

Speech by Commissioner Phil Hogan at EU Workshop

- *“Europe’s Opportunity in Digital Agriculture”*

14th January 2016, Brussels

- Check Against Delivery –

(Introduction)

- Ladies and gentlemen, it's my pleasure to be here with you today. A number of powerful factors have combined to make this an excellent moment to be having today's discussion.
- Firstly, the reformed CAP has provided a solid policy foundation for building the smart agriculture of the 21st Century.
- Secondly, the recent COP21 climate agreement in Paris has highlighted yet again the need for agriculture to become more efficient and climate-friendly.

- Thirdly, recent market difficulties in certain agri-food sectors have shown us that Europe's farmers and agri-businesses must be provided with the tools and know-how to have real choices in the coming decades.
- **Combined, these factors point in one direction only: agriculture must become smarter, leaner and cleaner.** We have to increase yields while respecting safety standards and ensuring sustainability. **As I often say, we have to learn to produce more, using less.**

(Potential of Innovation / Smart Agriculture / Precision Farming)

- Farmers never stop innovating. Every generation brings new technological and organisational improvements. This was true when stone-age man first used primitive tools. And when Jethro Tull first developed his seed drills. And when a farmer first climbed into a motor-powered tractor.
- **But we need to be honest and acknowledge that in this era of hyper-connectivity, where the pace of technological innovation is proceeding faster than ever before, agriculture has not yet caught up with the "digital revolution".**

- Yes, there is plenty of innovation in the sector.
- Smart and digital agriculture holds many promises for a more sustainable, productive, and competitive EU farm sector. We have seen solutions that have the potential to significantly improve resource efficiency, animal health, carbon footprint, and farmers' position in the supply chain.
- **But we have yet to witness a wider uptake in the broader farm community.** Developing new solutions is not in itself enough - encouraging sufficient uptake is an issue we must address.
- So how do we get there?
- Let's look at the good work already done.

(Measures under CAP)

- The new CAP provides EU Member States with a number of instruments to drive the growth of precision agriculture.
- Several Pillar II measures support Member States and Regions to develop precision agriculture in their Rural Development Programmes.

- This can for example happen through investments in physical assets or stronger cooperation measures.
- **And the CAP is not working in isolation. A smart, modern agriculture will contribute to a wide variety of economic, societal and environmental goals. This fact is recognised at all levels of the Commission.**
- **For example, I have personally discussed the importance of this matter with Commissioner Oettinger and other colleagues. And after my intervention, you will hear from Mario Campolargo, Director of DG CONNECT.**

(Horizon 2020 / EIP-Agri)

- There is €3.6bn available at EU level between now and 2020 to fund synergies between Agriculture and Research, via Horizon 2020 and the European Innovation Partnership for "Agricultural Productivity and Sustainability", or "EIP-AGRI".
- Around 64 million will be dedicated to precision farming and digital technologies in the agriculture sector under the current Horizon 2020 Work Programme 2016-2017.

- Under this Work Programme, 30 million euro will be invested in the implementation of an Internet of Things Large Scale Pilot on "Smart farming and food security".
- This Large Scale Pilot is expected to be an important instrument that will foster experimentation, replication and real-world deployment of Internet of Things technologies in the agriculture domain.
- **And just as importantly, it prioritises interoperability between these new technologies and plots a course for future European market adoption. I would remind everyone here that the call for applications is open until April 12th this year.**
- The EIP-AGRI is a major policy and networking initiative designed to speed up innovation on the ground. And sometimes innovation IN the ground!
- Co-operation projects could be used to involve actors from both agri-food and digital sectors in EIP Operational Groups.
- These Operational Groups can be funded under the Rural Development Programmes.

- At EU level, the EIP-AGRI will intensify networking between science and practice and help spread innovative solutions benefiting the agriculture sector and the food chain as a whole.
- So we can see that the business climate is favourable for digital agriculture, the policy foundations are being put in place, and EU funds are waiting to be drawn down.

(Collaboration: Alliance of Internet of Things Innovation [AIOTI] and Operational Groups)

- What we need now, above all, is for the ICT and digital industry to fully embrace the opportunities of digital technologies and engage with the agri-food sector. And we also need farmers and agri-businesses to play their part in seizing these chances.
- **Collaboration is the key to making innovation happen.** That's why we're here today!
- The interactive innovation approach takes research and develops it into practical applications and the creation of new ideas.

- Collaboration is especially relevant when speaking about opportunities in digital agriculture where technologies need to be adapted to users' needs. This means giving farmers and agri-business leaders the tools and confidence to reach out to new partners in the ICT and digital industry.
- One could argue that agriculture is the "last frontier" for ICT – the last undeveloped territory in which dedicated hardware and software are not driving productivity increases and economic growth.
- We need to establish vehicles to bring together people from both the agri-food and ICT industries to breach this "last frontier". In so doing, common opportunities will be identified, key collaborations will be established and things will start to happen.
- Operational Groups under the EIP-AGRI will hopefully prove one of the best places to bring those people together.

- Another European initiative, **the Alliance of Internet of Things Innovation**, created by our colleagues from DG CONNECT, is a very good example of a platform where the agriculture and digital sectors can network in order to create a dynamic European Internet of Things ecosystem.
- It is worth repeating that breaking down the silo mentality is a key priority of the Juncker Commission. As a College of Commissioners, our priority is to work together to deliver the conditions for sustainable jobs, growth, and investment for European citizens.
- The digital revolution of our entire economy is one of the major goals under President Jean-Claude Juncker. He said that *"enhancing the use of digital technologies and online services should become a horizontal policy, covering all sectors of the economy and of the public sector"*. Collaboration and synergy are the watchwords.
- It is for this reason that the Directorate-General for Agriculture and Rural Development and Directorate-General for Communication Networks, Content and Technology are working very closely to make this a reality.

(Advisory Services / FI / Juncker Plan)

- We must also enhance the systems for giving advice and training to farmers. The Farm Advisory Services (FAS), and the European Innovation Partnership (EIP) already established within the CAP implementation should maximize the benefits that can be achieved with precision agriculture.
- Loan instruments can also play a role. The Commission is working closely with the European Investment Bank to develop financial instruments that reflect the needs of our farmers. We have already developed a guarantee scheme for farmers.
- Over the coming months, a new model for a loan fund under the Rural Development Fund with price adjustable re-payment mechanisms will be developed. We are also looking into Financial Instruments for innovation projects.
- A further avenue for support which is worth exploring is the European Fund for Strategic Investments – part of the so-called €315 billion Juncker Plan. The EIB is already granting support via the EFSI guarantee. A number of agri-related projects have obtained loans.

(Conclusion)

- Finally, ladies and gentlemen, let's take a look at what can be achieved, if we succeed in our goals. The development, roll-out and adoption of digital services will enable agriculture and the wider rural economy to pursue a steeper and more sustainable growth path.
- The new smart agriculture will work in a variety of ways. For example, use of sensors to measure data can make a massive difference to on-farm efficiency.
- In the Spanish region of Asturias, a telecom company has partnered with a dairy operation to provide daily feedback on milk quality for each cow to farmers. This allows them to directly react and adapt their production parameters, by changing the pasture that is used.
- The main precondition for rolling out this type of service is the availability of fast broadband connections as well as sufficient knowledge on the side of the farmers to make use of it.

- Another example is the release of **detailed geospatial data**, which is a growing trend in the EU. Access to such data will stimulate intelligent use of Earth Observation imagery in agricultural monitoring applications.
- The development of the **Copernicus** services and in particular of Land Components are of interest for the Commission. Remote sensing data sources improved through Copernicus will have a positive impact on the development of precision agriculture.
- As well as these new types of information services, the more traditional mechanical components of agricultural work are also modernising and increasingly digitising. Europe is a leader in automated farming machinery, such as automated milking or feeding installations.
- Machinery for working the land is becoming larger, smarter and more autonomous. While driver-less cars for general traffic are only beginning to show up on the horizon, robot farming is a hotbed for innovation.
- This concerns relatively simple settings such as equipping standard vehicles with the ability to drive without supervision or to be remotely controlled.

- Combined with data collection and data analytics, smarter machinery can begin to tap into the potential of micro-climates, i.e. exploiting the exact soil and climate conditions in each part of an agricultural holding.
- **What is needed** is aggressive investment into the further development of such technologies and also into their widespread adoption. Research funding should be combined with support for pilot projects.
- In conclusion, let us resolve to work together and **unleash the potential of ICT to transform modern agriculture.**
- **Good luck to all delegates in your discussions today, and I thank you for your attention.**