

## INDEX

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

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

- cross-subsidization of
  - telecommunications services, 18–21
- cultural policy promotion. *See* VSS (video streaming services) regulation
- cybersecurity measures, exception clauses for
  - data localization exceptions, 65–69, 201–203
  - GATT-type general exceptions, 59–60
  - GATT-type security exceptions, 62–65
  - security exceptions of new generation FTAs, 67–70
  - security-based exceptions generally, 57–59
  - TBT legitimate objectives, 60–62
- cybersecurity regulation
  - 5G networks as critical infrastructure, 50–52, 70–73, 239
  - cyber risks of datafication, 48–50, 221–223
  - data localization measures. *See* data localization measures
  - due process safeguards, 74–75
  - foreign tech firms, restrictions on, 47, 49–50, 52–55, 57, 79–80
  - multilateral trade rules and, 55–57, 233–237, 242
    - exception clauses. *See* cybersecurity measures, exception clauses for
  - multistakeholderism for, 228–230, 237
  - risk-based approach, 73–74
  - standardization, bottom-up approach, 223–225
  - standards proliferation chaos, 225–228
- data capitalism and colonialism, 2–3, 144–148, 241
- data flows. *See* cross-border data flows
- data localization measures
  - exception clauses for, 65–69, 201–203
  - generally, 66–67, 199–201
  - JSI (Joint Statement Initiative) on E-commerce on, 203
- datafication
  - concept and trend, 1–4
  - data capitalism and colonialism, 2–3, 144–148, 241
  - international economic law, interface with, 4, 243
  - network architecture of, 6, *See also* broadband networks; cross-border data flows; platforms
- Delimatsis, Panagiotis, 101
- DEPA (Digital Economy Partnership Agreement between Singapore, Chile and New Zealand), 34–36, 68
- developing countries
  - competition enforcement limitations, 157
  - digital inclusion policies for. *See* digital inclusion
  - digital sovereignty concerns, 46
  - special and differential treatment for, 38
- “digital divide,” data on, 13–15, 145
- Digital Economy Partnership Agreement (DEPA), 34–36, 68
- digital inclusion
  - DEPA digital inclusion module, 34–36
  - “digital divide,” data on, 13–15, 145
  - Digital Silk Road initiative (China) and, 43–46
  - future demands on digital networks, 15–16
  - JSI (Joint Statement Initiative) on E-commerce negotiations on, 36–39
  - network neutrality regulation, 39–43
  - overview of arguments, 46–47, 238–239, 242–243
  - public morals exceptions applied to policies, 29–34
  - telecommunications sector liberalization, impact of, 16–20
  - universal service policies. *See* universal service policies
- digital platforms. *See* platforms
- Digital Silk Road initiative (China), 43–46

- 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
  - GATS application to, 82–84, 87–88
  - 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 Act)
  - DSA. *See* DSA (EU Digital Services 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, 50
- 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, 158
- 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.)  
 domestic regulation and. *See*  
   domestic regulation and market  
   access commitments  
 exception clauses. *See* exception  
   clauses  
 good governance obligations. *See*  
   platforms, GRPs (good  
   regulatory practices)  
 network neutrality obligations, 41–43  
 non-conforming measures schedules,  
   96–99, 240  
 platform immunity rules, 115–118  
 source code and algorithm non-  
   disclosure provisions, 176–181  
 fundamental rights approach to digital  
   inclusion, 22–24
- Gari, Gabriel, 191  
 Gasser, Urs, 230  
 GATS (General Agreement on Trade in  
   Services)  
   domestic regulation and. *See*  
     domestic regulation and market  
     access commitments  
   due process safeguards (Article VI:  
     1), 74–75, 183  
   evolutionary interpretation of, 85–90  
   general exceptions (Article XIV),  
     32–33, 59  
   on international standards, 235–237  
   Mode 1 commitments (cross-border  
     supply), 79, 82–84, 138  
   Mode 3 commitments (commercial  
     presence), 17–18, 79, 85, 103,  
     138, 238–239  
   progressive liberalization principle,  
     89  
   quantity/quality dichotomy of, 102–105  
   relevance concerns in datafication  
     era, 4–6, 79–80, 243  
   specific commitments, classification  
     problems, 80–82  
   technological neutrality principle,  
     82–84, 86, 90  
   telecommunications sector  
     liberalization, 16–18, 160–161  
   trade in services definition, 17
- GATS Telecom Reference Paper  
   on competition regulation, 155–157  
   cost-oriented rates rules interpreted,  
     27–29  
   political economy momentum for,  
     160  
   on universal service policies, 24–26  
 GATT (General Agreement on Tariffs  
   and Trade)  
   due process safeguards (Article X:3  
     (a)), 74–75  
   general exceptions (Article XX),  
     29–34, 59–60  
   security exceptions (Article XXI(b)),  
     62–65  
 GDPR (EU General Data Protection  
   Regulation)  
   algorithmic transparency regulation,  
     166–168, 170–171, 173–174  
   Code of Conduct and certification  
     scheme, 217–221  
   on de-identification, 211–212  
   general exceptions. *See* exception  
     clauses  
   good faith standard, 58, 63–64  
   good governance obligations. *See*  
     platforms, GRPs (good  
     regulatory practices)  
 Google, 81–82, 123, 147–148, 163  
 GPA (Government Procurement  
   Agreement), 56  
 Great Firewall of China, 54
- Heath, J. Benton, 65  
 Howse, Robert, 29  
 Huawei  
   Digital Silk Road initiative and, 45  
   protectionist policies towards, 56  
   Western bans of, 47, 49–50, 53–54,  
     57, 72  
 human rights approach to digital  
   inclusion, 22–24
- India  
   Chinese mobile apps, restrictions on,  
     54  
   Twitter, judicial review action in,  
     122–123

- Indo-Pacific Economic Framework (IPEF), 50, 186, 243
- Industry 4.0, 15, 204, 221–222
- information society services, ECJ
  - rulings on, 90–92
- Instagram, 114, 144
- international standards, WTO rules on, 235–237
- Internet streaming services. *See* VSS (video streaming services)
  - regulation
- Internet use data, 13–15
- IoT (Internet of Things)
  - cross-border data flows, reliance on, 198–199, 208
  - cyber risks, 48, 221–223
  - cybersecurity standards, 225–228
  - definition, 16
  - digital network demands, 15–16
- IPEF (Indo-Pacific Economic Framework), 50, 186, 243
- Japan
  - CPTPP market access commitments, 99
  - cybersecurity regulation, 230–233
  - GRPs (good regulatory practices) in, 188
  - VSS (video streaming services) in, 125
- Japan-EU Economic Partnership Agreement, 179
- Japan-United States Digital Trade Agreement, 116–117, 179
- JSI (Joint Statement Initiative) on Domestic Regulation (WTO), 102, 183–184, 192, 236
- JSI (Joint Statement Initiative) on E-commerce (WTO)
  - algorithms defined in, 177
  - on cross-border data flows, 203, 229
  - developing countries' participation, 36–39
  - on platform regulation, 95, 116, 118
- least developed countries
  - broadband connectivity, UN targets, 23–24
  - competition enforcement
    - limitations, 157
  - digital inclusion policies for. *See* digital inclusion
  - digital sovereignty concerns, 46
  - FDI flows to, 19–20
  - Internet use in, 14
  - special and differential treatment for, 38
  - legitimate objectives (TBT), 60–62
  - local content requirements for VSS. *See* VSS (video streaming services)
    - regulation
  - local presence requirements for platforms, 139–141
  - localization of data. *See* data
    - localization measures
  - machine-readable data, 1
  - media services regulation. *See* VSS (video streaming services)
    - regulation
  - messaging services, 39
  - Meta (Facebook), 114–115, 144, 151, 158
  - Metaverse/VR (virtual reality), 26, 137, 222–223, 240
  - Mexico – Telecom* (WT/DS204/R), 27–29, 103–104, 156
  - Mexico, USMCA special provisions for, 38
  - Mishra, Neha, 179
  - Mitchell, Andrew D., 179
  - Montréal AI Declaration, 167–171, 173
  - most-favored-nation principle, 55, 80
  - Moyn, Samuel, 24
  - Mundie, Craig, 207
  - Musk, Elon, 111–112
  - Myanmar, data governance in, 123
  - national security policies. *See* cybersecurity regulation
  - national treatment principle, 55, 80
  - necessity test, 31–34, 58, 61–62, 183
  - Netflix, 15, 39–40, 211, *See also* VSS (video streaming services)
    - regulation
  - Netherlands, Apple Dating app case, 147
  - network neutrality regulation, 39–43
  - New Zealand, CPTPP market access commitments, 99

- NIST Cybersecurity Framework (US), 225, 230–233
- non-discrimination obligations, 55–57, 132–134
- OECD policies on platforms, 149–150
- online streaming services. *See* VSS (video streaming services) regulation
- Pauwelyn, Joost, 104, 230
- platformization, concept and trend, 1, 143–148
- platforms, competition policies
- algorithmic transparency regulation as, 163–164, 241
  - common elements of, 150–151
  - of DMA (EU Digital Markets Act), 151–153, 159, 243
  - domestic policies, limitations of, 148–149, 157
  - of FTAs (free trade agreements), 154, 161–162
  - regional initiatives, 149–150
  - VLOPs (very large online platforms), competition concerns, 143–148
  - WTO initiative. *See* platforms, trade and competition rules (potential)
- platforms, domestic regulation
- Chinese platforms, foreign restrictions, 53, 72, 80
  - competition policies, limitations of, 148–149, 157
  - for cultural policy promotion. *See* VSS (video streaming services) regulation
  - fragmentation and overreach problems, 181–183
  - jurisdiction and law enforcement problems, 137–139
  - local presence conditions, 139–141
  - market access commitments and, 101, 105–107
  - speech regulation. *See* speech regulation of platforms
- platforms, GRPs (good regulatory practices)
- good governance obligations, overview, 183–187
  - good governance obligations, strength and breadth, 187–191
  - political support for, 191–194
- platforms, multilateral trade rules
- classification problems, 80–82, 90–93
  - competition focus. *See* platforms, trade and competition rules (potential)
  - cross-border data flows under FTAs, 65–69, 95–99, 139–140, 201–203, 240
  - future WTO work respecting, 93–95
  - GATS application under evolutionary interpretation, 85–90
  - GRPs promoted by. *See* platforms, GRPs (good regulatory practices)
- platforms, trade and competition rules (potential)
- challenges, 158–161
  - flexible modality option, 162–163
  - GATS Telecom Reference Paper as model, 155–157
  - general WTO approach to trade and competition, 153–155
  - soft law option, 161–162
- privacy regulation of cross-border data flows
- APEC (Asia-Pacific Economic Cooperation) Rules, 214–217, 229
  - GDPR Code of Conduct and certification scheme, 217–221
  - informed consent and big data analytics, 206–209
  - multilateral trade rules and, 233–237
  - notice-and-consent mechanisms, general limitations, 205–206
  - private governance, scope for, 209–212
  - public-private partnership model, 212–214
  - Trans-Atlantic Data Privacy Framework (EU-US), 203–204
  - public morals exceptions, 29–34

- Raustiala, Kal, 232
- RCEP (Regional Comprehensive Economic Partnership), 34–35, 68–70, 187–188
- reasonableness test, 42–43
- recommendations, algorithmic, 145–146, 179, *See also* algorithmic transparency regulation
- RIAs (regulatory impact assessments). *See* platforms, GRPs (good regulatory practices)
- right to regulate (digital sovereignty), 35, 46, 98–102
- rural broadband connectivity targets, 23–24
- Russia
- Google fined in, 123
  - Ukraine invasion (2022– ), 49
- Russia – Traffic in Transit* (WT/DS512/R), 63–64
- Schwartz, Paul, 237
- security policies. *See* cybersecurity regulation
- security-by-design paradigm, 222
- Shaffer, Gregory, 20, 62, 72, 229
- Singapore, Content Code for OTT TV, 138
- smart cities, 48
- smart manufacturing, 198
- social media, content moderation. *See* speech regulation of platforms
- Solove, Daniel J., 208
- source code non-disclosure provisions of FTAs, 176–181
- South Korea, VSS (video streaming services) in, 125
- special and differential treatment, 38
- speech regulation of platforms
- algorithmic recommendations, regulation of. *See* algorithmic transparency regulation
  - as authoritarianism, 122–123
  - “censorship” dilemma outlined, 109–112
  - DSA (EU Digital Services Act) on content moderation, 119–121, 240
  - DSA-like regulations, 122
  - immunity rules of FTAs, 115–118
  - immunity rules of US Communications Decency Act s.230, 111–115
- submarine cable infrastructure demand, 14–15
- surveillance, technological, 2–3, 45–46, 146, 203–204, 206, *See also* privacy regulation of cross-border data flows
- Taiwan
- “broadband human rights” advocacy, 23
  - GATS Schedule of, 88
- TBT (Technical Barriers to Trade Agreement), 56–57, 60–62, 75, 235–237
- technological neutrality principle of GATS, 82–84, 86, 90
- Telecom Reference Paper. *See* GATS Telecom Reference Paper
- telecommunications sector liberalization, 16–20, 160
- TikTok, 53, 72, 80
- Trachtman, Joel P., 182
- Trade and Cooperation Agreement (EU-UK), 34–35
- Trade and Technology Council (EU-US), 50
- trade secret rules for source code and algorithms, 176–181
- Trans-Atlantic Data Privacy Framework (EU-US), 203–204
- transborder data flows. *See* cross-border data flows
- transparency of algorithms. *See* algorithmic transparency regulation
- TRIPS (Agreement on Trade-Related Aspects of Intellectual Property Rights), 176–177
- Trump, Donald, 111
- Turkey, Internet Regulation, 138–139
- Twitter, 111–112, 114, 122–123, 206

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

“domestic content” identification	Warren, Elizabeth,
challenge, 130–132	115–116
local content requirements,	Weber, Rolf H., 3, 221, 237
128–130, 141	WeChat, 54, 80
non-discrimination obligations	WhatsApp, 39, 82, 144,
applied to, 132–134	151
traditional media regulation	
compared, 125–128	zero quota effect, 103–106
VSS proliferation data, 123–125	Zuboff, Shoshana, 2