Libya

Due to ongoing political turmoil it was difficult to solicit cooperation on the ground in Libya for the research in this project. A number of contacts, when requested to complete the expert survey and to implement the user survey, declined to participate. The following information is, therefore, based on desk research.[58]
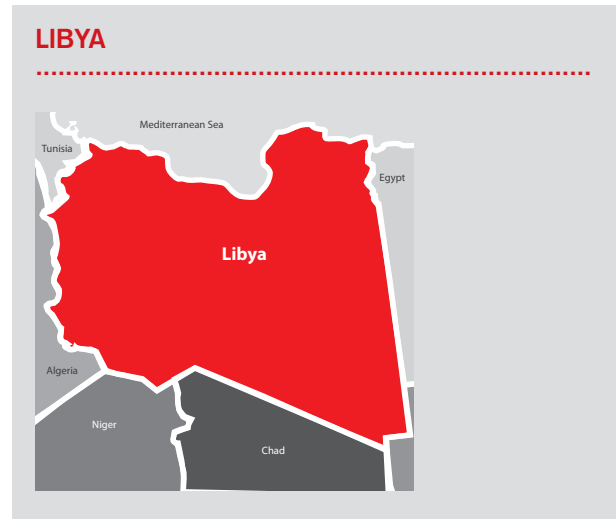
TELECOMMUNICATIONS MARKET

Indicator[57]	measurement	Value
Computers	Per 100	n/a
Internet Users	Per 100	14.0
Fixed Lines	Per 100	19.3
Internet Broadband	Per 100	1.2
Mobile Subscriptions	Per 100	171.5
Mobile Broadband	Per 100	n/a
International Bandwidth	Per 100	n/a

It is widely believed that Libiya's telecommunications infrastructure suffered significant damages during the recent ousting of the Gadhafi regime. It does, however, have a history of having one of the most advanced mobile network infrastructures in the whole of Africa, and one of the highest broadband penetration rates on the continent. Due to the lack of data, one can only make assumptions about the current state of the infrastructure.

Two networks were present under the Gadhafi regime: since Al-Madar and Libyana. The latter is believed to be the major catalyst towards bringing Libya a very high mobile penetration rate[59]. The Gadhafi regime had also invested heavily in other African countries' mobile networks. To facilitate eavesdropping and maximum control most international links were routed through Tripoli, the nation's capital, and the seat of the regime and it's security services.

LIBYA

During the course of the recent civil war the Ghadafi regime severed most interconnecting to phone networks in the country and cut off international access for networks serving the east and the rebel held town of Benghazi. Mobile service by Libyana remained in the air, there, however, and restoration efforts appear to be underway. Backed, in large part, by U.A.E and Qatar based firms, presumably hoping to make their way into the newly formed Libyan market, Libyana restored service in the east and went on to provide free service, for the duration of the conflict[60]. Due to the lack of the original HLR, the communication on this free network could not be encrypted.[61]

Both operators' websites remained inaccessible throughout the writing of his report.
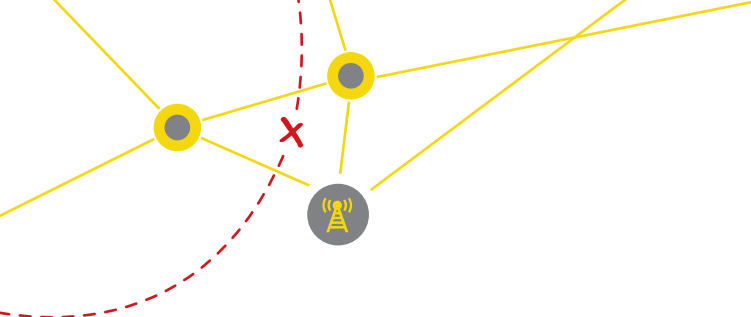
INTERNET ACCESS
Internet access in Libya was also severed during the

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58   http://www.worldbank.com

59   http://www.businesswire.com/news/home/20120531006052/en/Research-Markets-Libya---Telecoms-Mobile-Broadband

60   "How 'rebel' phone network evaded shutdown " Al Jazeera: http://www.aljazeera.com/indepth/features/2011/04/20114233530919767.html (last accessed July 7 2012)
Wall street journal:
http://online.wsj.com/article/SB10001424052748703841904576256512991215284.html
Qataris looking to buy into Libyana mobile network, Libya Herald: http://www.libyaherald.com/qataris-looking-to-buy-into-libyana-mobile-network/ (Last accessed July 7 2012)

61   The Register, Free Libyana: networkjacker speaks: http://www.theregister.co.uk/2011/04/14/free_libyana/page2.html (Last accessed July 7 2012)

2011 uprising. A report by Akamai, monitoring internet access from Libya, noted Libya as the country with the slowest internet speeds in the world.[62]

LTT, the country's only internet provider, has clearly not succeeded in bringing service levels back to what they were before the conflict. Recent rumors of a new, privately owned ISP could not be confirmed during the writing of this report.

Recent data or intelligence on mobile internet access was unavailable.

In terms of Mobile traffic emanating from Libya, 75% appears to originate from a Nokia (Symbian or Series 40) devices, according to statcounter statistics.

CENSORSHIP AND CIRCUMVENTION
The ousting of the Gadhafi regime brought to light a number of western firms that supplied advanced monitoring and blocking infrastructure to the Libyan regime. Libya was known to block Skype, censor YouTube, and blocked circumvention tools and proxies that would allow its citizens unfettered internet access.[63]

In more recent news Libya's interim government is said to be using the same equipment from the Gadhafi era to monitor calls and internet traffic of Gadhafi supporters.

CONCLUSION
Libya could not be adequately surveyed for this report. Ample anecdotal evidence suggests its telecommunications market is slowly getting back to its feet, although worries remain, especially around the use of Gadhafi-era monitoring equipment.

62   Kifah Libya, "Beyond LTT" http://www.kifahlibya.com/2012/05/20/tech-beyond-ltt-the-state-of-libyas-internet/

63   Wall street journal, Firms aided Libyan spies, http://online.wsj.co/article/SB10001424053111904199404576538721260166388.html (Last accessed july 7 2012)