Broadband Infrastructure in North Asia and Central Asia

Markets, Infrastructure, and Policy Options for Enhancing Cross-Border Connectivity

Michael Ruddy
Director of International Research
Terabit Consulting



Part 1: Background and Methodology



Project Scope

Between June and November 2013, Terabit Consulting performed a detailed analysis of broadband infrastructure and markets in 7 strategic markets in

No. & Central Asia: Ballic Sea

Azerbaijan

Kazakhstan

Kyrgyz Rep.

Russian Fed.

Tajikistan

Turkmenistan

Uzbekistan



Scope (cont'd.)

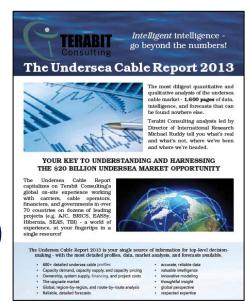
The data and analysis for each country included:

- ✓ Telecommunications market overview and analysis of competitiveness
- ✓ Regulation and government intervention
- ✓ Fixed-line telephony market
- ✓ Mobile telephony market
- ✓ Internet and broadband market
- √ Consumer broadband pricing
- ✓ Evaluation of domestic network connectivity
- ✓ International Internet bandwidth
- ✓ International capacity pricing
- ✓ Historical and forecasted total international bandwidth
- ✓ Evaluation of **international network connectivity** including terrestrial fiber, undersea fiber, and satellite
- ✓ Evaluation of trans-border network development and identification of missing links
- ✓ Identification of key highway and rail projects



Sources of Data

- Terabit Consulting has completed dozens of demand studies for submarine and terrestrial fiber networks worldwide
 - Constant contact with operators, ISPs, and other stakeholders
- Terabit Consulting's published reports include:
 - The Undersea Cable Report (1,500+ pages)
 - International Telecommunications
 Infrastructure Analysis (1,000+ pages)
- Terabit Consulting's data and intelligence covers infrastructure, definitely formation of the control of the



Part 2: State of North and Central Asia Bandwidth and Broadband Markets



Overview of Broadband Status

	GDP per Capita, YE 2012 (PPP, USD)	Int'l. Band- width per Capita (Kbps)	Int'l. Connect- ivity	Domestic Connect- ivity	IP Transit Price	Competitive- ness of Telecom Market	Fixed and Mobile Broadband Infra- structure	Annual 1 Mbps Broadband Subscription + Installation as % of Nominal GDP per Capita
Azerbaijan	\$10,800	22.4	Moderate	Adequate	Reasonably Priced	Somewhat Competitive	Relatively Strong	Reasonable
Kazakhstan	\$14,000	16.5	Moderate	Relatively Strong	Reasonably Priced	Somewhat Competitive	Relatively Strong	Reasonable
Kyrgyz Republic	\$2,400	0.893	Weak	Limited	Very Expensive	Somewhat Competitive	Limited	Very Expensive
Russian Federation	\$20,900	17.4	Moderate	Relatively Strong	Inexpensive	Competitive	Strong	Extremely Affordable
Tajikistan	\$2,300	0.313	Weak	Limited	Very Expensive	Somewhat Competitive	Very Limited	Very Expensive
Turkmenista n	\$9,600	0.125	Weak	Limited	Very Expensive	Not Competitive	Very Limited	Very Expensive
Uzbekistan	\$3,500	0.259	Weak	Limited	Very Expensive	Somewhat Competitive	Limited	Very Expensive



https://www.yunbaogao.cn/report/index/report?reportId=5_5998

onal Internet Bandwidth, YE12

