms
- Transparency
  Clarification of rights to access and process data
- Hands-on experience
  Engaging farmers and developers
- Platforms for optimisation
  Fertiliser / pesticide / water usage / quality
<table>
<thead>
<tr>
<th>Mainstreaming digital innovations</th>
<th>Integration, platforms, pilots</th>
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<tbody>
<tr>
<td>DIHs</td>
<td>Robotics: 25 M€ on precision</td>
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<td>DIH in smart agriculture to start</td>
<td>farming</td>
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<td>end of 2018: 20M€</td>
<td>IoT LSP: 30 M€</td>
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<td>Another DIH in robotics for</td>
<td>Big data: ~20 M€</td>
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<tr>
<td>agriculture and agro-food is</td>
<td>WP2018-20: 30 M€ +..</td>
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<td>running</td>
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| Adapting regulations:            | Preparation of the workforce   |
| Sept 2017: FFD regulation,       | Training, skills, work         |
| portability                      | environment                    |
| Cybersecurity package            |                                |
| Spring 2018: Revised PSI,        |                                |
| ..                               |                                |
Specific Challenges:

• Sustainability (farms revenues) - pressures on natural resources.
• Information and knowledge not fully exploited – need to speed up knowledge creation.
• Limited interoperability and lack of openness of systems.
• Lack of information on effectiveness of digital technologies.

Topic: DT-ICT-08-2019

Timeline:
• Call opening: 26th July 2018
• Call deadline: 14th November 2018, 17.00
• Budget: 30 Mio €
Scope: Pilots should address the 3 aspects:

1. Building platforms integrating different technologies.

2. Sharing data and generating knowledge.

3. Developing decision support systems, including benchmarking system on the productivity and sustainability performance of farms.
Thank you - useful links

- Digitising European Industry Strategy (DEI):

- The Alliance of Internet of Things Innovation
  http://www.AIOTI.eu

- Internet of Things in DAE:

- Horizon 2020 – The EU Framework Programme for research and Innovation:
  http://ec.europa.eu/research/horizon2020/index_en.cfm