Speech by Commissioner Phil Hogan
at ICT-Agriculture Conference

Ireland: Delivering sustainable intensification through collaboration

Friday 1st May 2015, Kilkenny Castle

- Check Against Delivery –

(Introduction)

- Ladies and Gentlemen,

- It is my great pleasure to address you today in the stronghold of Kilkenny Castle – one of my native county's crown jewels and, I am proud to say, one of Ireland's finest heritage attractions.

- In these historic halls, where traces of the past are all around, I wish to paint a picture for you of the future: a future where innovation, collaboration and the intelligent harnessing of
technology can transform the potential for agriculture to drive our shared prosperity.

Indeed, this castle is itself no stranger to innovation. You should be aware that it was the first OPW site in the country to have its own iPhone app, which I launched in 2011! This is just one small-picture example of how technological improvement can make a difference.

Today, we will discuss the big picture, and examine in detail the very exciting opportunities for the agri-food and agri-tech sectors to deliver more solutions, more food, and more wealth.

(Background)

- Let me first provide an overview of the global agricultural context. As you know, worldwide demand for high-quality food will continue to increase in the coming years, particularly in the emerging markets of Asia and Africa.

- Each year until 2030, at least 150 million people will be entering the global middle class. This massive growth in disposable income will result in significant changes to dietary patterns. To give just
one example: global demand for dairy products is projected to increase at an annual rate of 2%, and with the recent end of milk quotas, Ireland is well placed to meet some of that demand.

- Europe has recognised the changing global patterns, and has acted decisively in recent years to target supports where they are needed.

- The Common Agricultural Policy has moved from a system of price support with a heavily protected market, to a market-oriented agriculture sector. We have broken the link between subsidies and production so that farmers and agri-businesses look to the market rather than to Brussels when they decide what they will produce. As a result we have a more modern, more competitive sector, and we have seen considerable investment and innovation as the sector has moved forward.

- My goal as Commissioner is to ensure that EU agriculture continues to play a key role in satisfying global food demand and ensuring food security, by enhancing the overall competitiveness of our agri-food sector.
• However, we cannot lose sight of the environmental imperatives underpinning these changes. Stark reality informs us that our land banks are finite. So we still face the fundamental challenge of how to increase production while respecting our natural resources - how to produce more, using less.

• We are therefore compelled to not only intensify production, but to do so in a sustainable manner. In order to achieve this “sustainable intensification” we must consider various issues, including land management, rotational grazing and soil conservation, pest management, nutrient management, crop diversity and water conservation. As I will outline later, the time is ripe for ICT to play a transformative role in addressing these issues.

• From the EU point of view, by providing policy consistency to our innovating farmers and agri-business operators, they can confidently undertake long-term investment and take advantage of global demand increases, promoting innovation as a motor for quality and added value.
And let me be quite clear: collaboration is how that added value will be achieved. So what does collaboration mean, in real terms? It means working together to find solutions. It means giving farmers and agri-business leaders the tools and confidence to reach out to new partners. It means, in short, thinking outside the box, or more accurately, thinking outside the silo.

Breaking down the silo mentality is a key priority of the new Juncker Commission, which is now six months in office. As a College of Commissioners, our priority is to work together to deliver the conditions for sustainable jobs, growth, and investment for European citizens. Collaboration and synergy are watchwords. It is for this reason that EU Research, Science and Innovation Commissioner Moedas and I recently visited Ireland, to highlight the numerous possibilities for collaboration across our respective portfolios.

During this highly productive visit, Commissioner Moedas and I witnessed the state of the art research and innovation that is being carried out across the Irish research community.
We saw private sector innovation in action, with a visit to Glanbia. We attended the official opening of the Paddy O'Keeffe Innovation Centre at Teagasc Moorepark. And we visited UCD, meeting with a great mix of researchers, academics and businesspeople.

The collaborative mindset permeates all aspects of this brave new world, and the flow from laboratory to business to farm is apparent, and essential.

(EU Investment)

• Europe recognises this new reality, and has acted accordingly, putting its money where its mouth is to support innovation and collaboration in the sector.

• 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". The EIP-AGRI is a major policy and networking initiative designed to speed up innovation on the ground. Co-operation projects will involve
farmers and foresters together with other food chain actors and advisors and researchers in EIP Operational Groups.

- As a recent Irish-led example, the Teagasc project LANDMARK was selected for funding following the first call of proposals under Horizon 2020 funding. It touches upon the most relevant aspects of soil management and was identified by experts as the best proposal submitted in the Soil Function category.

- Concrete innovation projects can be funded under the Rural Development Programmes. I am glad to note that Ireland has decided to take up the EIP approach in its Rural Development Programme, co-financed under the new Common Agricultural Policy.

- At European level, the EIP AGRI will intensify networking between science and practice and help spread innovative solutions benefiting the agricultural sector and the food chain as a whole.

- Also, in order to support the significant on-farm investment which will be required for farmers to facilitate these changes, I have been working with the European Investment Bank to tailor a Fund
offering cheap finance over a 15-20 year horizon to farmers wishing to upgrade and expand their production.

(Irish Investment)

- In Ireland, too, national investment is being channelled towards these important goals. The Ireland Strategic Investment Fund was established in December 2014 with a statutory mandate to invest on a commercial basis in order to support economic activity and employment in the State.

- Some €7.5 billion is available for investment in accordance with the ISIF’s objective, and it is recognised at all levels of decision-making that agriculture is of critical strategic importance, with huge potential returns both commercially and economically.

(Precision Farming)

- So the business climate is favourable, the policy foundations are being put in place, and the investment funds are waiting to be drawn down. We agree that ICT has the potential to turbo-charge
the sustainable intensification we are working towards. So what comes next?

- **What we need now, above all, is for the ICT and digital industry to fully embrace this opportunity and engage with the agri-food sector.** One can 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.

- And the tech experts we need are not ten thousand miles away, in some Silicon Valley fortress... they are here on our doorstep! Ireland is the global technology hub of choice for the strategic business activities of ICT companies. Ireland has a deserved reputation for being the heart of ICT in Europe. With its highly creative and talented workforce and its open economy, Ireland has successfully attracted eight of the top 10 global IT companies to establish a significant presence here.

- As well as the IT multinationals, there is a growing indigenous digital technology sector. This sector alone employs over 30,000 people with total sales of over €2 billion per annum. So the
expertise is there on both sides of the Agri-tech equation. We need to start joining up the dots.

- 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! Ultimately, a national strategy geared towards developing an export-focused Agri - ICT industry should be the collective goal.

- Products and Apps have been developed for virtually every other economic sector – improving efficiencies and making work "smarter". This is what we mean by "precision farming" – harnessing ICT to enable farmers to do their work more smartly, and more efficiently.

- New hardware and software systems will improve agriculture in a multitude of ways. New ‘smart-agri’ production systems will use advanced ICT at all stages in the food chain: on the farm, through to processing and retailing. Such innovations will improve the quality of crop production, the quality of livestock health but also, crucially, the quality of life for farmers.
• To give just one example of innovative thinking: the Irish "Herdwatch" Farming App helps Dairy & Beef Farmers keep electronic records of their cattle, ensuring easy compliance and valuable hours saved.

• As machinery and equipment become ‘smarter’ and better ‘connected,’ they will improve the efficiency of agricultural inputs and outputs. They will also have mass data-gathering capability, an innovation which holds enormous potential for the sector. The increased presence of sensors throughout the value chain means large volumes of data can be collected. If harnessed correctly, this data can improve decision-making at all points in the food chain. It is estimated that employing sensor data could raise global yields by 10 to 20 percent.

• The core of "sustainable intensification" will be the smarter and more efficient use of all resources, i.e. improved management of the land and what goes into it, based on better information. This is where the importance of sensors and smart machinery comes into play.
• We are entering the era of Big Data for Precision Farming, and the Irish Agri-food sector must position itself to make the most of the coming changes. A key emerging challenge is how to integrate and make sense of a diverse range of data sources, and channel this into a usable form that delivers increased efficiencies and supports increased levels of sustainable production.

• This will mean sensors in the field, sensors for pesticide control, sensors for nutrient and water management and a host of other on-farm efficiencies. New technologies will also assist in animal management, slurry spreading and – importantly – animal DNA management. They can quite plausibly create farms where self-driving tractors and harvesters free up the farmer to concentrate on other tasks.

• Ireland is very well positioned to take a European and indeed global leadership role in the development of these new products. I am confident that nothing less than this bold ambition will inform all the conversations taking place here today.

(Conclusion)
• Ladies and gentlemen, the end of milk quotas opened up a world of new opportunity. Now let us put an end to silos, so that we can unleash the potential of ICT to transform modern agriculture, and drive the sustainable intensification we need to provide even more opportunities.

• Let us resolve that the only silos we want to see in the Irish agri-food and agri-tech community are in the farmyard!

• Technology can propel agriculture to new heights of productivity, but it will require the right people to find each other and do the work. A wonderful phrase in the Irish language comes to mind: "Ní neart go cuir le chéile". Loosely translated, it means "no strength without coming together," and this must be the motto for creating the collaborations which will deliver the sustainable intensification of the future.

Good luck to all delegates in your discussions today, and I thank you for your attention. Go raibh mile maith agaibh.