5G networks	as ethical issue, 115, 164
5G Toolbox (EU), 53-54, 57	explainability requirements, 171-174
China's "export" of, 45-46	five examples compared, 165–166,
as critical infrastructure, 50-52,	174–176
70–73, 239	regulatory targets, 166-167
resilience concerns. See	trade secret rules of FTAs and,
cybersecurity regulation	176–181
future demands on, 15-16	Amazon, 116, 211, See also VSS (video
'universal service' access to. See	streaming services) regulation
universal service policies	antitrust policies for platforms. See
1	platforms, competition policies
advertising and ranking	APEC (Asia-Pacific Economic
algorithmic transparency need. See	Cooperation) Cross Border
algorithmic transparency	Privacy Rules, 214–217, 229
regulation	Apple, 147, 158
Big Tech firms' business model for,	artificial intelligence. See AI (artificial
163–164	intelligence)
domestic advertising restrictions, 98,	Audiovisual Media Services Directive
108	(EU), 128–131
AI (artificial intelligence). See also	Australia
algorithmic transparency	Chinese tech firms, restrictions on,
regulation	54, 57
cross-border data flows, reliance on,	competition policies for platforms,
198–199	150
cyber risks, 48, 221–223	VSS (video streaming services) in,
semiconductors for, export controls, 73	125, 129
Airbnb and Uber rulings (ECJ), 90–92	120, 120
Alemanno, Alberto, 191	Belt and Road Initiative (China), 43-46
Algorithmic Justice Act (bill) (US),	big data analytics, privacy implications,
167–169, 171, 173	206–209
algorithmic recommendations,	big tech firms. See also names of firms
145–146, 179	accountability for algorithms. See
algorithmic transparency regulation	algorithmic transparency
in China, 182–183	regulation
as competition policy, 163–164, 241	digital sovereignty threatened by,
disclosure duties, recipients	100–101
distinguished, 167–171, 180	lobbying by, 115–116, 121
	1000,1115 110,121

multi-sided nature, 158 Cohen, Julie E., 2, 107 platforms. See platforms Communications Decency Act s.230 universal service funds, calls for (US), 111-115 competition policies for platforms. See contributions to, 26, 239 Brazil - Taxation (WT/DS472/1), platforms, competition policies 29 - 34Comprehensive and Progressive broadband networks Agreement for Trans-Pacific as critical infrastructure, 50-52, Partnership. See CPTPP content moderation. See speech 70-73,239resilience concerns. See cybersecurity regulation of platforms regulation COVID-19 pandemic, 15, 105-106 CPTPP (Comprehensive and future demands on, 15-16 network neutrality regulation, 39-43 Progressive Agreement for "universal service" access to. See Trans-Pacific Partnership) universal service policies Canadian cultural industry protection, side letter on, 136 Burri, Mira, 137, 204 cross-border data flows under, 65-67, cable infrastructure demand, 14-15 98, 139-140, 201-203, 240 Canada good governance obligations, cultural industry protections, 135-136 185-186, 188-189 net neutrality rules, 41-42 Huawei ban, 54 Montréal AI Declaration, 167-171, 173 preamble, 35 social media regulation in, 117-118 security exceptions, 67–68 Canada – Periodicals (WT/DS31/R), source code non-disclosure 133-134 provision, 176 Carr, Brendan, 26 special and differential treatment Cashore, Benjamin, 212–213 provisions, 38 critical infrastructure, 5G networks as, Chander, Anupam, 237 China 50-52, 70-73, 239 algorithmic transparency regulation, resilience concerns. See cybersecurity 182 - 183regulation cybersecurity regulation, 54-57, 66, cross-border data flows domestic restrictions as trade 223 - 224data governance generally, 123, 161 barriers, 199-201 Digital Silk Road initiative, 43-46 FTA provisions on, 65–69, 95–99, Google.com blocked by, 81-82 139-140, 201-203, 240 rare earth minerals, export controls, holistic approach and hybrid structure, 228-230 62 - 63source code disclosure requirements, overview of arguments, 241–242 177 privacy regulation of. See privacy Western bans on Chinese tech firms, regulation of cross-border data 47, 49-50, 52-54, 57, 72, 79-80 flows China - Publications and Audiovisual security regulation of. See Products (WT/DS363/AB/R), cybersecurity regulation 85-88 significance in datafied economy, Claussen, Kathleen, 71 197-199 WTO multilateral initiatives on, cloud computing services, 95 Cohen, Harlan Grant, 60 203 - 204

cross-subsidization of datafication telecommunications services. concept and trend, 1-4 data capitalism and colonialism, 2-3, 144-148, 241 cultural policy promotion. See VSS international economic law, interface (video streaming services) regulation with, 4, 243 cybersecurity measures, exception network architecture of, 6, See also clauses for broadband networks; crossdata localization exceptions, 65-69, border data flows; platforms 201 - 203Delimatsis, Panagiotis, 101 GATT-type general exceptions, 59-60 DEPA (Digital Economy Partnership Agreement between Singapore, GATT-type security exceptions, Chile and New Zealand), 34–36, security exceptions of new generation FTAs, 67-70 developing countries security-based exceptions generally, competition enforcement limitations, 157 TBT legitimate objectives, 60–62 digital inclusion policies for. See cybersecurity regulation digital inclusion 5G networks as critical infrastructure, digital sovereignty concerns, 46 50-52, 70-73, 239 special and differential treatment for, cyber risks of datafication, 48-50, "digital divide," data on, 13-15, 145 221 - 223data localization measures. See data Digital Economy Partnership localization measures Agreement (DEPA), 34-36, 68 digital inclusion due process safeguards, 74-75 foreign tech firms, restrictions on, 47, DEPA digital inclusion module, 49-50, 52-55, 57, 79-80 34 - 36multilateral trade rules and, 55-57, "digital divide," data on, 13-15, 145 233-237, 242 Digital Silk Road initiative (China) exception clauses. See and, 43-46 cybersecurity measures, future demands on digital networks, exception clauses for multistakeholderism for, 228-230, 237 JSI (Joint Statement Initiative) on Erisk-based approach, 73-74 commerce negotiations on, standardization, bottom-up network neutrality regulation, 39-43 approach, 223-225 standards proliferation chaos, 225-228 overview of arguments, 46-47, 238-239, 242-243 data capitalism and colonialism, 2-3, public morals exceptions applied to 144-148, 241 policies, 29-34 data flows. See cross-border data flows telecommunications sector liberalization, impact of, 16-20 data localization measures exception clauses for, 65-69, universal service policies. See 201-203 universal service policies generally, 66-67, 199-201 digital platforms. See platforms JSI (Joint Statement Initiative) on E-Digital Silk Road initiative (China), commerce on, 203 43 - 46

DSA. See DSA (EU Digital Services

digital sovereignty (right to regulate), 35, 46, 98-102 DMA (EU Digital Markets Act) algorithmic transparency regulation, 166, 169, 171–173, 180 competition rules for platforms, 151-153, 159, 243 domestic regulation and market access commitments. See also platforms, domestic regulation cross-border data flow restrictions, 199-201, 240 digital sovereignty (right to regulate), 35, 46, 98-102 JSI (Joint Statement Initiative) on Domestic Regulation, 102, 183-184, 192, 236 non-conforming measures schedules, 96-99, 240 platform regulation, 101, 105–107 quantity/quality dichotomy, 102-105 DSA (EU Digital Services Act) algorithmic transparency regulation, 166, 169, 171–173, 180 on content moderation, 119-121, 240 platform definition, 92–93 RIA (regulatory impact assessment) of, 190-191 territorial application, 137–139

## e-commerce

Act)

JSI on. See JSI (Joint Statement Initiative) on E-commerce (WTO)
platform delivery of. See platforms
ENISA (EU Agency for Cybersecurity),
224–225
EU-Japan Economic Partnership
Agreement, 179
European Union
broadband connectivity targets,
23–24
cybersecurity policies, 53–54, 57
data governance policies, overview,
26, 150
DMA. See DMA (EU Digital Markets

GATS application to, 82–84, 87–88

Act) ENISA (EU Agency for Cybersecurity), 224–225 GDPR. See GDPR (EU General Data Protection Regulation) Google Shopping case (European Commission), 147-148 information society services, ECJ rulings on, 90–92 Trans-Atlantic Data Privacy Framework, 203-204 VSS (video streaming services), local content rules, 128-131 EU-UK Trade and Cooperation Agreement, 34–35 EU-US Trade and Technology Council, exception clauses cultural exceptions, 134-136 for cybersecurity measures. See cybersecurity measures, exception clauses for for data localization measures, 65-69, 201-203 for digital inclusion policies, 29–34 for source code non-disclosure provisions, 181 Facebook (Meta), 114-115, 144, 151, facial recognition technology, 205-206 FDI, telecommunications sector liberalization impact, 17–20 Finland, broadband access as

facial recognition technology, 205–206 FDI, telecommunications sector liberalization impact, 17–20 Finland, broadband access as fundamental right, 22–23 Franklin, Ursula, 238 free speech via platforms. See speech regulation of platforms FTAs (free trade agreements). See also names of FTAs competition policies, 154, 161–162 cross-border data flows under, 65–69, 95–99, 139–140, 201–203, 240 cultural exceptions, 134–136 cybersecurity policies, conflicts with, 55–56

FTAs (free trade agreements). (cont.) GATS Telecom Reference Paper domestic regulation and. See on competition regulation, 155-157 domestic regulation and market cost-oriented rates rules interpreted, access commitments 27 - 29exception clauses. See exception political economy momentum for, clauses good governance obligations. See on universal service policies, 24-26 platforms, GRPs (good GATT (General Agreement on Tariffs regulatory practices) and Trade) network neutrality obligations, 41-43 due process safeguards (Article X:3 non-conforming measures schedules, (a)), 74-7596-99, 240 general exceptions (Article XX), 29-34, 59-60 platform immunity rules, 115–118 security exceptions (Article XXI(b)), source code and algorithm nondisclosure provisions, 176-181 62 - 65GDPR (EU General Data Protection fundamental rights approach to digital inclusion, 22-24 Regulation) algorithmic transparency regulation, 166-168, 170-171, 173-174 Gari, Gabriel, 191 Gasser, Urs, 230 Code of Conduct and certification GATS (General Agreement on Trade in scheme, 217-221 Services) on de-identification, 211–212 general exceptions. See exception domestic regulation and. See domestic regulation and market clauses access commitments good faith standard, 58, 63-64 due process safeguards (Article VI: good governance obligations. See 1), 74–75, 183 platforms, GRPs (good evolutionary interpretation of, 85-90 regulatory practices) general exceptions (Article XIV), Google, 81-82, 123, 147-148, 163 32-33, 59 GPA (Government Procurement Agreement), 56 on international standards, 235–237 Mode 1 commitments (cross-border Great Firewall of China, 54 supply), 79, 82-84, 138 Mode 3 commitments (commercial Heath, J. Benton, 65 presence), 17-18, 79, 85, 103, Howse, Robert, 29 138, 238-239 Huawei progressive liberalization principle, Digital Silk Road initiative and, 45 protectionist policies towards, 56 quantity/quality dichotomy of, 102-105 Western bans of, 47, 49-50, 53-54, relevance concerns in datafication 57, 72 era, 4-6, 79-80, 243 human rights approach to digital specific commitments, classification inclusion, 22-24 problems, 80–82 technological neutrality principle, India 82-84, 86, 90 Chinese mobile apps, restrictions on, telecommunications sector liberalization, 16-18, 160-161 Twitter, judicial review action in, trade in services definition, 17 122 - 123

Indo-Pacific Economic Framework digital inclusion policies for. See (IPEF), 50, 186, 243 digital inclusion Industry 4.0, 15, 204, 221-222 digital sovereignty concerns, 46 FDI flows to, 19-20 information society services, ECJ rulings on, 90-92 Internet use in, 14 Instagram, 114, 144 special and differential treatment for, international standards, WTO rules on, 235 - 237legitimate objectives (TBT), 60–62 Internet streaming services. See VSS local content requirements for VSS. See (video streaming services) VSS (video streaming services) regulation regulation Internet use data, 13-15 local presence requirements for platforms, 139-141 IoT (Internet of Things) cross-border data flows, reliance on, localization of data. See data 198-199, 208 localization measures cyber risks, 48, 221-223 cybersecurity standards, 225-228 machine-readable data, 1 definition, 16 media services regulation. See VSS digital network demands, 15-16 (video streaming services) IPEF (Indo-Pacific Economic regulation Framework), 50, 186, 243 messaging services, 39 Meta (Facebook), 114-115, 144, 151, 158 Metaverse/VR (virtual reality), 26, 137, Japan CPTPP market access commitments, 99 222-223, 240 cybersecurity regulation, 230-233 Mexico - Telecom (WT/DS204/R), GRPs (good regulatory practices) in, 27-29, 103-104, 156 Mexico, USMCA special provisions for, VSS (video streaming services) in, 125 Mishra, Neha, 179 Japan-EU Economic Partnership Agreement, 179 Mitchell, Andrew D., 179 Montréal AI Declaration, 167-171, 173 Japan-United States Digital Trade Agreement, 116–117, 179 most-favored-nation principle, 55, 80 JSI (Joint Statement Initiative) on Moyn, Samuel, 24 Domestic Regulation (WTO), Mundie, Craig, 207 102, 183-184, 192, 236 Musk, Elon, 111-112 JSI (Joint Statement Initiative) on E-Myanmar, data governance in, 123 commerce (WTO) algorithms defined in, 177 national security policies. See on cross-border data flows, 203, 229 cybersecurity regulation developing countries' participation, national treatment principle, 55, 80 necessity test, 31-34, 58, 61-62, 183 on platform regulation, 95, 116, 118 Netflix, 15, 39-40, 211, See also VSS (video streaming services) least developed countries regulation broadband connectivity, UN targets, Netherlands, Apple Dating app case, 147 network neutrality regulation, 39-43 23 - 24New Zealand, CPTPP market access competition enforcement commitments, 99 limitations, 157

NIST Cybersecurity Framework (US), platforms, GRPs (good regulatory 225, 230-233 practices) non-discrimination obligations, 55-57, good governance obligations, overview, 183-187 132 - 134good governance obligations, OECD policies on platforms, 149–150 strength and breadth, 187-191 online streaming services. See VSS political support for, 191-194 (video streaming services) platforms, multilateral trade rules regulation classification problems, 80-82, 90-93 competition focus. See platforms, Pauwelyn, Joost, 104, 230 trade and competition rules platformization, concept and trend, 1, (potential) cross-border data flows under FTAs, 143 - 14865-69, 95-99, 139-140, platforms, competition policies algorithmic transparency regulation 201–203, 240 as, 163-164, 241 future WTO work respecting, 93-95 common elements of. GATS application under evolutionary 150 - 151interpretation, 85–90 GRPs promoted by. See platforms, of DMA (EU Digital Markets Act), 151-153, 159, 243 GRPs (good regulatory domestic policies, limitations of, practices) 148-149, 157 platforms, trade and competition rules of FTAs (free trade agreements), 154, (potential) 161 - 162challenges, 158-161 regional initiatives, 149-150 flexible modality option, 162-163 VLOPs (very large online platforms), GATS Telecom Reference Paper as competition concerns, model, 155-157 143-148 general WTO approach to trade and WTO initiative. See platforms, trade competition, 153-155 and competition rules soft law option, 161-162 privacy regulation of cross-border data (potential) platforms, domestic regulation flows Chinese platforms, foreign APEC (Asia-Pacific Economic restrictions, 53, 72, 80 Cooperation) Rules, 214–217, 229 GDPR Code of Conduct and competition policies, limitations of, certification scheme, 217-221 148–149, 157 for cultural policy promotion. See informed consent and big data VSS (video streaming services) analytics, 206-209 regulation multilateral trade rules and, 233-237 fragmentation and overreach notice-and-consent mechanisms, problems, 181–183 general limitations, 205–206 jurisdiction and law enforcement private governance, scope for, problems, 137–139 209 - 212local presence conditions, 139-141 public-private partnership model, market access commitments and, 212 - 214101, 105-107 Trans-Atlantic Data Privacy Framework (EU-US), 203-204 speech regulation. See speech

public morals exceptions, 29-34

regulation of platforms

Raustiala, Kal, 232 DSA-like regulations, 122 RCEP (Regional Comprehensive immunity rules of FTAs, Economic Partnership), 34–35, 115-118 68-70, 187-188 immunity rules of US reasonableness test, 42-43 Communications Decency Act recommendations, algorithmic, s.230, 111-115 145-146, 179, See also submarine cable infrastructure algorithmic transparency demand, 14-15 regulation surveillance, technological, 2-3, 45-46, 146, 203-204, 206, See also RIAs (regulatory impact assessments). See platforms, GRPs (good privacy regulation of crossborder data flows regulatory practices) right to regulate (digital sovereignty), 35, 46, 98–102 Taiwan rural broadband connectivity targets, "broadband human rights" advocacy, GATS Schedule of, 88 Russia Google fined in, 123 TBT (Technical Barriers to Trade Ukraine invasion (2022-), 49 Agreement), 56-57, 60-62, 75, Russia - Traffic in Transit (WT/DS512/R), 235 - 23763-64 technological neutrality principle of GATS, 82-84, 86, 90 Schwartz, Paul, 237 Telecom Reference Paper. See GATS security policies. See cybersecurity Telecom Reference Paper regulation telecommunications sector security-by-design paradigm, 222 liberalization, 16-20, 160 Shaffer, Gregory, 20, 62, 72, 229 TikTok, 53, 72, 80 Singapore, Content Code for OTT TV, 138 Trachtman, Joel P., 182 Trade and Cooperation Agreement smart cities, 48 smart manufacturing, 198 (EU-UK), 34-35 Trade and Technology Council social media, content moderation. See speech regulation of platforms (EU-US), 50 Solove, Daniel J., 208 trade secret rules for source code and source code non-disclosure provisions algorithms, 176–181 of FTAs, 176-181 Trans-Atlantic Data Privacy Framework (EU-US), South Korea, VSS (video streaming services) in, 125 203 - 204special and differential treatment, 38 transborder data flows. See speech regulation of platforms cross-border data flows algorithmic recommendations, transparency of algorithms. See regulation of. See algorithmic algorithmic transparency transparency regulation regulation as authoritarianism, 122-123 TRIPS (Agreement on Trade-Related "censorship" dilemma outlined, Aspects of Intellectual Property 109-112 Rights), 176-177 DSA (EU Digital Services Act) on Trump, Donald, 111 content moderation, 119-121, Turkey, Internet Regulation, 138–139 Twitter, 111-112, 114, 122-123, 206 240

Uber and Airbnb rulings (ECJ), 90–92 United States-Mexico-Canada UGC (user-generated content) Agreement. See USMCA regulation. See speech universal service policies. See also regulation of platforms digital inclusion big tech firms' proposed financial Ukraine, Russian invasion (2022-), 49 contribution, 26, 239 United Kingdom broadband network coverage, 23 cost-oriented rates rules, whether RIA (regulatory impact assessment) compatible with, 27–29 guidance, 193 domestic policies, 20-24 United Kingdom-EU Trade and GATS Telecom Reference Paper on, Cooperation Agreement, 34-35 United Nations, digital inclusion goals, user-generated content regulation. See 23-24, 30-31 speech regulation of platforms United States USMCA (United States-Mexico-Algorithmic Justice Act (bill), Canada Agreement) 167-169, 171, 173 competition concerns, 161–162 cross-border data flows under, 96, broadband connectivity targets, 24 Chinese tech firms, restrictions on, 98, 240 47, 49-50, 52-53, 80 good governance obligations, cybersecurity policies, 52-53, 71, 80 185-186, 189 data governance generally, 161 Mexico, special provisions for, 38 Federal Trade Commission net neutrality rules, 41 regulatory enforcement, platform immunity rules, 117-118 risk-based approach to cybersecurity, 73 216-217, 231 GRPs (good regulatory practices) security exceptions, 67-68 promotion, 186-187 source code non-disclosure network neutrality debates in, 40-41 provision, 177-179 VSS (video streaming services) NIST Cybersecurity Framework, 225, regulation and, 131-132, 135 semiconductors for, export controls, Vail, Theodore, 20 social media regulation in, 111-115 video streaming. See VSS (video streaming services) regulation Trans-Atlantic Data Privacy Framework, 203-204 Vietnam universal service policies, 21-22 data governance in, 123 VSS (video streaming services) in, 124 data localization measures, 66 *United States - Gambling (WT/DS285/* VLOPs (very large online platforms), AB/R), 82-84, 104-105 competition concerns, 143-148 United States - Steel and Aluminium VPN blocking in China, 54-55 Products (WT/DS544/R), 64-65 VR (virtual reality)/Metaverse, 26, 137, United States - Tuna II (WT/DS381/ 222-223, 240 AB/R), 235-237 VSS (video streaming services) United States-EU Trade and regulation cultural exceptions in FTAs, 134-136 Technology Council, 50 United States-Japan Digital Trade culture v. trade debate, 109-110, Agreement, 116–117, 179 132-134, 136-137, 240-241

"domestic content" identification challenge, 130–132 local content requirements, 128–130, 141 non-discrimination obligations applied to, 132–134 traditional media regulation compared, 125–128 VSS proliferation data, 123–125

Warren, Elizabeth, 115–116 Weber, Rolf H., 3, 221, 237 WeChat, 54, 80 WhatsApp, 39, 82, 144, 151

zero quota effect, 103–106 Zuboff, Shoshana, 2