**THE POWER OF ‘BIG TECH’ AND NEW RULES ON DIGITAL TRADE:**

**MORE REASONS WHY THE NHS MUST BE KEPT OUT OF TRADE DEALS**

**A briefing from Keep Our NHS Public**

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**SUMMARY**

Free trade agreements (FTAs) are no longer simply about creating opportunities to sell more goods to other countries. Instead, they are predominantly about promoting foreign direct investment and giving new powers to multinational corporations. This is clearly the case where FTAs include digital trade, a sector that is becoming of huge importance in trade negotiations.

Disturbingly, multinational technology companies (Big Tech) are influencing negotiations on digital trade: they have shaped both the US trade goals (the Digital 2 Dozen proposals) and global rules proposals currently under consideration by the World Trade Organisation (WTO). Both sets of proposals, ostensibly aimed at governing digital trade, give Big Tech unprecedented new powers.

A number of these powers are of particular concern for the UK’s National Health Service. Because the NHS has already been opened up to private companies, its services are susceptible to being included in trade deals. The NHS is now becoming hugely attractive to Big Tech, partly because, in the digital economy, data has become ‘the new oil’ and the NHS holds one of the world’s most valuable stores of data.

What Big Tech want in the new trade rules includes:

1. **more control over data** by banninggovernments from insistingthatdata isstored in its country of origin where it is protected by that country’s laws.
2. **the right of access to a country’s digital market without having to maintain a local presence**, allowing tech companies’ actions to remain beyond the reach of that country’s laws and regulations.
3. **to be** **informed of, and to influence, governments’ national policy-making processes**, inevitably in their own interests.
4. **to keep their operating processes (e.g. source code and algorithms) secret**, so closed to scrutiny and unavailable for the public good.

This briefing looks at some of the implications of these new rules for the NHS and argues that

1. new digital opportunities should be managed for the public good, and not multinational corporations;
2. the NHS must retain control of operational and personal health data. This means:
* in the short term, **that the NHS must be comprehensively excluded from any future trade deals** (including any digital chapter), and
* in the longer term**, the NHS must be returned to being a fully publicly provided service.**

**INTRODUCTION**

Digital trade (including but not confined to e-commerce) is becoming increasingly important in Free Trade Agreements (FTAs): for example, it is seen as a key priority in the proposed US-UK deal.[[1]](#footnote-1) This partly reflects the rapid expansion of digital technologies over recent years. It is also due in part to the influence of multinational technology companies (Big Tech) that want to use trade deals and the rules that govern digital trade as a way of formalising and extending their reach while limiting the role of the state in regulation. Big Tech have already shaped the US demands for digital trade with the UK in Big Tech’s own interests, and are currently influencing the development of the World Trade Organisation’s (WTO) rules for global digital trade. These rules are of growing significance, not least because they reduce government control over private technology companies that deliver key public services.[[2]](#footnote-2)

In the UK, the NHS has become increasingly dependent on digital services, for example: in care-coordination; system planning; the provision of patient consultations by video or phone app; and the transfer, storage and analysis of patient records.[[3]](#footnote-3) As the NHS has been opened up to private companies (including multinationals), particularly since the Health and Social Care Act of 2012, it has become vulnerable to inclusion in trade deals. Inclusion not only means further liberalisation of services[[4]](#footnote-4) that would be almost impossible to reverse, but the proposed trade rules would give unprecedented new powers to technology companies, including those delivering NHS services.

There are already calls from civil society groups and others for the UK government to comprehensively exclude public services, including the NHS, from future FTAs.[[5]](#footnote-5) [[6]](#footnote-6) The implications of proposed digital trade rules provide further important reasons for exclusion.

**BIG TECH AND DIGITAL TRADE**

The digital economy is developing rapidly, driven by the ability to gain extraordinary access to our lives, including our inner worlds, and to collect and analyse huge amounts of machine-readable information. Data, the raw material of the digital economy, has become hugely valuable,[[7]](#footnote-7) and the big technology companies now dominating this data-based economy (including those known collectively as Silicon Valley) have become the largest and wealthiest corporations in the world. Their power is alarmingly pervasive, reaching into the heart of governments and public services. This control of the digital domain has been described as “the ultimate in privatisation”.[[8]](#footnote-8)

There is currently very little regulation to check the power of these corporations or to hold them to account. However, the big US technology corporations (essentially Apple, Google, Facebook, Amazon and Microsoft) now want to lock in and further strengthen their global position by demanding that new rules on digital commerce and the control of data become central to future trade agreements.

For example, The Office of the United States Trade Representative has already drawn up what it calls the Digital 2 Dozen (D2D),[[9]](#footnote-9) a set of objectives that Silicon Valley wants realised in new US trade agreements to ensure more liberalised trade in digital goods and services. Big Tech is now lobbying for these same stipulations to be adopted by the World Trade Organisation (WTO)[[10]](#footnote-10) in its negotiations for a new global agreement on digital trade.[[11]](#footnote-11)

The agenda underpinning both the WTO negotiations and the D2D is the same: Big Tech wants to use digital trade rules **to circumvent democracy and good governance** and, as Deborah James observes, to support its business model based on

* “gaining rights to access markets globally;
* extracting and controlling personal, social and business data around the world;
* locking in deregulation and evading future regulation;
* accessing an unlimited supply of labour that has been stripped of its rights;
* expanding its power through monopolies; and
* avoiding the payment of taxes.”[[12]](#footnote-12)

Big Tech demands, as set out in D2D and WTO provisions, are already shaping new FTAs. For example, the Trans Pacific Partnership (TPP) between the US and 11 other countries (and from which the US later withdrew) was one of the first trade agreements to deal specifically with digital trade and to be shaped by the aims of D2D. Japan agreed a wide-ranging digital trade agreement with the US in 2019, and is keen to sign the UK up to something similar.[[13]](#footnote-13) In addition, it appears that the proposed UK-EU agreement will be based on ‘strong commitments’ on digital trade, largely in line with the WTO proposals. In the current US-UK trade negotiations, the US wants to align the UK with D2D provisions; impose the same terms on digital trade as in the Canada-US-Mexico Agreement (CUSMA); and shift the UK away from at least some EU regulations, such as those governing privacy.

The NHS, as a single payer healthcare system, holds one of the world’s most valuable stores of data, including the primary care records of around 55 million patients, plus data from the secondary or specialist treatment of approximately 23 million people. Big Tech is already gaining access to this data. For example, a deal between Amazon and the Department of Health and Social Care in late 2019 allowed NHS data (excluding personalised patient information) to be handed over to the company so it can create new products, applications (such as Alexa), software and cloud-based services. Amazon was not charged for this access, even though – unlike the NHS – it will be able to profit from the arrangement.[[14]](#footnote-14) It can also pass on this data to third parties. (At the same time, Amazon is one of the worst of the Big Tech companies for tax avoidance.)[[15]](#footnote-15) [[16]](#footnote-16) If the NHS is included in post-Brexit trade deals, the exploitation of its data by multinational corporations is bound to increase drastically.

**WHAT IS IT THAT BIG TECH WANTS?**

Here, we focus on four of Big Tech’s demands (as encapsulated in D2D and proposed WOT rules) that seem particularly relevant in terms of their potential impact on public services such as the NHS.[[17]](#footnote-17) [[18]](#footnote-18)

*1*. ***Transferring data across borders*.**[[19]](#footnote-19)

Data is critical in all government policy making. At the same time, the control of data, and its potential for profit, is key to the digital economy. Increasingly, governments rely on contractors to process and store data from public services: notably,

“a digitised public infrastructure depends on and generates mass data, which gives the private corporations that run it access to and control over sensitive information about a country’s entire infrastructure.”[[20]](#footnote-20)

In addition, personal data, once captured, stored and sold, is hugely valuable to employers, insurers and other risk assessors, health providers, and finance companies, among others.

Big Tech wants to ban governments from demanding that data is stored in its country of origin: instead these corporations want an unfettered right to collect, transfer, store, process, sell and otherwise exploit data in any country they choose. This may be partly for reasons of efficiency, but also because it means they can choose locations with the least restrictive laws. Once data is held offshore, there are no guarantees that protections for data enshrined in national laws will be enforceable: the **data is governed by the rules of the country where it is held.**[[21]](#footnote-21) The destination of choice is the US, which allows technology companies to self-regulate, and has weak privacy and consumer laws.

The WTO’s proposed digital trade rules provide corporations with almost unlimited rights to prioritise their interests over consumer protections and the right to privacy.[[22]](#footnote-22) Significantly, proposed trade rules requiring the free flow of data potentially clash with the EU’s General Data Protection Regulation (GDPR). GDPR provides a set of rules, including protections regarding personal privacy and data collection, that the US Commerce Secretary has called an ‘unnecessary barrier to trade’. There is little data privacy protection in the US compared with the UK (which is still committed to the GDPR), so any interoperability between the UK and US systems would mean a standards race to the bottom.[[23]](#footnote-23) In addition, agreeing to US demands on data transfer could subsequently affect data flows between the UK and the EU.[[24]](#footnote-24)

Prohibiting restrictions on the flow of data would mean that **foreign companies are free to transfer NHS data overseas without necessarily any direct payment to, or other compensation for, the UK.** Apart from undermining the security of health data, this potentially represents the loss of a valuable resource for domestic development, including for research and planning purposes. The commercial value of NHS data has been estimated to be in the region of £9.8 billion per annum - a resource that should be held by the NHS and not become the property of multinational corporations.

Apart from the possible loss of patients’ privacy due to US rights to personal medical information, trade rules could result in UK data, once moved to servers in America, being mined there for new products that would be created and copyrighted by Big Tech.  In this scenario, the **NHS could find itself buying back diagnostic tools, medical technologies and expertise from US companies at great expense, even when these technologies have been created from freely exported NHS data**.

Although the proposed WTO rules suggest that a government will have the right to restrict cross-border flows of data when this is for a ‘legitimate public policy objective’, to do so will involve the government proving to the WTO that its actions are ‘legitimate’, ‘not arbitrary’, and do not constitute a ‘disguised restriction on trade’. In other words, a government’s right to determine policy can potentially be trumped by the WTO.

*2****. Preventing ‘localisation barriers’***

Technology companies want **the right to access a country’s market** **but without having to maintain a local presence.** Without a local presence, multinational companies are not subject to national requirements and **cannot be sued for breaches of domestic regulations, such as labour laws or tax regulations**.[[25]](#footnote-25) Tax avoidance by these wealthy corporations can lead to shortfalls in public revenue that – especially at a time of growing pressures on government services and support – are likely to mean cuts in public services and/or greater tax demands on citizens plus heavier burdens of care on families, and especially women.[[26]](#footnote-26)

***3. Promoting the participation of foreign technology companies in national policy making***

Technology corporations also want trade rules that ensure they will be able to influence governments’ national policy-making processes. They call this ‘transparency for stakeholders’. To be clear, this ‘transparency’ is not about allowing public scrutiny of Big Tech’s commercial operations. Instead it means that governments have to inform foreign-based technology companies about – and allow them to contribute to – the development of legislation, regulations and technical standards that might affect them:

“In other words, so they can lobby, threaten to bring disputes, run public scare campaigns and otherwise use their massive resources to stop or dilute proposed restrictions they don’t like.” [[27]](#footnote-27)

Digital trade proposals also require that future services will not be subject to regulations beyond those that already exist: through calls for ‘technological neutrality’, services will have to be operated according to the rules and commitments that countries agreed to before a new technology was invented. [[28]](#footnote-28) As one economist has put it

“…. big **corporations want to embed in international agreements, a framework that would stop domestic legislation**. It seems to me that there should be no inter- national agreement until there is a greater clarity about how to regulate them.”[[29]](#footnote-29)

***4. Banning the disclosure of source codes and algorithms***

Source code is the set of instructions that control a computer programme, while an algorithm is the basic logic of a computer programme (represented as a flow chart of steps and options) that is put into effect by source code.[[30]](#footnote-30) Digital trade rules want source code and algorithms to be treated as trade secrets.

Source code is generally protected under copyright laws. However there are many important reasons why a company should share its source code, for example, to allow checks for bias, to be able to deal with viruses and to ensure that systems function as designed[[31]](#footnote-31). In contrast, source code secrecy can affect software reusability and interoperability.[[32]](#footnote-32)

In the NHS, digital technologies have become an integral part of clinical practice and the delivery of healthcare. Source code is a crucial element of products such as MRI scanners and syringe pumps. **Banning the disclosure of source code means the composition of medicines or the software for medical devices cannot be checked**, yet a flaw in the source code could have fatal consequences for patients.  In addition, lack of access to source codes ensures that the **NHS remains dependent on multinational companies, rather than in-house experts** or local independent businesses for diagnosing and remedying faults within products.

Although generally thought of as neutral tools, both source codes and algorithms – as human creations - are inevitably value laden. They are designed with particular outcomes in mind that will privilege some interests over others, and will unavoidably share some of their designers’ assumptions and prejudices. For example, **algorithms can contain biases concerning race or gender**. The NHS is the largest employer in the UK, and as algorithms now play an increasingly important role in decision-making about the hiring and firing of staff, and assessments affecting pay and promotion, they should be available for scrutiny.[[33]](#footnote-33) [[34]](#footnote-34)

**Bias in algorithms used in clinical decision-making can have detrimental consequences for patients**. For instance, research shows algorithms used to analyse facial features (e.g. to monitor the progress of motor neuron disease) were biased as they were based on data from young and healthy adults and could be misleading when used to assess older adults with medical conditions.[[35]](#footnote-35)

To give another example, in the USA, an algorithm introduced by Medicaid for assessing the care needs of people with cerebral palsy did not take the possibility of diabetes as a co-morbidity into account. This led to some people having their hours of care cut after being found to have ‘no foot problems’ when they were amputees due to diabetes and actually had no feet.[[36]](#footnote-36)

Without open access there is no peer review or scientific process to test algorithmic systems or source code independently. Some would go further and say that closed-source clinical software is fundamentally unethical and “subverts the duty to share medical knowledge, and protects intellectual property to the detriment of patients”.[[37]](#footnote-37)

Finally, the European Union’s GDPR includes a right, under certain circumstances, for individuals to be informed of the logic of the decision-making systems that affect them. This right may be undermined if US and WTO digital trade rules prohibit the disclosure of source codes and algorithms.

**CONCLUDING REMARKS**

Digital technologies may offer significant benefits for health services and patients, such as easier access to care for some.[[38]](#footnote-38) However, the growing importance of digital services within new trade agreements will raise significant issues for the NHS. FTAs are forged for the most part in the interests of foreign direct investment and multinational corporations, including the big technology companies,[[39]](#footnote-39) while undermining the public ownership of services like the NHS that are viewed as ‘monopolies’ that limit investment opportunities.

Big Tech are already gaining substantial access to NHS data, now the bedrock of service planning and delivery. However, proposed global rules for digital trade will give these companies new powers, particularly over the control of data, and potentially weakening individuals’ privacy and governments’ right to regulate. There are deep concerns that corporate control of NHS data will hugely increase if the NHS is included in future FTAs.

**The NHS would not be at risk of being included in trade deals if its services were entirely publicly provided.** Given this is no longer the case, NHS services are especially vulnerable when, as is increasingly the case, trade negotiations are based on negative listing (where every service that a government does *not* want to be included has to be explicitly listed). As Jane Kelsey points out, if health services are part of a country’s digital economic strategy – and this now appears to be increasingly the case for the NHS - they are more likely to be framed as computer-related rather than health services by both Big Tech and governments, in which case governments may be reluctant to make health services exempt from trade deals.[[40]](#footnote-40)

The Prime Minister and the Secretary of State for International Trade have repeatedly given assurances that the NHS is not ‘on the table’ in post-Brexit trade deals. However they remain vague about what they mean by ‘the NHS’ and how its comprehensive exclusion will be ensured, given the interconnectedness of the NHS with associated services, such as digital. If the government really intends to exclude the NHS from trade deals, it must ensure that – in addition to exclusion from other relevant chapters - the NHS is clearly excluded from any chapter on digital trade to ensure that access to the NHS is not allowed via ‘the back door’.

**RECOMMENDATIONS**

1. **Co-operation between governments and technology companies** will be necessary to manage new digital opportunities, but this **should not be through FTAs,** as these will always seek to liberalise digital services rather than manage these for the public good.

2. The NHS must retain control of operational and personal health data. The most effective ways of doing this include:

1. in theshort term, **to** **comprehensively exclude the NHS from any future trade deals (including any chapter on digital services)**, and
2. in the longer term, **to return the NHS to a fully publicly provided service.**

Keep Our NHS Public Trade Deals Sub-group

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1. Department for International Trade *UK-US Free Trade Agreement* n.d <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/869592/UK_US_FTA_negotiations.pdf> [↑](#footnote-ref-1)
2. Duncan McCann *E-commerce, free trade agreements, digital chapters and the impact on labour*. New Economics Foundation, (written for the International Trade Union Confederation), 2019 <https://www.ituc-csi.org/e-commerce-report> [↑](#footnote-ref-2)
3. Here we do not attempt to deal with the potential advantages of digitalising services, or the significant disadvantages, such as widening social inequities and disenfranchising those without access to, or expertise in, using IT. [↑](#footnote-ref-3)
4. At its simplest level, liberalisation refers to the removal or reduction of ‘barriers to trade’. Put another way, liberalisation creates opportunities for foreign-based corporations to supply and profit from local services. [↑](#footnote-ref-4)
5. UK government assurances that the NHS is not ‘on the table’ in post-Brexit trade deals have been met with scepticism, given the lack of detail about how the NHS will be protected. [↑](#footnote-ref-5)
6. See for example Laura Bannister, *As Brexit talks continue, we need a deal fit for a post-covid world*, 2020 <https://www.tjm.org.uk/blog/2020/as-brexit-talks-continue-we-need-a-deal-fit-for-a-post-covid-world> [↑](#footnote-ref-6)
7. Joris Toonders *Data is the new oil of the digital economy*. n.d. <https://www.wired.com/insights/2014/07/data-new-oil-digital-economy/> [↑](#footnote-ref-7)
8. Jane Kelsey, *Digital trade rules and big tech: Surrendering public good to private power* Public Services International, February 2020 <http://www.ourworldisnotforsale.net/2020/PSI_Surrendering.pdf> [↑](#footnote-ref-8)
9. Office of the United States Trade Representative, *Digital 2 Dozen* <https://ustr.gov/trade-agreements/free-trade-agreements/trans-pacific-partnership/tpp-reports/digital-2-dozen> [↑](#footnote-ref-9)
10. WTO is the global rule-setting body on international trade. [↑](#footnote-ref-10)
11. Negotiations have been taking place in secret on 13 different provisions concerned with data collection, liability, market access rights, non-discrimination, source code disclosure and taxation, among other issues. [↑](#footnote-ref-11)
12. Deborah James, *Digital Trade Rules: A disastrous new constitution for the global economy, by and for big tech*, Rosa Luxemburg Stiftung, 2019. [www.rosalux.eu/digital-trade-rules](http://www.rosalux.eu/digital-trade-rules) [↑](#footnote-ref-12)
13. *Trade Secrets*. Robert Harding, FT July 14 2020 [↑](#footnote-ref-13)
14. Shaun Lintern *Conservative government giving NHS data to Amazon for free, documents reveal*. 8th December 2019, <https://www.independent.co.uk/news/health/amazon-nhs-data-access-uk-government-contract-a9237901.html> [↑](#footnote-ref-14)
15. Amy Walker *NHS gives Amazon free use of health data under Alexa advice deal*. 8th December 2019. <https://www.theguardian.com/society/2019/dec/08/nhs-gives-amazon-free-use-of-health-data-under-alexa-advice-deal> [↑](#footnote-ref-15)
16. Notably, the current Health Secretary has heavily promoted digital transformation of the NHS explaining, for example that the new NHS organisation for digital, data and technology, NHSX, would take a similar approach to innovation as the major Silicone Valley corporations. See Tamlin Magee, *Matt Hancock’s digital* *drive risks masking the real issues at the NHS*. 6th August 2019, <https://www.computerworld.com/article/3558554/matt-hancock-s-digital-drive-risks-masking-the-real-issues-at-the-nhs.html> [↑](#footnote-ref-16)
17. For further information about demands relevant to public services, see Jane Kelsey, op cit. <http://www.ourworldisnotforsale.net/2020/PSI_Surrendering.pdf>. [↑](#footnote-ref-17)
18. For the demands of the Internet Association (the “the unified voice of the internet economy” that includes Google, AirBnB, Microsoft, Uber Microsoft, Facebook, Linked-in, Paypal, ebay and Amazon), see <https://uk.internetassociation.org/files/ia_digital-trade-priorities-for-a-us-uk-fta-1/> [↑](#footnote-ref-18)
19. ‘Transfer’ here refers to companies sending data overseas to locations that probably have weak or non-existent data protection regimes, and not to individuals’ use of the Internet to send information. [↑](#footnote-ref-19)
20. Jane Kelsey, op cit. <http://www.ourworldisnotforsale.net/2020/PSI_Surrendering.pdf>. [↑](#footnote-ref-20)
21. Deborah James, op cit. [www.rosalux.eu/digital-trade-rules](http://www.rosalux.eu/digital-trade-rules) [↑](#footnote-ref-21)
22. Deborah James, ibid [↑](#footnote-ref-22)
23. Burcu Kilic, from Public Citizen, contributing to webinar *The UK’s digital trade dilemma: will the British sacrifice digital privacy?* <https://www.openrightsgroup.org/events/digital-tug-of-war-the-uks-digital-trade-dilemma/> 2020 [↑](#footnote-ref-23)
24. Javier Ruiz *Open Rights Group submission to UK consultation on a new Free Trade Agreement with the United States of America*. November 2918. <https://www.openrightsgroup.org/publications/org-response-to-uk-consultation-on-a-new-free-trade-agreement-with-the-united-states/> [↑](#footnote-ref-24)
25. Duncan McCann op cit <https://www.ituc-csi.org/e-commerce-report> [↑](#footnote-ref-25)
26. Deborah James, op cit [www.rosalux.eu/digital-trade-rules](http://www.rosalux.eu/digital-trade-rules) [↑](#footnote-ref-26)
27. Jane Kelsey, op cit <http://www.ourworldisnotforsale.net/2020/PSI_Surrendering.pdf> [↑](#footnote-ref-27)
28. Deborah James, op cit [www.rosalux.eu/digital-trade-rules](http://www.rosalux.eu/digital-trade-rules) [↑](#footnote-ref-28)
29. Joseph Stiglitz 12 April 2019, www.youtube.com/watch?v=Q- mIOI-5\_G2I&feature=youtu.be starting at 55:44. [↑](#footnote-ref-29)
30. Javier Ruiz op cit<https://www.openrightsgroup.org/app/uploads/2020/03/org_fta_consultation_usa.pdf> [↑](#footnote-ref-30)
31. <https://www.globaljustice.org.uk/sites/default/files/files/resources/e-pocalypse_now_briefing.pdf> [↑](#footnote-ref-31)
32. Sonia Katyal *The paradox of source code secrecy*. 2019, <https://www.lawschool.cornell.edu/research/cornell-law-review/upload/Katyal-final.pdf> [↑](#footnote-ref-32)
33. Duncan McCann op cit <https://www.ituc-csi.org/e-commerce-report> [↑](#footnote-ref-33)
34. Ansgar Koene, *Some implications of WTO e-commerce proposals restricting access to algorithms on algorithmic transparency*. <https://ourworldisnotforsale.net/2018/Koene_algorithms.pdf> [↑](#footnote-ref-34)
35. Babak Taati et al, *Algorithmic bias in clinical populations: evaluating and improving facial analysis technology in older adults with dementia*. 2019, <https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=8643365> [↑](#footnote-ref-35)
36. Colin Lecher *What happens when an algorithm cuts your health care*. 2018 <https://www.theverge.com/2018/3/21/17144260/healthcare-medicaid-algorithm-arkansas-cerebral-palsy> [↑](#footnote-ref-36)
37. Marcus Baw *Open source is the only way for medicine*. 2018, [https://medium.com/@marcus\_baw/open-source-is-the-only-way-for-medicine-9e698de0447e](https://medium.com/%40marcus_baw/open-source-is-the-only-way-for-medicine-9e698de0447e) [↑](#footnote-ref-37)
38. Not forgetting that it also increasingly excludes access to those who cannot use IT for one reason or another. [↑](#footnote-ref-38)
39. Jane Kelsey, op cit <http://www.ourworldisnotforsale.net/2020/PSI_Surrendering.pdf> [↑](#footnote-ref-39)
40. Jane Kelsey ibid <http://www.ourworldisnotforsale.net/2020/PSI_Surrendering.pdf> [↑](#footnote-ref-40)