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CONSULTATION ON ACCESSION TO THE CPTPP

BSA is the leading advocate for the global software industry before governments and in the international marketplace. We are headquartered in Washington, DC, and have operations around the world. Our member companies[1] are at the forefront of data-driven innovations, including cutting-edge advancements in artificial intelligence (**AI**), machine learning, cloud-based analytics, and the Internet of Things (**IoT**). These innovations are helping to make our devices smarter, our businesses more competitive, and the delivery of government services more efficient.[2]

BSA applauds the United Kingdom's Ministry of International Trade as it works towards accession to the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). By joining the CPTPP and accepting the strong digital trade provisions in the e-commerce chapter, the UK will enhance its prospects of maintaining and sharpening its competitive edge in software development, cloud computing, and AI. In the following pages we lay out: (1) The importance of strong digital trade provisions for the UK; (2) The UK's strong legal and regulatory landscape that positions it for success in the data economy; and (3) Key elements of BSA's Digital Trade agenda.

[1] BSA's members include: Adobe, Akamai, ANSYS, Apple, Autodesk, Bentley Systems, Box, CA Technologies, Cadence, CNC/Mastercam, DataStax, DocuSign, IBM, Informatica, Intel, Intuit, MathWorks, McAfee, Microsoft, Okta, Oracle, PTC, Salesforce, SAS Institute, Siemens PLM Software, Slack, Splunk, Symantec, Trend Micro, Trimble Solutions Corporation, and Workday.

[2] Software.org, a BSA foundation and an independent and nonpartisan international research organization, has released number of publications on AI, machine learning, cloud-based analytics, and IOT. See, for example,:

- *Sensor Sensibility – Making the Most of the Internet of Things* (July 2017, Software.org), available at https://software.org/reports/sensor-sensibility/;
- *Artificial Intelligence – Maximizing the Benefits* (March 2018), available at https://software.org/reports/artificial-intelligence/;
- *Encryption's Vital Role in Industrial Control Systems*, available at https://software.org/reports/icsencryption/; and,
- *Every Sector is a Software Sector: Manufacturing* (June 2018), available at https://software.org/reports/every-sector-is-a-software-sector/.

See also, BSA, *What is the Big Deal with Data* (2015), available at http://data.bsa.org/wp-content/uploads/2015/12/bsadatastudy_en.pdf.

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THE IMPORTANCE OF STRONG DIGITAL TRADE PROVISIONS FOR THE UNITED KINGDOM

The UK stands to benefit significantly by acceding to the CPTPP, which among other things: (1) preserves the ability of UK companies to transfer data on a cross-border basis; (2) strictly limits data localization requirements; and (3) precludes the forced transfer of, or access to, software source code or algorithms. The benefits of such provisions will inure not only to UK citizens, but also to service providers and manufacturers that rely on data analysis, AI, and cloud computing services to grow. These kinds of modern trade provisions will serve as a critical example for other countries hoping to develop their own digital trade rules and set an important precedent for future trade negotiations around the world.

Software is a crucial part of the UK economy. Today, the UK boasts Europe's leading software industry, driven by the UK's large financial sector and innovative service industry. With a direct value-added GDP contribution of €85.8 billion in 2016 – an increase of 31.5 percent over two years – the UK's software industry supported approximately 700,000 jobs directly and distributed €37.1 billion in wages.[3] Thousands of start-ups took their first steps at London's Silicon Roundabout, while tech hubs throughout the country, strong university partnerships, and an open economy led to the rapid growth of companies such as Sage, Sophos, Fidessa, and MicroFocus.

Margot James, Minister for Digital and the Creative Industries, clearly stated the high stakes for the UK in retaining its leadership position in AI, noting, "For the UK, the economic prize is clear: potentially adding 10 percent to our GDP by 2030 if adoption is widespread, with a productivity boost of up to 30 percent". According to Matt Hanock, Former Minister of State for Digital and Culture Cyber Innovation Centre:

> What makes AI so revolutionary is that it learns itself and gets better every single day. Just as AI itself is adapting every day, our economy and society is adapting too, and must adapt so we can make the most of this seismic change. All of the great advances in the human condition have been led by improvements in knowledge and collective intelligence. This one is no different except in that the intelligence is not just in the connection of human minds. Whether it's improving travel, making banking easier or helping people live longer, AI is already integral to our economy and our society. We are known across the world as a place where AI can thrive.[4]

Likewise, as Prime Minister Teresa May recently stated at the World Economic Forum:

> Imagine a world in which self-driving cars radically reduce the number of deaths on our roads. Imagine a world where remote monitoring and inspection of critical infrastructure makes dangerous jobs safer. Imagine a world where we can predict and prevent the spread of diseases around the globe. These are the kinds of advances that we could see and that we should want to see. Already the UK is recognised as first in the world for our preparedness to bring Artificial Intelligence into public service delivery. We have seen a new AI start-up created in the UK every week for the last three years. And we are investing in the skills these start-ups need, spending £45 million to support additional PhDs in AI and related disciplines and creating at least 200 extra places a

[3] Software.org: The Economic Impact of Software (2018): https://software.org/wp-content/uploads/EU_2018_Economic_Impact_factsheet_UK.pdf.

[4] Matt Hancock speaking at the opening of the Cyber Innovation Centre (2018): https://www.gov.uk/government/speeches/matt-hancock-speaking-at-the-opening-of-the-cyber-innovation-centre.

> year by 2020-21. We are absolutely determined to make our country the place to come and set up to seize the opportunities of Artificial Intelligence for the future.[5]

Today, software that powers AI is at work in applications ranging from voice and image recognition solutions, to medical diagnostics and genetic testing systems, to financial products that model risk.[6] As PwC projects, AI and related technologies will produce hundreds of thousands of new jobs in the UK over the next 20 years.[7]

The UK stands to gain significantly in industries where it has developed a high-technology competitive advantage, including the financial and transportation sectors. The financial sector for instance, consistently uses AI's assistive traits to enhance customer experience and protect assets. Banks leverage AI-based tools to create and deliver more efficient processes and services by monitoring global activity and identifying malicious actors. AI also helps predict credit risk, monitor for online fraud, and forecast economic occurrences that can affect consumer decisions and business outcomes. Likewise, the transportation sector – from jet engine R&D to transportation services – depends heavily on software and AI. This includes the deployment of knowledge-based design software at Rolls Royce PLC,[8] and the deployment of AI-enhanced enterprise software solutions at Transport for London, a local-government organization responsible for most aspects of London's transport system.[9]

In view of its advanced legal and regulatory landscape, accession to the CPTPP is a natural next step for the UK. As reflected in BSA's 2018 Cloud Computing Scorecard, which ranked the UK fourth among the 24 countries reviewed, the UK benefits tremendously from strong laws that promote cloud computing and cross-border data flows. The Scorecard examines the legal and regulatory framework of 24 countries around the world, identifying 72 questions that are relevant to determining readiness for cloud computing.[10]

Trade agreements such as the CPTPP, which boasts robust digital trade disciplines, can help secure and enhance the position of UK businesses that rely on software and AI to maintain their competitive edge. These UK businesses benefit from data analytics that allow them to reach more customers and improve both efficiency and cybersecurity, by pooling and analyzing large amounts of data from around the world. Trade agreement provisions that allow for the cross-border transfer of data and limit requirements to localize data and equipment are critical to allowing UK businesses to succeed in the future.

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[5] Theresa May's Davos address in full (2018): https://www.weforum.org/agenda/2018/01/theresa-may-davos-address/.

[6] UK Economic Outlook, Prospects for the housing market and the impact of AI on jobs (2018): https://www.pwc.co.uk/services/economics-policy/insights/uk-economic-outlook.html.

[7] Ibid.

[8] "Rolls-Royce plc invests in knowledge-based design software", Aircraft Engineering and Aerospace Technology, Vol. 72 Issue: 6, available at: https://doi.org/10.1108/aeat.2000.12772fab.015; *See also Every Sector is a Software Sector: Manufacturing* (June 2018), available at https://software.org/reports/every-sector-is-a-software-sector/.

[9] IBM's Transport for London: https://www.ibm.com/case-studies/transport-for-london.

[10] *See* BSA Cloud Computing Scorecard (2018), available at: http://cloudscorecard.bsa.org/2018/. The Scorecard examines each country's existing laws and policies and grades them on their strengths and weaknesses across seven key areas to determine how prepared they are for cloud computing adoption: Ensuring privacy; Promoting security; Battling cybercrime; Protecting intellectual property; Ensuring adherence to international standards; Promoting free trade and data flows; and Establishing the necessary IT infrastructure.

In addition, to protect the intellectual property and investments by UK businesses in software development, and to sustain employment for thousands of UK software engineers and programmers, it is critical UK trade agreements not only contain appropriate intellectual property provisions, but also prohibit trading partners from requiring the disclosure of trade secrets or source code as a condition of market access.

We provide additional details on these and other digital trade priorities in the following section.

RECOMMENDATIONS FOR FREE TRADE AGREEMENT NEGOTIATIONS

Below, we outline the four main pillars that form the basis of our recommendations for an effective digital trade chapter: data economy, regulation, intellectual property, and technology in government.[11] We would be pleased to discuss these elements in greater detail as you continue the accession process.

A. Data Economy

A strong digital trade chapter will require the following issues be addressed and included:

- Free Movement of Data Across Borders: In view of the importance of cross-border data flows to the modern economy, governments should not use privacy or security policies as disguised market barriers. Governments must refrain from imposing barriers to cross-border transfer of data. Recognizing that a government may determine it necessary to adopt or maintain measures for legitimate domestic public policy purposes, privacy or cyber-related measures must not discriminate against foreign service providers, must be narrowly tailored to achieve specific policy objectives, and must not constitute a disguised restriction on trade.

- No Localization Requirements: No matter the sector, governments must not use data localization requirements as a market access barrier. For example, a government should not require a data center to be built inside its borders as a condition for doing business in its territory. As a general principle, governments must not require, as a condition of doing business, a service provider use or locate computing facilities in its territory. In any event, privacy or cyber-related measures must not discriminate against foreign service providers, must be narrowly tailored to achieve specific policy objectives, and must not constitute a disguised restriction on trade.

- New Services: Governments should ensure that robust market access commitments cover both existing services, as well as those that may emerge in the future. Innovative new digital services should be protected against future discrimination, and trade agreements should not become obsolete as markets evolve and technology advances.

- Online Services: To promote growth of internet-based services, governments should ensure that internet intermediaries are protected against liability for unlawful content posted or shared by third parties.

- Electronic Authentication and Smart Contracts: To facilitate trade, governments should allow electronic authentications and signatures to be utilized in commercial transactions. In addition, governments should recognize the use of “smart” contracts and other autonomous machine-to-machine means for conducting transactions, such as blockchain.

[11] BSA’s Digital Trade Agenda (2017): https://www.bsa.org/~/media/Files/Policy/Trade/2017BSATradeAgendaGlobal.pdf.

- No Customs Duties on Electronic Transmissions: Governments should not impose customs duties on either the telecommunications value of electronic transmissions or the value of the information being transmitted.

B. Regulation

Half the world's population is now online, and billions of devices are connecting a wide variety of our daily activities to the Internet of Things. These online connections bring opportunity, but also create risk, including large-scale data theft, privacy violations, phishing scams, ransomware, and malicious information operations that affect millions of people every year.

These challenges make trust and security important policy priorities at both the domestic and international level. Addressing these challenges requires innovative cybersecurity practices and tools to defend the integrity, privacy, and utility of the Internet ecosystem, as well as policies that allow for law enforcement access to data, the adoption and safeguarding of international standards, and the prohibition of coercive technology transfer rules or favoritism for state-owned enterprises in the digital environment. We address these various elements below.

- Encryption: Governments should not undermine the use of encryption in commercial products by imposing restrictions on security technologies used to protect data in-transit or at-rest. Governments should not mandate how encryption and other security technologies are designed or implemented, by imposing requirements to build in vulnerabilities or 'back doors' or otherwise requiring the disclosure of encryption keys.

- International Standards: Governments should adhere to the legal disciplines of the WTO Technical Barriers to Trade, as updated and revised in subsequent agreements. This is a key area for technology companies that have participated in voluntary standards-setting processes. When standards are developed through voluntary, industry-led processes and widely used across markets, they generate efficiencies of scale, and speed the development and distribution of innovative products and services.

- Cybersecurity: Governments should seek to strengthen the foundations of digital trade and innovation by advancing mutually beneficial approaches to cybersecurity. First, governments should build upon previous negotiating experience, such as the principles proposed by the United Nations Group of Government Experts and endorsed by the G-7. Second, governments should encourage the mutual adoption of a voluntary, standards-based, outcome-focused cyber risk management framework to drive the adoption of stronger cybersecurity measures by both government and industry stakeholders.

- State-owned enterprises: Governments must not favor their state-owned enterprises through discriminatory regulation or subsidies.

- No Forced Technology Transfer: Governments should be prohibited from conditioning market access on the forced transfer of technology to persons in their territories. Likewise, governments must not require disclosure of trade secrets or source code as a condition of market access. These prohibitions should not, however, operate to impede legitimate security testing and research. Such provisions should be based on previous negotiating experience and should clarify the legitimacy of security testing and research.

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C. Intellectual Property

To promote continued innovation and technological advancement, intellectual property laws should provide for clear protection and enforcement, consistent with international standards, against misappropriation and infringement of the intellectual property rights that underlie the digital economy. We outline the major elements of this pillar below.

- Copyright Rules: Governments should ensure they have copyright laws that provide meaningful protections for rights holders, as well as safeguards to foster the Internet's continued growth as a platform for free expression, innovation, and digital commerce. Governments should provide online service providers with safe harbors from liability for infringing, or otherwise unlawful, content posted by third parties. Such safe harbors require internet service providers (ISPs) to remove infringing content upon notification by a rights holder, but should not be conditioned on any obligation by an ISP to monitor or filter infringing activity, as such obligations would weaken incentives for innovation and threaten the dynamism and values that have made the Internet so valuable. In addition, software companies should be able to develop world-class software-enabled data analytics solutions that power innovations in artificial intelligence. To that end, relevant rules and policies should be sufficiently flexible to permit commercial text and data mining of all lawfully accessible content.

- Trade Secrets: Governments should adopt or maintain civil and criminal causes of action and penalties for theft of trade secrets.

- Government Use of Legal Software: Governments should adopt or maintain laws and other measures obliging central government agencies to use only non-infringing software, and that such software be only authorized by the relevant license for both the acquisition and management for government use.

D. Technology in Government

Governmental policies regarding the procurement and deployment of technology of new technologies and software, including those relating to AI and blockchain, are critical to future innovation and robust and healthy digital trade. Governments are among the biggest consumers of software products and services, yet many are imposing significant restrictions on foreign suppliers' ability to serve public-sector customers. Not only do such policies eliminate potential sales for software companies, but they also deny government purchasers the freedom to choose the best available products and services to meet their needs. BSA recommends that the UK work to ensure that its software service providers can engage in government procurement in all FTA partner markets. In this respect the three pillars of BSA's Digital Trade Agenda relating to Technology in Government are as follows.

- Technology Promotion in Government: Governments should promote the use of innovative technology in their operations involving the provision of services to citizens.

- Procurement: Procurement rules should be changed to reflect the 21st century needs of governments.

- Choice: Companies and government agencies should be free to use the technology of their choice, and not be required to purchase and use local technology.

CONCLUSION

As summarized above, BSA strongly supports the UK's accession to the CPTPP and looks forward to the opportunity to work with the United Kingdom on these important e-commerce issues.

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