



# Türkiye'nin Internet'i ve Bölgedeki Yeni Gelişmeler

Jim Cowie, CTO  
TRNOG-2, June 2012

# Turkey is a True Regional Internet Power

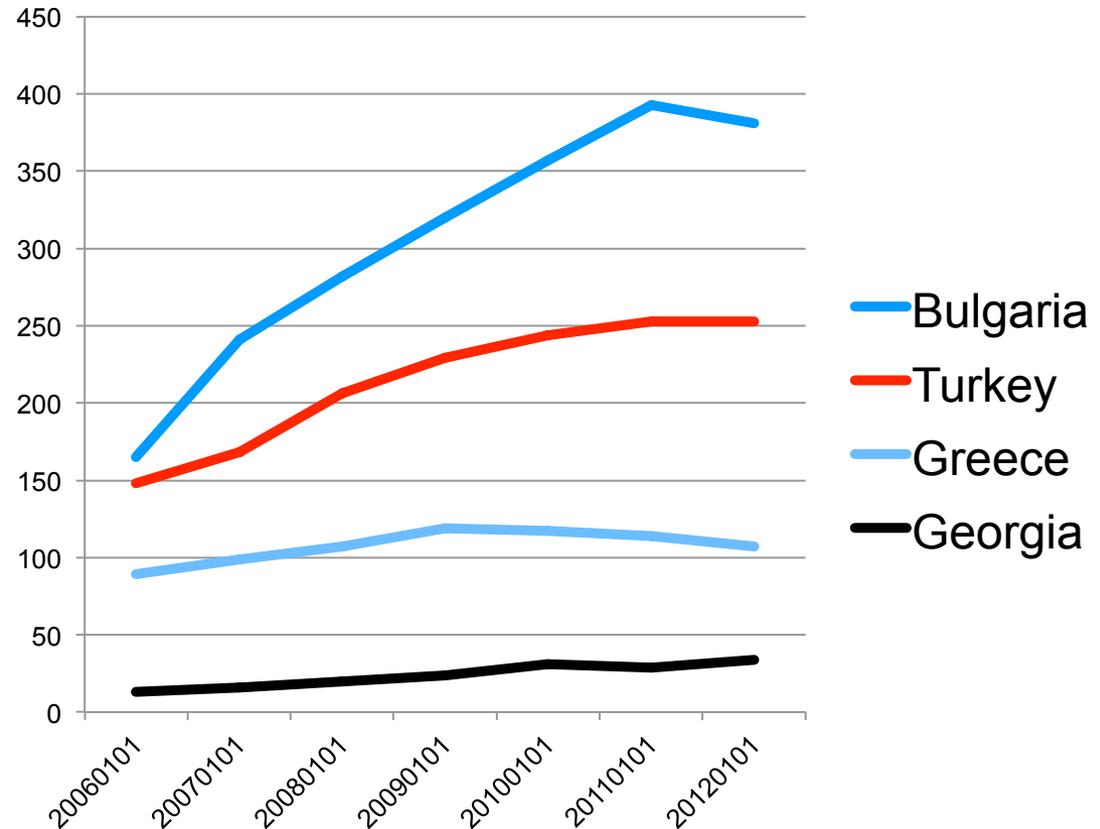
- New terrestrial connectivity projects such as RCN, JADI, and Iraqi connectivity are connecting Turkey to the GCC
- Superonline is now a transit provider to the Iranian incumbent DCI (since April 2012)
- Turk Telekom provides transit to Newroz in Iraq
- Superonline provides transit to IQ Networks in Iraq
- Turkish transit also plays a role in Cyprus, Georgia, Azerbaijan, .. the list grows each year.

# Turkey's Global Rank (June 2012)

- Renesys ranks countries according to their *total routed space*
- Same computation underlying the Renesys Market Intelligence Customer Base Score
- Turkey has fallen three places in the last year, from #20 – *why?*
- 18. Spain
- 19. Argentina
- 20. Hong Kong
- 21. Thailand
- 22. Poland
- **23. Turkey**
- 24. Sweden
- 25. Ukraine

# Domestic Autonomous Systems, 2006-2012

- “Domestic” ASNs have at least 70% of their total customer base score in the given country
- Global growth slowed 2009-2012 due to economics
- Bulgarian growth is much higher than Turkey’s – *why?*



# Bulgarian Market Diversity: Much Higher

## TURKEY

Population: **73M**

Domestic ASNs: 253

National on-net %pct:

- Turk Telekom: **96%**
- Superonline 34984: 23%
- Turkcell 16135: 10%
- Vodafone 15987: 7%

## BULGARIA

Population: 7M

Domestic ASNs: **376**

National on-net %pct:

- Bulgarian Telecom: 33%
- Spectrum Net: 18%
- Lirex: 13%
- Cabletel: 13%
- .....

# Turkish Transit Has Strong Competition

- Georgia-Bulgaria for Caucasus traffic
- Russia for Iran/Iraq, Asian, Gulf traffic to Europe
- Egypt for global east-west traffic



- *These are all growing faster than Turkey – Why?*

# Incumbent Dominance and ASN Growth

Country	Domestic ASN Growth 2006-2012	On-net Percentage of Largest Provider	Largest Provider
Russia	332%	41%	Rostelecom
Georgia	192%	26%	Caucasus Online
Egypt	183%	45%	Telecom Egypt
Bulgaria	159%	33%	Bulgaria Online
Turkey	<b>85%</b>	<b>96%</b>	Turk Telekom

# Hypothesis: Domestic Peering Is Critical

- Unless domestic providers interconnect, new market entrants tend to simply pick the largest provider
- Many new market entrants will remain single-homed or skip the ASN step altogether, reducing market growth and diversity further
- Without domestic peering, domestic traffic may incur extra latency penalties, create **national security vulnerabilities** by passing through foreign IXPs
- Improving peering would drive IT sector growth, improve Turkey's regional competitiveness



[www.renesys.com](http://www.renesys.com)