## Index

access  
conditional access services 74–5  
to final mile network 141, 147, 147–8, 153  
regulation of BT 68–70  
track access charges 106–10  
accounting fraud xviii–xix, 10–13, 18  
administrative costs 1–4  
Airports Act 1986  173  
allocative efficiency 167–9, 171  
appraisal optimism 45  
Appraisal Summary Table (AST) 21, 31  
Arriva Trains Northern 91–2  
asymmetric information 10–11  
AT&T 11, 12  
Atlantic 18  
Austria 142  
aviation xxii, 130, 160–83  
CAA’s approach to airport price caps xxii, 171, 173–6, 180–82  
framework for analysis 163–5  
investment incentives under a regulatory cost base approach 176–8  
public policy objectives 162–3  
public policy problem 161–2  
strengths and weaknesses of investment models 165–72  

Banana 127  
band managers 79  
banking, small business 50–51, 61–2  
BART (Bay Area Rapid Transit Line) 41  
BBC xx, 65–6, 80, 82  
regulating 75–8  
BBC Broadcast 77  
BBC Online 76  
BBC Worldwide 77  
Beesley, M. xviii, 51, 184, 190  
Belgium 128, 129, 142–3, 145  
Bell companies 11, 12  

### Berliner Wasserwerke 132  
Better Regulation Task Force 16  
‘big bang’ approach 143  
Birmingham Northern Relief Road (BNRR) 34–5  
Bowker, R. 110, 114, 116  
British Airways (BA) 136, 160  
British Coal 192  
British Energy 185, 189, 192  
BSkyB xx, 65–6, 80, 82  
regulating 71–5  
BT xx, 16, 17, 65–6, 80, 165  
regulating 66–71  
Buchanan, J. 190  
bundling 72–3  
bureaucrats 163  

California 127–8  
capacity  
excess in US telecommunications 5–6  
railways  
utilization 86–94, 123  
road networks  
adding capacity 25–9, 34–6  
more efficient use 32–4  
options for increasing 32–6  
carbon emission trading 197–9  
carbon emissions 129, 162, 196–9, 200  
carbon taxation 197–9  
cartel behaviour, criminalization of 52–5, 62–3  

Caves, D.W. 96  
Central Electricity Generating Board (CEGB) 186, 186–7, 196, 202, 205  
Certificate of Need programmes 170
character issues 11
cholera 133–4
CHP (combined heat and power) 200
Civil Aviation Authority (CAA) 36, 168–9, 170
approach to determining airport price caps xxii, 171, 173–6, 180–82
climate change 129, 162, 196–9, 200
coal 129, 185–6, 188, 189
protectionism 186, 187, 195–6, 201
Coase, R.H. 163
COBA 30–31
collective dominance 46–7
commercial freedom 139–40
commercial model 163–72, 180
strengths and weaknesses compared with state enterprise model
165–72
unregulated 177
commercial products, promotion of 77
commercial view of roads 21–3
Commission for Integrated Transport report 24–5, 27
Communications Act 2003 71
Communications Bill (2002) 65, 78
company failure xviii–xix, 10–13, 18
comparative institutional approach 163
compensation to TOCs 94–5, 121
competition
intermodal 9–10, 18
lack of in California 127–8
promotion 203
water networks 131, 134
Competition Act 1998 43, 56, 64, 71
aviation 160–61, 169, 173
criminalization and 54–5, 62–3
rehearing of decisions by OFT 59
Competition Appeal Tribunal (CAT) 48, 56, 58, 59
Competition Commission xix, 56, 58
aviation 173, 180
CAA recommendations 174
merger control 44, 46, 48, 60
mobile telephony 17
regulatory role 50–51, 61–2
competitive local exchange carriers (CLECs) 5–9
competitor-welfare standard 4–10
complexity 181
compliance

culture of 121–2
with EU law 142, 151
comprehensive measures 206–7
concessions system 132, 134
conditional access services 74–5
congestion 20, 98–9, 100–101, 112
efficient pricing of road transport and 23–5
typical motorway congestion charges 27–8
consultation 182
consumer welfare
vs competitor-welfare standard 7–10
merger control and 44–6
consumers 59–60
regulation and promotion of consumer interest 16–18
contracting out 95–6
cost base regulation 166, 168, 170, 176–8
cost–benefit analysis 164
investment in roads 30–31
cost of capital 181–2
cost–effectiveness 165–7, 171
cost escalation (railways) 94–6, 117, 121–2
cost recovery analysis
railways 96–104
roads 21–3, 98–9, 100–101
cost-of-service regulation 166, 168, 170

costs
administrative costs of deregulation 1–4
decreasing cost problem 164
supply of road networks 25–9, 36
Cowan, S. 160
Crandall, R. 6, 167
cream skimming 138–9
criminalization 52–5, 62–3
Cruiseways 35
curriculum support service 76–7
De Gaulle, General C. 132, 133
deadline for full liberalization 143, 151
delays, costs of 110–11
Demsetz, H. 191
Denmark 142
Department of Energy 187–8
Department of the Environment, Transport and the Regions (DETR) 105

Surface Transport Costs and Charges 22–3, 24

Department of Trade and Industry (DTI) 185, 205

Key Issues for Consultation 184, 194

Department for Transport 88, 96, 162
desiccation 130
deterrence 52–3
Deutsche Post 143, 144, 145
Direct Rail Support 86

Directing the Flow 131
discounts 141–2
dispute arbitration 138
diversification 128, 131, 196
dominance 66, 67, 69, 182
collective 46–7
double pipelines 131
drinking water 131, 134
dual till approach 174, 175, 177–8, 181
dynamic efficiency 169–71
economies of scale 97–8, 138, 154
efficiency
  allocative 167–9, 171
capacity use in road networks 32–4
dynamic 169–71
gains and merger control 44–6
productive 165–6
efficient component pricing rule 74
electricity 126, 127–8
  UK energy policy 186–7, 188, 195–6, 201–2, 206
electronic speed-limiters 33–4
energy 56
  EU xxi, 126–30
energy conservation targets 199
energy efficiency 200
Energy Efficiency Commitment 202
energy policy xxi–xxiii, 184–207
  history 185–9
  impact on energy regulation 201–4
  importance in 2002 184–5
  new-style 192–201
  theory of 189–92
Energy Review xxi, 184, 192–201, 207
energy policy investigations 43, 49–52, 56, 61–2
merger control 43, 44–9, 58–61
process issues 48–9, 56, 58–61
regulation and banking 50–51, 61–2
environment 201
constraints and aviation 182
issues and energy policy 194, 196–201
environmental movement 127
Euratom Treaty 128
euro 125
European Commission 74, 143
European Council Lisbon summit 125, 130
European Train Control System 95
European Union (EU) xxi, 125–35
  energy xxi, 126–30
  Californian situation 127–8
  liberalization 126–7
  nuclear energy 128–30, 133
Enterprise Act and EU law 43, 46–7, 54, 56
Internal Market 125
postal services regulation 137, 140, 143, 144, 145, 150
compliance with EU law 142, 151
TCAA 161–2
telecommunications regulation 8, 18, 66–7, 68–9, 74
water xxi, 130–32, 133–4
events 187, 189, 192–3
excess capacity 5–6
exclusive lane 42
external dependence 126, 128–9, 133
externalities 162
Fair Trading Act 1973 (FTA) 43, 49, 64
FCC Record 1, 3

Federal Communications Bar Association (FCBA) 2–4
Federal Communications Commission (FCC) xviii–xix, 1–15, 79
administrative cost of deregulation 1–4
annual budget 1, 2
final mile network
  access to incumbents’ 141, 147–8, 153
  monopoles 138–9
  (times 152)
Index

Finland 128
Ford, R. 94
form-based approach 54–5
Forsyth, P. 167–8
Fowkes, A.S. 87
France
  energy 126, 128, 129, 133
  postal services 142, 143, 144, 151
  water 132, 134
franchising 89–90
Freeview 71
freight rail 85–6, 87, 98, 103, 110, 113
gas 126, 128–9, 130
  UK energy policy 186, 188, 196, 202–3, 206
Gatwick Airport 173, 174, 175
general economic instruments 196–8, 206
Germany 132
  energy 126, 128, 129, 133
  postal services 143, 144, 145, 151
Gibson, S. 109, 110
Glaeser, E. 173
Glaister, S. 20
government failure 193, 195, 198–9, 206
greenhouse gases 129, 162, 196–9, 200
Griffin, J. 63

Hausman–Sidak test 8–9
Hayek, F.A. 191
Hays DX 142–3, 145
Health and Safety Executive (HSE) 96, 117
Heathrow Airport
  price regulation 173, 174, 175–6
  Terminal Five 162, 170, 174, 175
Helm, D. 117
Hewitt, P. 207
Highways Agency 19, 32
Hill, R. 140
Hundt, R.E. 4
hybrid governance options 172–3
impairment 6–8
import dependence 126, 128–9, 133
incentives
  criminalization 52–3, 63
  problem of incentives for investment
    xxii, 160–83
  railways 104–14, 117
incumbent local exchange carrier (ILEC)
  7–9
incumbents
  abuse of dominant position 138
  access to final mile network of 141, 147–8, 153
  commercial separation of main businesses 145, 152
independent economic regulation
  energy 202–3
  postal services 142–3, 151
  railways 117, 122–4
  roads 37, 42
individual penalties 53, 57, 63
information asymmetry 10–11
information shortage 191
infrastructure providers, and service providers 86–8
insider dealing 63
institutional issues 48–9
interest groups 191–2
interim licensing regime 144–5, 152, 156–7
intermodal competition 9–10, 18
Internet 17, 76–7
Interstate Commerce Commission 9
interventionism 199–201, 206
investment
  appraisal for road networks 30–31
  postal services 140
  problem xxii, 160–83
  allocative efficiency 167–9, 171
  cost-effectiveness 165–7, 171
  dynamic efficiency and optimal investment 169–71
  framework for analysis 163–5
  hybrid governance 172–3
  incentives under a regulatory cost base approach 176–8
  public policy objectives 162–3
  strengths and weaknesses of commercial model and state enterprise model 165–72
railways 114–16, 123–4
US telecommunications 5–6, 8
water 131, 134
Ionica 18
Italy 129, 132, 142
ITV Digital 66, 71
Jevons, W.S. 185
Jones-Lee, M.W. 96
Successes and failures in regulating and deregulating utilities

Joy, S. 97
judicial review 48, 58–9
judicial supervision 54, 55

Kyoto protocol 129

Lancaster, K. 190
Lawson, N. 184, 187–8
lawyers, telecommunications 2–4
Leeds First 94–5
Leighton, A. 141
leisure time 41
leniency programme 63
liberal licensing policy 144–5, 152, 156–7
light touch regulation see Ofcom
Lipponen, P. 128
Lipsey, R.G. 190
liquidation 12
Lisbon summit 125, 130
Littlechild, S. 51
local exchange networks 5–6
local loop unbundling (LLU) 17, 70
Loeb–Magat model 168
London 133–4
long-distance telecommunications 5–6
long term planning and investment 114–16, 123–4
LoopCo 70
lorry road user charging 21
loss of revenue, compensation for 94–5, 121
‘low frills’ carriers 160, 161

Mackie, P. 31
Major, J. 136
Manchester Airport (MA) 160–61, 169, 173, 174, 175
mandatory unbundling 4–10
margin squeeze 72
marginal cost and revenue analysis 96–104
market entry 127
protection of new entrants from unfair competition 147, 153
market imperfections and failures 190–91
market investigations 43, 49–52, 56, 61–2
market power see dominance
market segmentation 149
market share 149–50
markets
emphasis in energy policy 193–4
relevant 66–7
Marples, E. 32
MCI 11
measurement bias 44–5
membrane technology 131–2
Mercer report 84–5, 96, 114
Mercury 165
merger control 43, 44–9, 58–61
Middle East 126, 129
milestones 143, 151
ministries 142
mobile telephony 9–10, 17
model clauses programme 121–2
Mohring, H. 19
Monopolies and Mergers Commission 188
Morrison, H. 172
Morrison, S. 160

Nash, C.A. 87, 92, 113
National Air Traffic Services (NATS) 160–61
National Coal Board 186
National Energy Research Centre 199
national regulatory authorities (NRAs) 66, 67, 68
National Union of Mineworkers 186, 192
nationalization 123, 187, 188–9, 202–3
Nellthorp, J. 31
neoclassical approach 190–91
NERA 111, 139
NetCo 70
Netherlands, The 130, 144, 151
network code 122
Network Rail 96, 117, 124, 172
new entrants, protection from unfair competition 147, 153
New Roads and Streetworks Act 1991 34
New Zealand 137, 139, 143, 165
Newbery, D. 21–2, 23
Nilsson, J.E. 111
‘Nirvana economics’ 191, 200–201
Niskanen, W. 163
North Sea natural gas 186
not-for-profit organizations 172–3
Index

NTL 71
nuclear energy
EU 128–30, 133
UK energy policy 186, 186–7, 188, 189, 192, 196, 197

obligations 67
Ofcom xx, 65–83
BBC xx, 65–6, 75–8, 80, 82
BSkyB xx, 65–6, 71–5, 80, 82
BT xx, 65–6, 66–71, 80
Office of Fair Trading (OFT) 54, 63, 167
BSkyB 71–2, 73
market investigations 50, 51
merger control 44, 46, 48, 56, 58, 59
Office of the Rail Regulator (ORR) 89, 117, 120, 122, 172
decision criteria 90, 91, 120
incentives to TOCs 108–9, 110
Ofgem 200, 203
Oftel 16–18, 67–8, 69, 70, 74–5, 165
Ofwat 172
oil 126, 128–9, 186, 197
price 128, 129–30, 197
‘Open Skies’ model 161
OPRAF 105, 108, 114, 115, 122
optimal investment 169–71
output specification 170–71
outputs, measuring (for road networks) 29–30

partial private circuits (PPCs) 17
passenger rail traffic 85, 98, 102
Passenger Service Requirements (PSR) 104
pay TV xx, 65–6, 71–5, 80, 82
Paying for Road Use 24–5, 27
Performance and Innovation Unit (PIU)
Energy Review xxii, 184, 192–201, 207
performance regimes 108
perverse incentives 105–6
planning
energy policy and 201–2, 203, 206
long term and railways 114–16, 123–4
planning system 182
politicians 127
Portugal 132
Post Office 136, 145
see also Royal Mail Group
postal regulation xxii–xxii, 130, 136–59
access to Royal Mail’s network for delivery over final mile 147–8
criteria for judging 142–7, 154
testing in relation to Postcomm 151–3
final mile monopoly, USO and cream skimming 138–9
government’s reasons for liberalization in UK 139–42
liberalization in EU 137
need for 137–8
prevention of predatory pricing 148–51
Postal Services Act 2000 xxii, 139, 140, 141, 150, 151
Postcomm xxii–xxii, 138, 143, 156–9
intervention on service quality 145–6, 152, 157
licensing 144–5, 152, 156–7
social engineering 141
testing criteria for good regulation in relation to 151–3
Postwatch 138
predatory pricing 138, 147
prevention 148–51
Premier League 71, 74
pressure groups 191–2
price cap regulation 165, 169, 170
CAA’s approach xxii, 171, 173–6, 180–82
price equation 166–7
price path commitment 174–6
prices/pricing
aviation 167–8
energy 126, 127–8, 129–30, 187, 197
postal services
direct intervention in 146–7, 152–3, 158
discounts 141–2
predatory pricing 138, 147
prevention of predatory pricing 148–51
uniform tariff 140–41
railways 97–8
scarce capacity 111–12
road networks 35–6, 36, 98–9, 112
congestion charges 27–8
efficient pricing 23–5
telecommunications 51
control of BT’s pricing 67–70
water 131
private provision 164
see also commercial model
privatization 136, 165
aviation 160
drug energy industries 188–9, 203
postal services 136–7
sequencing liberalization and 130–31
water 130–31, 134
procedures 82
process issues 48–9, 56, 58–61
productive efficiency 165–6
project appraisal 20–21
project costs 121
promotion of commercial products 77
protectionism 186, 187, 195–6, 201
public choice problem 190
public choice theory 163
public interest corporations 172
Public Roads Authority (proposed) 22
public sector see state enterprises
public service broadcasting xx, 65–6, 75–8, 80, 82
pure cost of service regulation 166
pure incentive regulation 166
QANTAS 161
quality of service, intervention in 145–6, 152, 157
Quello, J. 13
RAC Foundation 37, 113
Radiocommunications Agency (RA) 78
Railtrack xx–xxi, 86, 97, 117, 122, 123, 145
contractors 95–6
long-term planning and investment 114, 115
project costs 121
timetabling and use of capacity 88, 89, 90
track access charges 108–10
Railway Reform Group 91
Railway Safety 95
railways xx–xxi, 84–124
cost escalation 94–6, 117, 121–2
incentives to TOCs 104–14, 117
long-term planning and investment 114–16, 123–4
services to be provided 96–104, 116, 122–3
structure of the industry 85–6
timetabling and use of capacity 86–94, 120–21
traffic on the network 85–6
regulation equation 166–7
regulatory asset base (RAB) regulation (single till) 173, 174, 177, 178, 181
regulatory cost base approach 166, 168, 170, 176–8
remedies 67
renewable energy 129, 199
Renewables Obligation 202
rent-seeking behaviour 192
reserved areas, current size of 143–4, 151–2
Restrictive Trade Practices Act 54, 71
revised regulatory cost base (RRCB) regulation (dual till) 174, 175, 177–8, 181
revocation 11
risk
railways and attitudes to 95
regulatory 170–71
rivers 134
RKO 11
road haulage industry 21, 37
road networks xix, 19–42
analytical studies 21–5
commercial view 21–3
cost recovery analysis 21–3, 98–9, 100–101
issues arising 25–31
options for increasing capacity 32–6
policy developments 20–21
pricing see prices/pricing
Road Track Costs Methodology 21
Road Track Costs report 21
roadworks 32, 36
ROSCOs (rolling stock leasing companies) 114
Royal Commission on Environmental Pollution (RCEP) 200
Royal Mail Group xxii, 139, 143, 150–51, 157, 158
access to final mile network 147–8
greater commercial freedom 139–40
Postcomm and regulation criteria 151–3
pricing 146–7
separation of main businesses 145
service quality 145–6
uniform tariff 141

see also Post Office

RPI-X 51
Russia 126, 129

safety expenditure 95, 96
Sansom, T. 98, 99, 110, 112
scientific consensus 197–8
second-best problem 190
Second World War 185
secondary spectrum markets 78–9
sector-specific economic regulation 165
Securities and Exchange Commission (SEC) 10, 11–12
security of energy supply 194–6
segmentation of letter market 149
Senior, I. 136
separate accounts 142, 145
separation of businesses 145, 152
Serious Fraud Office 54
service providers, and infrastructure providers 86–8
service quality, intervention on 145–6, 152, 157
services, decisions on (railways) 96–104, 116, 122–3
Sibley, D.S. 168
significant market power (SMP) 66, 67, 69
single till regulatory asset base (RAB) approach 173, 174, 177, 178, 181
Sizewell enquiry 205
small businesses 59–60
banking 50–51, 61–2
social benefits and costs 163
social engineering 140–42
social optimization 178
Spain 128, 130, 132, 142
spectrum, allocation of 10, 65, 78–9, 80
Spectrum Policy Task Force 79
speeds, vehicle 29–30
controlling 32–4, 42
Sprint 12
SSSL 74
stability 181–2
Stansted Airport 173, 174, 175
Starkie, D. 168
state enterprises 164–5
compared with commercial model 165–72
strategic planning 114–16, 123–4
Strategic Rail Authority (SRA) xx, xxi, 86, 116–18, 122–3
Capacity Utilisation Policy 120 and cost escalation 96
incentives to TOCs 109–10
long-term planning and investment 115–16
timetabling and capacity allocation 90, 92–4
subsidies, rail 85, 86, 88, 104, 106
substantial lessening of competition (SLC) test 43, 44–7
and collective dominance 46–7
supply costs for road networks 25–9, 36
failure of electricity in California 127–8
security of energy supply 194–6
surcharges 141
sustainable development 199
Sustainable Energy Policy Unit (proposed) 194, 199
Sweden 128, 137, 139, 143
taxation 164
carbon taxation 197–9
technology 131–2
telecommunications 130
Ofcom and light touch regulation xx, 65–83
pricing 51, 67–70
regulation in USA xviii–xix, 1–18
Telecommunications Act 1996 (US) 1, 4, 5, 6, 8, 12
telecommunications lawyers 2–4
TeleWest 71
ten-year plan for transport 20, 105
Thatcher, M. 136
time, value of xix, 31, 34, 40–41
timetabling 86–94, 120–21
total element long-run incremental cost (TELRIC) 4, 7–8
track access charges 106–10
train operating companies (TOCs) 94, 104, 114, 115
compensation 94–5, 121
incentives to 104–14, 117
Train Protection and Warning System 95
trains, types of 96–104
and capacity utilization 112–14
transaction costs 94, 121
Trans-Atlantic Common Aviation Area (TCAA) 161–2
transition to competition 137–8
Transpennine rail route 91–2, 93
transport 130, 200
ten-year plan for 20, 105
see also aviation; railways; road networks
Treasury 37
Trotsky, L. 79–80
Tullock, G. 190

U.S. Telecom Association v. FCC 6
unbundled network elements (UNEs) 4–7
unbundling, mandatory 4–10
uniform tariff 140–41
United States of America (USA) 165, 193
aviation 160, 161, 162
California 127–8
criminalization 54, 56
hospital investment decisions 170
telecommunications regulation xviii–xix, 1–18, 79
administrative cost of deregulation 1–4
mandatory unbundling 4–10
WorldCom xviii–xix, 10–13, 18
universal service obligation (USO) 138–9, 139
user clubs 172
Verizon Communications Inc. v. FCC 4–5
vertical separation 70, 82
Vicario, A.J.B. 99
Vickers, J. 172
Vickery, W. 24
Walksort mail 147–8
Walters, A. 23–4
waste water treatment 131
watchdog role 138
water xxi, 130–32, 133–4
Water Bill 134
West Coast project 121
White Papers on Energy Policy 187
2002 184–5, 207
wholesale services
price discounts for pay TV 72–3
telephony 68, 69–70
widening roads 26–9
Winston, C. 160, 167
World Bank 132
WorldCom xviii–xix, 10–13, 18
Yarrow, G. 168, 172