<u>Minister Breen Address at</u>
<u>National Artificial Intelligence and Machine Learning Summit</u>
<u>Croke Park Conference Centre – 6 March 2019</u>

Ladies and gentlemen

General introduction

I'm delighted to have the opportunity to talk to you today about Artificial Intelligence. It's an exciting time for AI in the context of the wider digital policy agenda, as a broad range of initiatives are being put in place that will help us to shape its evolution.

Today I'll be looking at AI in a broad context. I'll be sharing with you the progress in addressing the digital transformation agenda at EU and national level. I'll also be outlining the plans at EU and national level to maximise the potential of AI to help us grow our economy and society.

Digital Single Market (DSM)

I have had responsibility for driving the work of an Inter-Departmental Committee on the Digital Single Market for almost two years. This Committee – which now has representation from 10 Government Departments – has been working to deliver the 30

initiatives that have been announced by the European Commission since June 2015 under its EU Digital Single Market strategy.

The strategy recognises that Europe needed to embrace the digital revolution in a way that offers citizens and businesses real benefits and so far this strategy has been a notable success, with agreement reached on most of the 30 initiatives. For example, Europeans now do not pay roaming charges when travelling within the EU and, since December 2018, the new rules against unjustified geoblocking will ensure that consumers can buy online in another EU country with equal treatment.

Some of the initiatives are crucial for the development of AI, including the Public Services Directive, the Free flow of Non-Personal Data Regulation and GDPR. It is estimated that these three initiatives will give rise to annual economic gains of over €51 billion when fully implemented.

Completing the Digital Single Market is a priority for Ireland and we continue to work closely with the European Commission, the European Parliament and other Member States in delivering outcomes which are pro-trade, pro-enterprise and pro-innovation.

NDS

Ireland is already ranked the sixth most advanced digital economy in the EU, but we need to take advantage of these successes to maximise their potential to help us grow our economy. This means adopting a holistic approach to taking full advantage of the digital revolution by identifying how Ireland can best adapt to, and embrace, the increasing digitalisation of society.

To this end, an updated National Digital Strategy is being developed. This involved national and international research and an extensive series of consultation exercises with all sectors of society. What emerged was the identification of four pillars to focus on, namely; Digital Foundations; Trust, Security & Wellbeing; Effective Use of Digital and Digital Economy and Labour Market.

The emphasis will be on initiatives aimed at empowering the citizen, many of which are particularly relevant to the field of AI:

- Encouraging the digital skills of the wider population as well as specialist STEAM skills.
- Building better connectivity to support greater usability and inclusivity for all.
- Providing better data to promote innovation by business and more efficient and tailored services.
- Facilitating the provision and greater use of digital Government services.
- Fostering greater trust through improved security and privacy.

EU AI Strategy

In May last year, I had the pleasure of hosting a Ministerial meeting in Dublin of the "Digital 9" countries – the nine most digitally advanced European countries. The meeting provided an opportunity to build on the commitment shown by these countries in signing up to a European Declaration on Artificial Intelligence at the EU Digital Day the previous month. The Declaration committed signatories to cooperate on boosting Europe's technology and industrial capacity in AI and its uptake; addressing new ethical and legal issues and tackling associated socio-economic challenges.

Following this, the EU Coordinated Plan on Artificial Intelligence was developed in conjunction with Member States and published by the European Commission in December last year. Specific proposals in the Plan are based around eight key areas. These include priorities such as providing the necessary digital infrastructure, facilitating the marketing of academic research and setting standards for interoperability. Part of this approach will include the establishment of a network of regional Digital Innovation Hubs. It is intended that the Hubs will play an important role in stimulating the uptake of Artificial Intelligence by industry and public-sector organisations throughout Europe.

The Coordinated Plan also addresses two key factors that will facilitate a more widespread uptake of artificial intelligence. One of

these is the need for upscaling the digital skills of the EU workforce, including the development of strategies to encourage life-long learning and a steady supply of highly-skilled ICT professionals. The other is embracing AI in public administrations, such as through peer-learning and the establishment of testbeds for experimentation with AI-enabled services.

Through all of this, the cornerstone is data, the essential ingredient for Artificial Intelligence. AI needs access to masses and masses of data to be most effective. The EU aspiration is that this data will be provided through the identification of high-value public data sets, further development of the European Open Science Cloud and the creation of a common European Data Space.

EU Ethical Guidelines

Ethics has emerged as a key issue. The EU has recognised that a strong ethical approach in the development of its AI capacity represents a potential competitive advantage for Europe in a global context. They want developers and users to make sure that AI respects fundamental rights, applicable regulation and core principles. It wants to encourage the development of technology that can be made technically robust and reliable.

The Coordinated Plan will be complemented by a set of ethical guidelines – due to be launched in April – that aim at developing trustworthy AI that corresponds to European ethical values and

citizens' aspirations. This concept is based around two components. Firstly, that AI should respect fundamental rights, applicable regulations and core principles and values and, secondly, that it should be technically robust.

The guidelines will adopt a very practical approach and set out concrete measures as to how ethical considerations can be considered when implementing AI systems. The aim is to use ethics as inspiration to develop a unique brand of AI for Europe, which protects and benefits both individuals and the common good.

The EU approach is being supported by significantly increased levels of investment. The European Commission is aiming at combined public and private sector investment of at least €20 billion in the period 2018-2020. This is intended to increase progressively to €20 billion per year over the next decade.

National AI perspective

What this means is that huge opportunities will emerge for Irish businesses over the coming years. But extraordinary advances and changes are already happening, as attested by the pioneering ways in which many of the businesses and organisations in this room are already using AI to innovate for Ireland's future. I am inspired by these examples, which are a tribute to our intellectual creativity and

entrepreneurial culture, which is a key part of what Ireland offers to the world. We in this country are uniquely well-positioned to take part in this revolution and benefit greatly from it.

This is very much recognised in Future Jobs Ireland 2019 which I expect to be launched next Sunday. Future Jobs Ireland is all about preparing now for tomorrow's economy. I do not wish to precipitate the specific actions that will be announced, but you can be sure that the development of AI in Ireland will feature. This is because – to guarantee our future competitiveness – our companies must build on, and continue to develop cutting edge products and services that are better performing, more efficiently delivered and more effective for their customers. We may be in challenging and uncertain times – but there are real opportunities for our companies to develop and deploy AI in creating new and improved products and services across the whole economy.

I am pleased to say here today that my Department will spearhead the development of a National AI Strategy, which will be aligned with, and contribute to the broader EU strategy. It will present a cross-government framework and set out how Ireland will engage with the dynamic and challenging developments in AI technologies, with a focus on nationally significant areas of opportunity. It is my intention that the first phase of this high-level strategy will be published within six months setting the direction for further development of AI in Ireland. This will be a collective national task - we need to ensure the

whole country understands and supports the great changes ahead. I would invite you to engage with my officials in its development.

Every one of us has a stake in the future of AI, and a shared responsibility. We're all going to need to spend more time talking with, listening to and learning from each other. AI has the potential to enhance our lives, business and society, and we look forward to being part of this journey with you.