

Codebook Big Data Trade Agreements

number:	Unique ID for each entry in the database.
Dropbox:	No: not uploaded Yes: uploaded
short_title:	Short name of the agreement. For bilateral agreements, the two countries are always listed in alphabetic order (Chile-Lebanon, NOT Lebanon-Chile). Macedonia is used instead of FYROM. EC is used throughout instead of EEC, EU etc. Korea is used instead of Republic of Korea or South Korea.
Long_title:	Official name of the treaty
type:	Type of the agreement according to the title. <ul style="list-style-type: none">• Association Agreements (AA),• Economic Agreements (EAs)• Economic Complementation Agreement (ECAs),• Economic Partnership Agreement (EPAs),• Framework Agreement (FA)• Free Trade Agreement (FTAs),• Regional Trade Agreements (RTAs),• Trade Promotion Agreement (TPAs),
	If not in any of the previous categories, mapped as Preferential Trade Agreement (PTA). Non-binding treaties are not mapped.
type_memb:	Type of agreement according to membership: 1 bilateral 2 plurilateral 3 plurilateral & third country 4 regional 5 region-region (e.g. CARIFORUM EC EPA) 6 accession (e.g. UK EU accession agreement signed in 1972) 7 accession to an agreement as a result of membership in a regional agreement (for example, when Romania entered the EU, it also signed up to the FTA between the EU and Mexico signed in 2000)
parties:	List all contracting Parties in Alpha 3 of ISO 3166-countrycode, which abbreviates each land with three letters, separated by a comma (e.g. ALB, CHN for Albania-China). Currently they are listed in Alpha 2. See: https://www.iso.org/obp/ui/#search

Note: the abbreviation 'EU' represents all the EU Member states that signed the agreement

Status_parties: According to the [UN World Economic Situation and Prospects report](#).

1: Developed and developing

2: Developing and developing

3: Developed and developed

date_signed: List the date on which the agreement was signed, following the format DD.MM.YYYY.

date_into_force: List the date on which the agreement entered into force, following the format DD.MM.YYYY. If the date is different for each contracting State, it adds the Alpha 3 of ISO 3166-countrycode in parenthesis, separating each country with commas. E.g.: 22.01.2017 (ALB), 22.03.2017 (CHN)

Where the information available is only the year, blanks are filled with zeros e.g. 00.00.2017, or where an agreement has been in force since June 2017, 00.06.2017.

Where the dates for goods and services differ, is indicated with G and S to differentiate e.g.: 22.01.2012 (g), 01.01.2013(S)

in_force_status: Whether the date is still into force by the following categories:

1 treaty is in force

2 treaty is not in force

3 treaty is not completely expired or "partially in force"

4 treaty has been ratified not by all parties

accessions Represents the accession of one or several countries to a treaty. The Alpha 3 of ISO 3166-countrycode in parenthesis, separating each country with commas, follows accession date. E.g.: 22.01.2017 (ALB), 22.03.2017 (CHN)

withdrawals Represent the withdrawal of one or several countries to a treaty. The Alpha 3 of ISO 3166-countrycode in parenthesis, separating each country with commas, follows the withdrawal date. E.g.: 22.01.2017 (ALB), 22.03.2017 (CHN)

date_terminated: Date of the termination, if the treaty is terminated, following the format DD.MM.YYYY. If the date is different for each contracting State, it adds the Alpha 3 of ISO 3166-countrycode in parenthesis, separating each country with commas. E.g.: 22.01.2017 (ALB), 22.03.2017 (CHN)

termination_type: Means in which the treaty was terminated. There are the following types of termination:

1. Expired

2. Replaced by a new treaty

3. Terminated by consent
4. Unilaterally denounced

protocol_signed: Any relevant protocols or amendments associated with the treaty, entering the date they were signed, following the format DD.MM.YYYY. If the date is different for each contracting State, it adds the Alpha 3 of ISO 3166-countrycode in parenthesis, separating each country with commas. E.g.: 22.01.2017 (ALB), 22.03.2017 (CHN)

Where there is more than one protocol, the date and the number of the protocol are in brackets e.g.: 22.01.2012 (P1), 01.01.2017(P2)

protocol_in_force: Any relevant protocols or amendments associated with the treaty entered into force, entering the date following the format DD.MM.YYYY. If the date is different for each contracting State, it adds the Alpha 3 of ISO 3166-countrycode in parenthesis, separating each country with commas. E.g.: 22.01.2017 (ALB), 22.03.2017 (CHN)

replace_name: If the treaty was replaced and its termination Type was "replacement", lists the name and date of the new treaty with which the treaty was replaced.

replace_reference: Number of the new treaty that replaces one previously coded.

region_con: The following categories are used:

- Africa
- Americas
- Asia
- Europe
- Intercontinental
- Oceania

language: Languages in which the treaty was prepared, using the abbreviations of ISO 639-1:2002, which provides a 2-letter code that has been designed to represent most of the major languages of the world. See: http://www.loc.gov/standards/iso639-2/php/code_list.php

In case that the treaty has more than one official language, it adds every language separated by a ";"

Extent of legalization

[ecommerce_soft_legalization] Does the agreement include non-binding obligations on e-commerce?

"Soft" commitments are those that are not enforceable by another Party. These are commitments to make "best efforts" to comply with a provision or a principle, but a claim for their non-compliance cannot be brought under the dispute settlement mechanism of the agreement.

Example of non-binding commitments: 'recognize the importance', 'shall work towards', 'promote'. Cooperation provisions are always considered as non-binding unless an obligation to cooperate in certain areas is made explicit in the treaty, within a specific framework and time.

When coding these provisions, take into account that several treaties use language that initially it can be considered as 'binding' (e.g. 'shall') but that after adding another verb becomes hortatory (e.g. 'shall endeavour').

0: no

1: yes (soft), highlighted in yellow

[ecommerce_mixed_legalization] Does the agreement includes both binding and non-binding obligations on e-commerce?

To consider an agreement with "mixed legalization", the treaty should have both soft and hard commitments, regardless the number of provisions that have such characteristics; or if the agreement "allows" for something that is not explicitly implemented in the text (e.g. certain exceptions).

If an agreement has both hard and soft commitments on exactly the same topic (e.g. consumer protection, could have both hard commitments and soft cooperation commitments), the agreement should be considered as having "hard" commitments.

Here we code 2 also if a treaty is only partially applicable (e.g. some specific provisions of the TRIPS Agreement, not the whole treaty).

0: no

2: yes, highlighted in both yellow and green.

[ecommerce_hard_legalization] Does the agreement include binding obligations on e-commerce?

"Hard" commitments are those that are enforceable by another Party. These are commitments that oblige a Party to comply with a provision or a principle, and a claim for their non-compliance could eventually be brought under the dispute settlement mechanism of the agreement.

Example of binding commitments: 'shall', 'must', 'shall take appropriate measures'

0: no

3: yes, highlighted in green

1) E-commerce

1.1 [ecommerce_provisions] Does the agreement contain provisions on e-commerce?

Explanation: E-commerce is defined at WTO as the 'production, distribution, marketing, sale or delivery of goods and services by electronic means'. Following Monteiro and Teh (2017), keywords that can be used to identify e-commerce provisions are: computerized, cyber, digital, electronic, electronic commerce, e-commerce, e-government, information and communication, ITC, internet, online, paperless and telecommunication.

0: no provision on e-commerce

1: provisions on e-commerce or selected chapters

1.2 [ecommerce_chapter] Does the agreement contain an e-commerce chapter?

Explanation: E-commerce is defined at WTO as the 'production, distribution, marketing, sale or delivery of goods and services by electronic means'. Following Monteiro and Teh (2017), keywords that can be used to identify e-commerce provisions are: computerized, cyber, digital, electronic, electronic commerce, e-commerce, e-government, information and communication, ITC, internet, online, paperless and telecommunication (e.g.: A 'digital trade chapter' or 'electronic technologies in trade' (EAEU-Vietnam) equivalent to an e-commerce chapter).

We considered dedicated sub-sections on e-commerce inside of a chapter, as a separate chapter for the purposes of the coding.

0: no chapter on e-commerce

1: full chapter on e-commerce

1.3 [ecommerce_nt] Does the agreement provide for national treatment in e-commerce?

Explanation: The code is 1 if there is a specific clause on national treatment for digital products or in the context of e-commerce provisions, either as a standalone provision or as part of a provision on non-Discriminatory Treatment of Digital Products. National treatment means that parties should give a treatment no less favourable to other parties than they accord to domestic producers.

National treatment for services (as found in the trade in services chapter) or for investment (as found in the investment chapter) is not relevant for this question.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.4 [ecommerce_mfn] Does the agreement provide for MFN treatment in e-commerce?

Explanation: The code is 1 if there is a specific clause on most-favoured-nation treatment for digital products or in the context of e-commerce provisions, either as a standalone provision or as part of a provision on non-Discriminatory Treatment of Digital Products. MFN treatment means that parties should give a treatment no less favourable to other parties than they accord to non-parties.

MFN treatment for services (as found in the trade in services chapter) or for investment (as found in the investment chapter) is not relevant for this question.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.5. [ecommerce_technology_neutrality] Does the agreement include a principle of technological neutrality (i.e. same treatment for digital supply)?

Explanation: There are different versions of the principle of technological neutrality. It is understood here as a non-discrimination principle between products delivered electronically and other modes of supply (e.g. physical delivery). Technological neutrality limited to trade documents (paperless trading) is not taken into account. The neutrality should be about the product and its mode of delivery.

These provisions are also found under "Domestic Electronic Transactions Frameworks":

- gives or promotes equal treatment of electronic transactions or contracts, or
- established that laws should not discriminate arbitrarily between different forms of technology

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.6. [ecommerce_inconsistency_rules] Does the e-commerce chapter indicate which provisions prevail in case of inconsistencies?

Services and investment chapters also deal with e-commerce to the extent that they cover products that are digital or can be delivered electronically. Here we code if the agreement include provisions indicating which chapter prevails in case of conflict with other chapters

0: no reference to other chapters or no e-commerce chapter

1: yes (soft); 2: yes (mixed); 3: yes (hard): the e-commerce chapter has a provision indicating which provisions prevail in case of inconsistency with other chapters.

1.7 [ecommerce_service_investment_provisions] Does the e-commerce chapter refers to provisions on other chapters of the agreement, such as services and investment chapters?

Explanation: Services and investment chapters also deal with e-commerce to the extent that they cover products that are digital or can be delivered electronically, usually under the title "Electronic Supply of Services". Sometimes these provisions also refer to government procurement or financial services chapters. The applicability of other chapters also imply the applicability of their exceptions and non-conforming measures.

This provision can also be formulated as "no obligation to allow electronic delivery" except in accordance with the obligations of a Party in other chapters of the Agreement.

The code is 1 if there is a specific provision in the e-commerce chapter dealing with the interaction between e-commerce provisions and other disciplines such as services and investment.

0: no reference to other chapters or no e-commerce chapter

1: yes (soft); 2: yes (mixed); 3: yes (hard): specific reference to other chapters such as services, investment, financial services or public procurement"

1.8 [ecommerce_services_ma_nt] Are there services (and investment) market access (MA) and national treatment (NT) commitments for the sectors needed for e-commerce?

Explanation: The code is 1 if the services and investment chapters have market access and national treatment commitments in the following sectors: **computer and related services (CRS) (1.8.1), telecommunications (1.8.2) and financial services (1.8.3)**. The answer does not depend on exceptions and limitations. As long as there are commitments in some of the sub-sectors (for both cross-border trade and mode 3 or investment) for these three categories of services, the code is 1. Consider right to establishment also as part of market access.

The code is 0 if one of these sectors is fully excluded (for example financial services totally excluded in the agreement or computer services fully unbound both for market access and national treatment).

Example: Unless otherwise specified in its List of Reservations, each Party shall not adopt or maintain measures that unduly prohibit or restrict electronic commerce.

Other examples are found in services schedules. Each schedule has 4 columns:

- Column 1: Description of committed sector or sub-sector
- Column 2: Market Access (MA) Limitations
- Column 3: National Treatment (NT) Limitations
- Column 4: Additional Commitments

For each inscribed sector, undertake MA and NT commitments per mode of supply

Levels of commitments:

- "none": no limitations - meaning full commitment
- "unbound": no commitment, reserves right to employ any measures inconsistent with MA or NT
- "Limitation": specifies measure(s) departing from full MA or NT that may be maintained or adopted

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.9. [ecommerce_barriers] Does the agreement mention avoiding unnecessary barriers to e-commerce, or to minimise the regulatory burden on electronic commerce (usually under Domestic Electronic Transaction Framework)?

Explanation: The code is 3 if parties commit to avoid any unnecessary regulatory burden on e-commerce, or that electronic commerce not more restricted than other trade. Best endeavour clauses or the recognition of the importance of avoiding unnecessary barriers are also coded but as 1.

The provision can also include an explicit reference to domestic regulation, principle of no prior authorisation and provisions related to the conclusion of contracts by electronic means.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.10. [ecommerce_wto] Does the agreement mention the applicability of WTO rules to e-commerce?

Explanation: The code is yes if there is an explicit reference to the applicability of WTO rules on e-commerce or relevant WTO provisions.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.11. Custom duties

1.11.1 [ecommerce_duty] Is there a provision on the non-imposition of custom duties?

Explanation: The code is 1 if there is a provision stating a permanent moratorium on duty free treatment of electronic transmission, meaning that no customs duties should be imposed on electronic transmissions and digital products or if there is a recognition of the current practice of not imposing customs duties.

Sometimes there is an extra distinction between a digital product fixed in a carrier medium, or a digital product transmitted electronically, but both are generally considered duty-free.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.11.2 [ecommerce_duty_custom_value] Does the agreement include a provision on custom value of carrier mediums?

Such provisions usually state that parties shall determine the customs value of an imported carrier medium bearing a digital product of the other Party based on the cost or value of the carrier medium alone, without regard to the cost or value of the digital product stored on the carrier medium?

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.12. [ecommerce_dispute_settlement] Does the dispute settlement mechanism apply to e-commerce provisions?

1.12.1 [ecommerce_dispute_settlement_yes] if dispute settlement applies to e-commerce provisions and in particular the core provisions on non-discrimination and customs duties

1.12.2 [ecommerce_dispute_settlement_no] if dispute settlement explicitly exclude e-commerce provisions or chapters.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.13. Domestic Electronic Transaction Framework

1.13.1 [ecommerce_consistency_UNCITRAL] Does the agreement includes a provision on consistency of domestic legal framework with UNCITRAL Model Law on Electronic Commerce 1996?

http://www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce/1996Model.html

Code only agreements that have an explicit reference to UNCITRAL Model Law. Example: "Each Party shall adopt or maintain measures regulating electronic commerce taking into account the UNCITRAL

Model Law on Electronic Commerce and, as appropriate, other international standards, guidelines and recommendations".

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.13.2 [ecommerce_consistency_UN_ECC] Does the agreement includes a provision on consistency of domestic legal framework with the United Nations Convention on the Use of Electronic Communications in International Contracts - (the "Electronic Communications Convention", or ECC)?
https://www.uncitral.org/pdf/english/texts/electcom/06-57452_Ebook.pdf

Code only agreements that have an explicit reference to UNECC.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.13.3: [ecommerce_support_industry_development] Does the agreement include a provision ensuring that measures regulating electronic commerce support industry-led development of electronic commerce? Or the input of the industry as stakeholders? Or encourage business exchanges and cooperative activities? (see China-Korea FTA, Art. 13.7.3)

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.13.4. [ecommerce_participation_other_stakeholders] Does the agreement include a provision on facilitation of input by other interested persons in development of electronic commerce? Here code 1 if the treaty referrer to stakeholders that are not business, like civil society

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.14. [ecommerce_transparency] Does the agreement include provisions on transparency in the e-commerce chapter?

Provisions on exchange of information, legislation and regulations, are also considered in transparency provisions.

0: no transparency provisions or no e-commerce chapter

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.15. [ecommerce_self_regulation] Does the agreement include provisions encouraging the private sector to adopt self-regulations on e-commerce?

Explanation: Each Party shall encourage the private sector to adopt self-regulation. This may explicitly include the adoption of codes of conduct, model contracts, guidelines and enforcement mechanisms, with a view to facilitating electronic commerce.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.16 [ecommerce_promotion_facilitation] Does the agreement include provisions that recognizes the importance of promoting or facilitating electronic commerce? It could have several formulations:

- foster interoperability, innovation and competition;
- assist the timeliness and reduction of transaction costs;
- e-commerce policies are flexible and take account of developments in a rapidly changing technology environment.
- Promote the development of electronic commerce

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.17 [ecommerce_SMEs] Does the agreement include provisions for the facilitation the use of e-commerce by micro, small and medium size enterprises?

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.18 Electronic Government

1.18.1[ecommerce_egovernment] Does the agreement include provisions on e-government?

E-government provisions typically refer to reduce compliance costs and enhance the general level of transparency of government regulations; deliver efficiency in administration (for example, paperless trading); and reduce technical barriers to trade.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.18.2 [ecommerce_egovernment_open_data] Does the agreement include a provision on open government data?

Such provisions usually refer to facilitating public access to and use of government information.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.19. [ecommerce_paperless_trade] Does the agreement include a provision on paperless trading?

Typically these provisions include commitments to make trade administration documents available to the public in electronic form; accept trade administration documents submitted electronically as the legal equivalent of the paper version of those documents. Paperless trading could be between States, between a state and a private entity, or between private entities.

It is coded here even if provisions on paperless trade are found outside the e-commerce chapter.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.20 [ecommerce_electronic_signatures_certificates] Does the agreement include provisions on electronic authentication, electronic signatures or digital certificates?

Typically, these provisions allow authentication technologies and mutual recognition of digital certificates and signatures.

Example:

Article 15.6: Authentication (US-Peru FTA)

No Party may adopt or maintain legislation for electronic authentication that would:

- (a) prohibit parties to an electronic transaction from mutually determining the appropriate authentication methods for that transaction; or
- (b) prevent parties from having the opportunity to establish before judicial or administrative authorities that their electronic transaction complies with any legal requirements with respect to authentication.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.21. [ecommerce_international_alignment] Does the agreement include provisions on the participation of the parties in international fora to promote e-commerce?

It could be bilateral, regional or multilateral fora, or the mention of the international alignment of laws.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.22. [ecommerce_intellectual_property] Does the agreement include provisions that reconcile e-commerce with intellectual property?

It could include commitments 'not impair' IP rights, or the 'importance of protecting' IP rights, among others. It should explicitly mention e-commerce, general statements on effective protection of IP rights are code 0.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.23 [ecommerce_consumer_protection] Does the agreement include provisions on consumer protection?

This typically include provide protection for consumers using e-commerce, **or consumer confidence in e-commerce**, prevention of deceptive and fraudulent practices, and cooperation activities, or recognising the importance of cooperation between their respective national consumer protection agencies.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.24.0 [ec_data_prot] Does the agreement include provisions on data protection?

These typically consist in protection of personal data or data privacy of any kind.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.24.1 [ecommerce_data_protection] Does the agreement include provisions on data protection with no qualifications?

These typically consist in protection of personal data or data privacy, but the way this data is protect could vary considerably, recognising that the Parties may take different legal approaches to protecting personal information.

Consider that data protection provisions can be found outside the e-commerce or digital trade chapter.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.24.2 [ec_data_prot_princ] Does the agreement include provisions on data protection recognizing certain key principles?

These principles may include: limitation on collection; choice; data quality; purpose specification; use limitation; security safeguards; transparency; individual participation; accountability; non-discrimination and compatibility, among others.

Consider that data protection provisions can be found outside the e-commerce or digital trade chapter.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.24.3 [ec_data_prot_dom_law] Does the agreement include provisions on data protection according to domestic law?

Treaty may refer to the adoption or maintenance of a legal framework that provides for the protection of the personal information of the users of digital trade according to the domestic law of the contracting parties.

Consider that data protection provisions can be found outside the e-commerce or digital trade chapter.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.24.4 [ec_data_prot_int_standards] Does the agreement include provisions on data protection recognizing certain international standards?

Treaty may refer to the adoption or maintenance of a legal framework that provides for the protection of the personal information of the users of digital trade following international standards.

Consider that data protection provisions can be found outside the e-commerce or digital trade chapter.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.24.5. [ec_data_prot_least_rest] Does the agreement include provisions on data protection as a least restrictive measure?

Treaty recognize the importance of ensuring compliance with measures to protect personal information and ensuring that any restrictions on cross-border flows of personal information are necessary and proportionate to the risks presented.

Consider that data protection provisions can be found outside the e-commerce or digital trade chapter. Here we also coded the application 'mutatis mutandi' of Article XX GATT and Article XIV GATS.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.25. [ecommerce_data_protection_state_exclusion]

Does the agreement exclude from the data protection provisions in the e-commerce chapter the information held or processed by or on behalf of a Party or measures related to such information? It includes measures related to private data collection by State or its exchange.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.26 [ecommerce_internet_principles] Does the agreement include Principles on Access to and Use of the Internet for Electronic Commerce?

These principles could include:

- (a) access and use services and applications of a consumer's choice available on the Internet, subject to reasonable network management;
- (b) connect the end-user devices of a consumer's choice to the Internet, provided that such devices do not harm the network; and
- (c) access information on the network management practices of a consumer's Internet access service supplier.

These can also be found in the telecommunications chapter.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.27 [net_neutrality] Does the agreement include provisions on net neutrality?

Code no matter in which chapter these provisions are located (e-commerce, telecommunication, intellectual property, etc...). These provisions could be worded as "In order to guarantee a free and competitive market for Internet content, the Parties undertake to study mechanisms to make effective the principle of net neutrality in their internal legislation, in order to prevent certain contents or applications be discriminated in favour of others" (Brazil-Chile FTA 2018).

Note that it is not the same as "technological neutrality" or "competitive neutrality".

1.28 Data flows provisions in e-commerce chapters

1.28.1 [ecommerce_cross_border_information_transfer] Does the e-commerce chapter include provisions on data flows?

These provisions have different denominations "Cross-Border Transfer of Information by Electronic Means", "Cross Border Information Flows", and allow the cross-border transfer of information by electronic means, including personal information, when this activity is for the conduct of the business of a covered person.

They could also consider "maintain cross-border flows of information as an essential element in fostering a vibrant environment for electronic commerce"; or recognize "the importance of the free flow of information in facilitating trade, and acknowledging the importance of protecting personal information, the Parties shall endeavor to refrain from imposing or maintaining unnecessary barriers to electronic information flows across borders".

However, they usually recognise that each Party may have its own regulatory requirements concerning this transfer of information, and allow exceptions to achieve a legitimate public policy objective, provided that the measure does not impose restrictions greater than are required to achieve the objective, and are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.28.2 [ecommerce_data_flow_mechanism_to_address_barriers] Is there a mechanism to address barriers to data flows? 1 if yes, 0, otherwise

Explanation: The code is 1 if there is a mechanism dealing specifically with data flows issues such as the creation of a committee, a consultation mechanism or rules within the agreement limiting specific barriers to data flows.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.28.3 [ecommerce_data_flow_impose_localisation_requirements] Is there a provision imposing data localisation requirements?

Explanation: The code is 1 if parties have agreed to implement data localisation requirements or allow such requirements.

0: no provision on data localisation

1: yes (soft); 2: yes (mixed); 3: yes (hard): provision imposing data localisation requirements

1.28.4 [ecommerce_data_flow_limit_prohibit_localisation_requirements] Is there a provision banning or limiting data localisation requirements?

Explanation: The code is 1 if the agreement has provisions aimed at limiting or prohibiting the use of data localisation requirements. The provision should be specific (i.e. for all types of data flows) and not a commitment that could cover such barrier in the case of trade in services or investment.

0: no provision on data localisation

1: yes (soft); 2: yes (mixed); 3: yes (hard): provision limiting or prohibiting data localisation requirements

1.29 [ecommerce_internet_interconnection_charge] Does the agreement include provisions on Internet Interconnection Charge Sharing?

These provisions usually mention that the Parties recognise that a supplier seeking international Internet connection should be able to negotiate with suppliers of another Party on a commercial basis, on issues that may include compensation for the establishment, operation and maintenance of facilities of the respective suppliers.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.30. [ecommerce_spam] Does the agreement include provisions on Unsolicited Commercial Electronic Messages?

These measures may include:

- (a) require suppliers of unsolicited commercial electronic messages to facilitate the ability of recipients to prevent ongoing reception of those messages;
- (b) require the consent, as specified according to the laws and regulations of each Party, of recipients to receive commercial electronic messages; or
- (c) otherwise provide for the minimisation of unsolicited commercial electronic messages.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.31. [ecommerce_cooperation] Does the agreement include provisions on cooperation on issues regarding Electronic Commerce?

They could be included in the e-commerce chapter as well as in other chapters.

Cooperation activities could have been previously coded (e.g. consumer protection, spam, e-government, etc.), or could include general ones (e.g. cooperation in research and training activities to enhance the development of electronic commerce).

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.32. [ecommerce_cybersecurity] Does the agreement include provisions on cybersecurity?

These are usually cooperation activities such as:

- (a) building the capabilities of their national entities responsible for computer security incident response; and
- (b) using existing collaboration mechanisms to cooperate to identify and mitigate malicious intrusions or dissemination of malicious code that affect the electronic networks of the Parties.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.33. [ecommerce_source_code] Does the agreement include prohibitions to require the transfer of, or access to, source code of software owned by a person, as a condition for the import, distribution, sale or use of such software?

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.34. [ecommerce_inter_com_ser] Does the agreement include a provision on interactive computer services?

Such provisions usually refer to measures that treat a supplier or user of an interactive computer service as an information content provider in determining liability for harms related to information stored, processed, transmitted, distributed, or made available by the service.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.35 [ecommerce_crypto] Does the agreement include provisions on cryptography?

Such provision may consider that neither Party shall require a manufacturer or supplier of the ICT good, as a condition of the manufacture, sale, distribution, import, or use of the ICT good, to transfer or provide access to any proprietary information relating to cryptography, partner or otherwise cooperate with a person in the territory of the Party in the development, manufacture, sale, distribution, import, or use of the ICT good; or use or integrate a particular cryptographic algorithm or cipher.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.36 Exceptions applicable to e-commerce

1.36.1 [ecommerce_general_exceptions_applicable] Does the agreement make general exceptions explicitly applicable to e-commerce or data?

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

Coded here even if these provisions are found outside the e-commerce chapter, and if they are also partially coded again in 7. General Exceptions (which include general exceptions applicable to e-commerce or data outside the e-commerce chapter, either explicitly applicable or that could be applicable to e-commerce or data, even if they are not explicitly mentioned).

1.36.2 [ecommerce_spec_except] Does the agreement include specific exceptions on e-commerce?
Code 1 if the agreement has articles including exceptions exclusive of the e-commerce chapter, otherwise code 0.

Examples of exceptions:

- (National Treatment) does not apply to:
 - (a) subsidies or grants that a Party provides to a service or service supplier, including government-supported loans, guarantees, and insurance; or
 - (b) services supplied in the exercise of governmental authority,
- This Article does not apply to measures affecting the electronic transmission of a series of text, video, images, sound recordings, and other products scheduled by a content provider for aural and/or visual reception, and for which the content consumer has no choice over the scheduling of the series.
- a Party may require that, for a particular category of transactions, the method of authentication meet certain performance standards or be certified by an authority accredited in accordance with the Party's law, provided the requirement:
 - (a) serves a legitimate governmental objective; and
 - (b) is substantially related to achieving that objective.

This does not include exclusions, like a party being able to impose internal taxes on digital products, provided they are imposed in a manner consistent with the agreement (which are coded in 1.33.3), or exceptions found in other chapters (which are coded in 1.7).

1.36.3 [ecommerce_sec_except] Does the agreement include specific security exceptions? (national security or similar)

Here we include national security exceptions: (i) inside an e-commerce or digital trade chapter; (ii) as part of a general chapter or section on exceptions explicitly applicable to an e-commerce or digital trade chapter; (iii) as part of a general chapter or section on exceptions implicitly applicable to an e-commerce or digital trade chapter or provisions (meaning, when the agreement include provisions on data privacy or free transfer of data flows).

Here we also coded the application 'mutatis mutandi' of Article XXI GATT and Article XIVbis GATS.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.36.4 [ecommerce_tax_exclusion] Does the agreement include a specific exclusion for internal taxes?

Typical formulation is "...shall not preclude a Party from imposing internal taxes, fees or other charges on content transmitted electronically, provided that such taxes, fees or charges are imposed in a manner consistent with this Agreement". Often is found together with the provision on custom duties moratorium for electronic goods/transmissions.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.36.5 [ecommerce_exclusion_digitisation_financial_instruments] Does the agreement include a provisions not considering the digital representation of financial instruments as digital products?

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.36.6. [ecommerce_NCMs] Does the agreement include non-conforming measures (NCMs) on e-commerce?

Code yes if the agreement has articles including NCMs in the e-commerce chapter, or mentions the applicability of NCMs found in other chapters on e-commerce; otherwise code no.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.36.7. [ecommerce_reservations] Does the agreement include reservations on e-commerce?

Code yes if the agreement include explicit reservations that are not exceptions or NCMs (e.g. Japan-Switzerland Art. 73:1, reservations with regard to non-discriminatory treatment, Art. 78:3 with regard to electronic signatures); otherwise code no.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.37 [ecommerce_together_services_chapter] Is the e-commerce chapter together with the services chapter?

0: no

1: yes

1.38 [ecommerce_institutional_arrangements] Does the agreement consider specific institutional arrangements for e-commerce, e.g.: working group, committees, etc.?

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.39. Size of the e-commerce chapter

Indicate the size of the electronic commerce chapter. But not in case of chapters mixing services and e-commerce

1.39.1. [ecommerce_number_articles]: Number of Articles.

Count complete articles that refer to e-commerce in a specific e-commerce chapter or annex.

1.39.2. [ecommerce_number_words]: Number of Words.

Count the number of words of complete articles that refer to e-commerce in a specific e-commerce chapter or annex.

1.40 Diffusion of Models

1.40.1. [ecommerce_resemblance_US_model] Is the agreement similar to US PTAs with e-commerce chapter?

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.40.2. [ecommerce_resemblance_EU_model] Is the agreement similar to EU PTAs with e-commerce chapter?

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

1.40.3. [ecommerce_resemblance_other_model] Is the agreement similar to other PTAs with e-commerce chapter, but not to the US or EU models?

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

2) Data flows

Here code data flows provisions found outside the e-commerce chapter. The ones found inside the e-commerce chapter are coded in the preceding section.

2.1 [data_flow_free_movement] Does the agreement include a provision on the free movement of data?

Explanation: The code is 1 if there is a principle in the agreement that cross-border data flows are free between the parties (with possibly exceptions). Such principle goes beyond traditional services market access commitments that would only cover data corresponding to the supply of services. The principle can be included in the e-commerce chapter but should be broader than e-commerce to cover in particular private information exchanged by companies independently of commercial transactions.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

2.2 [data_flow_barrier] Is there a mechanism to address barriers to data flows?

Explanation: The code is 1 if there is a mechanism dealing specifically with data flows issues such as the creation of a committee, a consultation mechanism or rules within the agreement limiting specific barriers to data flows.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

2.3 [data_flow_impose_localisation_requirements] Is there a provision imposing data localisation requirements?

Explanation: The code is yes if parties have agreed to implement data localisation requirements or allow such requirements.

0: no provision on data localisation

1: yes (soft); 2: yes (mixed); 3: yes (hard): provision imposing data localisation requirements

2.4 [data_flow_limit_prohibit_localisation_requirements] Is there a provision **banning or limiting** data localisation requirements?

Explanation: The code is yes if the agreement has provisions aimed at limiting or prohibiting the use of data localisation requirements. The provision should be specific (i.e. for all types of data flows) and not a commitment that could cover such barrier in the case of trade in services or investment.

0: no provision on data localisation

1: yes (soft); 2: yes (mixed); 3: yes (hard): provision limiting or prohibiting data localisation requirements

3) Reference to data or data transmission in service chapters/sections

Is there any reference to data in particular services, especially regarding cross-border supply (GATS Mode I), and consumption abroad (GATS Mode II)? Investment chapters or provisions are not coded.

3.1. [data_telecommunications]: Is there any reference to the transfer of data flows in the telecommunications chapter/provisions?

0: no provision on data

1: yes (soft); 2: yes (mixed); 3: yes (hard): provisions(s) on data

3.2 [data_CRS]: Is there any reference to the transfer of data flows in computer and related services (CRS) chapter/provisions?

0: no provision on data

1: yes (soft); 2: yes (mixed); 3: yes (hard): provisions(s) on data

3.3 [data_audiovisual]: Is there any reference to the transfer of data flows in audiovisual chapter/provisions?

0: no provision on data

1: yes (soft); 2: yes (mixed); 3: yes (hard): provisions(s) on data

3.4 [data_financial_services]: Is there any reference to the transfer of data flows in the financial services chapter/provisions?

0: no provision on data

1: yes (soft); 2: yes (mixed); 3: yes (hard): provisions(s) on data

4) Intellectual Property (IP) Chapters

4.1 [IP_WIPO_internet_treaties] Does the agreement adhere to WIPO Internet Treaties?

World Intellectual Property Organization ("WIPO") Internet treaties include:

- WIPO Copyright Treaty (1996), and
- WIPO Performances and Phonogram Treaty (1996). Only explicit references are coded.

Only explicit mentions are coded. If the Parties affirm their existing rights and obligations under "multilateral agreements relating to intellectual property to which both Parties are parties", is not enough to be coded here.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.2 [IP_multilateral_agreements] Does the agreement include a list of multilateral agreements relating to IP?

These agreements include, inter alia:

- Paris Convention of 20 March 1883 for the Protection of Intellectual Property (Stockholm Act, 1967 as amended in 1979);
- Bern Convention of 9 September 1886 for the Protection on Literary and Artistic works (Paris act, 1971);
- International Convention of 26 October 1961 for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (Rome conventions);
- Madrid Agreement concerning the International Registration of Marks (Stockholm Act 1967 as amended in 1979);
- Patent co-operation Treaty (Washington, 1970 amended in 1979 and modified in 1984);
- Convention establishing the World Intellectual Property Organization (Stockholm Act, 1967 as amended in 1979);
- Joint Recommendation Concerning Provisions on the Protection of Well-Known Marks (1999), adopted by the Assembly of the Paris Union for the Protection of Industrial Property and the General Assembly of the WIPO;
- International Convention for the Protection of New Varieties of Plants (1991) ("UPOV Convention");
- Protocol Relating to the Madrid Agreement Concerning the International Registration of Marks (1989).

Only explicit mentions are coded. It is not necessary that ALL agreements listed above are included.

If the Parties affirm their existing rights and obligations under "multilateral agreements relating to intellectual property to which both Parties are parties", is not enough to be coded here.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.3 [IP_TRIPS]: Does the agreement adhere to the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)? Only explicit references are coded.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.4 [IP_copyright_and_related_rights]: Does the agreement include provisions on the duration of the terms of protection of copyright and related rights?

Take especial note of the agreements that provide for TRIPs or TRIPs + protection (Beyond TRIPs: 50 years after the death of the author).

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.5 [IP_copyright_and_related_rights_limitations_exceptions]: Does the agreement include limitations and exceptions to Copyright and Related Rights?

For example: "Each Party shall confine limitations or exceptions to exclusive rights to certain special cases which do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the right holders". (Jordan-US FTA (2000), Art. 4.16).

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.6 [IP_balance_copyright_and_related_rights]: Does the agreement include provisions that balance the copyright and related rights system?

Each Party shall endeavour to achieve an appropriate balance in its copyright and related rights system, among other things by means of including limitations or exceptions for the digital environment, giving due consideration to legitimate purposes such as, but not limited to: criticism; comment; news reporting; teaching, scholarship, research, and other similar purposes; and facilitating access to published works for persons who are blind, visually impaired or otherwise print disabled (TPP, Arts. 18.66).

Here are also coded provisions on an appropriate balance between the legitimate interests of intellectual property right holders and of users in subject matter protected by intellectual property rights in IPRs in general (mostly soft law)

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.7 [IP TPM]: Does the agreement include technological protection measures (TPMs)?

These include effective technological measures to prevent or restrict unauthorized acts in respect to IP protected rights.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.8 [IP_IRM]: Does the agreement include provisions to protect Information Rights Management (IRM)?

Information rights management (IRM) is a subset of digital rights management (DRM), technologies that protect sensitive information from unauthorized access. It is also known as Rights Management Information (RMI).

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.9 [IP_trade_secrets]: Does the agreement include provisions on trade secrets, or similar like protection of undisclosed information/protection of data?

No coding with regard to certain regulated products like pharmaceuticals or agricultural chemical products; and private contracts of all sort. Note that provisions on non-disclosure of information are not always equivalent to the protection of trade secrets.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.10 [IP_encrypted_satellite_cable_signals]: Does the agreement include provisions protecting encrypted satellite and cable signals?

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.11 [IP_government_use_non-infringing_software]: Does the agreement include provisions on the governmental use of (non-infringing) software?

Example: Each Party shall issue appropriate laws, regulations, or other measures ("measures") providing that all government agencies use only computer software authorized for intended use. Such measures shall actively regulate the acquisition and management of software for government use. (Jordan-US FTA (2000), Art. 4.15).

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.12 [IP_Internet_domain_names]: Does the agreement include provisions on Internet Domain names?

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.13 [IP_liability_ISP]: Does the agreement include provisions on the liability of Internet Service Providers (ISP)?

These provisions could also be found in the e-commerce chapter.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.14 [IP_safe_harbors_ISP]: Does the agreement include provisions on safe harbors for Internet Services Providers (ISP)?

Also include limitations on the liability of ISPs, as well as enforcement provisions. All agreements having a provision on safe harbors must also be coded 1 in 4.12[IP_liability_ISP].

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.15 [IP_software_patents]: Does the agreement include provisions on patents for computer implemented inventions (patents for software)?

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.16 [IP_open_database]: Does the agreement include provisions on intellectual property databases open to the public?

The word "public" needs to be included, and no data bases for Internet domain names are included here (these are coded in 4.10).

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.17 [IP_open_documents]: Does the agreement include provisions on the availability of documents on the Internet?

Include transparency obligations with explicit availability on line of documents. Soft provisions on "public domain" are not coded. Contact information for domain-name registrants are nor coded here but in 4.10.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.18 [IP_copyright_and_related_rights_electronic_reproduction]: Does the agreement include provisions on the right of reproduction in electronic form in copyright and related rights?

Code also under the formulation "any manner or form" as well as explicit.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.19 [IP_author_wireless_publication]: Does the agreement include provisions on author's right to publish by wireless means at any time individually chosen?

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.20 [IP_copyright_and_related_rights_electronic_storage]: Does the agreement include provisions on storage of works of copyright and related rights in electronic form?

These provisions include authors' right to authorize or prohibit temporary storage in electronic form of their works. Fixation is also considered part of storage.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.21 [IP_data_flows]: Does the agreement include provisions on data flows inside the intellectual property chapter?

Here only explicit provisions on data flows are coded.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

4.22 [IP_digital_economy]: Does the agreement include provisions on digital economy / globalization of technological innovation and trade?

This could include provisions on the globalization of technological innovation and trade, or with a similar wording.

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

5) Specifically created understandings or provisions:

5.1 [ICT_cooperation]: Does the agreement include an understanding or provisions about cooperation on Information and Communication Technology (ICT)?

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

5.2 [government_procurement]: Does the agreement include an understanding or provisions allowing government procurement including electronic means?

This is coded regardless the procurement is of digital products (explicitly mentioned) or the procurement via electronic means (digital procurement, electronic auctions).

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

5.3 [standardization_mutual_recognition]: Does the agreement include an understanding or specific provisions on standardization and mutual recognition regarding digital means?

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

6) Rules on trade in goods related to big data

[trade_goods_big_data]: Does the agreement include provisions about trade in goods related to big data? (E.g. rules on robotics, Internet of Things).

Provisions on paperless trading are not coded here, but in 1.19. [ecommerce_paperless_trading]

0: no

1: yes (soft); 2: yes (mixed); 3: yes (hard)

7) General exceptions

[general_exceptions]: Does the agreement have exceptions and other flexibilities with reference to data flows or e-commerce, outside the e-commerce chapter? Or overall exceptions that could be applicable to e-commerce or data, even if they are not explicitly mentioned?

These exceptions and flexibilities includes for example, privacy or security issues, only if are related to data or e-commerce.

wto_listed: Note if the treaty is WTO registered:

<http://rtais.wto.org/UI/PublicMaintainRTAHome.aspx>

Main Sources:

<http://www.worldtradelaw.net/databases/ftas.php>

<http://ptadb.wto.org/>

http://wits.worldbank.org/gptad/trade_database.html

<http://www.sice.oas.org/maps/indiceMapas.asp>

<http://ptas.mcgill.ca/>

<http://www.wcoomd.org/en/topics/origin/instrument-and-tools/database.aspx>

<http://www.bilaterals.org/>

<http://www.aladi.org/sitioAladi/acuerdos.html>

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