Chairperson, committee members, it is my pleasure to be welcomed here today. I am the Chief Executive and one of the co-founders of Ward Solutions, one of the largest indigenous, dedicated Cyber Security company's in Ireland. At Ward Solutions we spend our time helping a wide range of commercial, public sector, government and other organisations from a wide variety of sectors, on the island of Ireland to secure their people, systems and data from malicious or inadvertent threats. Prior to that I had the privilege to serve my country an officer in the Irish Defence Forces at home and overseas with the United Nations.

Since our foundation in 1999 we have witnessed a number of things relevant to the committees purpose here today:

- Irelands citizens, organisations and society have transformed to a sophisticated and prosperous digital economy, with very significant digital dependency.
- significant technology and born-in-the-cloud based sectors emerge both indigenously and through FDI to a point where Ireland now hosts upwards of 30% of European cloud data in data centres located on island.
- the dramatic digital transformation of traditional bricks and mortar organisations, including Government, to a very high digital dependency, based on accessing and servicing their markets via digital channels.
- a lot of business and wealth, now located in Ireland, has digital roots and is much more portable, as distinct from less portable legacy businesses. This portable business and wealth can easily relocate to countries who are in a position to appropriately secure it.

In the field of Cyber security, we have witnessed:

- the emergence of cyber security on global, national and corporate risk registers consistently as one of the top 3 risks, along with climate change, global pandemics and the increasing occurrence of all 3 risks.
- relentless increases in the scale, sophistication and effectiveness of attacks directed against individuals, organisations and the state from criminals, hacktivists and militia, to a point where the financial scale of cyber-crime at \$6TN annually has overtaken the global illicit narcotics trade.
- organisations increasingly challenged to protect themselves from inadvertent or nonmalicious cyber events that similarly threaten their survival or prosperity.
- a global shortage of cyber security talent estimated to be 3.2M professionals by 2022
- the Cyber Security market emerge as a massive opportunity for Irish companies, conservatively estimated to be worth \$173BN in 2020 and growing to \$270BNBN by 2026.
- The emergence of a vibrant cyber-security ecosystem in both the Republic of Ireland and simultaneously in Northern Ireland.

We work with our clients through their full cyber security lifecycle of Assess, Protect, Detect and Respond. There is one absolute observable trend that we and our industry generally notices. Clients who invest and adopt a systemic approach to their cyber security posture, working to move from an immature approach to fully optimised approach, suffer from the same hostile environment but are typically breached less. When breached optimised clients respond quicker and better and thus suffer less impact and cost to their business. Cyber optimised organisations treat cyber security as a journey not a destination.

Ireland now need a fundamental acceleration of our approach to National Cyber Security:

- We have a society worth defending. We need politically and societally to move to a national defence mind-set with our national cyber security as one of the key pillars of our defence.
- We need to move to leading and developing national and global consensus, collaboration on cyber laws, norms, ethics and behaviour and the global enforcement of same.
- We need a full blooded, joined up, coherent and committed strategy for our defence, encompassing all government, national security and intelligence, industry, academic and research resources to outgun the cyber bad actors.
- We need to adopt a 10-year goal of making Ireland the cyber security capital of Europe. We
 can do this by developing a world class cyber security ecosystem in Ireland so that we have
 the resources in country to secure ourselves. In doing so Ireland also stands the possibility of
 benefiting from a rapidly growing global cyber marketplace estimated to be worth\$ 270BN
 by 2026.
- We need to raise our game nationally from an immature to an optimised approach to cyber security to protect our citizens, our government and our economy.