COMMISSION STAFF WORKING DOCUMENT

on digital trade negotiations with the Republic of Korea and with Singapore

Accompanying the document

Recommendation for a Council Decision

authorising the opening of negotiations for digital trade disciplines with the Republic of Korea and with Singapore

{COM(2023) 230 final}
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1. Introduction

This staff working document accompanies the Commission recommendation for a Council Decision authorising the opening of negotiations with the Republic of Korea and with Singapore on digital trade rules\(^1\). Such negotiations will build on the strengthened cooperation on digital trade issues created by the Digital Partnerships formalised between the European Union and, respectively, the Republic of Korea and Singapore. On the basis of the non-binding political commitments in the Digital Partnerships and Digital Trade Principles with the Republic of Korea and with Singapore, the negotiations will be used to pursue binding digital trade disciplines. The staff working document describes the context in which these negotiations will take place, highlighting the increasing importance of digital trade and the efforts of countries around the world to develop international rules in this area. It also presents the different approaches to digital trade rules adopted by the European Union, the Republic of Korea and Singapore.

2. Digital trade

a. Defining digital trade

The exponential development of information and communications technologies (ICTs) during the last two decades has created a digital economy with new ways to produce, market and consume goods and services. It has led to businesses innovation, opened markets, facilitated investments and generated economic growth and created new quality jobs\(^2\).

The digitalisation of the economy worldwide has particularly changed the scale, scope and speed of international trade, which is increasingly enabled by ICTs. Digitalisation has allowed businesses to reach and sell goods and services to a larger number of customers around the world and greatly expanded consumers’ choice. New and innovative digital tools such as flexible cloud computing services have been introduced in production processes and made business overcome barriers to growth. Small and medium enterprises (SMEs) especially can benefit from these opportunities and become more easily integrated in global value chains\(^3\).

Whilst there is no internationally recognised definition of digital trade, there is growing consensus that it encompasses all trade in goods and in services enabled by ICTs.\(^4\) This includes a broad spectrum of transactions in which ICTs play a fundamental role. It covers in particular trade in goods and services that are ordered digitally and physically delivered (such as the online purchase of a physical book or the online booking of a holiday apartment), trade in goods and services that are ordered and delivered digitally (such

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\(^1\) COM(2023) 230 final.
\(^4\) Organisation for Economic Cooperation and Development (OECD), ‘Digital Trade’, *OECD Trade Policy Papers*, July 2017, [https://www.oecd-ilibrary.org/trade/](https://www.oecd-ilibrary.org/trade/); The term ‘digital trade’ is often used interchangeably with the term ‘electronic commerce’ or ‘e-commerce’, which in the context of the World Trade Organisation (WTO) has been defined as the production, distribution, marketing, sale or delivery of goods and services by electronic means.
as an e-book or software acquired online), or the use of digital technologies in a production or distribution process (such as the tracking of road cargo in real time).

A key aspect of digital trade concerns the cross-border flow of data. With the development of the digital economy data has become a key factor of production that has been the basis for new services such as cloud computing or the internet of things. Different categories of data may be part of digital trade transactions, including data that can be used to identify natural persons, i.e. personal data.

Digital trade has a far-reaching impact throughout the economy. Goods and services ordered, acquired, produced or supplied through ICTs across the world will often be used as intermediate inputs for downstream production and value creation. Digital trade thus facilitates the creation and development of global value chains.

b. The extent and value of digital trade

Whilst digital trade is undisputedly growing in importance on a global scale, it is very challenging to measure its exact value. First, the lack of an internationally recognised definition makes it difficult to rely on and to compare existing figures.

Moreover, on a practical level, digital trade is not fully reflected in existing figures. In contrast with physically delivered goods and services, which usually involve customs and other related authorities and procedures, digitally delivered services are typically not subject to the same level of scrutiny and existing figures often exclude smaller transactions as part of a de minimis threshold. That may result in a tendency to underestimate digital trade notably in the business-to-consumer context. Further, existing figures also underestimate trade in online services that are not paid at the point of delivery, such as online search or browser services. Finally, measuring the impact of digital trade on global value chains is particularly challenging. Whereas it may be possible to measure initial transactions of goods and services enabled by ICTs, this is more difficult for follow-on transactions and downstream added value. An example concerns the functioning of so-called ‘infomediaries’ that create added value on the basis of data generated from transactions that took place on digital platforms. Such data may be used for e.g. marketing purposes or website optimisation. As a result, the impact of digital trade on the economy is often underestimated.

The Organisation of Economic Cooperation and Development (OECD), the World Trade Organisation (WTO) and the International Monetary Fund (IMF), have tried to overcome these challenges and develop new methods specifically suited to measure digital trade. Their joint ‘Handbook on measuring digital trade’ is a useful contribution in this regard, but it recognises that more progress is needed.

In view of these challenges, existing figures only provide for estimates of the value of digital trade. For instance, the World Bank estimated that in 2018 global trade in certain digital services such as computer network maintenance, entertainment, broadcasting and financial management services, amounted to

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USD 2.7 trillion globally. It suggested that the share of these services in global trade in services has increased significantly, from 20 percent in the early 2000s to around 50 percent in 2021. However, these estimates do not take account of digitally enabled trade in other services or goods.

The United Nations Conference on Trade and Development (UNCTAD) reported a similar trend and estimated an increase in global exports of digitally deliverable services (including telecommunications, computer and information services, financial and insurance services and business services including professional and management consulting), from USD3.3 trillion in 2019 to USD3.8 trillion in 2021. UNCTAD also reported a sharp increase of the worldwide share of digitally deliverable services as part of the total value of services exports: from 52% in 2019, to 64% in 2020 and 63% in 2021. Although this relative growth has been influenced by the contraction due to the COVID-19 pandemic of trade in other services (such as transport and travel services), it shows a clear growing trend. Again, these figures do not take account of digitally enabled trade in other services or goods.

UNCTAD also projected that the global value of e-commerce (including both business-to-consumer and business-to-business transactions) reached USD26.7 trillion in 2019, corresponding to about 30% of the global Gross Domestic Product (GDP) and representing an increase of 4% from 2018. The overall majority of the global value of e-commerce was estimated to be composed of business-to-business transactions, representing USD21.9 trillion or 82% of the global value of digital trade. Business-to-consumer transactions were estimated at USD4.9 trillion in 2019, representing an increase of 11% over 2018. However, a significant part of these transactions took place at domestic level, and UNCTAD estimated that only 9% of the total business-to-consumer transactions involved cross-border sales, i.e. USD440 billion in 2019, representing an increase of 9% over 2018. UNCTAD did not provide for estimates of the value of cross-border business-to-business transactions.

In terms of data flows, the World Bank estimated that by 2022 internet traffic was expected to reach 150,000 Gigabits of traffic per second, a 1000-fold increase compared to 156 Gigabits in 2002. However, these figures do not specify the source and destination of the data and thus do not differentiate between domestic and cross-border data flows. In addition, the figures do not specify the type of data concerned (such as whether they relate to video or software, personal or non-personal data), which makes it difficult to assess the relevance of the data flows to digital trade.

In the context of trade-related data flows, the OECD calculated that in 2019, exports of data services, such as database conception, data storage and the dissemination of data and databases, search engine services that find Internet addresses for clients who input keyword queries etc., from the EU to the rest of the world amounted to USD18.6 billion, and from the United States to the rest of the world to amount to USD10.2 billion. Exports of such data services between 2010 and 2019 from the EU increased by 4.7 times and doubled from the United States. The OECD also calculated that in 2019 imports of those data services from the rest of the world to the EU amounted to USD11.8 billion, and from the rest of the world

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10 United Nations Conference on Trade and Development (UNCTAD), Supporting countries to measure the digital economy for development, December 2022, www.unctad.org
12 Supra note 6.
13 OECD, Measuring the value of data and data flows, December 2022, www.oecd.org
to the United States amounted to USD 2.7 billion. The import of such data services between 2010 and 2019 to the EU increased by 2.5 times, and by 1.7 times to the United States.

However, these statistics only measure the value of international trade in data services where data are the main object of the transaction. They do not include the value of data that are traded as part of an international transaction in goods or services. By way of example, this could concern the maintenance service provided in relation to plane engines as part of which data about the performance of such engines is being created, processes and transmitted across borders. With the development of the internet of things such processing and transmission are becoming increasingly important. As such, statistics based on the above definition are likely to underestimate the actual value of trade flows in data.

c. Barriers to digital trade

With the growth of digital trade over recent years, an increasing number of barriers to digital trade have been identified. Different categories of digital trade barriers that are often discerned are: i) fiscal restrictions (tariffs and trade defence, taxation and subsidies, public procurement), ii) establishment requirements (foreign investment, competition policy, business mobility), iii) restrictions on data (data policies, intermediary liability, content access), and iv) trading restriction (quantitative trade restrictions, standards, online sales and transactions). These barriers may have a negative effect on digital trade by restricting access to markets for businesses or discriminating against foreign companies as compared to domestic competitors. Such barriers may limit the ability of businesses and consumers to engage in digital trade and benefit from it.

In certain cases, barriers to digital trade may result from domestic regulation that countries enact to pursue certain legitimate public policy objectives, such as the protection of privacy and personal data, consumer protection or cybersecurity. However, barriers to digital trade may also result from measures enacted for protectionist reasons, to give an advantage to domestic businesses over foreign competitors.

By way of example, countries may give an advantage to domestic companies by requiring foreign business to transfer or disclose to competitors their key technologies, such as software source code or cryptography related technologies. Such requirements may expose key assets or intellectual property developed by a business and generally have a chilling effect on their openness to engage in cross-border operations.

Countries may also impose unjustified restrictions to cross-border data flows, which may have a detrimental effect on the ability of businesses and consumers to engage in digital trade across borders. Data localisation restrictions may affect any business that uses the internet to produce or deliver goods and services. Whereas the free flow of data, including both personal and non-personal data, is guaranteed in the European Union based on a common high level of protection, this is not the case at international

\[14\] European Centre for International Political Economy (ECIPE), Digital Trade Restrictiveness Index, April 2018, www.ecipe.org


level. A study of 2021 suggests that EU exports would decrease by around 4%, amounting to 1% GDP loss per year, if the EU could not rely on its existing transfer mechanisms under the General Data Protection Regulation and if trade partners would increase their overall levels of restrictions on cross-border data flows. Cumulatively, this would represent a loss of €1.3 trillion, by 2030. This study also indicates that EU exports would grow by more than 2% per year if the EU and major trade partners were to adopt measures facilitating cross-border data transfers. This would add 0.6% to GDP per year and amount to a cumulative worth of around €720 billion, by 2023.\(^\text{17}\)

Several initiatives have been taken to identify and list barriers to digital trade in order to inform businesses, consumers and policy makers. The OECD has created a database of barriers to trade in digitally enabled services across 80 countries and economies in its Digital Services Trade Restrictiveness Index (STRI).\(^\text{18}\) The European Centre for International Political Economy (ECIPE) has developed a Digital Trade Restrictiveness Index (DTRI) that measures how countries in the world restrict digital trade.\(^\text{19}\)

The Digital STRI shows that some of the most common barriers involve impeding access to communication infrastructure and the flow of data across networks. A number of barriers also affect electronic transactions and payments. However, other barriers such as the obligation to establish a local presence before engaging in digital trade are common in several countries. An important challenge to trade in digitally enabled services identified by the Digital STRI relates to measures affecting infrastructure and connectivity and measures affecting the movement of data such as data localisation restrictions.

d. Digital trade rules

Many countries around the world are trying to develop digital trade rules to facilitate digital trade, to address protectionist measures and to ensure legal certainty for business engaged in cross-border digital trade.\(^\text{20}\) In January 2019, a group of WTO members, including the EU, launched a plurilateral negotiation in the context of the WTO Joint Statement Initiative on e-commerce (e-JSI).\(^\text{21}\) A total of 87 WTO Members are currently engaged in these negotiations that cover rules on, amongst other things, facilitating electronic transactions, enhancing consumer and business trust, addressing protectionist barriers, protecting computer source code, facilitating online trade in goods, improving the regulatory conditions for telecommunications services, and granting market access in services and goods that are key for digital trade.\(^\text{22}\)

In parallel to these global efforts to develop international standards on digital trade, a group of countries in the Indo-Pacific region have been in the last years developing a rich network of regional and bilateral agreements that are progressively building such standards in ways that are not always aligned with the

\(^{17}\) Frontier Economics, *The value of cross-border data flows to Europe: risks and opportunities*, 2021, [www.digitaleurope.org](http://www.digitaleurope.org)

\(^{18}\) OECD, Digital Services Trade Restrictiveness Index Simulator, [www.oecd.org](http://www.oecd.org)

\(^{19}\) *Supra* note 14.


\(^{22}\) World Trade Organisation, Joint Initiative on E-commerce, [www.wto.org](http://www.wto.org)
EU approach. These standards are sometimes set out in a dedicated chapter with digital trade rules of a comprehensive free trade agreement providing detailed rules on market access.

In particular, in 2018 several Indo-Pacific countries concluded the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).\(^{23}\) The CPTPP incorporates by reference the dedicated chapter on electronic commerce from the Trans-Pacific Partnership (TPP) that was signed but has not been ratified and has not entered into force.\(^ {24}\) This electronic commerce chapter includes provisions on customs duties, non-discriminatory treatment of digital products, domestic electronic transactions frameworks, electronic authentication and electronic signatures, online consumer protection, personal information protection, paperless trading, access to and use of the internet for electronic commerce, cross-border transfer of information by electronic means, internet interconnection charge sharing, location of computing facilities, unsolicited commercial electronic messages, regulatory cooperation, cooperation on cybersecurity and source code. A growing number of countries have in the meantime applied to join the CPTPP, including the United Kingdom in February 2021 and China in September 2021.\(^ {25}\) The parties to the agreement are currently assessing these applications.

Moreover, in July 2020, the United States, Mexico and Canada concluded their United States-Mexico-Canada Agreement (USMCA) to substitute the North America Free Trade Agreement (NAFTA). The agreement also includes a comprehensive digital trade chapter that comprises significant commitments to facilitate digital trade between the countries.\(^ {26}\)

In other cases, countries in the Indo-Pacific region have concluded specific agreements on digital trade, often referred to as Digital Agreements or Digital Economy Agreements\(^ {27}\). These are typically used by parties to those agreements to pursue domestic regulatory alignment that eliminates barriers to digital trade, provides a level playing field for businesses and facilitates digital trade.

In June 2020, Australia, Chile and Singapore concluded the first of such agreements with their Digital Economy Partnership Agreement (DEPA).\(^ {28}\) The DEPA is open to other WTO Members, in December 2020 Canada expressed an interest in joining and negotiations with the Republic of Korea also started in October 2021. The DEPA aims to cover various aspects of the digital economy that support trade in the digital era and includes provisions on business and trade facilitation, the treatment of digital products and related issues, data issues, business and consumer trust, digital identities, emerging trends and technologies, innovation and the digital economy, SME cooperation, and digital inclusion.

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\(^ {23}\) A free trade agreement between Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, Peru, New Zealand, Singapore and Vietnam.

\(^ {24}\) Office of the United States Trade Representative, Trans-Pacific Partnership (TPP) full text, [www.ustr.gov](http://www.ustr.gov)

\(^ {25}\) United Kingdom, Formal Request to Commence UK Accession Negotiations to CPTPP, February 2021, [www.gov.uk](http://www.gov.uk); Reuters, *China applies to join Pacific trade pact to boost economic clout*, September 2021, [www.reuters.com](http://www.reuters.com)

\(^ {26}\) Office of the United States Trade Representative, United States-Mexico-Canada Agreement, [www.ustr.gov](http://www.ustr.gov)

\(^ {27}\) WEF, *Digital economy agreements are a new frontier for trade – here’s why*, August 2022, [www.weforum.org](http://www.weforum.org)

\(^ {28}\) New Zealand Foreign Affairs and Trade Ministry, Digital Economy Partnership Agreement (DEPA) overview, [www.mfat.govt.nz](http://www.mfat.govt.nz)
In May 2022 the United States also launched with several other countries in the Indo Pacific region negotiations for an Indo-Pacific Economic Framework for Prosperity (IPEF). The IPEF should advance resilience, sustainability, inclusiveness, economic growth, fairness, and competitiveness for the participating countries’ economies, which together represent about 40 percent of global GDP and 28 percent of global goods and services trade. The negotiations cover four pillars on 1) trade, 2) supply chains, 3) clean energy, decarbonization and infrastructure, and 4) tax and anti-corruption. The trade pillar is expected to include comprehensive digital trade rules.

3. Digital trade and the European Union

a. The European Union’s digital economy

The European Union and its Member States have a well-developed digital economy and are generally considered to have a high capacity and readiness to adopt digital technologies as a driver for economic development for businesses, government and society as a whole.

The European Green Deal communication adopted in 2019 presents a set of deeply transformative policies. In this regard, it provides that the EU should promote and invest in the necessary digital transformation and tools as these are essential enablers of the transformational changes needed for a more sustainable economy. The Commission set out its vision for the European Union’s digital transition by 2030 in the March 2021 Communication on a Digital Compass. The Communication announces the ambition to pursue digital policies that allow people and businesses to have a human-centered, inclusive, sustainable, and prosperous digital future. The Communication stresses that the EU will pursue an open digital economy based on the investment flows and innovation as an engine for prosperity as a starting point for its policies, while strongly promoting the EU’s core interests and values. On that basis, the European Union has recently adopted legislation governing important aspects of the digital economy such as the Data Governance Act, the Digital Services Act and the Digital Markets Act. The Commission recently also proposed new rules relevant to the digital economy, including for example a Data Act, an Artificial Intelligence Act, an Artificial Intelligence Liability Directive and a Cyber resilience Act.

The Commission also proposed concrete targets to implement the EU’s ambitions for its digital transformation, which have been estimated could unlock €1.3 trillion in value by 2030. Amongst other

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29 Australia, Brunei Darussalam, Fiji, India, Indonesia, Japan, the Republic of Korea, Malaysia, New Zealand, Philippines, Singapore, Thailand, and Vietnam.
30 Office of the United States Trade Representative, Indo-Pacific Economic Framework for Prosperity (IPEF), www.ustr.gov
31 International Institute for Management Development (IMD), World Digital Competitiveness Ranking 2022, 2022 www.imd.org
34 Regulation (EU) 2022/868 (3.6.2022); Regulation (EU) 2022/2065 (27.10.2022); Regulation (EU) 2022/1925 (12.10.2022).
36 Public First, Unlocking Europe’s Digital Potential: How cloud computing can support the EU’s Digital Decade, 2022, https://awsdigitaldecade.publicfirst.co.uk/
things, the Commission defined targets to ensure gigabit broadband connection coverage for all households and 5G coverage in all populated areas. The Digital Economy and Society Index (DESI) of 2022 showed uptake of fixed broadband connections by 78% of all households in 2021 (up from 75% in 2019), with an uptake of at least 100 Mbps broadband by 41% of households in 2021 (up from 28% in 2019) and an uptake of gigabit connections by 7.6% of householders in 2021. The share of EU enterprises using internet connections of more than 1 Gbps was 10% in 2021. The DESI of 2022 indicated 5G coverage of 66% of populated areas the EU.37

The Commission also defined targets in terms of the integration of digital technologies by businesses by 2030, including the use of e-commerce. Amongst other things, the DESI of 2022 showed that the level of digitalisation of businesses is growing but remains uneven across EU Member States and economic sectors.38 More than 19% of European businesses received online orders in 2022, with 38% of large businesses and 18% of SMEs obtaining more than 1% of their turnover from e-commerce sales. In 2022, on average 17.6% of the turnover of enterprises was based on e-commerce sales.40 In 2021, 34% of EU businesses purchased sophisticated or intermediate cloud computing services and incorporated cloud technologies to improve their operations while reducing costs. The cloud uptake of large companies (60%) almost doubled that of SMEs (33%) in 2021.41

b. The EU’s approach to digital trade

In its February 2021 trade policy review, the Commission recognised the growing importance of digital trade and identified establishing digital trade rules as a key priority.42 It undertook to support Europe’s digital agenda as part of its trade policy to ensure a leading position for the EU in digital trade and in the area of technology.

i. Multilateral digital trade rules

An important element to achieve this objective is the conclusion of an ambitious and comprehensive WTO agreement on digital trade. The Commission is committed to seeking a rapid conclusion of the eJSI negotiations, in which it participates on behalf of the EU.43 The EU’s objectives for the negotiations are to enhance global electronic commerce, facilitate the operations of businesses, including micro, small and medium enterprises, strengthen consumers’ trust in the online environment and create new opportunities to promote inclusive growth and development.44

38 Supra note 35.
40 Supra note 37.
41 Supra note 37.
44 Communication from the European Union, EU proposal for WTO disciplines and commitments relating to electronic commerce, 26 April 2019, INF/ECOM/22.
**ii. Bilateral digital trade rules**

The EU is also pursuing digital trade rules as part of its negotiations for bilateral free trade agreements with its partner countries. Whereas some of these digital trade rules mainly provide a basis for regulatory cooperation, such as in the EU-Canada Comprehensive Economic and Trade Agreement (CETA) that entered into force provisionally in 2017, more recent agreements provide for a comprehensive chapter on digital trade rules. For instance, the EU-UK Trade and Cooperation Agreement (EU-UK TCA) that entered into force on 1 May 2021 includes a full-fledged chapter on digital trade. The same applies to the EU-New Zealand trade agreement and the EU-Chile Advanced Framework Agreement, for which the negotiations were concluded in June 2022 and in December 2022 respectively. These chapters contain, amongst other things, detailed provisions on cross-border data flows, the protection of privacy and personal data, customs duties on electronic transmissions, electronic contracts, electronic authentication and trust services, the transfer of or access to source code, online consumer trust, unsolicited direct marketing communications, open government data, and regulatory cooperation on digital trade.

The EU has also proposed specific digital trade chapters with similar disciplines for its ongoing negotiations for free trade agreements with Australia, India and Indonesia. The EU is also engaged in negotiations with Japan on cross-border data flows in the context of the EU-Japan Economic Partnership Agreement that entered into force on 1 February 2019.

In the September 2021 EU strategy for cooperation in the Indo Pacific, the Commission and the High Representative for Foreign Affairs and Security Policy committed to developing Digital Partnerships with some of its key partners in the region. The Digital Partnerships have an important trade-aspect and include Digital Trade Principles as a key deliverable. Although non-binding in nature, the Digital Trade Principles have an important political value to reflect a common understanding on key digital trade issues. The principles include, amongst other things, political commitments with regard to digital trade facilitation, data governance, consumer trust, business trust and cooperation on digital trade. Although the Digital Partnerships have generally been welcomed by businesses, they have also resulted in calls on the EU to develop binding digital trade rules.

**iii. EU digital trade disciplines**

Based on its experience in multilateral and bilateral negotiations on digital trade, as well as the digital trade principles agreed with the Republic of Korea and with Singapore, the EU generally pursues commitments as part of its negotiations on digital trade in the areas set out in table 1.

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47 European Commission, EU-Chile: Text of the Agreement, [https://policy.trade.ec.europa.eu](https://policy.trade.ec.europa.eu)
49 European Commission, EU-India agreement: documents, [https://policy.trade.ec.europa.eu](https://policy.trade.ec.europa.eu)
50 European Commission, EU-Indonesia agreement: documents, [https://policy.trade.ec.europa.eu](https://policy.trade.ec.europa.eu)
51 European Commission, EU and Japan start negotiations to include rules on cross-border data flows in their Economic Partnership Agreement, October 2022, [https://policy.trade.ec.europa.eu](https://policy.trade.ec.europa.eu)
53 Borderlex, Interview: EU and Singapore need to upgrade their trade agreement, October 2022, [www.borderlex.net](http://www.borderlex.net)
<table>
<thead>
<tr>
<th>Discipline</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cross-border data flows</td>
<td>To prevent restrictions that limit cross-border data flows in an unjustified manner.</td>
</tr>
<tr>
<td>2. Protection of personal data and privacy</td>
<td>To recognise the importance of the protection of privacy and personal data and to maintain a high-level of protection based on strong safeguards set out in national law.</td>
</tr>
<tr>
<td>3. Customs duties on electronic transmissions</td>
<td>To prevent the application of customs duties on electronic transmissions.</td>
</tr>
<tr>
<td>4. No prior authorisation</td>
<td>To prevent a requirement of prior authorisation for the delivery of services by electronic means.</td>
</tr>
<tr>
<td>5. Electronic contracts</td>
<td>To facilitate the use and recognition of electronic contracts.</td>
</tr>
<tr>
<td>6. Electronic authentication</td>
<td>To facilitate the use and recognition of signatures or seals or timestamps in electronic form.</td>
</tr>
<tr>
<td>7. Electronic invoicing</td>
<td>To facilitate the use of electronic invoicing.</td>
</tr>
<tr>
<td>8. Transfer or access to source code</td>
<td>To not require the transfer of or access to source code of software, as a condition for the import, export, distribution, sale or use of software.</td>
</tr>
<tr>
<td>9. Online consumer trust</td>
<td>To ensure a high level of protection of consumers engaging in e-commerce transactions and to provide the same protections for online consumers as for any other consumer.</td>
</tr>
<tr>
<td>10. Open government data</td>
<td>To recognise the benefits of making government information available to the public and to agree on promoting certain approaches such as to release the data in a machine-readable format.</td>
</tr>
<tr>
<td>11. Unsolicited commercial electronic messages</td>
<td>To adopt or maintain measures to protect users against spam.</td>
</tr>
<tr>
<td>12. Cooperation</td>
<td>To exchange information on areas of mutual interest, including e.g. e-government, cybersecurity, and challenges for SMEs.</td>
</tr>
<tr>
<td>13. Paperless trading</td>
<td>To facilitate paperless trade by eliminating paper forms and documents necessary for trade administration.</td>
</tr>
<tr>
<td>14. Open internet access</td>
<td>To recognise the benefits of certain aspects of open internet access.</td>
</tr>
</tbody>
</table>

Table 1: EU digital trade disciplines

4. Digital trade and Singapore
   
   a. Singapore’s digital economy
Singapore is one of the most open and digitised economies in the world. In 2021, it had the world’s eleventh largest GDP per capita\textsuperscript{54} and it has been ranked third in the 2022 World Competitiveness Ranking\textsuperscript{55} and fourth in the Digital Competitiveness Ranking.\textsuperscript{56} Singapore ranked sixth in terms of ICT adoption and digital skills in the 2020 World Economic Forum’s Global Competitiveness Report.\textsuperscript{57}

Singapore has promoted its digital transformation and the development of a digital society through its 2018 Smart Nation strategy.\textsuperscript{58} Singapore’s 10-year Infocomm media 2025 strategy from 2015 specifically aims to build on the power of data and communications and computational technologies to support digital transformation.\textsuperscript{59}

Singapore has progressively developed its regulatory framework in relation to the digital economy. Amongst other things, Singapore amended its Electronic Transactions Act in 2010 to provide for the security and use of electronic transactions and to implement the United Nations Convention on the Use of Electronic Communications in International Contracts.\textsuperscript{60} It has since then been amended in 2017 and 2021 to also implement the UNCITRAL Model Law on Electronic Transferable Records. Singapore has taken significant steps to facilitate paperless trade in the framework of its electronic government strategy, and its Customs Act provides a basis for the establishment and operation of an electronic customs service and provisions for trade documents to be made, served or submitted by electronic transmission. Singapore’s legislation to protect personal data has been in place since 2012 and has most recently been amended in 2020 to also include obligations with regard to data breach notification and data portability.\textsuperscript{61} In the area of cybersecurity, Singapore has comprehensive legislation in place since 2018.\textsuperscript{62} Singapore’s recent 2023 Online Safety Act aims to tackle online harms and strengthen online safety for users.\textsuperscript{63}

Singapore’s digital economy has grown by 22% from 2021 to 2022 and is estimated to reach almost USD30 billion by 2025.\textsuperscript{64} The size of the e-commerce market in Singapore grew by 4% in 2022 on a year-on-year basis and is expected to reach USD11 billion by 2025. Singapore had more than 3 million e-commerce customers in 2021, representing more than half of Singapore’s population and 90% of shoppers in Singapore make purchases online.\textsuperscript{65}

In terms of connectivity, Singapore is a leading country with 99% of households having access to broadband internet in 2022. Singapore also had more than 50% outdoor nationwide coverage by 5G the

\textsuperscript{54} The World Bank, World Bank Open Data, \url{https://data.worldbank.org}
\textsuperscript{55} IMD, World Competitiveness Ranking 2022, \url{www.imd.org}
\textsuperscript{56} IMD, World Digital Competitiveness Ranking 2022, \url{www.imd.org}
\textsuperscript{57} WEF, The Global Competitiveness Report 2020, \url{www.weforum.org}
\textsuperscript{58} Smart Nation and Digital Government Office, Smart Nation: the way forward, 2018, \url{www.smartnation.gov.sg}
\textsuperscript{59} Singapore Ministry of Communications and Information, Infocomm Media 2025, 2015, \url{www.mci.gov.sg}
\textsuperscript{60} Singapore Infoomm Media Development Authority, The Electronic Transactions Act 2010, \url{www.imda.gov.sg}
\textsuperscript{61} Personal Data Protection Commission of Singapore, Personal Data Protection Act Overview, \url{www pdpc.gov.sg}
\textsuperscript{62} Cybersecurity Agency of Singapore, Cybersecurity Act, \url{www.csa.gov.sg}
\textsuperscript{63} Singapore Ministry of Communications and Information, Online Safety (Miscellaneous Amendments) Act Takes Effect on 1 February 2023, \url{www.mci.gov.sg}
\textsuperscript{64} Google, Temasek and Bain, e-Conomy SEA 2022, 2022. \url{https://economysea.withgoogle.com}
\textsuperscript{65} Singapore Company Incorporation, Why is E-Commerce in Singapore Experiencing Explosive Growth?, 2021, \url{www.singaporecompanyincorporation.sg}
end of 2022. In 2022, 16% of its businesses was considered as digital performers or digital leaders in terms of the adoption of technologies, up from 9% in 2019.\(^6\) EU-Singapore trade relations

As set out in the September 2021 EU strategy for cooperation in the Indo Pacific, the EU considers its relations in the region as a priority\(^6\) and Singapore is one of the key trading partners for the EU in the region. Following the commitment in the EU strategy for cooperation in the Indo Pacific, the Commission concluded a Digital Partnerships with Singapore on 1 February 2023. The EU-Singapore Digital Partnership has an important trade-aspect and includes Digital Trade Principles as a key deliverable. The EU-Singapore Digital Trade Principles were announced on 14 December 2022 and signed on 31 January 2023.\(^6\) The EU-Singapore Digital Partnership is a flexible instrument that provides a basis for collaboration in the field of research and innovation, regulatory cooperation and collaboration in international fora on topics such as semiconductors supply chain resilience, 5G and 6G, cybersecurity, platforms, data and Artificial Intelligence.\(^6\)

The EU-Singapore Digital Trade Principles are a non-binding instrument that sets out political commitments between the EU and Singapore in the area of digital trade. They cover commitments in the area of cross-border data flows, the protection of privacy and personal data, customs duties on electronic transmissions, electronic contracts, electronic authentication and trust services, the transfer of or access to source code, online consumer trust, unsolicited direct marketing communications, open government data, artificial intelligence and open internet access. The Digital Trade Principles agreed with Singapore demonstrate a high level of convergence with the EU’s approach to digital trade.

The European Union and Singapore have also negotiated a Free Trade Agreement and an Investment Protection Agreement. The agreements were signed on 19 October 2018 and entered into force on 21 November 2019.\(^7\) The agreements aim to remove customs duties, to improve trade for goods like electronics, food products and pharmaceuticals and services, to stimulate green growth, remove trade obstacles for green technology and create opportunities for environmental services, and encourage EU companies to invest more in Singapore, and Singaporean companies to invest more in the EU.

The EU-Singapore free trade agreement includes limited rules in the area of digital trade. Its chapter on services, establishment and electronic commerce contains provisions on customs duties, the electronic supply of services, electronic signatures and regulatory cooperation on electronic commerce. Notwithstanding these provisions, the EU-Singapore free trade agreement is significantly less comprehensive on digital trade compared to recent agreements such as the EU-UK TCA and the EU-New Zealand free trade agreement.

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On the basis of the EU-Singapore free trade agreement Singapore has become the EU’s largest trade and investment partner in Southeast Asia. More than 10,000 EU companies are registered in Singapore and have a strong foothold in Singapore to do business in the wider Asia-Pacific region. In 2020 the annual EU-Singapore trade in goods and services was valued at over €90 billion in 2020. Singapore ranked globally as the EU’s 5th largest trade in services partner and 7th largest Foreign Direct Investment destination in 2020. In addition, EU-Singapore trade in goods increased by 4.5% in 2021 on a year-on-year basis and the EU registered a trade surplus of €11.7 billion in 2021 (11th largest globally).\(^\text{71}\)

b. Singapore’s approach to digital trade

i. Multilateral digital trade rules

Singapore has become a key player in the development of digital trade rules, both globally and at regional and bilateral level. At multilateral level, Singapore is one of the three co-convenors of the WTO Joint Statement Initiative on e-commerce (together with Australia and Japan) and is an active participant in these negotiations.\(^\text{72}\) As part of the WTO e-commerce negotiations, Singapore submitted in 2019 an ambitious proposal covering rules on paperless trade, customs duties on electronic transmissions, domestic electronic transactions frameworks, electronic authentication and electronic signatures, electronic invoicing, electronic transferrable records, cross-border transfers of information by electronic means, location of computing facilities, access to and use of the internet for e-commerce, source code, unsolicited commercial electronic messages, personal information protection and online consumer protection.\(^\text{73}\)

ii. Regional digital trade rules

At regional level, Singapore is party to the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) of 2018, and the Agreement on Electronic Commerce of the Association of Southeast Asian Nations (ASEAN) that was signed in Singapore in January 2019, and entered into force in December 2021.\(^\text{74}\) Singapore is also one of the founding parties of the Digital Economy Partnership Agreement (DEPA) between Australia, Chile and Singapore that was signed in June 2020 and entered into force in January 2021.\(^\text{75}\) Singapore is also participating in the ongoing negotiations for the Indo-Pacific Economic Framework for Prosperity (IPEF).

iii. Bilateral digital trade rules

Singapore has also negotiated bilateral agreements on digital trade with some of its trading partners, which it refers to as Digital Economy Agreements (DEAs). With the DEAs, Singapore aims to establish common frameworks and rules for digital trade to enable companies in Singapore to connect digitally with their overseas partners more seamlessly. The agreements’ objectives are to lower the cost of operations,

\(^{71}\) European Commission, Trade statistics by trading partner, \(\text{https://policy.trade.ec.europa.eu/analysis-and-assessment/statistics}\_\text{en}

\(^{72}\) World Trade Organisation, Joint Initiative on E-commerce, \(\text{www.wto.org}

\(^{73}\) Communication from Singapore, \(\text{Joint Statement Initiative on electronic commerce},\) April 2019, \(\text{INF/ECOM/25}.

\(^{74}\) ASEAN agreement on electronic commerce, 2019, \(\text{www.asean.org}

\(^{75}\) New Zealand Foreign Affairs and Trade Ministry, Digital Economy Partnership Agreement (DEPA) overview, \(\text{www.mfat.govt.nz}
increase business efficiency and create more seamless and easier access to overseas markets. More specifically, the DEAs aim to i) align digital rules and standards, and facilitate interoperability between digital systems, ii) support cross border data flows and safeguard personal data and consumer rights, and iii) encourage cooperation between Singapore’s economic partners in nascent areas such as digital identities, artificial intelligence and data innovation.

Thus far, Singapore has concluded three bilateral DEAs: the Singapore-Australia Digital Economy Agreement (SADEA) that entered into force on 8 December 2020, the United Kingdom-Singapore Digital Economy Agreement (UKSDEA) that entered into force on 14 June 2022, and the Korea-Singapore Digital Partnership Agreement (KSDPA) that was signed on 21 November 2022 and came into force in January 2023. These DEAs include a number of modules including on artificial intelligence, cross-border data flows, personal data protection, data innovation, digital identities, e-invoicing, fintech and e-payments, open government data, and paperless trade. Several of the DEAs are complemented by memoranda of understanding or the exchange of formal letters that set out practical steps for closer collaboration between partners.

5. Digital trade and the Republic of Korea
   a. Republic of Korea’s digital economy

South Korea’s economy has shown rapid growth since the 1960s, to become the tenth largest in the world in 2021 in terms of GDP, and it remains one of the fastest-growing developed countries. Since the 1980s South Korea has had a strong focus on high technology electronics industries, and is one of the world’s leading manufacturers of semiconductors and consumer electronics such as smart mobile devices, televisions and computers.

South Korea has progressively developed its digital polices and regulatory framework for the digital economy. Amongst other things, South Korea facilitated the use of electronic documents with its Digital Signatures Act of 1999 and its Framework Act on Electronic Documents and Transactions of 2016. South Korea has taken significant steps to facilitate paperless trade in the framework of its electronic government strategy. Its Trade Automation Act, revised Customs Act, Electronic Transactions Act, and revised Commercial Law currently provide a basis for e.g. the circulation of electronic trade documents. South Korea has developed its data protection laws over recent years and its Personal Information Protection Act provides for a high level of protection. On 17 December 2021 the EU adopted a Decision

76 Singapore Ministry of Trade and Industry, What are Digital Economy Agreements (DEAs)?, www.mti.gov.sg
80 Supra note 75.
83 OECD, Promoting digital innovation to deliver value to Korean citizens, available at www.oecd.org
on the adequate protection of personal data by the Republic of Korea. The Decision recognises that personal data will be able to travel safely from the EU to South Korea to the benefit of citizens and economies on both sides, without any need for further authorisations or additional tools. It recognizes that EU citizens benefit from strong protection under Korean law when their data is transferred to South Korea, including through the additional safeguards that were agreed as part of the adequacy dialogue. The adequacy Decision has a broad scope of application, covering both commercial operators and the public sector. It not only supports European business operators transferring personal data to South Korea as part of their commercial operations, but also facilitates regulatory cooperation between European and the Republic of Korea public authorities.

In recent years, South Korea has adopted new legislation in relation to the digital economy, including an Artificial Intelligence Framework Act, Metaverse Special Act, Cyber Security Framework Act, Digital Inclusion Act and a Data Framework Act. As part of its September 2022 Digital Strategy of Korea, the Korean Government has committed to additional actions in relation to e.g. investing in new digital industries and establishing a new legal framework for the digital economy and society.

In the 2020 World Economic Forum Global Competitiveness Report, South Korea ranked first in the world in terms of ICT adoption and tenth in terms of digital skills. South Korea is at the forefront in the development and deployment of communications technology and networks, with 99.9% of households having internet access according to the OECD in 2021.

As such, e-commerce is particularly strong in South Korea, with 97% of South Koreans between the ages of 20 and 39 making purchases over the internet, and an annual online shopping growth rate of 12.9%. Cross-border e-commerce is also rapidly increasing, reaching 4.5 billion USD in 2021. The OECD’s 2019 Digital Government Index ranked South Korea as first in the world in terms of adoption of digital technologies and using data in central and federal public sector authorities.

In 2020, as part of a package for recovery from the crisis triggered by the Covid-19 pandemic, the South Korean government announced a Digital New Deal, with a view to investing in the further development of 5G infrastructure, artificial intelligence and data, in order to promote and spread digital innovation and dynamism.

As set out in the September 2021 EU strategy for cooperation in the Indo Pacific, the EU considers its relations in the region as a priority. South Korea is a strategic partner of the Union and a key partner for the EU in the Indo-Pacific region. Following the commitment in the EU strategy for cooperation in the Indo

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84 Commission Implementing Decision (EU) 2022/254 (24.2.2022).
85 Korea Ministry of Science and Technology, Korea to Come up with the Roadmap of Digital ROK, Realizing the New York Initiative, www.msit.go.kr
87 OECD, Korea country statistical profile, https://data.oecd.org
92 JOIN(2021) 24 final (16.9.2021)
Pacific, the Commission concluded a Digital Partnership with the Republic of Korea on 28 November 2022. The EU-Republic of Korea Digital Partnership is a flexible instrument that provides a basis for collaboration in the field of research and innovation, regulatory cooperation and collaboration in international fora on topics such as semiconductors supply chain resilience, 5G and 6G, cybersecurity, platforms, data and Artificial Intelligence.

The EU-Republic of Korea Digital Partnership has an important trade-aspect and includes as a key deliverable EU-Republic of Korea Digital Trade Principles that were signed on 30 November 2022. These Digital Trade Principles are a non-binding instrument that sets out political commitments between the EU and South Korea in the area of digital trade, similar in scope to the EU-Singapore Digital Trade Principles. The Digital Trade Principles agreed with the Republic of Korea demonstrate a high level of convergence with the EU’s approach to digital trade.

In 2011, the EU concluded a Free Trade Agreement with the Republic of Korea, the first in the region. This trade agreement has eliminated customs duties on nearly all products (98.7%), including fisheries and agricultural products. It has also removed non-tariff barriers to the exports of key EU products to Korea, such as automobiles, pharmaceuticals, electronics and chemicals. Not the least, services markets in both the EU and South Korea have largely opened to businesses and investors from each other. However, the EU-Republic of Korea free trade agreement includes very limited rules in the area of digital trade under the e-commerce section in the Service Chapter, regarding cooperation on developing electronic commerce and a provision on customs duties. As such, the EU-Republic of Korea free trade agreement is significantly less comprehensive on digital trade compared to recent agreements such as the EU-UK TCA and the EU-New Zealand free trade agreement.

South Korea is the EU’s ninth largest export destination for goods, whereas the EU is South Korea’s third largest export market. Since the entry into force of the EU-Republic of Korea free trade agreement on 1 July 2011, bilateral trade and investment have expanded remarkably. Total bilateral trade in goods amounted to 107.3 billion euros in 2021, up by over 70% from 2011. Bilateral trade in services increased by over 72% between 2011 and 2020, amounting to 18.6 billion euros in 2020. The EU remains South Korea’s biggest foreign direct investor, ahead of Japan and the US. The EU and South Korea cooperate closely in international fora such as the WTO and the G20.

The adequacy decision complements and supports the Free Trade Agreement between the EU and the Republic of Korea, and cooperation between the EU and the Republic of Korea on digital trade.

b. Republic of Korea’s approach to digital trade

i. Multilateral digital trade rules

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At multilateral level, the Republic of Korea is one of the original signatories of the WTO Joint Statement Initiative on electronic commerce and an active participant in these negotiations.

ii. Regional digital trade rules

The Republic of Korea is a participant in the ongoing negotiations for the Indo-Pacific Economic Framework for Prosperity (IPEF) that were launched in May 2022. In October 2021, DEPA Parties agreed to commence negotiations with the Republic of Korea to formally join DEPA.96

iii. Bilateral digital trade rules

Since 1999, the Republic of Korea has concluded 18 bilateral FTAs with countries across the world,97 and is currently seeking to conclude further agreements.98 In terms of bilateral digital trade rules, Korea’s first digital trade agreement, the Korea-Singapore Digital Partnership Agreement (KSDPA) was signed on 21 November 2022 and entered into force on 14 January 2023.99

6. Conclusion

Digital trade is increasing in importance globally and provides for new opportunities for businesses and consumers. Countries around the world are pursuing the development of digital trade rules that address restrictions to digital trade and provide a clear and safe framework for businesses and consumers to engage in digital trade. It is important that like-minded partners work together to develop those rules, which can become global standards, in a manner that reflects their common values.

The Indo-Pacific region is at the forefront of the development of digital trade rules and closer cooperation with key partner countries will provide new opportunities for EU businesses and consumers and will ensure that the EU takes part in setting global standards on digital trade.

The Commission Recommendation for a Council Decision to authorise the opening of negotiations for digital trade disciplines with Singapore and with the Republic of Korea will enhance the deep bilateral relations achieved through the existing free trade agreements and Digital Partnerships with those countries. On the basis of the non-binding political commitments in the Digital Partnerships and Digital Trade Principles, the negotiations will be used to pursue binding digital trade disciplines.

Binding digital trade disciplines will provide for legal certainty for EU businesses engaged in cross-border operations in both countries, and for Singaporean and South Korean operators active in the EU market. It will increase the opportunities for EU business in South Korea and Singapore, notably for micro, small and medium enterprises, and improve the investment conditions in the EU.

The negotiations will allow the EU, Singapore and South Korea to leverage their highly performant digital economies and to create synergies based on their respective digital policies. The negotiations can build

96 New Zealand Foreign Affairs and Trade Ministry, Digital Economy Partnership Agreement (DEPA) overview, www.mfat.govt.nz
98 Korea Times, Korea seeks to sign over 10 free trade deals this year, January 2023, www.koreatimes.co.kr/
on the high level of convergence on digital trade issues between the EU and these two key partners reflected in the Digital Trade Principles signed with them.