**Contributions to the first document of "Digitising European Industry Working Group 2" Strengthening leadership in digital technologies and in digital industrial platforms across value chains in all sectors of the economy", resulting from the activities developed during the two first work meetings held on October 21 and December 8, 2016.**

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**Etiqueta:** "DEI", "WG2"

**Topic:** “agriculture”

**Public-Private Partnership (PPP).** “Smart Specialization Platforms for Agri-food (Traceability and Big Data, Andalusia)”

The next meeting will be a public session of WG2, held during the Stakeholder Forum on 1 February 2017 in Essen, Germany: [Registration](https://www.bmwi-registrierung.de/digitising-european-industry/), [Programme of the event](https://ec.europa.eu/futurium/en/content/programme-stakeholder-forum-essen-3112017-122017), and [General information](https://ec.europa.eu/futurium/en/content/first-digitising-european-industry-stakeholder-forum).

**General Reviews:**

We consider this first report of the WG2 dated December 23, 2016, to be a very valuable contribution to the Digital Agenda for Europe, launched in May 2010 to boost the European economy and making the most of the sustainable economic and social benefits of the single digital market. Moreover, this document is also very useful for the "Digital Single Market Strategy" (2015), the proposal for "Digitising European industry" (2016) and especially, useful to make progress in the alignment of the private and public strategies and actions of the European Member States and regions. It may also contribute to the development of joint roadmaps, to federate initiatives and, above all, it may result in an important progress for open innovation, business opportunities and welfare in the whole EU and the complementarity and creation of synergies between the different initiatives.

We believe that the approach that this report shows focused on the value chain, jobs creation and the importance of digitising to trigger innovation for SMEs is very appropriate. Regarding the concern on the imbalances of the development of different parts of the world and not seizing opportunities as well as the importance of regulatory and legal frameworks, the point of view given by this document is also appropriate.

It is also important the concern that this document shows for the public-private partnership and the permanent reference to the opportunity offered by a joint and collaborative European project. It mentions the need to improve the skills and competences, as well as to take into account the different sectors of the economy as case studies and their possible extrapolation to other sectors. In addition, the cross-cutting case studies chosen on "Platforms of industrial data" and "IoT" are very relevant.

It is also relevant the confirmation of the multitude of initiatives already existing in the EU and the need to complete the map in a more exhaustive way and search for complementarities and synergies between them. The proposal of considering that it is mandatory and desirable to keep different initiatives, different approaches, needs and utilities, but making an special effort regarding interoperability and interconnectivity, networking, enhancing communities of users and public-private cooperation is remarkable.

It is very important to highlight the multidimensionality of digitising, in which social, legal, economic and territorial aspects, among others, have influence and also, everything related to privacy, data property, etc.

We can conclude that although this is just a first version, it is an excellent document which fully addresses substantive aspects of industrial digitising and it is very useful so as to launch a public debate that will allow to draw the attention and promote the active participation of various social and economic actors on the importance of the challenges of digitising, its usefulness and the strategies and actions needed. We believe that this current version is useful to think about the proposal of policies and programmes at regional, national and EU levels, as well as to promote the commitment of the various stakeholders.

In addition to the assessment of the document made in the above paragraph, in order to make some suggestions to continue moving forward towards a more consolidated document from the food chain perspective, we would point out some aspects which we think may be relevant.

**- Importance and peculiarities of the food chain**

Designing, manufacturing, distributing, and consuming healthier, safer, more traceable foods also adapted to the demands of the markets and consumers, as well as improving energy efficiency, life cycles and reducing waste, promoting the circular economy, and generalizing their application in the food supply chain, make it necessary to consider the value chain in a comprehensive way and introduce numerous innovations which include: smart surveillance systems, open innovation, inter-territorial cooperation, generalizing the use of key enabling technologies, value shared, incorporating the experience of consumers in time real, the development of new technologies, etc. For all this, it is essential to assume the importance of a deep innovation and digitising process, which would lead to: sensor generalization, the promotion of the Internet of Things, cloud computing, food industry 4.0, precision farming, the generalization of "OPEN DATA", "BIG DATA", "Artificial Intelligence" that will result in placing it all in a context of support for multilevel decisions-making and developing an ecosystem of support for innovation and entrepreneurship.

It is also important to highlight the quantitative and qualitative importance of the food chain and the need of innovation as 75% of regions of the EU chose in their smart specialization strategy (3S), the agri-food chain in their priorities, among others reasons. This fact has driven the European Commission to boost a platform of smart specialization for the agri-food sector (S3P agri-food), with the objective of accelerating the development of joint investment projects in the EU through the promotion and the support to interregional cooperation.

We can add that there are numerous areas in which the agri-food chain plays an important role such as food security, health and welfare, governance, environment and use of natural resources, rural development, jobs creation, circular economy, a cross-cutting approach with other chains and sectors, transport and logistics, energy, etc.

An aspect of great importance to take into account in the digitising process is that those products associated to the agrifood value chain are living products and of different nature thus, requiring special consideration in many dimensions. They also need a special treatment due to the huge number of products and the characteristics of the data generated in the whole agrifood chain, most of them generated in the context of public institutions and the new demands of consumers.

**Suggestions to be considered by the WG2**

The following are some aspects we think the document should consider to a greater extent:

- The importance of communication strategies to eliminate or mitigate the reluctance to digitising processes.

- Considering the role of digitising in the response to and the incorporation of consumers' experience and food customization.

- The relations of digitising with circular economy, treatment and reuse of waste, smart food, innovation in public institutions, etc.

- Digitising and its relation with life cycles, energy efficiency and the use of natural resources.

- Improving the efficiency of the agrifood chain, traceability and food safety.

- Complementarity of physical and virtual worlds.

- Those aspects related to 4.0 logistics and reverse logistics, key aspects for more agile and flexible approaches.

- The importance of the cross-cutting nature of the agri-food chain and in particular with regards to health, environment and transport.

- Cognitive technologies and artificial intelligence are mentioned in the document but their current and future importance would need a deeper approach.

- It would be important to go further on the "blockchain" technology and its potential to share experiences, knowledge and the collaboration of the different actors and territories.

- The importance of the segmentation of digitising processes for different types of users and, in particular, for SMEs, especially those in the agri-food sector.

- One of the most important initiatives within the EU regarding metadata and interoperability was the INSPIRE Initiative "Infrastructure for spatial information" Directive 2007/2/EC of the European Parliament and the Council, which has been a good example of private and public cooperation so, its reference and learning from it is very useful to formulate policies through borders. Moreover, the digitising process has a huge impact in different chains and especially in the agrifood one.

- The territorial dimension and its monitoring and the role played by remote sensors, particularly highlighting the satellite effort made by the EU and the huge potential of satellites such as the constellation "Sentinel", as well as the technology of remotely manned flights, which are already playing an important role in the innovation of the agri-food chain that will do it even more in the future.

- The 'pull factor' and mobilising the digital economy for the provision of advanced services to a system as complex as the agrifood chain.

- The importance of the alliance for the Internet of Things and especially with regards to the advantages and disadvantages of the different standardisation strategies for protocols.

- Importance of the agrifood chain to interact with digital technology companies, creating shared value, the opportunity to make large scale trials in real-world scenarios and the role played by experts in a so wide and complex chain.

- The resources associated with "open data", platforms and open source software.

From the Smart Specialization Platform for the agrifood sector (Agrifood S3P), particularly from the one corresponding to "Big Data and Traceability", we offer to collaborate on any aspect that the WG2 deems appropriate.