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Incorporating Algorithmic or Computational Law matters into Trade Agreements

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In 2022, the World Economic Forum and the World Trade Organisation published a joint paper drawing greater attention to the need to put in place “building blocks” for TradeTech policy adoption¹. TradeTech might be loosely described as the set of technologies that enables global trade to become more efficient, inclusive and sustainable². TradeTech is or must necessarily be about integrating not only the supply chain but also the networks of relationships supporting trade, sometimes popularly called the trade ecosystem. TradeTech is not intended however to be specifically tied to any particular type of information technology. That said, the main foci of the policy debates at the World Economic Forum and the WTO are the potential of artificial intelligence (AI), blockchain and distributed ledger technology (DLT) and the internet of things (IoT).

Many of the TradeTech solutions are targeted at improving the efficiency cost of trade – it is outside the scope of this article to detail what those costs are and what the efficiencies which would be achieved by TradeTech are.³ Using the assumption that TradeTech is able to achieve cost efficiencies, the question is about access to those TradeTech solutions. Access to commercial solutions, including those offered by TradeTech providers, is broadly speaking better supported if the prospective user is better able to understand the legal implications for them and their business. Moreover, it is natural for businesses to be risk conservative where international trading is concerned⁴ – preferring not to venture into

¹ World Economic Forum & WTO, “The Promise of TradeTech: Policy approaches to harness trade digitalization” (2022) published at https://www.wto.org/english/res_e/publications_e/tradtechpolicyharddigito422_e.htm

² Ibid, at 4.

³ On this issue, there is a wealth of literature. Please see generally Jouanjean, M. (2019), “Digital Opportunities for Trade in the Agriculture and Food Sectors”, *OECD Food, Agriculture and Fisheries Papers*, No. 122, OECD Publishing, Paris, <https://doi.org/10.1787/91c40e07-en>; UNECE (2011), *The Data Pipeline*, Discussion Paper for the Global Trade Facilitation Conference 2011, Connecting International Trade: Single Windows and Supply Chains in the Next Decade; World Economic Forum (2018), *Trade Tech: A New Age for Trade and Supply Chain Finance*, World Economic Forum, by W. Lehmacher, T. Olsen, G. Mattios and A. Di Marzo; Joint United Nations Regional Commissions (2017), *Trade Facilitation and Paperless Trade Implementation Survey – Global Report 2017*; Hoffmann, J. (2017), “Intelligent trade and technologies: Preparing for the trade facilitation of the future”, Article No. 12, UNCTAD Transport and Trade Facilitation Newsletter N°76, Fourth Quarter 2017; Nakasone, E., Torero, M, et Minten, B. (2014), “The power of information: The ICT revolution in agricultural development”, *Annu. Rev. Resour. Econ.*, 2014, vol. 6, no. 1, p. 533-550, 10.1146/annurev-resource100913-012714; OECD (2017a), “Going digital: Making the transformation work for growth and well-being”, Meeting of the OECD Council at Ministerial Level Paris, 7-8 June 2017; OECD (2016b), “The internet of things: Seizing the benefits and addressing the challenges”, *OECD Digital Economy Papers*, No. 252, OECD Publishing, Paris and many more similar papers published under the auspices of the OECD.

⁴ The matter of risk aversion in trade has been subjected to much research and analysis ever since the 1970s. See, for example, Clark, Peter B. “Uncertainty, exchange risk, and the level of international trade.” *Economic Inquiry* 11.3 (1973): 302 and the highly cited book by Helpman, Elhanan, and Assaf Razin. A

opportunities without proper assessment of the legal risks. However, legal risks are not easily measurable – especially for Small and Medium Sized Enterprises (SMEs) where the information deficit is significant.

An important TradeTech solution, which forms the observational target of this study, lies in the algorithms which can aggregate the manifold regulatory and legal requirements for export or import trade and automating regulatory and rule (including contracts) compliance for traders. Traders operate in a highly complex and sophisticated regulatory environment. They are subject to regulations at many levels – from local, national to international. They are also subject to trade association standards and contract specifications in the movement of goods, capital and services. This problem of complexity is managed traditionally by the use of appropriately crafted contractual clauses assigning responsibility for compliance to particular individuals in the trade chain or providing for limits on liability for failure to meet regulatory requirements or allocating the risk of non-compliance to insurers. These are however only of limited effect because a good number of those regulations could attract criminal liability or civil penalties. All the contractual devices do, putting it bluntly, is to re-allocate or re-adjust the risk of compliance.

For SMEs, although there already exist trade policy transparency tools such as the UN endorsed ePing2 system⁵, many traders continue to find it difficult to identify and meet the relevant market access rules and specifications, such as tariffs and non-tariff measures or to use their legitimate preferences. There are several problems with ePing2 system – as with most e-alert systems. The usual problems include language barriers, partial information, lack of effective training for users, and deficiencies of devices used to receive the e-alerts.⁶ It is submitted, critically, that the system is not smart (that is to say, it is not personalised to the user's individual trade interests and needs). It is therefore needful for an AI driven solution to be adopted. Artificial Intelligence can make such a system more user relevant and also be smart in the types of regulatory information it passes on. Indeed, with generative AI the information can even be provided and tailored to suit the user's linguistic, cultural and commercial preferences.

It is to that an end an important TradeTech development is the introduction of apps or solutions based on what is increasingly called algorithmic or computational law.⁷

theory of international trade under uncertainty. Academic Press (1978). The latter is available as online publication at <https://core.ac.uk/download/pdf/6717132.pdf>

⁵ For a video on how ePing makes regulations more transparent and accessible for traders, see <https://www.un.org/development/desa/dpad/2017/new-informational-video-on-e-ping-2/>; the UN website describes the ePing2 system as “an online alert system designed to help government agencies and small and medium-sized enterprises keep track of the latest information on regulatory requirements for international trade. It provides free, timely updates on new sanitary and phytosanitary measures and technical barriers to trade in countries around the world. It also facilitates dialogue among the public and private sector in addressing potential trade problems at an early stage. Users of ePing will be able to easily keep up-to-date with notifications affecting foreign markets and products of particular interest to them.” (see URL above).

⁶ WTO Committee on Technical Barriers to Trade, Survey on ePing Report, G/TBT/GEN/227 (2017).

⁷ See M. Genesereth, Computational Law: The Cop in the Backseat, White Paper, CodeX—The Stanford Center for Legal Informatics (2015). Computational law should not be confused with computer law. The

Algorithmic law is legal informatics (or in lay terms, information technology applied to law) concerned with the codification of regulations and rules in explicit, discrete and computable form. It has also been called, “the basis for computer systems capable of doing useful legal calculations, such as compliance checking, legal planning, regulatory analysis, and so forth”.⁸ The World Economic Forum and WTO in their joint publication⁹ are broadly positive about algorithmic law. Algorithmic law directs the use of machines to perform legal analyses and processes on behalf of humans thereby reducing cost and time. Algorithmic law can also facilitate the automation of private obligations (e.g. contracts, financial standards, business rules for pricing).

TradeTech based on algorithmic law works well with smart contracts and smart systems. The TradeTech solution would identify the relevant regulations, draw them together and communicate with other devices, platforms or computers to enable the user/s to meet their regulatory obligations.

From a trade perspective, [smart] machines relying on algorithmic law can enhance the functionality of electronic systems for trade information (e.g. trade information portals, transparency notification tools, tariff calculators), operations (e.g. enterprise resource planning, transportation and logistics, e-commerce, banking and finance platforms) and facilitation (e.g. National Single Windows (NSWs)).¹⁰ The benefits for the traders are that supported by these systems, they are better able to automate compliance with regulations across the many jurisdictions they trade. For governmental agencies responsible for the control of trade flow, they can use algorithmic enabled technologies better to understand the application and implementation of their own rules and regulations.

Acknowledging these benefits are likely to quicken the adoption of such TradeTech solutions, this article is concerned with the research question as to how best can trade agreements support this development. This work is not concerned with the national law and regulation changes required to facilitate Big Data and AI guided TradeTech – such as laws on the recognition of electronic trade documents, consumer protection, cybersecurity, supply of AI products, cryptoassets, data protection etc. The algorithmic law agenda for national jurisdictions is indeed monumental and probably at present out of the reach of many emerging economies. That said, the concern here in this article is squarely on the accommodation of TradeTech in trade agreements. Both multilateral and bilateral trade agreements would be analysed, though there will be a greater emphasis on bilateral free trade agreements and any digital trade partnerships or compacts arising therefrom.

This article is organised into three parts. Part one will demonstrate why algorithmic law might be properly perceived as an optimal solution for trade regulatory compliance – whether for large or small enterprises. Part two looks at the issue of the digitalisation of

latter is the law applying to the use of computers. Computational law is the inverse, more or less. In this article, to avoid confusion, the term algorithmic law will be used.

⁸ Ibid

⁹ See n. 1.

¹⁰ See n.1 at p. 55.

trade is being framed by emerging trade policies. It interrogates the different interests impacting on the policy shaping exercise. Part three turns the spotlight on trade agreements and the increasing incorporation of digital trade rules and norms into trade agreements.

A. Why algorithmic law is especially suited for trade regulatory compliance?

The broad view is that algorithmic law is based on algorithmic or computational logic, that is to say, regulations and facts are represented by sentences which in turn are “processed” by mechanical reasoning techniques to work out the consequences of those facts based on the law/regulations so described or inputted.¹¹ It is immediately obvious that for best results, algorithmic law is better suited to situations where the laws are in writing and deemed to be definitive. The more explicit and clearer, the better. In cases where the law is subject to various interpretations drawing from different normative considerations – such as that usually occurring in a common law setting where judicial or legal creativity is pronounced – algorithmic law is less suited.

In the international trade, the kind of legal or judicial creativity alluded to above is rare. Trade regulations, standard boilerplate agreements (especially those sponsored by trade and shipping bodies such as BIMCO, GAFTA, NYPE, ICC etc.) and technical specifications are reduced to writing, seldom amended and adopted and interpreted virtually literally. Those rules are categorical allowing for little discretion. As such, they lend themselves rather splendidly to the adoption of algorithmic law.

It is also important to stress that algorithmic logic is necessarily deductive and less inductive. The deductive reasoning process, as many law students should know, contains three phases – the identification of a major premise to be followed by an articulation of the facts and finally, a conclusion is made¹². A major premise, usually a rule in question, is identified. This rule is derived from a wide range of sources – including many trade and trade related regulations. Second, a specific set of facts should be identified or described. Finally, as a result, the conclusion is made that the facts *must* apply to the rule, thus proving that the entire syllogism is accurate. This process is logical and can be learnt by the machine. It is algorithmic.

Inductive reasoning requires the assembling of different factual situations with a view to ascertaining a general rule¹³. It is not *logical* in the algorithmic sense. A machine, driven by AI, would thus find doing this much more problematic. That said, generative AI based on deep learning technology is already making significant advancement towards replicating

¹¹ For an example of how facts and rules are reduced mechanically, see Sergot, Marek J. et al. “The British Nationality Act as a logic program.” *Commun. ACM* 29 (1986): 370. Also, Hildebrandt, Mireille. “Law as Information in the Era of Data-Driven Agency.” *The Modern Law Review* 79.1 (2016): 1 and generally, Branting, L. Karl. *Reasoning with rules and precedents: a computational model of legal analysis*. Springer Science & Business Media, 2013.

¹² Weinreb LL. *Analogy and Inductive and Deductive Reasoning*. In: *Legal Reason: The Use of Analogy in Legal Argument*. Cambridge University Press; 2005:19-40.

¹³ Ibid.

inductive reasoning¹⁴, though there are legitimate concerns at biases in the “reasoning” process.¹⁵

Trade regulations are in the most parts directive and instructional. They are intended to have a deductive quality. Traders are to identify the rules and recognise their factual circumstances and then conclusions are drawn on whether there is compliance or not. As such algorithmic logic can be applied to help ease compliance.

B. Digitalisation of Trade Policy

In line with the fast growth in TradeTech in global trade, the international bodies and individual countries must do their part to ensure this “new”¹⁶ development is properly supported and recognised in the legal environment for trade. As far as providing for the appropriate trade policy mechanisms in place, it might be suggested that there are two policy and legal options for states or international organisations. One is to provide for a broad-based digital trade policy which would attempt to accommodate different TradeTech solutions. This approach is by necessity resource intensive and require an established trade facilitation institutional framework. The other option is to adopt a more piecemeal approach – specific TradeTech measures are included in a government’s or country’s specific policies or technical measures on specific sectors of their trade or economy, or particular systems of administrative controls (e.g. customs, taxation, licensing etc.).

The piecemeal approach might be seen in the World Economic Forum and WTO joint publication. That paper uses as a good practice case study of the latter the Chilean government’s introduction of freely accessible online repository of trade rules in a human-readable and machine-executable “rules as data” form using tabular declarative programming. The TradeTech solution introduced by the Chilean government is to enhance accessibility and functionality of trade rules that are conventionally written in complex natural languages and “legalese”. Chile thus aims to become the first jurisdiction to express and publish trade rules as “standardizable” data packages to the internet that can be picked up and used by any system, anywhere. In time the benefits extend beyond merely acquiring the relevant trade information. Traders having accessed these standardizable data packages can use them to instruct their own machines to manufacture goods according to the requisite specifications, to set up payment mechanisms based on those regulatory requirements, to prepare relevant trade documentation, to issue computer commands to machines responsible for arranging for shipping etc. and to do all these processes much quicker, cheaper and safer. The potential benefits are thus considerable.

¹⁴ The promise of machine learnt inductive reasoning was identified as early as the late 1980s, see Muggleton, Stephen. "Inductive logic programming." *New generation computing* 8 (1991): 295-318.

¹⁵ Goyal, Anirudh, and Yoshua Bengio. "Inductive biases for deep learning of higher-level cognition." *Proceedings of the Royal Society A* 478.2266 (2022): 20210068.

¹⁶ “New” is of course somewhat of a misnomer given that technology to make trade processes and documentation easier and more cost and time efficient has been around for several decades.

An example of the more systemic approach is the recent adoption by the European Union of their Digital Trade Policy in 2021. The policy document is set out by a Communication from the Commission to the European Parliament, Council, European Economic And Social Committee and Committee Of The Regions¹⁷. It is indeed a very comprehensive trade policy paper covering not merely the issue of digital trade and digitalisation of trade but other pressing matters related to trade such as the EU's perception that the WTO system has not worked well, post COVID 19 challenges, the "China" problem and climate change matters. Those issues are not discussed here for obvious reasons. On digital trade, the policy paper stresses that the term is to be construed widely and would most certainly, as such, apply to digitalisation of trade (including TradeTech).

There are several observations to be made.

First, the EU new trade policy stresses the importance of making the best use of existing trade agreements and the adoption of trade agreements which promote the EU's values and interests.

Secondly, within this framework digital trade features very starkly, especially as a medium-term measure¹⁸. The emphasis on medium term is noteworthy. Digitalisation of trade cannot be pushed back any further. It is suggested that countries seeking to leverage on their trade relations with the EU should henceforth take the matter of digitalisation of trade seriously too.

Thirdly, the policy paper also commits the EU to proposing that the terms and spirit of the Paris Agreement should be considered an essential element in the EU's future trade and investment agreements. In addition, the conclusion of trade and investment agreements with G20 countries should be based on a common ambition to achieve climate neutrality as soon as possible and in line with the recommendations of the Intergovernmental Panel on Climate Change (IPCC). This ambition should also be properly reflected in Nationally Determined Contributions (NDCs) submitted under the Paris Agreement.¹⁹ The digitalisation of trade policy is proximately linked to the EU's climate change commitments and strategy. For this author this indicates that when it comes to the EU assessing or evaluating the ESG (Environment Social Governance) index of a trade deal²⁰ the presence of digitalisation of trade in a trade agreement would be a relevant indicator of ESG and climate change performance.

¹⁷ COM/2021/66 final

¹⁸ Para 3 of the Communication (ibid).

¹⁹ Para 3.2.2 of the Communication.

²⁰ ESG index or scores are crucial where [green] financing or investment is needed for international trade. See, where the EU is concerned, Communication from the Commission on the Strategy for Financing the Transition to a Sustainable Economy [COM\(2021\) 390 final](#). The legal building blocks for testing the ESG performance of enterprise and organisations are: 1) a classification system, or 'taxonomy', of sustainable activities, 2) a disclosure framework for non-financial and financial undertakings, and 3) investment tools, including benchmarks, standards and labels.

Fourthly and importantly, the trade policy paper states that the EU digital agenda shall be a priority.²¹ This entails doing two things – the adoption or incorporation of EU data and other digital economy principles (such as those on AI²²) into the EU’s bilateral and multilateral trade relationships. As to the former, those principles are likely to be treated as *sine qua non* for trade agreements. On the latter, the EU’s policy paper states unequivocally that the EU will lobby the WTO to lay down stronger frameworks for digital trade and the flow of data.

Thus far the policy paper has emphasised the need to introduce EU values into the matter of digitalisation of trade. It is underscored in the policy paper that digitalisation of trade can create unfair trade relations²³ if the global communities do not accept a fundamental governance compass. Against that backdrop, the EU has introduced new parameters for its trade agreements. Trade agreements already signed may be used as the platform to enter into negotiations for a Digital Trade Partnership. An example of this is the ongoing negotiations between the EU and Singapore following a Joint Declaration in July 2023 to commence discussions for a Digital Trade Partnership.²⁴

C. Trade Agreements and Digitalisation of Trade

As has been alluded to above, a digitalisation-oriented trade policy such as that of the EU often will lead to the making of digital trade compact or partnership, a term preferred by the EU. Digital trade is of course wider than TradeTech. Hence, this article will focus only on those aspects relevant to algorithmic law matters.

It might be useful to take the EU-Singapore partnership principles²⁵ (intended to guide the negotiations for a digital trade partnership to come) as an observational target and a working template on how best to improve such TradeTech related international agreements.

The starting point should perhaps be to remind ourselves that the aim of such agreements is to bring about a body of computational law that can be accessed by both humans and machines. Trade agreements should therefore encourage governments to publish, alongside the deposited natural language texts, official machine-executable packages of commercial policies (i.e. trade and domestic rules that affect cross-border transactions) and necessary data sources to the internet. TradeTech computational rules and data sources when made available online, in parallel to the natural language texts, supports entirely the development of single windows and systems for e-certificates of origin, payments, and digital identity, and others. As noted by the World Economic Forum and

²¹ Para 3.2.3 of the Communication.

²² Notably a so-called human centric approach to AI use. See too the EU AI Law; generally at [Artificial intelligence act: Council and Parliament strike a deal on the first rules for AI in the world - Consilium \(europa.eu\)](https://consilium.europa.eu/en/policies/artificial-intelligence-act/)

²³ Though lacking in detail. It might however be surmised that the EU’s concern is that whilst the bloc is committed digitalisation of trade constrained by the need to respect ESG standards, other countries might not do likewise.

²⁴ The EU has initiated similar discussions with Japan and South Korea.

²⁵ The document was signed on 31 January 2023.

WTO joint publication, “this creates potential for the creation of tools by not only governments but through private sector innovation and developer community access to official computational rules and data sources”.²⁶ These data packages are executable – namely that they are not merely information-only data but computer programmes which can directly or indirectly initiate processes (including processes which cause the production of paper or electronic trade documents).

However, this matter of providing for executable forms of data is not covered, it is submitted, by the provisions on transparency under the WTO regime.²⁷ The US Centre for Strategic and International Studies echoes the view of many states within the WTO system that such provisions are absolutely critical to the WTO trading system. It states:

“the importance of compliance with transparency and notification obligations and the consequences of noncompliance can be grave. Incomplete information makes it more difficult to develop trade policies and undermines the international trade order.”²⁸

The WTO Glossary describes transparency as “the degree to which trade policies and practices, and the process by which they are established, are open and predictable.” Transparency has been encouraged through the general transparency principles stated in Article X of the General Agreement on Tariffs and Trade (GATT), Article III of the General Agreement on Trade in Services (GATS), and Article 63 of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). Notification obligations compliment transparency provisions by requiring countries to share information on trade measures with their trading partners through the WTO. Notification obligations²⁹ are found throughout the WTO agreements.

The provision of executable data packages carrying regulatory information does not fall within these provisions. The provision of executable forms of data also exceeds the scope of Article 1(2) (Information Available Through Internet) of the WTO’s Trade Facilitation Agreement, which is currently the only WTO rule requiring members to publish trade information online.

Hence, it would be a significant impetus for TradeTech for trade agreements, *multilateral* or *bilateral*, or their offshoot digital trade agreements to extend the principle of transparency to the provision of executable data packages.

²⁶ p. 56, note 1.

²⁷ Including the GATS, GATT and other WTO agreements.

²⁸ See [Transparency at the WTO: Why Does Transparency Matter, and Are Members Meeting Their Obligations? \(csis.org\)](https://www.csis.org/analysis/transparency-at-the-wto-why-does-transparency-matter-and-are-members-meeting-their-obligations)

²⁹ The WTO agreements have three kinds of obligations:

1. Ad hoc notifications required when a member takes a certain action.
2. One-time-only notification obligations, most of which are required to provide information on the situations existing at the time of a member’s entry into the WTO.
3. Regular, periodic notifications that may be annual, semi-annual, biennial, or triennial.

As regards bilateral trade agreements such as that between the EU and Singapore, the Joint Declaration of Digital Trade Principles makes it plain that (it is needful to reproduce in full those principles):

“1. Digital Trade Facilitation

1.1 Paperless trading

1. To cut red tape and enable more businesses to trade, it is essential that governments and industry drive forward the digitisation of trade-related documents and processes, including through means of addressing legal, technical, and commercial barriers to the digitisation of paper processes.
2. In particular, the transition towards the use of forms and documents required for import, export, or transit of goods in data-based formats is important in order to create a paperless border environment for trade of goods.
3. The online publication of electronic forms issued or controlled by customs authorities and other government agencies for import, export, or transit of goods is an important element of this.
4. It is also important that customs authorities and other government agencies increasingly accept such forms and, as appropriate, supporting documents in electronic format, as the legal equivalent of the paper version of those documents.
5. The use of international standards and cooperation in international fora are important instruments to promote the use of electronic forms and documents required for import, export and transit, and thereby to facilitate trade in goods.
6. Where governments use digital systems for processing imports, exports, and goods in transit, it is important that such systems facilitate the flow of goods along the entirety of the supply chain.

1.2 Single windows

Single trade windows should be developed to streamline stakeholder interactions with border agencies. They should take into account common standards, with interoperability as a key goal, and in line with the best practice recommendations of the World Customs Organization.”

Paras. 1.2 and 1.3 are especially pertinent as regards the facilitation of TradeTech. These principles are technology neutral, as is commonplace regulatory approach these days where the use of legal technology (including algorithmic law) is concerned. These principles are intended not to be associated with any particular form of algorithmic law solutions but prescribe a commitment to the parties to use algorithmic law in developing appropriate trade policies.

The EU-Singapore Digital Trade Principles 2023 moreover call for government data to be made publicly available in an anonymised, open, interoperable and machine-readable format.³⁰ A good policy would also encourage both parties to the digital trade agreement not only to allow, but actively facilitate the reproduction, redistribution, republishing, regrouping or the use the data for commercial and non-commercial purposes. As is immediately obvious this principle lays the groundwork for the adoption and roll-out of TradeTech.

What is less obvious in the EU-Singapore Digital Trade Principles 2023 is any express duty on the parties to provide for the mutual recognition of trusted digital identity schemes in either jurisdiction. This is deeply relevant to the successful adoption of TradeTech. It goes without saying that traders and government need to know and trust the data which is produced, conveyed and processed. Identity and trust sits at the heart of every interaction between traders and their wider network of stakeholders (such as banks, insurers, downstream purchasers, government etc.). In the context of TradeTech, machines will need to be able trust another machine, that is to say, one machine will need to “know” and ensure that it is dealing with the right machine or the machine belonging to the right organisation. The machine does this by efficiently and effectively linking a digital identity and a real organization, and ascertaining the trustworthiness of identities claimed.

There is no doubting that digital identity verification and management systems are increasingly made more and more robust and powerful to support complex identity verifications in the supply chain. However, such systems if in an international trade context are not interoperable and there is no mutually recognition, they will come to very little. The need for increased digital cooperation and digital solutions has indeed been emphasised by the United Nations Road Map for Digital Cooperation and across the Sustainable Development Goals.³¹ Crucially, trade agreements should be recognised as the optimal vehicles to promote greater digital cooperation and the development of mutually recognized trusted digital identity systems.

A fit for purpose digital trade agreement should thus include provisions on the procedures for the mutual recognition of entities established in the relevant jurisdictions issuing and for proofing identities.³² States should also commit to ensuring that there is integrity and trustworthiness in the institutions and procedures involved in issuing and verifying identities. States wishing to benefit from such preferential trade agreements would need to hasten the upgrading of their legal and regulatory infrastructure to ensure that the use of electronic signatures and electronic trade documents is trustworthy, safe and accessible. Underpinning such commitments has to be a preparedness by the contracting party to adopt the counterparty’s (e.g. the EU) requirements for data protection, cybersecurity, human rights etc. These are the critical points with strong socio-cultural and

³⁰ Para 2.2.2

³¹ <https://www.un.org/en/content/digital-cooperation-roadmap/>

³² See generally the Policy Briefing prepared by H. Norberg, E. Ganne & N. Hewett, World Economic Forum, “Super Charging Trade With A Trusted Global Digital Identity System” (at <https://www.unescap.org/sites/default/files/86%20FinalTeam%20Hanna%20Norberg-Sweden.pdf>)

value-based undertones for the trading parties to iron out in their trade talks. That is a dimension the most well intentioned digital trade agreement cannot provide for simply by the letter of the agreement.

Conclusion

Digital trade principles associated to trade agreements should be based on commercial trust, predictability and legal certainty but they are by necessity also subject the socio-cultural values of the contracting parties as we see in the EU setting. Hence, it is clear that such agreements on digital trade or TechTrade are unlikely to work where the parties are not exactly like-minded, whether or not they have the requisite technology or the legal infrastructure to facilitate TradeTech. However, where that political will and societal value coincide, as discussed in this article there are some key provisions a good digital trade agreement should adopt.