

Address by Hon. David McGuinty, P.C., M.P., President of the Canadian Group to the Inter-Parliamentary Union, to the 139th Assembly of the Inter-Parliamentary Union

Dear fellow parliamentarians,

- Thank you for the opportunity to discuss this topic of critical importance with you today. There is perhaps no issue of international governance with as wide-ranging an impact as scientific innovation and technological change.
- It has become largely accepted as fact that innovation and technological change are altering our social, political and economic environments at an ever-increasing rate. This fast-paced change, that is so evident all around us, feels new, unprecedented.
- While this may be true, it's easy to lose sight of the fact that technological change has been a constant of human civilization. In many ways, we have been here before, and our past successes and failures at managing change should inform our current efforts to do the same.
- One lesson that history teaches us is that the choices we make matter, and that nothing is inevitable. Technological change is what we make of it, and its ultimate value for human civilization will be determined by us, not by the technology.
- Parliaments, and parliamentarians, are in the business of making choices, often difficult ones. And as such, it is up to us to help lead the debate and build consensus, both within our individual countries and internationally, about how we collectively manage technological change, ensuring that we take advantage of the opportunities that innovation presents while mitigating the new dangers that it can create.
- One big choice we have to make deals with role of government and the public sector in fostering innovation and technological change. In the age of trillion-dollar tech firms, it is easy to forget that the internet was largely developed by the public sector. Governments have an important role to play in innovation, and when that role is played effectively, it empowers and augments complementary efforts by private firms.
- We in Canada have embraced the government's role in empowering and cooperating with the private sector in pursuit of innovation. Through programs like the Strategic Innovation Fund, which spurs innovation by providing over a billion dollars to private firms, or the Superclusters initiative, which fuels innovation by bringing companies together with public sector researchers and institutions in strategic sectors, the Canadian government is demonstrating that it can work effectively with the private sector to the benefit of all.
- This focus on innovation also extends to Canada's international engagement. For example, the Grand Challenges Canada program supports over one thousand health sector innovations in more than 80 countries. With a model based on integrating technology with social and business innovation, the program recognizes the need for public initiatives to work with the private sector to maximize results achieved.
- Nurturing innovation also requires that government re-thinks things it already does. Perhaps most obviously in the education sector, where governments play an important role in ensuring citizens, in particular young people, develop the knowledge and skills that ultimately lead to innovation. Training

the next generation must start from an early age, which is why Canada has invested 50 million dollars to support coding and digital skills education for primary and secondary students.

- While innovation is creating previously unimaginable opportunities, it is also creating new dangers. As more of our lives, including critical public services, continue to move into the digital realm, cybersecurity is becoming a central concern of governments around the world. Events in recent years have clearly demonstrated the impact that cyberattacks can have. The tools that are used to perpetrate cyberattacks are weapons - weapons which are altering the nature of armed conflict - and must be treated as such.

- Again, we can look to the past to inform the present. This is not the first time that international norms have had to adapt to the changing nature of armed conflict. From chemical weapons, to nuclear explosives to landmines and the proliferation of small arms, the international community has demonstrated the ability to adapt existing norms of international peace and security and create new ones in response to deadly advances in weapons technology.

- While those efforts were imperfect, and remain incomplete, they show a path forward. As with previous technological change, norms around the use of cyberweapons will be determined to a large extent by state behaviour. Parliaments therefore must hold their governments to account for the use of cyberweapons and extend and adapt oversight mechanisms to account for this new form of warfare. State-sponsored actors are among the most frequent perpetrators of cyberattacks, parliamentarians need to do more to prevent such behaviour.

- At the same time, we need to advocate at the international level for the infrastructure necessary to facilitate state cooperation. As with effective cooperation on disarmament in the past, international institutions will likely play a key role in the development and maintenance of international norms around cyberwarfare. Such institutions act as a critical source of independent expertise and a valuable venue for discussion, where emerging principles and rules around the use of cyberweapons can be consolidated into established norms, and eventually international law.

- Canada recognizes the importance of cybersecurity and is doing its part to advance knowledge around this critical issue. Canada's National Cyber Security Strategy is in the process of establishing the Canadian Centre for Cyber Security, which will consolidate national cybersecurity expertise within an institution specifically tasked with addressing Canada's cybersecurity.

- Canada is also committed to parliamentary oversight of its national security related cyber activities. I am proud to chair the National Security and Intelligence Committee of Parliamentarians, a bicameral, multi-party committee with the authority to review government national security activities. The committee is a powerful tool to ensuring that government remain accountable for its actions, one I believe is worth replicating in other countries.

- The current rate of technological change and innovation may seem overwhelming, even uncontrollable. But every day, we as a society – and we as parliamentarians – are making decisions that influence how this technological change will impact people around the world. The effects of innovation are not inevitable. We can, and must, make the choices that ensure that we seize the opportunities presented by innovation while mitigating the new dangers it creates.

- Thank you