Index

A
adaptive antennas 75, 85
adaptive applications 53
adoption of technology 235
Africa ONE 173
American mobile phone system 111
array beamforming 81
array steering vectors 84
authentication 93

B
bandwidth management 210
broadband vi
broadband connectivity 214
broadband fixed wireless 73
browser 56

C
cable modem services 22
cable modem technology vi
callback service 162
CANARIE optical Internet 21
cell relay/ATM service 201
cellular phones 241
centralization 241
challenge-handshake authentication protocol 95
Chinese telecommunications 129
client-server applications 49
code-division multiple access 78
common object request broker architecture 12
communication protocol 48
“community” network 190
community-wide objectives 190
competition 166
competitive strategies 162
connectivity x, 96, 169, 177
convergence vi
cordless phone systems 117
cross-cultural diversity 236

D
data collection methods 194
data filter 56
deregulation 149
digital signatures 95
digital subscriber line vi
digital video cameras 41
DSL 201

e-mail 41
electronic information 225
electronic order forms 222
ethernet 32
ethernet networks vi

F
federal geographic metadata standard 222
fiber systems 23
fiber to the curb 23
firewalls 93
flexibility 206
formalization 248

frequency division multiple access 111
full service access network initiative 23

G
gateways 213
GEO satellite 179
geographic information systems 219
gigabit ethernet 32
gigabit Internet to the home 21
GIS application development 220
GIS clearinghouse 220
GITH network 39
global positioning systems 89
global standardization 124

H
help-desk 207
high speed multimedia services 22
high-speed Internet access service 201
home caching 42
Huber’s theory 235

I
IDD service 149
integrated business applications 48
intelligent network 2
intelligent networks viii
interference 69
international gateway 160
international simple resale 157
international telecommunications
satellite organs 170
International Telecommunications
Union 108, 111
Internet access 92
Internet engineering task force 93
Internet protocol 165
IP packets 103
IP security 93
IP telephony 213
ISDN-based videoconferencing 210

K
knowledge-barrier 196

L
leased lines 165
local area network 92

M
market liberalization 162
MetroNet 192
mobile computing 45
mobile mail reader 57
mobile personal location service 89
mobile subscribers 108
mobile systems 73
mobile wireless network 64
modularity 206
monopoly 129
MP3 player 55
MPEG filter 55
multi protocol label switching 29
multi-media applications 212
multimedia communications vi, viii

N
network address translation 93
network dependence 137
network licensees 157
network service vi
networking vi
networking equipment 190
New York state GIS data sharing policy 220
New York State Library 224
non-private enterprises 137

O
open interfaces 5
open system interconnect 205

P
paging service 137
passive optical networking 32
password authentication protocol 95
public switched telephony network 2
public telecommunications operators 174
public-key cryptography 95

R
radio link 87
regional African satellite communication system 170
regulators 166
regulatory reforms 142

S
satellite communications 140
service provider 100
service providers 211
services reference architecture 205
shared control model 101
space division multiple access 75
spatial multiplexing 70
standardization ix, 15, 109, 241
standards 7, 206
switched digital video 23
switched-beam techniques 75

T
TCP 48
technological imperative theory 239
technology adoption across cultures 236
telecommunications vi
telecommunications reform 137
telecommuters 96
time division multiple access 111
total access communication system 111
tunneling protocols 93

U
Unicom 139

V
virtual organization 92
virtual private networks 92
virtual private networks ix
voice-over-IP 89

W
Web-enabled applications 207
wireless access 25
wireless communication link 75
wireless links 48
wireless marketplace 75
wireless networks 64
wireless public telephone 108
wireless telecommunications vi
wireline telecommunications 108

X
xDSL 22