



À vos jeux, Canada!
Jouer pour gagner dans l'économie numérique

Rédigé par l'association canadienne du logiciel de divertissement

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SOMMAIRE

1. Pour être efficace, une stratégie numérique doit prendre compte des industries du contenu

Le gouvernement fédéral a annoncé récemment qu'il allait élaborer et mettre en œuvre une stratégie de l'économie numérique en vue de favoriser la prospérité, la compétitivité et l'innovation. L'association canadienne du logiciel de divertissement, la voix du secteur canadien du jeu vidéo, appuie l'élaboration d'une stratégie numérique complète pour notre économie, qui sera axée sur le contenu numérique. Une approche globale – qui reconnaît les relations et les liens qui existent entre les divers segments de l'écosystème numérique – soutiendra nos secteurs créatifs, favorisera l'innovation dans les technologies et les communications et stimulera la croissance économique et la création d'emplois.

2. Le secteur du jeu vidéo représente une part importante de l'économie numérique du Canada

Le secteur du jeu vidéo est celui du divertissement qui affiche la plus forte croissance dans le monde. Le secteur canadien du logiciel de divertissement – qui devrait croître au rythme de 29 % par an au cours des quelques prochaines années – se situe actuellement au troisième rang mondial et l'on doit aux développeurs et aux éditeurs de jeux vidéo canadiens certains des titres les plus vendus à l'échelon international. Ce secteur emploie plus de 14 000 professionnels hautement qualifiés et très bien rémunérés, dans les domaines de la programmation, des arts, de l'animation, des effets visuels, du design de jeux et du son, de la saisie du mouvement, de la production, de l'assurance de la qualité, des affaires et du marketing et il injecte des milliards dans l'économie canadienne. Le secteur du logiciel de divertissement fait d'importants investissements dans la recherche et le développement de nouvelles technologies et a aussi d'importants effets sur d'autres secteurs.

3. Adopter un plan visant à former des professionnels d'avant-garde et à les retenir

Sans professionnels spécialisés, les studios de développement et autres entreprises du numérique ne peuvent se maintenir à l'avant-garde. Le Canada doit mettre une priorité sur la formation et l'enseignement de matières classiques comme les mathématiques et les technologies, mais aussi de disciplines comme les arts, l'animation, les effets visuels, le design de jeux et du son, qui mènent à des emplois recherchés et bien rémunérés.

4. Améliorer la littératie numérique des Canadiens par la sensibilisation et l'éducation

Le développement de la littératie numérique des enfants est essentiel à une préparation adéquate aux environnements Internet et à la participation à l'économie numérique. Le gouvernement devrait travailler avec les provinces pour mettre au point une stratégie qui intégrerait la littératie numérique dans le programme des cours et sensibiliserait les parents à la question.

5. Attirer les travailleurs étrangers et les retenir, et éliminer les obstacles à la mobilité de la main-d'œuvre

Le Canada doit éliminer les obstacles à l'engagement de travailleurs étrangers qui ont les études, la formation et l'expérience nécessaires dans les secteurs numériques. En étendant les programmes qui existent déjà et en modifiant les formalités trop lourdes d'embauche de travailleurs étrangers, on

réussira non seulement à combler la demande criante en professionnels compétents au pays, mais aussi à stimuler les transferts de compétences et de connaissances, la création d'emplois et le maintien des employés de grande valeur.

6. Trouver de nouvelles sources de capitaux et d'investissement dans la commercialisation

L'accès fiable au financement et aux capitaux est essentiel au développement d'une économie numérique solide. De nouvelles sources de capitaux pour les entreprises numériques motiveront les investissements en offrant les moyens de se protéger contre les risques, et donc de diminuer la volatilité et le roulement du secteur, et de lui permettre une croissance plus stable et plus prévisible.

Le gouvernement fédéral devrait se concentrer davantage sur la commercialisation de la R-D et les investissements directs dans des projets viables au plan commercial. De nouveaux fonds devraient être affectés au volet « expérimental » du Fonds des médias du Canada ou à un nouveau fonds des médias numériques interactifs, non seulement pour le marché intérieur, mais aussi pour appuyer le contenu canadien de niveau international destiné aussi à des publics internationaux.

Il est essentiel d'améliorer le programme Recherche scientifique et développement expérimental (RS&DE) en élargissant son champ d'application limité et en lançant un nouvel incitatif fiscal pour les médias numériques interactifs si l'on veut soutenir la production de médias numériques. D'importants acteurs comme Ubisoft, Electronic Arts et Eidos ont été attirés au Québec par les incitatifs fiscaux destinés aux médias numériques. Étant donné la force du dollar canadien, le Canada risque de perdre son avantage compétitif alors que d'autres juridictions offriront des incitatifs fiscaux attrayants.

7. La protection de la propriété intellectuelle est au cœur de l'économie numérique

La protection de la propriété intellectuelle représente un volet fondamental et nécessaire de toute stratégie d'économie numérique. Le gouvernement fédéral doit promulguer des réformes du droit d'auteur qui aligneraient le Canada sur les normes internationales par l'interdiction du contournement des mesures de protection technologiques et le trafic d'appareils et de services de contournement. Les lois du Canada doivent aussi être clarifiées en ce qui concerne la responsabilité de ceux qui facilitent le piratage en ligne. Les créateurs doivent pouvoir compter sur la collaboration des FSI lorsqu'il s'agit de faire respecter les droits d'auteur en ligne. Une « exonération » devrait donc être prévue pour les FSI, avec une limite de responsabilité conditionnelle à une collaboration positive avec les propriétaires de droits d'auteur en vue de lutter contre les infractions en ligne.

Des lois démodées sur le droit d'auteur, des mesures d'application plutôt faibles et des frontières perméables ont aussi leur part de responsabilité dans le piratage prospère de biens matériels, tels les copies de jeux vidéo et les appareils de contournement comme les puces de modification. Afin de freiner l'afflux des biens piratés à la frontière, des changements administratifs s'imposent pour accorder aux agents des douanes le pouvoir d'agir. Les responsables de l'application des lois devraient aussi recevoir la formation et les ressources nécessaires pour lutter efficacement contre le piratage, aux frontières et dans les commerces de détail.

8. Créer une infrastructure numérique plus accessible, plus rapide et plus abordable

Une infrastructure à large bande, avec accès et disponibilité continus, représente un élément essentiel reconnu de l'économie numérique du Canada, qui permet aux citoyens d'accéder aux connaissances, aux services, aux offres d'emplois, qui stimule l'innovation et améliore la productivité et la prospérité

économique. Une infrastructure à large bande robuste est aussi essentielle au développement de nouveaux produits et services numériques, de nouveaux modèles d'affaires et de nouvelles méthodes de distribution et elle est fondamentale pour le secteur du jeu. Les jeux et modèles de livraison en ligne, pour le secteur du jeu, sont un domaine possible d'essor phénoménal. Par conséquent, les politiques qui encouragent l'accès haute vitesse plus rapide, plus accessible et à meilleur marché présenteraient l'avantage de favoriser le développement des emplois dans le secteur du jeu vidéo.

9. Favoriser le libre-échange et les marchés libres à l'étranger

Les entraves au commerce international, les droits de douane et autres politiques protectionnistes étrangères peuvent énormément nuire aux exportateurs canadiens, notamment à ceux du secteur des jeux vidéo, qui tirent 90 à 100 % de leurs recettes des ventes à l'exportation. Les marchés libres à l'étranger sont essentiels au développement de l'économie numérique du Canada et à la croissance continue du secteur canadien des logiciels de divertissement et de ce fait, appuient vivement les efforts en vue d'éliminer les entraves au commerce international par des traités et des accords commerciaux.

10. Étudier attentivement les incidences des nouveaux règlements sur l'économie numérique et étudier le rôle des organismes gouvernementaux connexes

L'économie numérique canadienne, qui en est à ses premiers stades du développement, est très dynamique. Par conséquent, le gouvernement doit faire preuve de prudence lorsqu'il adopte de nouveaux règlements qui toucheront les entreprises du secteur numérique. Avec une concurrence internationale de plus en plus vive, tout fardeau réglementaire onéreux ne fera que pousser les entreprises vers d'autres juridictions. Les règlements devraient donc avoir comme objectif premier d'appuyer l'économie numérique canadienne en plein essor et l'incidence possible de tout nouveau règlement devrait être étudiée avec soin. En conséquence, le gouvernement devrait revoir le rôle et le mandat du Conseil de la radiodiffusion et des télécommunications canadiennes (CRTC) et de la Commission du droit d'auteur, du fait qu'ils ont tous deux un lien avec les environnements Internet et les nouvelles réalités numériques.

association canadienne du
logiciel
de divertissement



L'ALD est la voix du secteur dynamique et en plein essor des jeux vidéo et informatiques au Canada. Les membres de l'association incluent les plus grands développeurs et éditeurs de logiciels de divertissement interactif du pays, notamment **Electronic Arts, Ubisoft, Activision Blizzard, Microsoft Canada, Nintendo du Canada, Sony Computer Entertainment, Disney Interactive Studios, THQ et Take Two Interactive**, ainsi que les distributeurs **Solutions2Go et Team One Marketing**. Ensemble, ils ont représenté plus de 90 % des deux milliards de dollars de vente au détail de matériels et de logiciels de divertissement au Canada en 2009 et des milliards de plus en ventes à l'exportation dans le monde entier.

Game On, Canada!

Playing to win in the digital economy

1. INTRODUCTION

In both the recent Speech from the Throne and Budget 2010, the Government of Canada announced that it will develop and launch a Digital Economy Strategy in order to foster “a strong digital economy [that] will contribute to a more prosperous and competitive Canada.”¹ This follows on the Federal Government’s strategic allocation of funding in

“Digital media is poised to transform our economy in ways we have not yet imagined”
– Industry Minister Tony Clement

Canada’s Economic Action Plan to broadband infrastructure, education, and the cultural industries,² each of which are important elements in the development of a robust digital economy. Further, Minister of Industry Tony Clement announced in June 2009 that the Federal Government was committed to developing “an action plan on the digital economy ... that will secure Canada’s position at the leading edge, driving innovation and prosperity for decades to come.”³

As the industry association for companies in Canada that develop, publish and distribute video and computer games for video game consoles, handheld devices, personal computers and the Internet, the **Entertainment Software Association of Canada (ESAC)** applauds and supports these initiatives. While Canada is a world leader in many key economic areas, including energy, natural resources and financial services, there is a growing perception that Canada is slipping in its capacity for innovation and in the state of its digital economy.

The Council of Canadian Academies has reported on Canada’s weakness in innovation and lagging investment in research and development (R&D) and information and communication technologies (ICT).⁴ The Conference Board of Canada recently gave Canada a “D” in innovation, ranking the country 14 out of 17 developed industrialized nations for its ability to turn knowledge into money-making products and services.⁵ Similarly, while availability of broadband internet access remains strong across the country, international rankings by The Economist,⁶ the Organization for Economic Cooperation and Development (OECD)⁷ and others⁸ have each placed Canada well down the list in terms of Internet

¹ Speech from the Throne, 40th Parl., 3rd Sess. (3 March 2010), online: Government of Canada <<http://www.speech.gc.ca/eng/media.asp?id=1388>>; *Budget 2010: Leading the Way on Jobs and Growth* (4 March 2010), online: Department of Finance Canada <<http://www.budget.gc.ca/2010/pdf/budget-planbudgetaire-eng.pdf>> at 84.

² *Canada’s Economic Action Plan: A First Report to Canadians* (March 2009), online: Government of Canada <http://www.plandaction.gc.ca/grfx/docs/ecoplan_e.pdf>.

³ The Honourable Tony Clement, PC, MP, “Canada 3.0: Defining Canada’s Digital Future” (Speech delivered to the Canada 3.0 Conference, June 2009), online: Industry Canada <<http://www.ic.gc.ca/eic/site/ic1.nsf/eng/04737.html>>.

⁴ Council of Canadian Academies, *Innovation and Business Strategy: Why Canada Falls Short* (April 2009), online: Council of Canadian Academies <[http://www.scienceadvice.ca/documents/\(2009-06-11\)%20Innovation%20Report.pdf](http://www.scienceadvice.ca/documents/(2009-06-11)%20Innovation%20Report.pdf)>.

⁵ Conference Board of Canada, “How Canada Performs” (2 February 2010), online: Conference Board of Canada <<http://www.conferenceboard.ca/HCP/Details/Innovation.aspx>>.

⁶ Economist Intelligence Unit, *The 2007 E-Readiness Rankings* (2007), online: EIU <http://graphics.eiu.com/files/ad_pdfs/2007Ereadiness_Ranking_WP.pdf>

⁷ OECD, *OECD Broadband Portal* (June 2009), online: OECD <http://www.oecd.org/document/54/0,3343,en_2649_34225_38690102_1_1_1_1,00.html>

access and other measures. Accordingly, if Canada is to remain competitive in the changing global economy it is clear that concrete action must be taken to address these deficiencies.

Furthermore, other countries around the world are recognizing the need for their own digital strategies, and are already taking action to implement policies intended to strengthen their digital economies. Indeed, the release of *Digital Britain*, the UK's highly ambitious and comprehensive digital strategy,⁹ in June 2009 is but one of the most recent initiatives,¹⁰ highlighting Canada's urgent need to develop and implement its integrated policy in order to address the complex challenges of the 21st century and keep pace in the global digital economy.

Developing a strategy for Canada's digital future is a critical component of ensuring prosperity and opportunities for all Canadians. While plans to grow and expand Canada's information and communications technology (ICT) sector and technological infrastructure are clearly integral components of our competitiveness and productivity, a national digital strategy that will create sustainable next-generation jobs and secure Canada's position as leader in the knowledge economy must also include a comprehensive plan to support the production and distribution of content and the growth of robust domestic creative and digital media industries. Indeed, content and technology are symbiotic, and the development of new digital products, services and distribution methods, enabled by a vibrant ecosystem of diverse digital business models, will continue to be a primary driver of broadband adoption and will spur innovation.

Accordingly, rather than focus on specific sectors or elements on piecemeal basis, Canada should adopt a comprehensive, holistic approach to the development of Canada's digital economy strategy. A strategy that is narrowly focused on expanding broadband access or facilitating adoption of ICT will necessarily be limited in scope and will not consider the corresponding impact on development of digital content and other policy areas. As the Minister of Industry has observed, "digital media is poised to transform our economy in ways we have not yet imagined",¹¹ and the ESAC strongly believes that the issues arising from these transformative changes should be examined comprehensively with a view to their overall impact. By developing a comprehensive national strategy for the digital economy that includes digital content at its core, the Federal Government will foster Canadian creative industries, generate innovation in technology and communications, and drive investment, economic growth and job creation.

⁸ See e.g. Professor Leonard Waverman & LECG, *Connectivity Scorecard: Canada*, online: Connectivity Scorecard <<http://www.connectivityscorecard.org/countries/canada>>.

⁹ United Kingdom, *Digital Britain: Final Report* (June 2009), online: Department for Culture, Media & Sport <<http://www.culture.gov.uk/images/publications/digitalbritain-finalreport-jun09.pdf>>.

¹⁰ Others include Australia, *Australia's Digital Economy: Future Directions* (July 2009), online: Department of Broadband, Communications and the Digital Economy <http://www.dbcde.gov.au/__data/assets/pdf_file/0006/117681/DIGITAL_ECONOMY_FUTURE_DIRECTIONS_FINAL_REPORT.pdf>; New Zealand, *Digital Strategy 2.0* (August 2008), online: New Zealand Digital Strategy <<http://www.digitalstrategy.govt.nz/upload/Documents/Digital%20Strategy%202.0%20FINAL.pdf>>; France, *Numérique 2012: Digital Economic Development Plan* (October 2008), online: France Numerique 2012 <<http://francenumerique2012.fr/>>.

¹¹ *Supra* note 3.

2. CANADIAN VIDEO GAME INDUSTRY

The video game industry is the fastest growing entertainment industry globally, and in fact represents one of the fastest growing market segments in the global economy overall.¹² The Canadian entertainment software industry is currently ranked third in the world (second only to the United States and Japan), and Canadian video game publishers and developers are behind some of the world's most successful game titles¹³ and are regularly ranked amongst the best in the world.¹⁴

Canada is a net exporter of entertainment software, and over 50% of Canadian video game companies have reported relying on foreign sales for 90 to 100% of their revenues.¹⁵ Canadian developers and publishers are conservatively estimated to generate over CAD\$2 billion in annual revenues, and some estimates place annual revenues as high as CAD\$3.47 billion.¹⁶ Furthermore, the Canadian industry is conservatively estimated to contribute over CAD\$1.7 billion in direct economic activity to the Canadian economy (including salaries, overheads and other capital expenditures),¹⁷ and this does not include the considerable amount of non-direct economic activity created by the industry (e.g. distributors, retailers, marketers, spin-off industries, etc.).

Today, Canada's video and computer game industry employs over 14,000 people in creative, high-paying jobs, and is projected to grow 29% annually over the next few years.¹⁸ According to the Game Developer Census, the industry job growth rate in 2009 was 30%, exceeding projections despite the global

Canadian Video Game Industry - Quick Facts:

- Fastest growing entertainment industry, and one the fastest growing sectors worldwide
- Canada is the third most successful video game industry in the world
- Employs 14,000 people in high paying jobs
- Compound annual job growth rate of 29%, and Canadian job market grew 30% in 2009
- Canadian video game developers and publishers generate \$2 billion in annual revenues and contribute \$1.7 billion in direct economic activity to the Canadian economy
- Canadian video game developers and publishers are net exporters, and rely on exports for majority of their revenues
- Canadian video game developers and publishers make significant R&D investments leading to the development of viable commercial products
- Video game industry builds tremendous synergies with other creative industries and drives innovation in other areas such as science, technology and research

¹² According to PricewaterhouseCoopers, the global entertainment software market is projected to grow at 7.4% annually over the next five years and grow from US\$51.4 billion in 2008 to US\$73.5 billion by 2013. PricewaterhouseCoopers LLP, *Global Entertainment and Media Outlook: 2009-2013* (2009).

¹³ 10 of the top 50 selling video games in North America and Europe in 2008 were produced by Canadian game development studios. Edge Staff, "The 60 Biggest Selling Games of the Last 12 Months" (29 January 2009), online: Edge Online <<http://www.edge-online.com/features/the-60-biggest-selling-games-last-12-months>>.

¹⁴ Electronic Arts Canada and Ubisoft Montreal were recently ranked in the top 6 most successful game studios in the world. Develop Magazine, "Develop 100: The World's Most Successful Game Studios" (2009), online: Develop 100 <<http://www.develop100.com>>.

¹⁵ Entertainment Software Association of Canada, *Canada's Entertainment Software Industry: The Opportunities and Challenges of a Growing Industry* (2009).

¹⁶ Games Investor Consulting, *Raise the Game: The Competitiveness of the UK's Games Development Sector and the Impact of Governmental Support in Other Countries* (2008). Specifically, the Report estimated Canadian Industry revenues to be £1.77 billion in 2008, or CAD\$3.47 billion (at the average interbank currency exchange rate for 2008). The Report also projected that Canadian industry revenues in 2009 would be £1.95 billion, or CAD\$3.82 billion.

¹⁷ *Supra* note 15.

¹⁸ *Ibid.*

economic downturn.¹⁹ Industry surveys show that entry-level workers in the entertainment software industry earn almost twice as much as the average recent college graduate, and the average salary across all Canadian provinces is US\$65,500,²⁰ with higher average salaries in game development hubs such as Vancouver and Montreal. Accordingly, the entertainment software industry as a whole has created thousands of highly skilled, high-paying jobs in Canada in a variety of disciplines, including programming, art, animation, visual effects, game design, sound design, motion capture, production, quality assurance, business and marketing, and contributes billions to the Canadian knowledge economy.

The entertainment software industry also makes significant investments in R&D of new technologies. According to a study by the National Research Council - Industrial Research Assistance Program (NRC - IRAP) and New Media BC, 55% of Canadian video game companies reported that they are developing proprietary technology to aid them in production (such as game engines and content/asset management software), and 61% of these companies believed they could develop viable commercial products from these technologies.²¹ Furthermore, a broad array of service providers have also emerged in most major game industry clusters. Many companies that are primarily focused on the television and motion picture industries have found that their capabilities (such as digital animation, motion capture, sound design, etc.) are in demand by game developers, while game companies are increasingly developing capacity in digital animation and offering computer graphics services to the film industry.²²

The influence of entertainment software technologies extends well beyond synergies with similar industries. Advances in raster scan, real-time graphics, three-dimensional graphics, graphical user interfaces, trackball, joystick, artificial intelligence, and network persistence technologies have been driven by the entertainment software industry and have had a considerable impact outside of the industry. For instance, real-time and three-dimensional graphics are now used in military and flight simulations, medical imaging, and architecture, while game design principles are increasingly being applied in education and training to augment traditional instruction.

While it is difficult to fully determine the economic value of these transfers from the entertainment software industry to other industries, it is clear that the impact on Canada's economy is substantial. Coupled with the tremendous growth potential presented by the global market for entertainment software and related technologies, Canada has a substantial interest in the continued expansion and development of this key component of our nation's future prosperity.

Canada must seize the opportunity to establish itself as the world leader in this innovative and cutting-edge industry through the development of a comprehensive digital economy strategy that not only addresses specific issues such as broadband access and ICT adoption, but adopts a holistic approach that

¹⁹ Greg Tito, "Canada Sees Substantial Growth of Game Developers in 2009" (21 December 2009), online: The Escapist <<http://www.escapistmagazine.com/news/view/97004-Canada-Sees-Substantial-Growth-of-Game-Developers-in-2009>>.

²⁰ Game Developer Magazine, *Game Career Guide - Fall 2009*, online: Game Developer <<http://gamedeveloper.texterity.com/gamedeveloper/2009fall/>> at 38.

²¹ New Media BC, *National Game Map: Final Report* (March 2005). For instance, London's Digital Extremes, which co-developed the original Unreal Engine with Epic Games, developed its own Evolution Engine for its 2008 action game Dark Sector, and has recently started licensing the game engine technology to game developers, while Toronto's TransGaming Technologies has pioneered a variety of software portability technologies that allow video games to be migrated quickly and cost-effectively across multiple gaming platforms. See Digital Extremes, "Tech: The Evolution Engine", online: Digital Extremes <<http://www.digitalextremes.com/tech/>>; TransGaming Technologies, "Business", online: Transgaming Technologies <<http://www.transgaming.com/business/>>.

²² For instance, Ubisoft Montreal has been developing its capacity to create special effects, graphics and animation for the movie industry, acquiring Canadian special effects studio Hybride Technologies, and working with Twentieth Century Fox on James Cameron's science-fiction film *Avatar*. See Brain Ashcraft, "Ubisoft Ready To Blend Movie And Game Business" (2 June 2008), online: Kotaku <<http://kotaku.com/5012195/ubisoft-ready-to-blend-movie-and-game-business>>.

recognizes the interrelationships between different segments of the digital ecosystem. The ESAC urges the Federal Government to develop a digital economy strategy that addresses a full range of digital economy issues, including matters pertaining to the development and commercialization of digital content and intellectual property.

3. RECOMMENDATIONS FOR A DIGITAL ECONOMY STRATEGY

The ESAC has crafted this discussion paper to highlight and provide concrete recommendations on a range of topics that are critical to the ongoing success of the Canadian entertainment software industry (and, more generally, Canada's interactive digital media (IDM) and software industries) and that will play an integral role in the development of a robust and vibrant digital economy for Canada.

A. Talent Development

Adopt a plan to develop and retain cutting edge talent

Access to capital and investment incentives are inadequate to support an industry in the absence of a talented and highly skilled workforce. Without talent, game development studios and other digital media companies are unable to remain on the cutting edge regardless of how cost effective they may be. Consequently, consistent access to a highly skilled talent pool is a foremost consideration for digital media industries,²³ and the development and retention of cutting edge talent must be included in a digital economy strategy.

Increase the number of graduates in math, science and technology streams such as computer science, as well as more "artistic" digital media streams such as art, design, animation and visual effects

If Canada is to maintain a successful digital economy, it is critical that we develop and maintain a highly skilled talent pool. To address this, the Information Technology Association of Canada (ITAC) has recommended that "We need: more children taking math, science and technology educational streams and more grads in related disciplines; more graduates with the right package of education (essentially more people with a combination of technology and business acumen); and better integration of skilled foreign workers."²⁴ The ESAC agrees, but would highlight that the development of most forms of digital media (including entertainment software) involves not only highly developed technical disciplines such as computer science, but also more traditionally "creative" fields such as art, animation, visual effects, game design and sound design, which also represent high value, high paying jobs.²⁵ Accordingly, the ESAC proposes that the increase in the number of students apply not only to math, science and technology fields such as computer science, but also to the more "creative" disciplines associated with interactive digital media.

Foster digital media training and skills development by co-ordinating with provincial governments to provide direct support for educational programs

²³ *Supra* note 17.

²⁴ ITAC, *Upping our Game: A National ICT Strategy for Canada* (June 2009), online: ITAC <http://www.itac.ca/uploads/news/upping_our_game_may2509.pdf>.

²⁵ In 2009, the average salary across all Canadian provinces for each discipline was: Programmers: US \$65,500; Art & Animation: US \$57,417; Game Design: US \$47,760; Production: US \$67,368; Audio: US\$58,929; and QA: US \$35,147. See *supra* note 20.

Canada is well regarded in terms of talent (a factor that has acted as a competitive buffer from rapidly changing business costs associated with the fluctuating value of the Canadian dollar), and provincial governments, academia and industry have all been very proactive in developing educational programs for digital media.²⁶ The Federal Government should proactively foster IDM training and skills development by co-ordinating with provincial governments to provide direct support for these educational programs.

B. Digital Literacy

Improve the digital literacy of Canadians, including promoting an understanding of online safety and cyber ethics

The digital economy represents a transformative force exerting significant changes on Canadian society, both in terms of productivity and innovation, and in terms of social relationships. In this environment, the development of a digitally literate and educated populace is an essential element in building a safe and sustainable digital economy for Canada.

Digital literacy encompasses not only an understanding of digital technology and how it can be used to develop new social and economic opportunities, but also awareness of the hazards and risks of the online environment, and an understanding of online safety and security, and cyber ethics (including obeying laws that apply to online behaviour). Digitally literate people can communicate and create more efficiently, safely, securely and respectfully, enabling them to maximize productivity and contribute their creativity and innovation to the development of Canada's digital economy.

“Digitally literate people can communicate and create more efficiently, safely, securely and respectfully, enabling them to maximize productivity and contribute their creativity and innovation to the development of Canada's digital economy.”

Moreover, the development of digital literacy among children is critical in order to properly prepare them for participation in the online world. Both parents and educators (supported by industry and government) have a role to play in preparing our children to be "digital citizens". In particular, parents should educate themselves about the Internet and media and the ways in which their children use it, explore and evaluate available technological tools for their individual child, and adopt those tools they consider appropriate for their particular family context. Parents must also be engaged and involved in their children's Internet and media use, and remain conscious of the common hazards and risks in order to help their children understand and navigate the technologies. Parents must also instil a strong sense of cyber ethics and teach their children about acceptable behaviour online, including issues such as cyberbullying, plagiarism, rude or bad language, communicating with strangers, online impersonation, and respect for privacy and intellectual property.

²⁶ For instance, Ubisoft funded the 'Ubisoft Campus' in Montreal, which now offers a series of college and university level training programs in key video game development fields in collaboration with Cégep de Matane and the Université de Sherbrooke, while in 2007, Electronic Arts announced a \$1 million grant to the Masters of Digital Media program (MDM) at the Great Northern Way Campus.

Support parental and educators involvement in digital literacy by co-ordinating with provinces to incorporate digital literacy programs into educational curriculums

Educators can support parental involvement by incorporating digital literacy programs into their curriculums, by being aware of their students' Internet and media use and responding appropriately, and by making resources on online safety, security and cyber ethics available to parents and encouraging them to take an active role.

Well-regarded organizations such as the Media Awareness Network (MNet) and Kids Internet Safety Alliance (KINSA) have worked in co-operation with industry, child safety experts, technologists, public policy advocates, social services, and law enforcement to develop resources and materials for educators and parents. The Federal Government should work in conjunction with the provinces to develop a strategy to incorporate digital literacy into school curricula, and support the activities of organizations like these.

C. Labour Mobility

Attract and retain highly skilled foreign talent

While developing talent and digital literacy is critical in a strong digital economy, it is only part of the solution. If Canada is to remain truly competitive, we must intensify our efforts to bring in foreign workers with the right education, training and experience we are seeking to develop. Canada must also improve on integrating these skilled immigrants into jobs commensurate with their abilities and experience. Hiring skilled foreign workers can not only address unmet domestic demand for skilled employees, it can also spur skills and knowledge transfer, and promote job creation and retention of high-value employees. If Canadian companies are prevented from hiring talented and skilled foreign workers due to inflexible or cumbersome government policies and procedures and equivalent domestic talent is not readily available, companies may be forced to complete projects with compromised staffing or possibly even relocate their projects to other jurisdictions where the talent is available. Consequently, the Federal Government must make labour mobility for foreign knowledge workers as fluid and frictionless as possible.

Introduce specific tax incentives for executives, specialists and other professionals in digital media disciplines in order to attract foreign industry experts of the highest calibre

In the Canadian entertainment software sector, a domestic shortage of executive and senior-level personnel may compel Canadian companies to recruit abroad and bring the required expertise to Canada. However, while Canadian companies frequently offer generous compensation packages to such highly skilled foreign professionals, the applicable Canadian personal income tax rate is considered cumbersome and often plays a significant role in the refusal of an offer of employment in Canada. In order to attract foreign industry experts of the highest calibre, Canada should consider the introduction of specific tax benefits and incentives for executives, specialists and other professionals in digital media disciplines.

Eliminate barriers to labour mobility by developing expedited work permit and visa procedures for skilled foreign workers

Canada must develop expedited permit procedures for foreign knowledge workers. One such program already exists for Information Technology Workers, permitting employers hiring workers in seven specialized job categories²⁷ to circumvent usual process of obtaining a Labour Market Opinion (LMO),²⁸ thereby accelerating the hiring process for foreign employees in these categories. However, the Federal Government is rescinding this program, and will instead consider LMO applications made for these positions on a case-by-case basis in accordance with standard LMO processes. This will not only introduce some degree of uncertainty into the hiring of foreign workers in these categories (as obtaining a favourable LMO cannot be assured), but will also increase the amount of paperwork and lengthen the processing time required to hire a skilled foreign worker. Also, government might not be in the best position to determine a foreign worker's suitability for highly technical jobs, as the job requirements or job descriptions in highly specialized fields can shift dramatically as technologies evolve.

Rather than rescind the program, the Federal Government should not only retain but expand the program to include other categories of knowledge workers, and update the existing job categories (which were created in 1997) to more appropriately match the highly educated, skilled and experienced foreign workers in the ICT, IDM and other digital economy sectors that Canada is seeking to attract.

The Federal Government also should seek to reduce the processing time for visas and work permits and develop an expedited process for knowledge workers (or allocating greater resources to the relevant departments to speed processing), particularly if that worker is already working in Canada (currently, hiring a foreign worker in Canada takes just as long as hiring a foreign worker outside of Canada). Canada must also examine other immigration issues which hamper the hiring of skilled foreign workers, such as the treatment of the spouses of qualified foreign workers, who often cannot obtain work permits.

D. Financing & Access to Capital

Generate new sources of financing and investment in digital media

Reliable access to financing and capital is essential to the development of a robust digital economy. However, the limited size of Canada's venture capital pool has been a barrier to the development of high growth companies, particularly in technology. Accordingly, as ITAC has recommended, "we need to find ways of accelerating the development of this sector in Canada by removing barriers to foreign venture capital and growing the availability of venture capital within our country."²⁹

²⁷ Specifically Senior Animation Effects Editors, Embedded Systems Software Designers, MIS Software Designers, Multimedia Software Developers, Software Developers – Services, Software Products Developers and Telecommunications Software Designers.

²⁸ Specifically, in recognition of the critical labour shortages in the specified occupations that are experienced throughout Canada, Human Resources Development and Services Canada has issued a standing national LMO for these job categories. Consequently, employers are deemed to have met HRSDC labour market requirements irrespective of the location of work in Canada and are not required to apply for individual LMOs, which can be a lengthy and unpredictable process.

²⁹ *Supra* note 24 at 5.

While access to capital is an endemic challenge in all technology-related sectors, it is particularly challenging in the digital media sectors, where projects often require substantial investments at early stages but are unproven and cannot guarantee a predictable return. The entertainment software sector is a very good example of this. The global video game market is intensely competitive, and with potentially large development budgets (\$10-30 Million) and lengthy development timelines (up to three years), there is a significant possibility that a company may not recoup its considerable investments in a game title.³⁰ Due to the high level of risk, venture capital and other forms of outside financing found in the technology sector can be difficult to obtain, and consequently game development studios have traditionally relied on financing from major publishers (in the form of recoupable advances) to fund game development. Furthermore, due to the relative newness of the sector, even risk tolerant investors often lack the necessary industry understanding or experience and/or willingness to invest in Canadian game development studios, which has severely limited alternative sources of funding and led to significant underinvestment in this growing sector by firms outside the industry. Thus, it is not surprising that in a national survey of Canadian video game companies, access to capital was viewed quite poorly.³¹

Accordingly, while the ESAC supports the removal of Section 116 certificate process tax barrier in Budget 2010, as well as other measures intended to facilitate foreign direct investment in Canada's digital economy, it is imperative to go further and proactively improve access to capital for the digital media industries if Canada is to sustain a vibrant digital economy, with Canadian companies developing innovative digital products, services, distribution methods and business models. In our view, there are two principle means to accomplish this: direct government funding, and tax incentives in the form of favourable tax treatment of expenditures related to R&D, development, marketing and distribution of IDM. Through the adoption of these measures and development of new sources of capital for digital media, Canada will incentivize foreign and domestic investment in its digital media industries by providing investors a means to hedge against risk, which will in turn lead to the creation of more development studios, more projects, and more employment, while at the same time reduce industry volatility, reduce studio turnover, and provide more stable and predictable growth for the sector.

i. Direct Funding

The Government should emphasize commercializing innovation and focus its direct investments on commercially viable projects.

The ESAC supports the Federal Government's commitment to increase investments in scientific research and innovation in Budget 2010, including its emphasis on the commercialization of R&D, leading to new market opportunities for Canadian businesses. We also applaud the Federal Government's efforts to update the Canadian Television Fund by creating the Canadian Media Fund (CMF). However, in order to build and maintain a successful digital economy, the Federal Government should increase its emphasis on the commercialization of R&D and innovation, and focus its direct investments on commercially viable projects.

³⁰ According to Electronic Entertainment Design & Research, only 20% of video game titles released ever attain profitability, and for every commercial success there are a multitude of commercial failures. See Luke Plunkett, "Only 20% of Games Make a Profit - EEDAR" (24 November 2008), online: Kotaku <<http://kotaku.com/5098356/only-20-of-games-make-a-profit--eedar>>. Furthermore, most game titles will earn the vast majority of their overall sales revenue within the first 60 days after release, with the bulk of sales occurring within the first few weeks of release. Thus, in order to continue developing and publishing a diverse range of video game titles, video game companies must use the revenues from successful titles, much of which is earned immediately after release, to offset the development costs of unsuccessful games.

³¹ *Supra* note 17.

New funds should be allocated for the “experimental” stream of the Canadian Media Fund or to a new interactive digital media fund

Increased funding should be allocated for the new "experimental" stream of the CMF, one of the few sources of federal funding currently available for the production of IDM, since the anticipated budget allocations will be insufficient to provide robust support to the rapidly growing IDM sector (especially not high-quality, big-budget IDM production).

Moreover, the ESAC strongly supports the creation of a new interactive digital media fund, separate and distinct from the CMF. IDM (and entertainment software specifically) is fundamentally different than television (or other audio-visual content),³² and the IDM industry employs vastly different production methods and business models. Accordingly, to maximize the creation of new and world-leading IDM in Canada as well as the development of viable digital business models, access to the fund should not be tied to a broadcast component, but solely focused on the development of interactive media. In addition, to reflect the global nature of the IDM sector, the fund should be outward looking, and provide financial support for both development of content for the global market,³³ as well as associated marketing and distribution costs.

ii. Tax Incentives

Develop and introduce tax incentives to facilitate foreign and domestic investment in digital media sectors

While direct government funding will provide an important source of financing of digital media, appropriate and well constructed tax incentives will be absolutely critical in facilitating foreign and domestic investment in the digital media sectors. This includes improving the existing federal Scientific Research and Experimental Development (SR&ED) tax credit, as well as addressing the gap between the SR&ED and traditional film and television production tax credits by introducing a new federal tax credit for IDM. The ESAC strongly believes that implementing these measures will provide a crucial “safety net” for the investment community to provide much-needed funds to Canadian digital media companies, and will play a key role in building Canada’s digital economy.

a) Scientific Research and Experimental Development Tax Credit

Improving the existing Scientific Research and Experimental Development (SR&ED) tax credit by broadening its scope and making it refundable for all firms

³² For instance, audio-visual content is typically passive and linear, with each end user essentially hearing and/or seeing the same sounds and/or visual images in the same sequence and having a very limited degree of control over their individual experience. By contrast, IDM (and entertainment software specifically) is inherently interactive and non-linear, with control over the experience resting with the end user, who continually changes the sequence, timing, and even the nature of the experience him or herself. Consequently, IDM does not comport with any conventional understanding of “audio-visual” content.

³³ According to PricewaterhouseCoopers, the Canadian entertainment software market represents less than 3% of the global market. See *supra* note 12. Consequently, the Canadian market is simply not large enough to sustain the enormously high creative costs associated with video game production, and virtually all video games are produced for the global entertainment software market.

The SR&ED tax credit is one of the keys to promoting and supporting the successful commercialization of our R&D, and it can be very effective in getting technologically-based innovation and advancements into Canadian products and processes. The Canadian entertainment software industry certainly considers the credit to be highly valuable, and it plays an important role in financing the proprietary technologies such as game engines underlying video and computer games.

Nonetheless, the existing SR&ED credit suffers from several critical deficiencies that undermine its effectiveness. The Council of Canadian Academies notes that the credits “discrimination in favour of very small R&D performers – via the higher 35% credit and the refundability condition – blunts the potential benefit that could be induced if the more generous parameters were available to large firms” and that as it is only refundable for small firms, the credit is of significantly “less benefit for large firms when tough economic conditions reduce or eliminate taxable income”.³⁴ Furthermore, as ITAC has indicated, in jurisdictions like the U.S. (which have to add back to taxes payable in the U.S. on global income what they deduct from taxes payable in Canada) the SR&ED credit as currently structured offers no benefit, and consequently does not factor into a foreign company’s decision to engage in R&D activities in Canada or operate to incentivize foreign investment in R&D in Canada.³⁵ This would not be the case if the SR&ED was a refundable credit for these investors.

Accordingly, the ESAC concurs with the recommendation of the Canadian Chamber of Commerce,³⁶ ITAC, the Canadian Advanced Technology Alliance (CATA)³⁷ and others that the SR&ED tax credit program be changed to permit all firms access to refundable tax credits. Furthermore, we also support CATA’s recommendation that the current definition of SR&ED be broadened to better support the full commercialization process for advanced technologies and build the digital economy.

Finally, the SR&ED tax credit has not kept up with inflation, and that other countries are providing more generous credits for technology companies.³⁸ Canada should consider increasing the size of the SR&ED tax credit if it is to remain globally competitive.

b) Interactive Digital Media Tax Credit

Bolster existing provincial digital media tax credit programs by introducing a new federal digital media tax credit

If Canada is to build and maintain globally competitive digital media industries, enhancing the federal SR&ED tax credit will not of itself be sufficient. While the SR&ED tax credits may apply if a company is developing new technology, the development of IDM also involves design, production of art assets and animation, and other “creative” elements which are not eligible for the credit regardless of how

³⁴ *Supra* note 4 at 157. The Council also speculates that this “might even have the unintended consequence of encouraging some firms to stay small”.

³⁵ ITAC, “Sharpening Canada’s Competitive Edge” (Submission to the Competition Policy Review Panel) (January 2008), online: Industry Canada <[http://www.ic.gc.ca/eic/site/cprp-gepmc.nsf/vwapj/Info_tech_assoc.pdf/\\$FILE/Info_tech_assoc.pdf](http://www.ic.gc.ca/eic/site/cprp-gepmc.nsf/vwapj/Info_tech_assoc.pdf/$FILE/Info_tech_assoc.pdf)> at 13.

³⁶ Canadian Chamber of Commerce, Submission to Competition Policy Review Panel (January 2008), online: Industry Canada <[http://www.ic.gc.ca/eic/site/cprp-gepmc.nsf/vwapj/chamber_commerce.pdf/\\$FILE/chamber_commerce.pdf](http://www.ic.gc.ca/eic/site/cprp-gepmc.nsf/vwapj/chamber_commerce.pdf/$FILE/chamber_commerce.pdf)>.

³⁷ CATA, “SR&ED Update CATAAlliance March 2010” (March 2010), online: CATA <http://www.cata.ca/Advocacy/SRED/updates/sred_update_Mar10.html>.

³⁸ For example, France is reducing 50% of R&D expenditures for start-up companies in their first year, 40% in the second, and 30% thereafter. See Terry Matthews, (Speech delivered to “Canada’s Digital Economy: Moving Forward”, June 2009), online: CATA <http://www.cata.ca/files/PDF/2009/THM_Keynote_DigitalEconomy_22June09.pdf>.

innovative they may be. Moreover, IDM companies will often license the underlying technology in order to increase efficiency, in which case the company would be completely ineligible. Consequently, while the technology and film and television sectors benefit from federal tax credit programs, digital media often falls into the gap that currently exists between pure technology (SR&ED) and content (film and television production), and thus the introduction of a new federal IDM tax credit program, separate and distinct from the SR&ED and film and television production tax credits, and crafted to address the specific needs and business models of the IDM sector, will be crucial to its ongoing success.

Indeed, the introduction of a provincial multimedia tax credit in the 1990s has been a critical element of Quebec's success as centre of videogame and multimedia development. It is a direct consequence of that program that major multinational publishers such as Ubisoft, Electronic Arts and Eidos (among others) each established game development studios, creating thousands of high-paying, high value jobs.³⁹ Moreover, it is estimated that Quebec received 2 to 1 return on this investment and fully recouped the cost of the program within 5 years of introduction,⁴⁰ demonstrating that it was an extremely wise investment.

In the wake of Quebec's tremendous success, other provinces have followed suit and introduced or increased their own IDM tax credit programs.⁴¹ While the provinces have undertaken tremendous efforts to support the growth of the IDM industries in their respective jurisdictions, the Federal Government cannot afford to remain complacent. Indeed, various foreign jurisdictions have started emulating Canadian provinces by introducing their own IDM tax credit programs. This, coupled with the high Canadian dollar, means that Canada is rapidly losing one of its most significant competitive advantages. In fact, the Canadian industry is already seeing a growth in outsourcing of some elements of game production to low cost jurisdictions such as China and India, while at the same time the tremendously strong entertainment software industries in the United Kingdom and South Korea are threatening to overtake our current position of third in the world.⁴²

Accordingly, the ESAC strongly recommends that the Federal Government bolster existing provincial IDM tax credit programs by developing (in consultation with industry) and introducing a new federal IDM tax credit program. The credit should supplement other applicable federal and provincial tax credits, and be consistent with provincial IDM tax credits in order to facilitate efficient administration. The credit should also be sufficiently flexible to account for the wide variety of production cycles and business models in the IDM sector, and include a certification program to facilitate financing from outside investors. The introduction of a robust federal IDM credit will ensure the international competitiveness of the rapidly growing domestic industry, and assist Canada in establishing and retaining a leading position in the global digital economy.

³⁹ More recently, multinational publishers THQ and Warner Bros. Interactive each announced the creation of new studios in Quebec, which will create hundreds of new jobs. See *e.g.* Government of Quebec, News release, "Québec Premier announces Warner Bros. plan to establish a video game studio in Montreal", online: Government of Quebec <<http://communiqués.gouv.qc.ca/gouvqc/communiqués/GPQE/Mars2010/22/c3958.html>>.

⁴⁰ "Multimedia Tax Credits a Great Success, Landry Says" (19 November 2009), online: Montreal Gazette <<http://www.montrealgazette.com/business/Multimedia+credits+great+success+Landry+says/2229291/story.html>>.

⁴¹ For instance, Ontario recently increased its IDM tax credit in order to attract foreign investment in Ontario's digital media sector, while British Columbia recently announced that it would also be introducing a new IDM tax credit in order to stimulate industry growth.

⁴² *Supra* note 16, which projects that Canada will be overtaken in global sales rankings by South Korea and China, and that the UK will jostle with Canada for fifth place position.

E. Intellectual Property

Intellectual Property is the cornerstone of the digital economy and must be adequately and effectively protected

In the modern knowledge economy, economic growth and prosperity is contingent on the capacity to develop, exploit and commercialize intellectual property, which in turn requires that intellectual property is adequately and effectively protected.⁴³ Accordingly, updating our intellectual property framework is crucial to the development of a market-driven digital economy.

Specifically, Canada must modernize its aging copyright regime to address the challenges of the digital age. A robust regime that provides adequate and effective protection for creative works in the digital environment benefits both businesses and consumers by providing greater certainty in digital marketplace and permitting market forces to operate properly. By protecting the considerable time, money, labour and creativity that creators and companies invest in innovative and creative new digital works, and enabling creators and companies to determine the most appropriate means to distribute their works, a modern copyright regime will spur investment in the development of new digital products, services and distribution methods and support a diverse range of new and innovative digital business models, fostering legitimate competition, more consumer choice and lower prices.

“Updating our intellectual property framework and in particular modernizing Canada’s aging copyright regime for the digital age, is crucial to the development of a market-driven digital economy.”

i. Copyright

Copyright reform must bring us in line with international standards, including the WIPO Internet Treaties

⁴³ This has been recognized by a multitude of government and industry reports. For instance, the Competition Policy Review Panel noted that in the knowledge economy “intellectual property frameworks play a central role in rewarding and encouraging innovation by granting creators the rights that enable them to monetize the products of their innovation,” and determined that modernizing our IP framework in the online environment was especially critical due to the ever-increasing importance of the economic activity associated with the digital economy. Accordingly, the Panel concluded that it was urgent that Canada’s IP framework be updated so that we “develop strong IP capacity and demonstrate to the world how competition and productivity can be furthered by a modern IP regime.” See Competition Policy Review Panel, *Compete to Win* (June 2008), online: Industry Canada <[http://www.ic.gc.ca/eic/site/cprp-gepmc.nsf/vwapj/Compete_to_Win.pdf/\\$FILE/Compete_to_Win.pdf](http://www.ic.gc.ca/eic/site/cprp-gepmc.nsf/vwapj/Compete_to_Win.pdf/$FILE/Compete_to_Win.pdf)> 94-95. Meanwhile, the Conference Board of Canada recently observed that “21st-century world economies are fuelled and refuelled by intellectual property” and that the robust intellectual property rights “encourage technological change through positive impacts on R&D investment.” See Ruth Corbin, “Intellectual Property in the 21st Century” (February 2010), online: Conference Board of Canada <http://www.conferenceboard.ca/temp/d96ab35d-73e4-4de4-a9c0-af0a615d21f6/10-186_IPRreport_WEB.pdf> at 9, 37. Likewise, in its digital strategy discussion paper, TELUS submitted that “Intellectual property is the currency of an information economy just as much as access to broadband is a prerequisite to participation”, and further noted that “economic growth or economic dependency will be directly correlated with our ability to develop, protect, exploit and profit from intellectual property” and that “monetization of content is critical to ensuring a supply of high value content.” See TELUS, “Leaping Forward – Wireless Broadband And A National Digital Strategy” (30 November 2009), online: Scribd <<http://www.scribd.com/doc/23376655/Leaping-Forward-Wireless-Broadband-and-a-National-Digital-Strategy-FINAL>> at 12.

Canada exists in a global context and participates in a global economy, and therefore any reforms to copyright must be consistent with international standards and modernized in accordance with the WIPO Internet Treaties and international best practices.

Canada must adopt prohibitions on the act of circumventing technological protection measures and the trafficking in circumvention devices and services

Many creative industries make widespread use of a variety of technological protection measures ("TPMs") that prevent the unauthorized access to, use or transmission of copyrighted materials to protect their works. These TPMs not only prevent piracy, but also permit companies to differentiate products to meet consumer demands by enabling a diverse range of features and options that would otherwise be unavailable, and facilitate digital distribution of products and services. However, many TPMs can be circumvented through the application of hardware, software or services developed specifically to descramble, decrypt, bypass or deactivate TPMs. In order to sustain the digital content, services and business models that TPMs facilitate, it is necessary to discourage circumvention.

Canada must enact copyright reform legislation that brings Canada into full compliance with the WIPO Internet Treaties, including adopting prohibitions specifically addressing both the act of circumventing TPMs (including TPMs that limit copying and TPMs that control access) and the trafficking (sale, distribution, import, export) in circumvention devices and services and implementing deterrent criminal and civil remedies against those engaged in provision of services and tools that circumvent TPMs.⁴⁴

Secondary infringement and intermediary liability must be clarified so that the liability of those facilitating and encouraging infringing acts by third parties are clearly held accountable

It is also urgent that copyright reform legislation in Canada address the pervasive problem of online piracy, which fundamentally undermines the integrity of the online marketplace and development of digital content, services and business models by requiring creators and companies to compete against their own products, siphons revenue necessary to recover the significant investments associated with digital media production, and leads to business failures and lost jobs.

In Canada, the liability of those who knowingly facilitate, encourage or contribute to infringement (such as illicit file-sharing services) is ambiguous and uncertain. While it is probable that acts that induce or materially contribute to copyright infringement could be considered authorizing infringement and/or secondary infringement, this is unclear. These secondary infringement doctrines are essential for rights holders to pursue legal action against online pirate sites and services, and consequently the law in this

⁴⁴ While some have argued that implementation of the WIPO Internet Treaties requires only prohibiting circumvention for purposes that directly infringe copyright, "the dominant view internationally is that legislation that prohibits only the circumvention of TPMs for the purpose of infringement would not be adequate and effective," and most consider that "the WIPO Internet Treaties obligate member states to legislate against the circumvention of access controls and trafficking in devices to circumvent access controls, rather than simply the circumvention of copy controls." Heather A. Sapp, "North American Anti-Circumvention: Implementation of the WIPO Internet Treaties in the United States, Mexico and Canada" (2005) 10 Comp. L. Rev. & Tech. J. 1 at 9-10. See also Mihaly Ficsor, *The Law Of Copyright And The Internet* (Oxford Univ. Press 2002) at 549-550. Moreover, WIPO itself has indicated that, because acts of circumvention are often carried out privately, any prohibition limited to just the act of circumvention can be very difficult to enforce, and therefore such a limited prohibition cannot be said to "provide adequate legal protection and effective legal remedies" as required by the Treaties. See WIPO, *Guide to the Copyright and Related Rights Treaties Administered by WIPO and Glossary of Copyright and Related rights Terms* (WIPO, English No.891(E), 2004) at paras. CT-11.14 - CT-11.17.

area must be clarified and the liability of those who knowingly facilitate, encourage or contribute to infringement firmly established.

Canada must introduce a “safe harbour” for ISPs and intermediaries with liability limitations conditioned on affirmative and effective co-operation with copyright owners in combating online infringements

Canadian creators and companies must be able to rely on meaningful and expeditious cooperation from ISPs to effectively enforce rights online. At the same time, ISPs deserve certainty regarding potential liability for copyright infringements occurring over their networks. Accordingly, Canada should introduce a “safe harbour” for ISPs with liability limitations conditioned on affirmative and effective co-operation with copyright owners in combating online infringements. Specific measures should include appropriate incentives for service providers to expeditiously remove infringing content that is stored or hosted on their systems (including a statutory “notice-and-takedown” regime) and voluntarily co-operate with rights holders in effectively addressing transitory P2P infringements occurring across their networks (including implementing mechanisms to impose effective sanctions against repeat infringers sufficient to deter unlawful conduct).

The ESAC strongly supports regular, cooperative dialogue between content owners and the ISP community to facilitate collaborative and effective efforts to address infringing activity online. It may be desirable for governments to aid in initiating and facilitating this dialogue, or, where such dialogue fails, for governments to propose appropriate legislation, regulation, or protocols.

ii. Intellectual Property Crime

To combat hard good piracy, custom officials should be empowered to seize pirated goods, and law enforcement officials should be equipped with the necessary training and resources to effectively combat piracy both at the border and at the retail level

Hard goods piracy, involving the illegal manufacture and sale of counterfeit optical discs for use in consoles or PCs, as well as counterfeit cartridges for handheld devices such as the Nintendo DS / DSi, is pervasive in Canada and presents a significant threat to the development of a sustainable digital economy. Optical disc piracy is a particular challenge, as readily available and inexpensive computer equipment allows anyone to “burn” their own limitless supply of pirated game software. Moreover, our outmoded copyright laws and weak enforcement make commercial piracy highly attractive to organized crime groups, which use piracy to support more serious criminal activity, while our porous borders are ideal for transshipment of illegitimate products, such as circumvention devices.

Recently, the Federal Government has taken action to address the challenge of Intellectual Property crime, recently amending the Proceeds of Crime regulations to allow law enforcement to pursue proceeds from the distribution, sale and importation of pirated goods. The ESAC applauds and strongly supports these measures, but more is needed if Canada is to successfully combat Intellectual Property crime. First and foremost, Canada must stem the influx of pirated goods and circumvention devices at the border by making the legislative, regulatory and administrative changes necessary to empower Canadian customs officials to make *ex officio* seizures of these products at the border without a court

order. Furthermore, Canada must provide law enforcement with the resources and training required to effectively combat piracy both at the border and within Canada, and direct law enforcement, customs officials and prosecutors to give high priority to IPR enforcement, including against retail piracy and imports of pirated products, and to seek deterrent penalties against those convicted of these crimes. The Federal Government should also establish and properly fund an IP Crime Task Force, composed of police officers, customs officers, and federal prosecutors, to guide and coordinate IP criminal enforcement.

F. Digital Infrastructure

Create more affordable, accessible and faster digital infrastructure

Ready, cost effective access to a first-class wireline and wireless broadband infrastructure is a critical component of Canada's digital economy, providing Canadian citizens with access to knowledge, services, and employment opportunities, stimulating innovation and increasing productivity and economic prosperity. It is also crucial to the development of new digital products, services, distribution methods and business models, which, in turn, will drive broadband adoption. Accordingly, the ESAC agrees with TELUS that the Federal Government should consider it a "fundamental premise that continued investment in and availability of advanced broadband infrastructure, particularly on a competitive basis, will be a critical component of Canada's economic, social and cultural welfare in the 21st century."⁴⁵

Access to advanced broadband infrastructure is essential for online games (e.g. Massively Multiplayer Online Games, social games and casual games), games with online functionality or features (e.g. multiplayer) and digital delivery of games (via platforms such as Xbox LIVE or Valve Corp.'s Steam) As such, broadband is vital to the entertainment software industry's future growth. Government policies that encourage more affordable, more accessible, and faster broadband would have the beneficial effect of fostering job growth within the video game industry At the same time, consumer interest in online games and digital delivery platforms help drive demand for advanced broadband services, which is a necessary precondition for investment in and deployment of the next generation of broadband networks.

Develop and implement devise a "Made in Canada" solution to get Canada into a position of leadership in next-generation broadband by 2014

The ESAC strongly supports the Federal Government's efforts to provide essential infrastructure to Canadians in rural and remote areas, such as the allocation of funds in Canada's Economic Action Plan to extend broadband coverage to unserved and underserved communities. However, it is clear that more is needed. For instance, the Canadian Chamber of Commerce has noted that "the U.S. and Australia have both focused on the need for higher speeds for broadband in their new investment/stimulus programs

"Availability of advanced broadband infrastructure, particularly on a competitive basis, will be a critical component of Canada's economic, social and cultural welfare in the 21st century."

– TELUS

⁴⁵ TELUS, *supra* note 43 at 6.

... . Our global competitiveness requires Canada to develop its own “Made in Canada” investment strategy to rejoin the lead in stimulating and accelerating competitive deployment of network facilities.”⁴⁶

Similarly, ITAC has argued that “Canada should develop an approach that fits our circumstances and repositions us among the world leaders. We need to finish the roll-out of broadband to all Canadians across all of Canada, and then we need to move to higher capacity and speed on a world-class scale.”⁴⁷ The ESAC agrees with this assessment, and supports ITAC’s recommendation that the Federal Government “assess our current situation and public and private investment plans and devise a “Made in Canada” solution to get Canada into a position of leadership in next-generation broadband by 2014.”⁴⁸

G. International Trade

Foster free and open international trade

The Internet is both borderless in nature and global in reach, providing Canadian companies easy access to foreign markets. However, trade barriers, customs tariffs, and other protectionist policies abroad can severely impact Canadian businesses. Indeed, for entertainment software, high tariffs (of up to 30 percent) and additional taxes in certain foreign markets translate into higher prices for software, consoles, and peripherals, and dampens demand for legitimate products, which hampers the growth of the Canadian industry.

“ Open markets abroad are vital to the development of Canada’s digital economy .”

Open markets abroad are vital to both the development of Canada’s digital economy and the continued growth of the Canadian entertainment software industry, and the ESAC strongly supports efforts to break down trade barriers via treaties and trade agreements. Furthermore, Canada should ensure that Canadian companies developing digital products, services and delivery methods have equitable access to foreign markets by seeking consistent and favourable treatment for digital goods and services and in international agreements, and seeking to bolster intellectual property protections in export markets with high piracy rates.

H. “Smart” Regulation & Government Institutions

Carefully consider the impact of new regulations on the digital economy and examine the role of related government institutions

Many organizations such as ITAC and the Canadian Chamber of Commerce have argued that to flourish in the digital economy, Canada needs “smart” regulation that grasps the new realities of an increasingly digital and increasingly global marketplace, reflects the dynamic pace of change in knowledge-based

⁴⁶ Canadian Chamber of Commerce, *Mapping the Future of the Digital Economy: Key to Canada’s Economic Success* (June 2009), online: Canadian Chamber of Commerce <http://www.chamber.ca/images/uploads/Reports/ICT_Digital_Economy22-06-09.pdf> at 11.

⁴⁷ *Supra* note 24 at 11.

⁴⁸ *Ibid.* at 12.

industries, and builds confidence among customers and fosters new forms of high-value commerce. Accordingly, we “must look at our existing regime and any proposed regulatory interventions from the standpoint of whether they will foster world-leading adoption and development of technology; and in particular, whether they will impede or promote investment.”⁴⁹

The ESAC agrees with the focus on “smart” regulations, and further recommends that Federal Government consider whether a proposed regulatory intervention would support development of innovative digital products, services and distribution methods. The Canadian digital economy is highly dynamic and in early stages of development, and consequently government must be cautious when introducing new regulations that will impact digital industries. Furthermore, given the reality of increasing global competition, any onerous regulatory burdens will simply drive companies to other jurisdictions. Accordingly, any form of regulatory intervention should primarily operate to support Canada’s growing digital economy by encouraging innovation and consumer choice, and the Federal Government must carefully weigh the potential impact of any regulation on digital industries in consultation with affected stakeholders.

We agree that Canada must make a concerted effort to update our legal and regulatory regime for the digital economy, and support ITAC’s recommendations that Canada “review our existing framework legislation and regulatory regimes (including the *Broadcasting Act*, the *Telecommunications Act* and the *Copyright Act*) in order to coherently reflect the Internet world and the interdependencies that it brings.”⁵⁰ Furthermore, as part of this process, Canada should review and possibly reconsider the role and mandate of both the Canadian Radio Television and Telecommunications Commission (CRTC) and the Copyright Board in the online environment.

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⁴⁹ *Supra* note 24 at 5.

⁵⁰ *Ibid.* at 32.