

Annex C: G7 Innovation Ministers' statement on stimulating innovation

The G7 Ministers of Innovation met in Montréal, Québec on March 27-28, 2018 to further our dialogue and cooperation on approaches to spur innovation and elevate the growth trajectory of our nations. This is our opportunity to deepen collaboration, learn from each other's experiences, and exchange examples of innovation initiatives, case studies, and best practices. To this end, we have identified four interconnected and mutually reinforcing themes to stimulate innovation:

Skills and Talent: The Common Trait of Innovation

Fostering innovation and entrepreneurship requires an emphasis on skills development and training for the labour force of tomorrow. This requires a new mindset of continuous learning which starts in school but also includes continual up-skilling and re-skilling to ensure that our workforce is ready to fill present skills gaps and is able to grow into the jobs of tomorrow.

G7 members shared the following innovation initiatives, case studies, and best practices:

- The **UK**'s commitment to test ambitious new approaches to lifelong learning through different approaches to help people to retrain and upskill throughout their working lives. The UK Government has announced the rollout of a National Retraining Scheme which includes testing the use of AI and innovative EdTech in online digital skills courses so that learners can benefit from this emerging technology, wherever they are in the country.
- **Canada**'s efforts, through its Global Skills Strategy, to enable firms to tap into global talent pools and recruit highly skilled individuals from abroad and attract the talent they need to succeed in the global marketplace. In addition, Canada established six sector-specific Economic Strategy Tables to identify specific challenges and opportunities for innovation, including skill demands. To meet the demand for these new skills, Canada has launched the Skills Boost Initiative, providing adult learners who are looking to return to post-secondary education to upgrade their skills with enhanced access to student financial assistance and EI flexibilities. There are also targeted initiatives to support women and underrepresented groups (e.g. Indigenous peoples, low-income Canadians, people with disabilities and seniors) by providing them with training and support to maximize their participation in the digital economy.
- The Digital Skills and Jobs Coalition in the **European Union** brings together Member States, companies, social partners, non-profit organisations and education providers, who take action to tackle the lack of digital skills in Europe. In this framework, the European Commission has recently launched a pilot project to financially support cross-border apprenticeships (the "Digital Opportunities" initiative).
- Tax credit for companies in **Italy**, for the training of employees on Industry 4.0 technologies together with the financing of Technical High Institutes conferring high tech specialisation to the next-generation labour force, through the promotion of a teaching methodology based on practical experience.
- **Germany**'s 'Mittelstand 4.0' Competence Centres providing a wide range of awareness raising, information, testing and training programmes on digital technology, focusing on SMEs. Additionally, the Industrie 4.0 platform develops recommendations for new training methods and presents best practice examples showing how employers and employees work together. In the area of continuing education, the employers and employees have already developed a number of solutions together. These are being used in companies, teaching factories and vocational schools. To ensure that young people acquire the skills they need in the future world of work, the curricula of the dual vocational training system are continuously updated in cooperation with all of the stakeholders.

- The Grande Ecole du Numérique in **France**, a network of free and short digital training programmes with no requirement for prior degrees, specifically targeting the youth, which aims at training 10,000 persons within 200 certified programmes by the end of 2018. One hundred seventy training programmes have been certified so far.
- To follow changes of labour needs of industries dealing with AI and data-related technologies, **Japan** is upgrading and expanding human resource development tools such as the skill standards for IT professionals and the qualification system for IT engineers. Furthermore, Japan established an accreditation program for private IT-skill training courses to meet the 4th industrial revolution and enable workers who complete the training program to acquire certification.

The above demonstrates that G7 countries recognize that education and workforce development must follow the changing needs of industry.

Technologies and Breakthroughs: The Inflection Point of Transformative Capabilities

Scientific discovery and technological breakthroughs are the primary sources for expanding the frontiers of human knowledge and for responding in innovative and practical ways to the challenges and opportunities of the 21st century. We need to highlight the importance of transformative technologies to elevate the competitiveness of established and emerging firms, industries, and clusters.

G7 members shared the following innovation initiatives, case studies, and best practices:

- An investment of \$950 million over five years to support five business-led **Canadian** Innovation Superclusters, which will be matched dollar for dollar by the private sector and is expected to create more than 50,000 middle-class jobs and grow Canada's economy by \$50 billion over the next 10 years.
- **France's** recently launched "*fonds pour l'innovation de rupture*", a 10B € fund for innovation and industry which aims at financing breakthrough innovation and at investing in disruptive technologies with a specific focus on critical sectors (Artificial Intelligence, cybersecurity, mobility and health).
- **Germany's** Central Innovation Program (ZIM) which offers grants for R&D projects, in particular for co-operations between businesses and research institutes. Bilateral agreements stimulate international research co-operations for the benefit of SMEs. The cluster and network activities, which form an important part of the innovation system: The Leading-Edge Cluster Competition with public funding of 600 million and a total project budget of 1.2 billion Euros successfully supports top-performing innovation clusters, bringing together partners from science and industry (including SMEs) under a common strategy.
- The holistic approach taken by the **United States** which provides multiple forms of support for innovation. For example, the National Science Foundation (NSF) supports the Industry-University Cooperative Research Centers (IUCRC) that help build long-term partnerships among industry, academia and government to build innovative capacity and expand the national research enterprise as well as the Innovation Corps (I-Corps™) that helps researchers develop technologies, products and processes from scientific discoveries.
- The promotion of holistic policies in **Japan** such as "Society 5.0", "Connected Industries" and "Change by TECH" to create added value and new business models by fully utilizing transformative technologies to solve social challenges and realize economic and social prosperity. Japan also promotes the provision of competitive funding of R&D activities, including financial support for ambitious technical challenges

with the potential to generate disruptive innovation, and for start-ups and university spin-offs commercializing new technologies.

- The pilot **European Innovation Council (EIC pilot)** brings together several innovation schemes to provide support with no thematic restrictions to innovative firms and entrepreneurs with the potential for rapid scale-up. It is particularly aimed at companies who have ideas that could lead to products or services radically different to those on the market or under development, are highly risky, and require significant investments.
- Promoting knowledge-intensive investments in **Italy** such as Enterprise 4.0 which offers an incremental tax credit on R&D expenditure, robust deductions on IP-related income and a “super-depreciation” scheme to make more favourable the purchase of new machinery, especially instrumental goods that fit the Industry 4.0 paradigm.
- The **UK’s** Industrial and Digital Strategies, which set out our ambition of building an economy which works for everyone – delivering high wages, high skills, high productivity and creating the conditions for competitive, world leading businesses right across the UK. We are stepping up to back business to invest for the long term, to build on the UK’s strategic strengths and tackling our weaknesses. The Digital Strategy applies these principles to the digital economy. It is about backing our world-leading digital sectors and promoting digitally-driven productivity growth across the rest of the economy, while also ensuring that everyone, in every part of the UK, benefits from the digital revolution.

G7 countries understand that risk taking can lead to benefits that accrue to all and that assistance should be given to those willing to do the work to turn ideas into the next generation of transformative innovation.

Growing Innovative Companies: A Conduit to Better Jobs

Today’s companies are competing in a global marketplace even if they don’t realize it. They need tools, supports, and predictable business environments to enable them to invest and rapidly adopt new technologies to remain competitive and grow.

G7 members shared the following innovation initiatives, case studies, and best practices:

- Digital Innovation Hubs in the **European Union** which allow companies to experiment with innovative ICT technology and, if successful, help them to find financing for follow up investments. The hub can also train and reskill the employees of the company to work effectively with the new innovations.
- Launching a new Women Entrepreneurship Strategy in **Canada** to help women entrepreneurs grow their businesses with access to financing, talent, networks, and expertise and making more capital available to SMEs through the Business Development Bank of Canada’s programming as well as the Venture Capital Catalyst Initiative. Also, the new Innovative Solutions Canada initiative which looks at how the federal government can act as a first customer to test and validate Canadian technologies.
- Helping SMEs that lack preparedness to innovate in **Germany** by providing assistance in acquiring relevant competences and capacities. Programs like the Go-Inno and Go-Digital provide counselling directed at increasing firms’ know-how in innovation and digital matters. Similarly, Germany’s “Mittelstand 4.0 – Digital Production and Work Processes” supports SMEs and craft trades in the digitalisation, networking and introduction of industry 4.0 applications. The “KMU-innovativ” initiative is aimed at strengthening the potential for innovation among small and medium sized enterprises. Funding is open to cooperative high-risk industrial research projects and takes place within broader research communities thus increasing mutual learning and spill-over effects.

- Promoting the use of information technology (IT) in MSMEs in **Japan** by building a system to provide them with information on efficient IT tools as well as by setting up a nation-wide network of companies and organizations to support MSMEs through “Smart Manufacturing”.
- Promoting a national network of publicly-selected and funded sector-specific Competence Centers in **Italy**, that can support firms, especially SMEs, by providing assistance and contributing to the development of industrial and experimental projects. These Centers complement the “greenfield” educational activities carried out by Digital Innovation Hubs, spreading awareness of Industry 4.0 technologies and spurring digital transformation.
- The **UK**’s Digital Strategy which includes a pillar that covers Digitisation of Business – helping every British business become a digital business. The UK announced a Business Basics pilot to support SMEs with the potential to improve their productivity, but lack the management capacity, practical resources or capability to adopt productivity-boosting technologies. In January the UK published the Digital Charter to make the UK both the safest place to be online and provide businesses with a framework that allows clarity and stability under which industry can flourish.
- The ***French Tech*** initiative which certifies startup-friendly territories in order to support startups’ growth and their international development, this initiative includes territories in every G7 country. The “Structuring Projects for Competitiveness program brings together public companies and public research organizations to develop innovative products, processes, or services that are not available on the market while providing local benefit. France also provides support for the digitalization of SMEs.
- Supporting small businesses developing next generation technologies through the Small Business Innovation Research and Small Business Technology Transfer (SBIR/STTR) programs in the **United States**. The SBIR/STTR programs provide funding for early-stage R&D across a variety of mission areas, from health and agriculture to energy, defense, and more, fueling the commercialization of Federal investments in R&D for innovators and entrepreneurs across the United States.

G7 countries recognize that SME growth drives prosperity and that the integration of transformative technologies is required across all businesses to maintain competitiveness.

Ease of Doing Business: To Foster Entrepreneurship

Effective policies for innovation rely on a sound business environment that encourages investment in technology and R&D and embolden innovative firms to experiment with new ideas, technologies, and business models without the fear of being stigmatized when experiments don’t succeed. It also requires streamlining many of the hurdles that entrepreneurs must navigate in order to free themselves to focus on their goals.

G7 members shared the following innovation initiatives, case studies, and best practices:

- Launching **Innovation Canada** to provide a single point of contact for innovators and entrepreneurs looking to grow their businesses. This innovative interface is an entrepreneur’s gateway to government programs and services and a historic reform and simplification of business innovation programs. Total overall funding will increase, and the reform will see a reduction in the total number of business innovation programs. This will consolidate and streamline the suite of programs to be client-centric, easy to navigate, and ensure that programs offer the best support to innovators.
- Undertaking regulatory reforms in **Japan** to facilitate the deployment of pilot projects that rely on AI and IoT technologies and making efforts to improve the international business environment by working with like-minded countries to ensure the free-flow of

data, prevent data localization and prohibit compulsory access to, or transfer of, source code.

- Taking a holistic approach to policy making for innovative entrepreneurship in **Italy** through the “Italian Startup Act”. Innovative start-ups benefit from legal facilitation (for example their digital incorporation) covering each phase of the business life-cycle and receive support during interactions with others in the innovation ecosystem, such as incubators, VCs, and established companies.
- Continuing **Germany**’s EXIST programme and the High Tech Founders Fund which provide financial help and assistance to start-ups and young companies when outsourcing ideas from universities to businesses.
- The **European Union**’s Digital Single Market (DSM) strategy, which aims to reduce regulatory and non-regulatory barriers to cross-border adoption and deployment of digital technologies across all sectors – public and private. The DSM is embedded in broader economic and societal needs. The European Council is also proposing an EU Blockchain Partnership to promote a coordinated approach, focused on public sector use cases towards a new generation of more effective public sector services for businesses, citizens and administrations.
- Efforts to simplify the regulatory framework for entrepreneurs and companies are being pursued in **France**. One such effort is a draft law being debated which eliminates sanctions for good faith errors (“droit à l’erreur”).
- The **UK**’s Industrial Strategy which committed to develop an agile approach to regulation that promotes and supports innovation and ensures effective protections for citizens and the environment. To support this, the Department for Business, Energy and Industrial Strategy will launch a £10m Regulators’ Pioneer Fund in 2018 to support regulators to develop innovation-friendly approaches to emerging technologies.

Streamlining interactions between businesses and governments to ease burdens is a goal we all share and are taking positive steps to ensure that launching and growing businesses is simplified.

Source: <https://g7.gc.ca/en/g7-presidency/themes/preparing-jobs-future/g7-ministerial-meeting/chairs-summary/annex-c/>