



**LEBANESE REPUBLIC**  
**MINISTRY OF TELECOMMUNICATIONS**  
**THE MINISTER**

**“LEBANON AT HORIZON 2013”**  
**A PEOPLE-CENTERED INFORMATION SOCIETY**  
**SUPPORTED BY**  
**A NEW, EFFECTIVE & MODERN TELECOM LANDSCAPE**

**POLICY PAPER**

**“General rules for the Regulation of Telecommunications Services in Lebanon”**  
*Including*  
**A *Change-Reform-Repair Plan Of Action***

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*“Everyone should be enabled to participate in and no one should be excluded from the benefits of the Global Information Society”*  
*(Okinawa Charter on the Global Information Society, July 2000)*

*Beirut May 2009*

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## Executive Summary

The telecom sector is universally recognized as an enabler of economic growth as it serves as the infrastructure for businesses and consumers to interact more effectively. It is recognized that Lebanon is in need of revitalizing its telecoms and broader ICT capabilities.

Different phases of Lebanon's recent history (1974 - 2008) have affected the Lebanese telecom sector. While in some cases the sector witnessed growth following the war phase, later years were characterized by low growth and stagnation leading to the current market position which places the Lebanese telecom sector behind many of its regional peers or other mature markets.

This policy aims to formulate direction for the Lebanese telecom sector's future evolution ensuring that it is repositioned among telecom leaders in the region.

Presently, the sector is equipped with an acceptable telecoms law, but it has not been fully implemented. It is necessary the legal and regulatory instruments already in place are used to facilitate competition, investment (e.g. through privatization) and improved services.

This policy paper aims to draw the roadmap to transformation towards the next stage of change and reform in the Telecommunications sector, following the immediate repair actions which took place in the last ten months, leading to full implementation of the vision aimed at building the information society to keep pace with the communications revolution, all of which are set forth in this document.

Thus, acting in accordance with Law 431/2002 Article 3 "Powers of the Minister" specifically the section "Establishment of general rules for the regulation of Telecommunications Services in Lebanon, supervision of such application through the reports submitted to him by the Authority, and proposal of draft laws and decrees related to the Telecommunications sector to the Council of Ministers", the Minister is hereby establishing these rules in this document, along with the Vision, Principles and Objectives that will serve as the binding general rules for such regulation, to be implemented by the Telecommunications Regulatory Authority (TRA) under the supervision of the Minister of Telecommunications

## **Telecom Sector Historical Overview and Diagnosis**

A Policy Paper provides by nature guidance for future strategies. However, no strategy can lead to successful results unless it would start from a correct assessment of the existing situation. It is therefore important but moreover absolutely necessary to have a fair realistic diagnosis of the history of telecom sector in Lebanon

### **Diagnosis:**

1. A jungle of organizational chaos, conflict of laws and powers, accumulation of responsibilities, management disintegration, a surplus of workers, especially in the post, and distortion of the concept of public service. All this has led to delays in services, and a strike to the interests of the private sector, and a knock to the image and role of the public sector.
2. Illegal acts in international voice telephony, Internet, public phones, tapping without any controls, and other acts which have resulted in harm to the resources of the state and the interests of the people.
3. Internet services and broadband (Broad Band) are mostly provided by illegal means; while the legitimate services are provided over limited capacity that did not exceed 130 (E1), all of this led to the brain drain, and the deportation of a large number of business and corporations.
4. Cellular network is badly deteriorated, with a very low level of penetration of 32% in the summer of 2008; prices are among the highest in the world, at an average user cost of \$74, and almost negligible Value Added Services.
5. Fixed network (PSTN) has a minimal services and quality of service, it is badly exploited allowing only 700 thousand subscribes to utilize and access to a network with of a capacity of 1,700,000 lines. New infrastructure was prevented such as fiber-optic networks with required new systems and terminal equipment.

As far as telecom activities are concerned, it is widely recognized that Lebanon has fallen down during the past fifteen years (1994-2008) from a leading position in the region to almost the least and there is no possible debate on how to qualify the situation of telecom sector in Lebanon on July 2008... it resembled a disaster zone.

## VISION, PRINCIPLES AND OBJECTIVES

### Vision for the Information Society in Lebanon

The Ministry is hereby pursuing a two-tier vision: a) the vision set in Geneva during the first phase of the World Summit on the Information Society (WSIS), and b) local needs and requirements and features of these requirements

#### Information Society

1. Ministry of Telecommunications shall lead the national global effort needed to build a people-centered, inclusive and development-oriented Information Society in Lebanon, realizing the vision on which the representatives of all peoples of the world agreed when they gathered in Geneva from 10-12 December 2003 for the first phase of the *World Summit on the Information Society (WSIS)* ([www.wsis.org/dop](http://www.wsis.org/dop)).
2. This vision is one of a people-centric information society where “everyone can create, access, utilize and share information and knowledge”; of a society fully connected and of a society favoring the coexistence and partnership between Lebanese communities, fairly supporting the social integration of low-revenue, poor or disadvantaged communities, enabling individuals, government and public agencies, business and NGOs to bring all their potential for the sustainable development of their country and improving their quality of life.
3. A society for Lebanon where all global public-private or local-foreign partnerships for development would be systematically encouraged with clear and strong incentives; A society using *Information and Communication Technologies (ICTs)* as tools for economic, social and human development, in a secure manner fully protecting national security interests, individual freedom, data home and business privacy.
4. In such an Information Society, every political or public authority in Lebanon, at any place or position it would lay, would act anytime in recognition of the fact that:
  - a. Communication is a fundamental social process, a basic human need and the foundation of all social organizations, that it is central to the Information Society and that everyone, everywhere in Lebanon should have the opportunity to participate and no one should be excluded from the benefits the Information Society can offer;

- b. Education, knowledge, information and communication are at the core of human progress, endeavor and well-being and further that *Information and Communication Technologies (ICTs)* have an immense impact on virtually all aspects of our lives;
- c. Extremely rapidly progressing telecom technologies should be regarded as the most powerful tools and instruments for economic and social development, to increase economic and industrial productivity, to generate revenues that may help reduce or reimburse our National Public Debt, to create jobs for our youth and young graduates, to bring back our brains who have fled the country during the past three decades, to reduce all traditional obstacles, especially those of time and distance, thus facilitating social integration and harmony;
- d. In our country, young people are the future workforce, leading creators and earliest adopters of ICTs and must therefore be empowered as learners, developers, contributors, entrepreneurs and decision-makers and that it is authorities' duty to focus especially on assistance that should be provided to young people who have not yet been able to benefit fully from the opportunities provided by ICTs and to ensure that the ICT applications and services are introduced and operated paying full respect to their rights and protecting their well-being;
- e. Development of ICTs could provide enormous opportunities for a greater and faster integration of women;
- f. ICTs could be used to cover as far as possible with a great degree of priority, the special needs of older persons and persons with disabilities, empower the poor, particularly those living in remote, rural or marginalized urban areas; cover needs of marginalized and vulnerable groups in our society including refugees, unemployed and underprivileged people, minorities and nomadic people and that all of these should be granted access to communication services and the means to use ICT as a tool to lift themselves out of difficulty;

### Features based on needs and requirements

- 5. **Features of Lebanon Information Society.** Lebanon as an Information Society is composed of vision elements which Minister has identified as "Broadband Lebanon", "Information High-Ways" and "Cyber-Cities". Implementation of these elements requires precise action regarding the ground-backbone infrastructure and the connectivity-model:
  - a. **Backbone Architecture:** All Lebanese cities should be grained with underground and/or overlaid (using electrical pylons) FTT-x cables, connected, everywhere applicable,

in an IP-based High Density Local Area New Generation network (HD-LA-NGN), and interconnected through nationwide IP-NGN backbones that will respect the criteria of network resilience and comply with Emergency and Survivability objectives as set-out by the Minister; All villages not served through the FTT-x infrastructure should necessarily be served through a DSL-based deployment and, if DSL-based deployment is unavailable be served through Wireless Technologies offering Broadband Services; Wireless Technologies offering Broadband Services must be made available throughout the Lebanese Territory regardless if the areas covered are already served through FTT-x or DSL; With this respect, it is Minister's Policy to implement as a priority, the backbone project that Minister has presented in March 2009 aiming at deploying optical fiber rings (5000 Km) covering the entire national territory, it is also his policy to increase the number of DSL equipped exchanges from 32 sites (mid 2008) to 83 (beginning 2009), to around 200 (end 2009) reaching a full coverage to all exchanges by 2010. It is the minister's intention to encourage the adoption and deployment of Wimax enabling and encouraging national providers, public and private, towards speeding up the required process to achieve that.

b. Bandwidth and Connectivity should be easily accessible, affordable and abundant with the objective of reaching European levels of Tariffs and Capacity offered to end-users. It is the Minister's Policy to re-position Lebanon as a major International Hub interconnecting the South Asia/MENA region with Europe, Africa, the rest of Asia and the Americas (North, Central and South) and bring Lebanon on to become in the coming decade one of the top international actors of bandwidth supply business;

c. Cyber standards: Our cities must evolve pursuant to cyber-urban model while new quasi-cities entirely cyber shall be built in areas which could accommodate the related advanced urban planning; Convergence allowing Quadruple Play should be universal meaning available everywhere throughout the territory; It is Minister's Policy to promote before Council of Ministers the adoption of new Decrees amending the existing Construction Code in a manner where Developers shall be under legal obligation to set out all new buildings to be ready for reception of optical fiber allowing to achieve full FTTH Lebanon and beyond connectivity, to include all core Cyber Standards.

d. RED: All Real-Estate Developers (RED) must be allowed and licensed to build over the area under their management their own advanced telecom infrastructure or to sign agreement with Licensed operators to built this infrastructure and they should also be allowed to operate it under a Label-Policy Agreement signed with licensed operators and regulated by TRA; RED working within area covered by relevant backbone must consider leasing the existing infrastructure.

## Principles & Objectives

6. Leading the national effort for Information Society in Lebanon, Minister of Telecommunications shall first abide by all 11 principles listed in the WSIS Declaration of Principles” in particular WSIS Principle 1, **role of governments and all stakeholders in the promotion of ICTs for development** which states that “building a people-centered Information Society is a joint effort which requires cooperation and partnership among all stakeholders (governments, private sector, civil society, the United Nations and other international organizations), including at decision-making levels”.

7. **Reform of Telecom Sector.** Based on these principles, and using all powers granted by Constitution and by Lebanese Law in particular by 431, Minister of Telecommunications shall engage without delay a global reform of the telecom sector through the implementation of a Plan of Action covering various segments:

### Law Enforcement

8. **Full implementation of Law 431:** Minister shall work to implement core provisions of Law 431 not yet implemented in particular, among others the creation, incorporation and constitution of LIBAN TELECOM including its partial privatization through the selection of a Strategic Partner and opening its shareholding to the Lebanese Public at large through an IPO in the Beirut Stock Exchange; the re-organization of MOT and the completion of TRA Board by nominating the fifth member.

9. **Launching the preparatory work for a new Telecommunications Law.** Pursuant to powers granted to Minister in Article 3.A.1 of Law 431, Minister shall launch the technical and preparatory work, for the elaboration of a draft new Telecommunications Law, that corrects the flaws of the current law, targeting among many others, the following objectives:

a. To insert all eventual provisions granting a strong legal basis to the new telecom landscape drawn by the present Policy Paper, in particular the achievement of convergence between Fixed Service and Mobile Service, the deployment of Terrestrial Broadcasting Service and the provision of advanced hi-speed broadband data and internet services by either nationwide or local area new generation networks;

b. To undertake clear implementation of respective Minister and TRA powers and responsibilities with respect to spectrum *assignment*, spectrum *allocation* and spectrum *management*;



- c. To serve, in compliance with Law 228 ("privatization law"), as legal basis for the selling of public assets represented by MIC1 and MIC2 network infrastructure ("privatization"), the related equipment and customers portfolio, not including assets that would be listed in the *List of Transferable Assets ("LTA")* which pursuant to Law 431 are to be transferred from MOT / OGERO in favor to LIBAN TELECOM without any further law being required;
- d. To develop/change the concept of privatization from a process that favors the interests of foreign companies to favoring the national economy and national companies before any foreign interest, and avoiding the transfer from state monopoly to private monopoly. This will be achieved by proposing a new law to be adopted by the Lebanese Parliament after getting a national and economical consensus; the law would aim at allowing the sale of cellular networks and defines the conditions of sale, including: 1) to maintain the majority of the shares to the Lebanese individuals and companies, investors and funds giving "The right of management" to the winner. 2) Launching Liban Telecom before the privatization. 3) To maintain the income to the national treasury through "revenue sharing" scheme and use the amounts received in the sale process for the development of any other public sector such as electricity, and for the reduction of public debt. And in this context giving back the first mobile subscribers, who paid the \$500 to build the mobile networks in the 90s adequate compensation such as proper shares.
- e. To define the modality and procedures applying to MOT's role in LIBAN TELECOM following privatization, the role and procedures to be followed by the 3 or more members of the board appointed by the Council of Ministers as set forth in Article 44 of the Telecom Law.

### Telecom Regulatory Authority TRA

**10. Telecom Policy Issues.** In Lebanon, the treatment of Policy issues falls under the sole responsibility of Minister of Telecommunication. Policy Issues cover number of domains including but not limited to, licensing principles and path; spectrum allocation principles; national treasury revenue insurance; privatization of telecom operations; use of telecommunication infrastructures for national security purposes; regulation and supervision of operations of telecommunication infrastructures and telecommunication equipments licitly deployed throughout the national territory aiming at serving Lebanon's national security interests; lawful interception and protection of privacy; cyber-security strategy; capacity-building strategy; fraud management. In addressing such Policy issues, Minister shall request TRA to take appropriate decisions and/or issue relevant recommendations and/or conduct related studies that will facilitate such tasks. Under such circumstances, TRA duty and responsibility is to provide such support to Minister in timely and most-effective manner.

**11. Powers, Responsibilities, Duties and Missions of TRA.** Pursuant to provisions included in Article 3.1 of Law 431, TRA is bound to fulfill all its duties and responsibilities under Minister's supervision, following all "General rules for the Regulation of Telecommunications Services in Lebanon" set out by the Minister. TRA Board of Commissioners shall exert all their powers as set forth in Law 431 in order to achieve the most-effective regulation of all telecom services in Lebanon. Such regulation is based on the implementation of a Licensing framework, being the only tool able to have all telecom operations conducted throughout Lebanon in a licit manner, protecting the consumers, preserving the financial interests of national treasury and favoring the introduction of advanced services at affordable cost within a transparent and competitive environment.

**12. Independence of TRA.** TRA shall enjoy full "financial and administrative independence", as per the provisions of law 431.

**13. TRA Board of Commissioners activities.** The board started work on April 2007 despite the lack of one of its members and despite that the law was enacted since 2002. The TRA has not issued any license which is its primary mission, duty and role as set forth in Law 431. This absence of achievement by TRA has hindered the growth of business in the Telecom sector and Lebanon has once again missed opportunities to generate additional financial revenues and create sustainable jobs. It is the Minister's Policy to put an end to this situation by taking all appropriate measures that will empower the TRA to regain its efficiency and capability to fulfill its core missions.

**14. Regulation of Telecom services.** Following the publication of the present Policy, TRA Board of Commissioners must observe greatest cautiousness warranting that their decisions are fully compliant with the General Rules set forth in the Minister Policy Paper. TRA Board of Commissioners to conduct, with high degree of priority and urgency, a review exercise of all previous decisions they have made since its establishment, in order to confirm full compliance with this Policy. Minister shall enact all Law 431 provisions dealing with TRA powers and duties with respect to the regulation of all Telecommunications services including those operated on behalf of MOT by OGERO, MTC, Orascom or any further substitute as well as incumbent Data Services Providers and Internet Service Providers. With this respect, Minister shall review all decisions made by TRA which have been objected by MOT and shall take appropriate decisions in this regard. Minister shall also act in order to solve pending legal issues related to TRA among which the most important are:

- a. Appointment as a matter of extreme urgency, of the fifth TRA Board Member
- b. Issue a circular defining the binding procedures applying for exchange of documents between Ministry and TRA.

**15. Spectrum.** All functions, roles and missions falling to spectrum allocation, assignment, management, control of use of Radio Frequency Spectrum are part of "regulation of

Telecommunications services”, and TRA Commissioners are bound to follow the “general rules” as defined by Minister.

16. **Spectrum Allocation.** Spectrum allocation at National level is a Policy matter and, as such, remains under the sole responsibility of the Minister. The Minister, in setting out the Spectrum Allocation Policies, shall take into account resolutions adopted by ITU-WRC which resolutions have value of international treaties.

- a. **ITU-WRC.** Pursuant to this Policy Paper and in compliance with Decree **14264** (4/3/2005), TRA Telecommunications Technology Unit (TTU) shall assist the Minister in the national preparatory work for ITU World Radiocommunication Conferences (WRC). The internal ratification process of treaty valued WRC Resolutions and/or Final Acts shall remain under the solely responsibility of Minister;
- b. **High-Level National Spectrum Committee (HLNSC).** Minister is in charge of coordination with ministries, governmental & public authorities or agencies interested in the management of national spectrum. Minister shall set up under his personal chairship a High-Level national Spectrum Committee (HLNSC) to include high-level representatives from Ministry of Interior, Ministry of Defense, Lebanese Army Command, Security Agencies, Security Forces, Ministry of Information and Licensed Operators;

17. **Spectrum Assignment.** As provided for in Article 15 of Law 431, stating “The Authority may upon a notice not less than three months substitute frequencies for which the License is granted provided that such substitution does not affect the quality and efficiency of the service”, TRA has “exclusive power to assign, manage the Radio Frequency Spectrum and overview its use” and the Minister shall by all possible means empower TRA to fulfil this national core-mission with respect to *assignment* of Radio Frequency Spectrum, while TRA shall abide by the Spectrum Allocation Policy as defined by the Minister. Minister shall request from TRA to review all frequency assignments designated to licensed operators, in order to make sure they are following the guidance included in this Policy Paper and are serving the best interests of telecom sector in Lebanon.

18. **Spectrum Assignments & Allocations for MIC1 and MIC2 in the 900 and 1800MHz frequency range.** Such spectrum assignments and allocations have been already undertaken.

19. **Spectrum Allocation Policy in view of existing incumbent nationwide wireless operations.** As an integral part of this policy, the spectrum allocation policy and general rules with respect to spectrum that TRA shall assign to the incumbent nationwide wireless operators (Cable one, CedarCom, GDS, Pesco Telecom), is the following: For *access* services, none of the ranges from all of the 1.9 GHz, 2.3GHz, 2.5GHz, 2.6GHz, 3.5GHz and 26GHz frequency ranges shall be closed for assignment to incumbent nationwide wireless operators, allowing each operator to offer corporate and residential services on one hand and fixed, nomadic and mobile services on the other, in full compliance with the license originally issued by the

Council of Ministers or that to be issued by TRA as far as the allowed service offerings are concerned. For *Backbone and backhaul* services none of the ranges from all of the 7 GHz, 8 GHz, 15 GHz, 18 GHz and 23 GHz ranges shall be closed for assignment to incumbent nationwide wireless operators. Accordingly, when determining which amount of spectrum shall be assigned to each operator, TRA must take into consideration international best practices regarding which amount of spectrum bandwidth is technically needed by a modern operator for the provision of competitive advanced broadband services. Therefore, non-withstanding TRA's powers as set forth in the Law and in particular Article 15.4, TRA shall propose spectrum refarming taking into account the absolute legal obligation and necessity not to affect the quality and efficiency of services currently offered by the incumbent operators. It is also a matter of policy that technology-neutrality should be the rule and not the exception for any frequency assignment issued by TRA.

20. **Long term Licensing of Incumbent Operators, IPO on the Lebanese Stock Exchange.** It is Minister Policy that national incumbent operators should be granted licenses by TRA, the licensing features that will allow them to strongly compete in the Lebanese market, and offer high-quality advanced competitive broadband services. Consequently, the Minister defines as a rule for regulation that TRA grants incumbent operators new long term licenses (15 to 20-years licenses) with adequate spectrum assignment. It is Minister Policy and Rule of Regulation that such long term licenses include provisions imposing on licensees to open their shareholding base (minimum 33% of total in compliance with Lebanese Commercial Law) to the Lebanese Public through IPOs in the Beirut Stock Exchange within a predetermined time as of the license issuance. The participation of the Lebanese Public into the ownership of national Telecom operators (LT, Mobile, New PSTN operator, Broadband Licenses) and make sure the Lebanese maintain the majority of shareholders, if not wholly owned by them, is an integral part of the Policy and a key national strategic objective.

21. **Licensing Re-instated operators.** With respect to the licenses that have been cancelled previously by the Council of Ministers and that have been reinstated by the Council of State, TRA is requested to proceed with the assignment of amount of spectrum in the 2.3GHz frequency range. For those licensees that have already started operation, TRA is also requested to audit such operation and report to the Ministry to allow it to issue the proper invoice and recover the legitimate dues of the Public Treasury, in accordance with the provisions of the reinstated licenses. Licenses granted to re-instated operators shall contain provisions with respect to opening of shareholding to Lebanese Public through IPO exactly similar to what is referred to in paragraph 20 above.

22. **Licensing Newcomers.** TRA shall take into consideration licensing newcomers including foreign companies, yet giving a priority to Lebanese companies, provided this licensing occurs after LIBAN TELECOM is created and final licenses are issued to current incumbent and reinstated operators. Licenses granted to newcomers operators shall contain provisions with

respect to opening of shareholding to Lebanese Public through IPO exactly similar to what is referred to in paragraph 20 above.

23. **Spectrum License Fees.** It is within the Powers of the Minister, as set out in Article 3 of the Law, to propose to the Council of Ministers the appropriate fees due by each licensed operator for the use and the management of spectrum that has been assigned by TRA (Article 3.A.6, Article 3.A.7). The Minister will issue such proposals in a way as to encourage the development of telecommunications services throughout the country.

24. **Equal Treatment:** Competition shall be promoted through the implementation of Equal Treatment framework between all licensees (Incumbents, Re-instated, LT, Newcomers).

25. **Standardization:** Pursuant to this Policy Paper and in compliance with Decree 14264 (4/3/2005), TRA shall be in charge, under Minister's Policy guidance, of the national work on standardization and for the national coordination work with international or regional standardization institutes and notably with ITU standardization sector (ITU-T).

26. **Numbering.** TRA shall be guided to work on a National Numbering Plan (NNP) in order to prepare far in advance, the era of 3G and 4G of mobile services where universality of subscriber number may become technically possible.

## Ministry of Telecommunications MoT

27. Within the process of full and rapid implementation of the Law 431, the Minister will accelerate the reorganization of the Ministry of Telecommunications in compliance with Article 3.B of the Law and other relevant provisions. The MoT should be restructured in line with the need to reallocate resources between the Ministry and Liban Telecom.

## Liban Telecom

28. The minister's policy is to Launch the mobile network and services of Liban Telecom

29. Council of Ministers will approve the list of assets owned by MOT to be transferred to LIBAN-TELECOM ("*List of Transferable Assets (LTA)*") and its financial valuation before its incorporation in LT share capital and privatization. Minister shall submit a proposal for the creation of a Public Real Estate company 100% owned by MOT which shall keep the ownership of all buildings and lands currently owned by MOT, and the mechanism for using such assets for telecom projects.

30. Following the decision to be made with this respect by Council of Ministers, Minister shall start the process of creating LIBAN-TELECOM pursuant to provisions set for in Law 431 starting with the appointment of the five Temporary Board members. Considerations should be made to separate executive powers from supervisory powers and all necessary transitional activities should be undertaken with immediacy.

31. **Privatization of the Fixed Service.** As provided for in Law 431, Minister shall proceed with the work aiming at setting up the technicalities for the creation, incorporation and constitution of LIBAN TELECOM (LT) including the scenarios for selection of Strategic Partner (SP) that would own a maximum of 40% of LIBAN-TELECOM shares and the opening of its shareholding to the Lebanese Public at large (33% at minimum) through an IPO in the Beirut Stock Exchange. It is the Minister Policy to favor privatization option where such Strategic Partner would be a consortium bringing together a well-established, experienced telecommunication operator and Lebanese private investors. It is also the Minister policy that Lebanese institutional investors (Social Security Fund, Elderly Retreat Fund, Central Bank and eventually others) to be offered the opportunity to subscribe shares in LIBAN-TELECOM.

### International Affairs

32. The Minister shall concentrate efforts to improve relationship with international partners for the promotion of telecom projects. Minister shall draw a new framework for the cooperation with UN System bodies and agencies in particular with the International Telecommunications Union (ITU); with League of Arab States through *the Arab Telecommunications & Information Council of Ministers (ATICM)*; European Union, governmental development agencies (CFD, USAID, ACDI etc.), with professional forums ICANN, IPv6 Forum, GSM Association, UMTS Forum, WIMAX Forum and many others. The Minister will also carefully follow the work conducted by private sector associations such as Arab Business Forum for ICT (ABF-ICT), South-Asia Middle East & North Africa Telecommunications council (SAMENA) and will also participate in coordination with TRA in the work conducted by regional associations such as Arab Network of Regulators, ITU-Global Symposium for Regulators (GSR), UE-based CEPT and ERC, African Telecommunications Union and APT.

33. Minister shall personally lead the work conducted in Lebanon within WSIS framework under ITU leadership.

## New Telecom Landscape

34. **Network Audits.** The Minister shall request from a specialized firm to conduct an independent technical & physical audit of the Public Switch Telephony Network and operations (PSTN) and of MIC1 and MIC2 networks and operations and to submit recommendations with respect to “Revenue assurance” and “fraud management” including all relevant business-economy-model and according recommendations aiming at improving the operations of the Fixed and mobile networks and incrementing the revenues it could generate in the near future for the National Treasury.

35. **Networks Expansion and Roll-Out, Revenue Assurance (C-EIR + EIR-s):** the Minister has already launched a *Network Extension & Price Reduction (NEPR)* project aiming at increasing the radio-connection capability of each GSM network with not less than 400,000 new connectable lines each (which represents a minimal total of 800,000) as a first phase and later with additional 1,200,000 lines while reducing at the same time the GSM tariffs by not less than 36% (average) without diminishing the global collective financial surplus collected by National Treasury, as the Minister cannot accept that Mobile Voice Services remain in Lebanon a disguised tax burdening the activities of all citizens and business corporations. Following the GSM Network Rapid Expansion Plan that will reach the limit of 2.2 million line capacity and 1500 site by the end of the first half of 2009, a second expansion plan to start in the second half of 2009, this will lead to smooth and gradual change in the following:

- a. Increase the penetration rate of mobile users from 32%(2008) to 60%(2009) then 80-90% by 2010 reaching to more than 100% on later stages
- b. Gradual decrease in the ARPU from 74\$ (2008) to 60\$ (2009) moving to 40\$(2010) reaching a 20\$ ARPU on later stages (adopt billing per second, one year subscription and other corrective and reform measures.)
- c. Creation of special accounts with special features for Diaspora
- d. Creation of special accounts for students
- e. Moving towards new generation network and data services

36. Ensure a higher exploitation and penetration rate of the fixed telephony in order to utilize the existing capacity of 1.5 million subscriber; this has already started through the increase of 75,000 fixed line users in the last few months, this is also triggered by new services such as introducing new services like IPTV, decreasing monthly subscription fees, decrease international tariffs, prepaid cards, reaching rural areas with satellite technologies and other innovative services

37. **Privatization and Licensing of Mobile Service.** The two 100% state-owned companies (MIC1 and MIC2) would be subject to privatization and been sold with their respective portfolios of customers to two companies through a bidding process (auction and/or beauty-contest) managed by Minister with the assistance of High Council of Privatization and TRA. In

parallel with, within the process of and as support for, acquiring the assets of MIC1 and MIC2, the two companies shall each be granted a 20 years license giving them the right to:

- a. operate the existing 2-2.5G network infrastructure they had acquired using the spectrum the corresponding MIC has already been assigned in the 900MHz and the 1800MHz frequency ranges
- b. build and operate a new 3G network infrastructure using spectrum assigned by TRA in frequency ranges allocated by Minister for the provision of IMT2000 services according to decisions made with this respect by ITU-WRC 2007 and further WRC-s

It is the Minister policy that such bidding-process is to start after the creation and privatization of LIBAN TELECOM pursuant to the process described in Law 431 (Chapter VIII) and that LIBAN TELECOM been offered a Right of First Refusal to acquire one of the two MIC and been granted the related license, or give them the possibility of launching a third network as soon as possible. It is the Minister Policy that under such circumstances, all appropriate legal procedures should be conducted by Council of Ministers and furthermore if necessary by the Parliament to implement a proposal that Minister shall submit warranting that Lebanese individuals who had invested \$500 in the Mobile service during the BOT phase and who were never able to recover their investment to be compensated adequately, such as through shares in the new company

### Hi-Speed Broadband Internet & Data

38. In Lebanon, **Broadband Internet & Data** services are provided by one public entity (MOT / OGERO) a semi-public entity (SODETEL, 50% owned by MOT) and by 4 incumbent nationwide broadband wireless operators (Cable One, Cedarcom, GDS, Pesco) which are privately owned companies. Minister policy with respect to the new telecom landscape for broadband in Lebanon includes following players:

- a. LIBAN TELECOM and later, a Second PSTN Operator
- b. The five incumbent operators (including SODETEL), the two reinstated operators and later, 2 newcomers
- c. Local Area New Generation Network Operators

39. **Broadband License Features.** It is the Minister's policy that the Broadband licenses to be issued by TRA to the 5 incumbents, the reinstated operators and the new comers be identical. It is the Minister's policy that infrastructure sharing should be encouraged and that licensees should be encouraged to share, whenever feasible, the same backbone infrastructure. The licensees must have the right to install and operate core, aggregation and access networks using their assigned spectrum, the FTT-x networks to be installed, the PSTN infrastructure through the unbundling framework, the PSTN backbone through dark fiber allocations, and



the ducts through right of way and right of use frameworks, to lay down their own fibers, if necessary. The licenses will furthermore include International gateway features, landing and exiting rights (shared/unshared) to install new submarine cables if necessary, Earth Station rights to operate satellite-based connectivity, if necessary and freely self-procure their needs in terms of int'l bandwidth through fiber (submarine and terrestrial) or satellite. (According to a clear policy to be announced later, and in accordance with the applicable laws and regulations)

40. Local Area New Generation Networks (HD-LA-NGN) will have the right to combine throughout their assigned area, Optical Fiber (in cities with the approval, participation and support of MOT ) and wireless technologies (with the participation and support of the licensed wireless operators) to use their own int'l gateway and freely self-procure their needs in terms of int'l bandwidth. (According to a clear policy to be announced later, and in accordance with the applicable laws and regulations).

### Universal Broadband Access

41. Minister intends through "Broadband Lebanon" to achieve within a fairly short period the objective of Universal Broadband Access. "Broadband Lebanon" has the potential to create 40 to 60,000 direct and indirect sustainable jobs by end of 2013 and contribute to the national economic growth.

42. **Internet.** The provision of Internet services has started in Lebanon in 1995 and the number of permanent Internet connections in Lebanon is around 208,000 which correspond to 655,000 frequent users. Lebanon which total population is around 4,318,000 inhabitants (Lebanese citizens, foreign citizens including refugees), is hosting around 1,180,000 households (individuals, small corporations). Whatever is the criteria used to measure Internet penetration rate in Lebanon (households, population), it can be stated that such penetration rate is below 17.6% which represents an unacceptable level in view of the Lebanese potential and eagerness to use ICT-s. This situation is caused by two major factors:

- a. The lack of Internet Int'l Bandwidth (IIB) availability and affordability
- b. The low rate of Lebanese households' equipment with Desk-Top computers (28%) and the very low rate of Lebanese individuals equipped with Lap-Tops (3.6%)

It is Minister's policy to bring within a fairly short period the number of Internet subscriptions in Lebanon from existing 208,000 to 650,000 through:

- A new Bandwidth tariff Policy aiming at supplying ISP bandwidth needs on STM1 (155Mbit) to STM4 basis and not anymore on E1 basis as currently applying against a dramatically decreased monthly fee in order to reach ultimately \$200 per 1 Mbps following international practices. Such new tariff policy should allow ISP to offer

Internet access packages at tariff levels that are similar to those of developed Internet markets in Asia, Europe and North America. In order to achieve such objective, Minister shall launch within a short-term the implementation of a project carrying the Label “Lebanon Information Gate (I-Gate)” aiming at bringing abundant (above 20Gbits) and low-cost connectivity into Lebanon through sub-marine (I-ME-WE3 and others) and terrestrial optical fibers backbones. It is the Minister Policy to welcome and furthermore encourage participation of private licensed operators in the investments that Lebanon needs to consent in order to implement “I-Gate” within appropriate legal and regulatory frameworks notably public-private partnership framework. The procurement by Lebanon of large amount of int’l bandwidth to be used by all licensed operators is considered by Minister as a strategic objective for our country and therefore benefits from highest degree of priority

- Encourage the creation of joint funding projects leading to the use of all electronic services such as e-learning, e-commerce, teleconferencing, etc...
- Bringing Lap-Top penetration rate from 4% up to 35% (with an important focus on youth in colleges or universities who should all be equipped with Lap-Tops) and Desk-Top penetration rate from 28% up to 50%. In order to achieve such objective, Minister shall launch within a short-term the implementation of a WSIS project carrying the Label “Computing Lebanon” involving all interested stakeholders (Banks, Hardware suppliers, Int’l and Regional Financial institutions)

### New considerations in the Telecom sector

43. **Satellite Service, LIBANSAT™.** Minister is aware of the great importance for the future of Lebanon in developing satellite communications and with this respect, the Minister shall set-up an Ad-Hoc group which will include TRA TTU representatives to work on LIBANSAT™ a project aiming at launching a Geo-Stationary Orbit (GSO) satellite mixing:

- a. Various *civil* applications from the Fixed Satellite Service (FSS), the Broadcasting Satellite Service (BSS), Radio-Navigation Satellite Service (RNSS) all able to allow Internet connection through terrestrial antennas composing the ground segment. Particular attention should be granted to Broadcasters and Minister encourages the creation in Lebanon of Media Cities where they would be hosted and benefit from all technical and practical facilities including spectrum, digital channels, and sound video equipment.
- b. Various *military* applications
- c. Various *scientific* applications (earth-observation for meteorology, agriculture, mineral resources etc...).

44. With respect to broadcasting service received via terrestrial cables or unlicensed satellite antennas, MOT shall work with Ministry of Information, TRA and National Council for Audio-Visual in order to have this sector been better regulated in order to avoid unnecessary conflicts of interests at the era of convergence. Minister shall monitor the very complex process of migration of the terrestrial broadcasting service from analog to digital era. Minister shall also work on settling in the most human and most comprehensive manner, the complex business issues generated by the illegal provision of cable broadcasting services during the past 15 years.

45. **Call-Centers. Lebanon is an ideal place for building and operating Call-Center services. Minister has already approved fifteen projects and Minister shall encourage the deployment of additional projects. These Call-Centers shall create around 9,000 sustainable jobs to be carried by young females and males and would represent an important contribution to the national economic development policy.**

46. VOIP. After allowing the utilization of VOIP in Call centers, gradually adopting the use of this technology in other services in such a manner that does not negatively impact or harm the national interest

47. Consumer Protection: Consumer protection will become central as the market develops and grows. Concerned stakeholders (MoT, MoET, TRA and other GoL entities) and advocacy groups need to collaborate to appropriately shape and formulate needed consumer protection guidelines. Such guidelines should ensure a fair price and good quality policy and strict prevention of anti-competitive behavior by industry players. It must also be ensured that any premiums paid for licenses are not passed on to consumers.

48. Access to Infrastructure: An open access policy needs to be adopted to enable the right level of competition. Liban Telecom's infrastructure, along with all newly built infrastructure by new entrants will be catalogued and priced at levels optimal to develop competition while maintaining healthy investment incentives. Equal and non-discriminatory access to infrastructure (ducts, conduits, fiber, co-location) will be guaranteed through proper wholesale regulation. Overall, the open access policy specifically aims to:

- Expedite the development of the sector
- Optimize the use of scarce resources
- Avoid unnecessary duplication of networks
- Optimize added value created by investments

49. Applications and Services: The MoT shall work with all Government agencies and Ministries, hand in hand with the private sector, to enable the development of applications and services to support different industries and stakeholders, namely:

- Government sector

- Health industry
- Education industry
- IT industry
- Content and digital media industry

Additionally, telecom and media regulation will be re-examined and potentially streamlined to enable convergence and drive the next wave of growth through innovative and converged services.

50. **ICT Development:** ICT sectors, considered an extension of telecom sectors, are key to the development of information based societies and fuelling economic growth. The Minister shall initiate and promote to the GoL of Lebanon, with all relevant stakeholders to seek and formulate a revival plan for the ICT industry. Multiple initiatives are needed across different government constituencies to:

- Define and allocate a budget to encourage R&D
- Mature and enforce intellectual property protection
- Incentivize investments in the ICT sector
- Increase PC penetration through public/ private partnership
- Collaborate with relevant authorities to support and enforce an up-to-date ICT program in educational curriculums
- Develop needed e-commerce enablers (e-signature, e-banking, privacy and security regulation...)

### Security, Telecom for Emergency and Disaster Recovery

51. **Resilience and Redundancy, Disaster Recovery:** Different technologies and connectivity routes will be required to ensure that the sector is resilient enough when faced with natural disasters or other form of faults with severe impacts. Modern Emergency and Disaster Recovery procedures will also be developed and enforced on licensed service providers.

52. **Defense and National Security.** Minister shall deal with network security and security of content carried by Lebanese telecom network infrastructures pursuant to WSIS principles; The MoT needs to seek, in collaboration with all forms of legitimate law enforcement and defense agencies, to regularize and properly channel access to telecom records and telecom surveillance serving purposes of national security and sovereignty. In addition, all measures should be taken to protect consumer data and privacy, particularly following the privatization of telecom assets

- a. *Lawful Interception:* Minister shall deal with this extremely complex and sensitive issue with an aim to re-establish confidence in our national legal interception system and model. In order to achieve this objective, Minister shall ensure that:

- Interception is always lawful (conducted pursuant to judicial or administrative request)
- Interception is compliant with highest ethical principals as defined by int'l community and with highest int'l technical standards institutes and,
- Interception is never unduly attempting personal privacy.

b. *SPAM*: Minister shall work with TRA, DSP and ISP in order to implement recommendations of ITU-led anti-spam WSIS Group

c. *Cyber-Security*: Minister is committed to lead the national effort against use of telecom networks for purposes of terrorism, financial fraud, pedophilia and child abuses, economic spying and more generally al types of cyber-criminality. Minister shall work with Ministry of Justice, Security & Intelligence agencies, with Interpol and other regional police organizations, in coordination with TRA, DSP and ISP in order to implement international recommendations (ITU) regarding Cyber-Security

53. *Illegal Operations*: Control of all illegal telephony, through finding a fair legal frame work and motivating those in breach to engage in new legislation and regulations, rather than punishing and prosecuting them. Controlling illegal telephony through the adoption of modern systems to control the revenues (Revenue Assurance), and control of theft (Fraud Management) and through the proper control and management of Quality control through Key Performance Indicators (KPI's).

**Beirut**

**Eng. Gebran Bassil**

**Minister of Telecommunications**