



TELECOMMUNICATIONS Broadband's Roadblock

The morass of Internet infrastructure plans

Being stopped at an army checkpoint is a regular feature of Lebanese life, largely endured without complaint as a necessary condition for maintaining the country's semblance of security. These checkpoints are normally benign: more often than not the officer in charge will give the vehicle a cursory glance before waving the driver through to go about his or her business.

Lebanese Internet, on the other hand, has been pulled over at the same roadblock for more than a decade, leaving the country and its economic development held up behind, while the vast majority of the rest of the developed and developing world passes by Lebanon in the broadband fast lane.

In the past year there have been financial wheels set in motion to move the country past this Internet impasse, but when, or even whether it will be waved through is far from certain.

Political and vested interests have attempted to thwart development at almost every step, and to circumvent the country's legislative paralysis the "progress" that has been achieved has often been through blatant violations of the same law enacted to liberalize the telecommunication sector. The telecommunications ministry has effectively admitted to having purposely-opaque policies that call into question the integrity of the entire process, while security concerns and

ISP tariffs for DSL services (2009)

Residential	128Kbps		256Kbps		512Kbps		1.024Kbps		2.3Mbps	
	Fee (\$)	Gigabyte cap	Fee (\$)	Gigabyte cap	Fee (\$)	Gigabyte cap	Fee (\$)	Gigabyte cap	Fee (\$)	Gigabyte cap
MOT	23	2	33	3	47	4	77	5	200	8
Sodelet	19/27	2/0L	23/36	3/0L	40	4	70	5	no	no
Terranet	19	2	23	3	40	4	70	5	no	no
IDM	19	2	23	3	40	4	70	5	no	no
Cyberia	19	2	23	3	40	4	70	5	no	no
Wise	19	2	23	3	40	4	70	5	150	6

Note: prices are subject to an additional 10 percent VAT
Source: World Bank

espionage charges have piled up like a fast-action thriller.

In the following report, EXECUTIVE lets you in on what's still blocking the road to broadband.

Stalled in a feedback loop

In January 2010, the Minister of Telecommunications, Charbel Nahas, declared that he would release his policy strategy by November — exactly a year after becoming minister — while his ministry announced that it was beginning the process of upgrading Lebanon's bandwidth from an estimated two gigabits per second (gbps) to 120 gbps. This included connecting Lebanon to an undersea cable called the India-Middle East-Western Europe 3 (IMEWE3) [see box].

Almost a year later, however, as EXECUTIVE went to print, neither of these pledges have been fulfilled.

"We tried to assist and be an advisory body to the minister in order to help him to develop and write his policy to submit it to the Council of Ministers," says Mahassen Ajam, commissioner and member of the board of the Telecommunications Regulatory Authority (TRA), the body theoretically mandated to regulate Lebanon's telecommunications market. "The year is over and there is still no policy for the sector, which is a dilemma for us."

It's a dilemma because, according to Law 431, the TRA is supposed to be regulating the as-yet non-existent Liban Telecom that is meant to be the government-owned entity holding all the state's telecommunications assets. Setting up Liban Telecom has become such a contentious issue, however, that when EXECUTIVE queried Minister Nahas about it he replied: "I am part of a large governmental block, so don't talk to me about when to apply the law."

Indeed, Mahmoud Haidar, principal advisor to the Minister of Telecommunications, says the minister is willing to stand by are only that pricing should be lower and that the state monopoly over telecommunications should end.

"When Liban Telecom is established it has the right to have a five year monopoly by the law and the minister doesn't like that," he says.

Haidar adds that: "We are all Lebanese and we shouldn't be hypocrites about our realities. If Liban Telecom is, as the law says, an established

Troubled connection to the IMEWE3

For the Lebanese to have Internet access speeds on par with what most of the world already takes for granted, the country must boost its international bandwidth. "The actual backbone [in Lebanon] can sustain doubling or tripling the speed that you get at home or in the office with no changes, but we don't have the international capacity," says Mahmoud Haidar, principal advisor to the Minister of Telecommunications, Charbel Nahas. This international bandwidth was slated to bloom in May 2010 when the country was to be hooked into the India-Middle East-Western Europe 3 (IMEWE3) cable, a 12,000-kilometer submarine fiber optic line running from Mumbai, India, to Marseille, France. Lebanon's current bandwidth is estimated at two gigabits per second (gbps), while the IMEWE3 connection would initially bring some 120 gbps, with the possibility of further upgrades. The May connection celebration was postponed, however. It was then slated to go ahead again on December 13, but was postponed again, for reasons that have remained somewhat vague. "The technical reasons that were reported to us... varied at different times. There were mainly delays with respect to laying down the fiber on Egyptian soil," says Haidar. A source at one of the companies invested in the project told EXECUTIVE that Ogero, Lebanon's state-owned telecommunications monopoly operator, has already put \$45 million into the project and that there is currently an undersea cable running from Tripoli, Lebanon, to Alexandria on the Egyptian coast — Lebanon's connection point to the IMEWE3. Several other sources close to the proceedings told EXECUTIVE that Egyptian security services, insisting on control over the connection point, have caused the delays. Inside Lebanon, there has also been a standoff between telecommunications minister Nahas and the head of Ogero, who are politically allied with different camps. The Council of Ministers had previously mandated responsibility for the IMEWE3 project to both the ministry and Ogero, a decision Nahas unilaterally overturned recently when he placed responsibility for connecting to the undersea cable with the Directorate of Construction and Maintenance, also within his ministry.



The telecom ministry is being far from clear about plans to build a nation-wide fiber optic network.

company to be owned by the government, its board of directors appointed by the Council of Ministers, I really see that no Lebanese in his true and genuine sense sees that this will be free from politics. The Council of Ministers getting into the appointment of anything is politics. So to those who promote Liban Telecom as the paragon to come, I would simply ask them how they see this happening."

Indeed, for Liban Telecom to become a reality, the minister would have to propose it and the cabinet would have to assign the board members; since the minister seems disinterested and the cabinet is unable to even meet regularly (if at all), progress appears stalled.

"You are right in asking about where we are now because we have not come to the public and said everything," said Haidar, who stressed that the minister never said he would issue an official policy paper because it has no legal mandate.

Thus with the law unimplemented and a policy unissued, Lebanon's telecommunications regulator finds itself at a loss as to what it should do. Technically, the TRA is in violation of the same Law 431 that created it, given that

the law mandates the TRA be financially independent within two years of its creation, which was in 2007.

The TRA cannot yet be financially independent from the government, says Ajam, as the TRA's independence is "based on the principle that the sector be liberalized... which means giving licenses and making revenues from the market."

"We were not able to give licenses — it's as simple as that," she said, adding that without a national budget approving investments, the TRA had no choice but to take the funds advanced to it by the cabinet. [The TRA does, however, gain some revenue from the annual income licenses it is permitted to grant to the country's service providers and has recently received a World Bank grant.]

No straight talk

Considering that it is the government body responsible for upgrading communications in the country, Lebanon's Ministry of Telecommunications (MOT) has been exceptionally poor at informing the public how it is going about it.

In April 2010 the ministry announced \$92 million would be spent on a range of projects, including a national fiber-optic backbone. Following this announcement Mahmoud Haidar, principal advisor to the Minister of Telecommunications, explained to EXECUTIVE that this figure may or may not represent what the ministry will in fact spend, given that it avoids releasing its actual budget before issuing tenders, as this would influence bidders' offering price.

EXECUTIVE later learned the ministry received a \$66.3 million treasury advance to begin building the fiber-optic backbone (a treasury advance is a payment made outside of the national budget with the approval of the cabinet). The ministry's design proposes two large fiber-optic "rings" that span the width and breadth of the country, with most of the cost of the project going to drilling.

The MOT then announced in September that it had contracted out the first phase of the project, namely laying the fiber and drilling, to a consortium consisting of Alcatel-Lucent and its local partner Consolidated Engineering and Trading (CET), for \$40 million. Neither Alcatel-Lucent nor CET were willing to comment for this article. The cost of the current project becomes all the more relevant when it is juxtaposed against alternatives.

As previously reported in EXECUTIVE, the International Telecommunications Union (ITU) proposed a Internet blueprint for Lebanon in



Telecoms minister Gabriel Mohay

2002 that would have cost \$40 million in total — in other words, equal to what is now being paid for the first phase of implementation alone. Riad Bahsoun, a telecoms expert with the ITU, described the current project design as "obsolete" and overpriced due to excessive drilling and said that the costs associated with drilling will only benefit the companies that drill. "They will do it this way and in 50 years we will cry about why they did it this way," he said. However, Habib Torbey, head of the Lebanese Telecommunications Association (LTA) and president of GlobalCom Data Services, owner of Internet provider IDM, called the design adequate for Lebanon.

"When you talk about security and redundancy you cannot always look at cost; it's not a question of cost," he said.

Securing the lines

Security has been big news over the last two years, with headlines littered with intrigue and espionage involving Lebanese telecommunications. These included the arrest of workers at Alfa (one of Lebanon's two mobile operators) and Ogero (the state-owned fixed-line monopoly) for allegedly carrying out clandestine intelligence operations for Israel, as well as calls by Hezbollah members of Parliament for telecommunications evidence in the United Nations Special Tribunal for Lebanon to be thrown out because of Israeli infiltration of the Lebanese net-

work. Last month, Hezbollah announced, "As part of its persistent efforts to counter Israeli espionage, the Islamic Resistance has made a new major achievement by foiling an Israeli attempt at infiltrating its telecommunications network."

"Telecommunications technicians of the Resistance managed to discover a spying device the enemy had planted on its telecom network in the Al Qaysiyya valley, near the southern town of Majdel Selem," said a statement released by the Hezbollah media relations department. "The enemy [Israel] remotely detonated its device as a result of the discovery." With all these security concerns regarding telecommunications, one might think the MOT would attempt to address the security of Lebanon's network when undertaking a project to upgrade the country's infrastructure — especially when the minister is from the political bloc allied to Hezbollah.

However, "There is not even the slightest mention of security issues in the tender book," says the ITU's Bahsoun, adding that the current plans do not meet ITU standards.

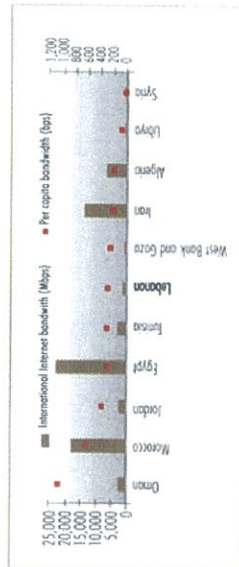
"No expert can understand what motivated the cutting of this project into two different parts: one called 'civil works' and the other 'active equipment'; there is absolutely no technological rationale behind such sectioning," says Bahsoun, noting that this sort of segmentation can be used to "fool the budget," and lead to money being siphoned off of the telecommunications upgrading project to different interested parties.

Haidar, the advisor to the Minister of Telecommunications, claims the opposite and says that the first phase of the project is "absolutely" ITU compliant. "How do they know? These documents are confidential," he remarked to EXECUTIVE. "I am surprised that they are commenting on documents that they are not supposed to be aware of."

Also threatening Lebanon's communications security is the existence of illegal operators, which came to the fore in August 2009 when an Israeli telecommunications network site was discovered on the Barouk Mountain in the Chouf region of Lebanon selling bandwidth to Lebanese operators.

"The Barouk issue is not a penetration of the Lebanese network. It was an Israeli network in Lebanon, installed by Israelis, managed from Israel with Israeli equipment reaching well inside Lebanon under a disguised commercial cover," said Habib Torbey, head of the Lebanese Telecommunications Association (LTA), and president of GlobalCom Data Services,

International Internet bandwidth



Source: World Bank

Overview of market structure*

Service	Owner	Operator	Market size
Fixed	State	MoT/OGERO	750,000
GSM Mobile	State	(alfa) Orascom	900,000
	State	(MTC Touch) Zain	1,200,000
DSL	State	MoT/OGERO	90,000
	Various private	n/a	10,000
Internet Services	State	MoT/OGERO	51,000
	Various private ISPs	n/a	29,000
Data Services	State	MoT/OGERO	58,000
	Various private DSPs	n/a	22,000
E1 Line Provision (% of market share)	State	MoT/OGERO	37%
	Various private	n/a	63%
CATV	Various formal private	Cable Vision, EcoNet, Digitek	N.A.
	Various unlicensed		750,000**

*All data as of March 2009

** Households

Source: World Bank



Italian soldiers serving with the United Nations Interim Force in Lebanon (UNIFIL) inspect the site where a suspected Israeli spy device was blown up near the southern Lebanese village of Hula in 2009.

owner of Internet provider IDM. "How do they expect us to take seriously the security effort [the government] is doing to secure the GSM [Global System for Mobile communications] networks when such big issues are kept under the rug? It's just not serious and it calls their credibility into question."

A source with knowledge of the Barouk proceedings told EXECUTIVE that a colonel in the Lebanese Army posted at the MOT during the last cabinet's term in 2009, had spearheaded the discovery of the Barouk station along with 80 to 100 other illegal operators. Haidar confirmed this officer was Colonel Dany Fares.

According to the same source, after the telecommunications equipment, built by the Israeli firm Ceragon, was confiscated by the authorities, a man named Fadi Qassem infiltrated the location where the equipment was being held and was later re-apprehended by military intelligence with the equipment in his possession. The source added that Qassem was let go "immediately" because of political pressure. Several other sources, which also asked to remain anonymous, confirmed to EXECUTIVE that Qassem was behind the operation, though he was described as "small fry" by one.

In February 2009, in the midst of a political debate over wiretapping during the term of the last cabinet, MP Walid Joumblatt — who exercises far-reaching influence over the Chouf Area — called for Colonel Fares to be removed from his post in the telecoms ministry in an interview with *Ad Diyar* newspaper. It was later during this government's term that Defense Minister Michel Murr ordered the colonel to be removed from the telecoms ministry, according to Haidar.

Murr also came under attack last month in the Lebanese press after Wikileaks, a global whistleblower site, released United States diplomatic documents from March 2008 to *Al Akbar* newspaper stating that Murr advised the US on where any future attack may hit and that he would instruct the army to move in only after any Israeli attack had wiped out the resistance movement. The Ministry of Defense did not respond to a request for clarification and an interview.

In December a Hezbollah tip-off led to two more discoveries of Israeli espionage devices on Mount Sannine and, once again, the Barouk Mountain east of the capital. At present there is a committee tasked with uncovering illegal operators within the telecommunications ministry but Haidar refused to disclose details of how many illegal operators have been apprehended so far.

The road ahead

So while the country has been waiting for years for a way forward, and there does seem to be some momentum building to end the roadblock to move us onto the broadband highway, politics still seems to be leaving our tires flat.

"We are losing our voices telling [the politicians] to remove the telecom sector from politics because this is an economic and strategic sector for the rest of the country, not a stand alone sector," says the LTA's Torbey. "God willing, they will hear us one day."