



Background: VoEx International LLC

Since inception in 2001, the founders of VoEx have seek excellence and technology innovation each within their own field of expertise and with the common base being Enhanced Global Mobility Services and Products (EGMSP) that molds all our offerings in one global communications medium.

By now, VoEx International LLC has set foot in many countries, regions and territories and delivered various services in many diversified telecom fields. Our Founders have been actively involved in the development and setting standards for:

- 1- IP Trunking as the ultimate communications Voice & Data medium
- 2- IP Based applications including Wireless Voice, Video and Data (*Single or Dual Mode*)
- 3- Design of GSM, CDMA, WCDMA/UMTS and iDen networks for development in the Middle East and Africa regions.
- 4- Design of Data Centers for third world countries
- 5- Standardization of Wireless Internet including WLL, WiFi, WiMAX and 802.20
- 6- Design, Build & installation of Satellite Communications including VSATs and SAT Phones
- 7- DNS development and evolution including stepping into the e164 arena

VoEx is currently recognized among the leaders in the Middle East & North Africa MENA region and is expected to have an active role in the design and upgrade of telecom for the next decade. VoEx officers have been recognized and spoke at events for the UN, ITU, ICANN, ABFICT, GITEX and other telecom events and seminars related to the deployment of Mobile Networks including WLL for Voice & Data.

VoEx's Chief Strategy Officer Dr. Alnajjar and VoEx executives through the different forums has participated actively in setting the grounds for the 4G of telecom or what will be trade marked as *WiVoIP* (Wireless VoIP) or *VoWLAN* (Voice over WLAN) as the ultimate evolution of Mobile Services.

So far, VoEx Wireless Team and Technology partners Arcade Technologies AG have provided full operational LAN, WAN, WLAN, GSM, CDMA2000 or iDen mobile networks, serving many capitals and local markets in third world countries. Our enhanced VoIP network and long-distance rates through our mother company VoEx has put us ahead of the competition in any market and attracted partnerships with the majors. Services include expansion and upgrades of Mobile-Data Networks in Europe, the Middle East & Africa and to facilitate Satellite & GSM operations support. Long-distance capability through VoEx terminations has in fact enhanced mobile operators business in the Middle East & Europe.

Some of our Past Experience includes, but not limited to:

- 1- Design-Build-Operate of VoIP Centrex with customized enterprise & IP Mobility solutions.
- 2- Design-Build-Operate for GSM, CDMA, WLL or iDen mobile networks.
- 3- Design-Build-Operate for Mobile-Data, WiFi and WiMAX networks.
- 4- Development of handheld devices (SmartPhones, PDAs and Softphones)
- 5- Development of applications utilizing all layers of the DNS including e.164 standards
- 6- Satellite Phones and communications
- 7- Provide a variety of added value services to mobile operators (Edge/ UMTS/ WCDMA)



Since late 2000, our officers have been active in Europe and the Middle East, participating in mobile & roaming standardization through the extensive work of ITU and WiMAX forum. We are currently positioned to lead the way for alternative mobile communications as part of the global network, and be among the decision makers for the Wireless VoIP market as a whole. VoEx is currently among the teams whom are considered for the deployment of Citywide Wireless Internet in third world countries.

Last March 2004, May 2004 and January 2005, VoEx was the only non-mobile operator invited to speak on the future of Mobile Communications and the 4G forecast at the UN, ESCWA and the ITU respectively.

Mobile & Wireless Division

- Design-Build of Mobile Networks (GSM, CDMA, TDMA, WCDMA, WLL, iDEN)
- Planning, Realisation and Support of Mobile Networks
- Network Planning & Dimensioning
- Site Acquisition negotiating
- Deployment of Standard WMAN & WLAN services
- Integration of VoIP Solutions for Mobile Operators
- Seamless Handover Mobile Solutions
- Design & Installation of Satellite Terminals (C, Ku, VSAT ...)

Engineering & Design Division

- Turn Key Solutions Planning & Deployment Strategy
- Project Planning & Construction Management
- Telecom Solutions for Enterprises
- Authentication & Billing platforms and software

Research & Development Division

- Product research and design development (Ericsson, Nokia, Lucent, Nortel & Intel)
- IP Trunking & VoIP solutions & products (Cisco)
- White Paper Development for the next generation of mobility
- Design & Testing of Fixed & Mobile terminals for GSM & CDMA networks
- Research & Development for several technologies

- ✚ GSM with 3G, UMTS & VoWLAN
- ✚ WCDMA Voice & Data (WLL)
- ✚ WIMAX for Back Hauling & End Users
- ✚ WLAN (802.11 a/b/i/g)
- ✚ Back Hauling via Microwave Networks

Websites:

<http://www.VoExIntl.com>

<http://www.VoEx.com>

<http://www.VoEx.us>



VoEx Wireless Experience

VoEx International and partners have been actively involved in Europe, Middle East & North Africa Countries for the Study, Planning, Case Studies and deployment of many telecom innovations including wireless alternatives.

Our work and experience includes as explained in the following pages extensive knowledge and experience in the Design, Build, Evaluation and Deployment of many Mobile Network for Third World Countries.

Mobile & Telecom Forums

Development and discussions for GSM, iDEN, CDMA/ WCDMA & EvDo network design, standards & business case studies to provide evolving markets with advanced Voice & Data services.

CURRENT PROJECTS – IRAQ

Iraq (WLL National License) September 2004 – Ongoing

Developed a business plan & case study for the deployment of a national WLL networks submitted for the approval of the Iraqi Ministry of Telecom. Proposal included:

- ✚ Market Study and evaluation of consumer needs
- ✚ Projection of the required capacity within the different regions and market segments
- ✚ Development of several profit sharing models for financing & funding of the different phases of the intended WLL networks as it relates to the Iraqi National Economy
- ✚ Recommendations for the technologies to be used and implemented for the various segments and components of the network to be specified in the tender document.
- ✚ Preparation of the legal contract and partnership frame work for the bidders.
- ✚ Establishing guide lines for the marketing strategy control and consumer products offered
- ✚ Establishing guide lines for the annual fees, activation fees & procedure, gross profit margin sharing and public stock offerings.
- ✚ Put scoring system, scales and measure to evaluate the various bid submittals.
- ✚ Establish evaluation, announcement and final signature procedures.
- ✚ Will negotiate with the winning parties the deployment & contract specific once awarded at a later date in 2005.

Irbil – Iraq February 2005 – Ongoing

- ✚ Design-Build of a 120,000 subscriber WLL network as an anticipated joint venture with Lucent to provide Fixed Terminal solution for Voice & Data.
- ✚ Prepare Detailed Market Study and focused consumer needs and products.
- ✚ Prepare investor's packages and business model projections and profitability.
- ✚ Development of a complex profit sharing model for vendor financing & funding through stocks and options for the deployment of the intended WLL network in Irbil.
- ✚ Negotiate with the vendors and subcontractors to build the best network with the least cost to the operator.
- ✚ Develop an extended three year marketing strategy
- ✚ Comparison and evaluation tables for the different technologies and products considered for each component of the network.
- ✚ Perform the required Civil Works for the building of the communication towers for the back haul connectivity of the network.

Baghdad – Iraq October 2003

Ongoing case study for WLL Voice & Data network to allow complete project deployment and evaluation of the WLL network for the Iraqi market. Work so far included the evaluation of many alternatives for network connectivity, technologies and back hauling. Solution addressed the need for a quick deployment for essential telephone connectivity.



Iraq (GSM National License) May 2003 known as "ZAGIL"

- # Participated in the final bid and was among the first runner ups.
- # Prepare full market study and evaluation with extended business models. Work included evaluation and recommendations of the different technologies that can be deployed.
- # Active role in the preparation of the technical requirements
- # Leading role in the writing of the final tender and its legal requirements.
- # Establish guidelines and milestones to measure operator's performance as required by the license deployment and network role out.
- # Evaluation of the evolution of the Mobile Network in this virgin market and provide the Iraqi Government with detailed report of actual vs. projected scope.

CURRENT OTHER PROJECTS – Other Countries

Egypt October 2004 & February 2005

- # Development of profit sharing models for the expansion of the different phases of the recommended WLL networks as it relates to the evolving Egyptian Telecom Market in lieu of the deteriorating copper telephony.
- # Market Study and evaluation of consumer needs
- # Recommendation of end user Voice & Data solutions through WLL in rural areas
- # Projection and market feasibility study to show growth potential in rural cities of Egypt

Nepal December 2004

- # Development of several profit sharing models for financing & funding of the different phases of the intended GSM or CDMA network.
- # Development of a WiMAX solution for private ISP operation
- # Design-Build of Satellite-GSM solutions to allow seamless connectivity
- # Design-Build VoIP gateway and mobile interface to allow PSTN to GSM international long distance connectivity.

Algiers January 2005

- # Technology Study and evaluation of specific network needs for the law enforcement
- # Recommendation of end user Voice & Data solutions through WLL and or Tetra technology
- # Full analysis of the existing wireless and mobile infrastructure with recommendations for upgrades and added value services.

Some VoEx Partners' background:

IT Division

- Planning, Realisation and Support of ICT Networks
- Network Dimensioning
- Planning and Construction of WAN's
- Datacenter Design and Construction
- Construction of Standard and Temporary WLAN Spots
- Security Solutions (Firewall, IDP, Antispam, Antivirus, etc.)
- Backup Solutions (NAS, SAN, iSCSI etc.)
- Integration of Server-Solutions (Linux, Windows)
- Integration of VoIP Solutions
- Mobile Solutions (ConnectAnywhere)
- Development and Integration of Accounting and Authentication (Radius) Servers for Telecommunication Enterprises

Application Division

- Conception and Project Management
- Development of Site Management Solutions
- Development of Accounting Solutions
- Development of Individual Web Applications based on PHP, ASP, .net etc.
- Emergency Programming
- Development of Mobile Applications
- Online Payment Services

Datacenter Division

- Server Housing (e.g. Radius Server, Accounting Solutions)
- Shared and Dedicated Hosting
- Outsourced Security Solutions
- Outsourcing of Carrier and VoIP Servers

Communication Division

- Geo Marketing Analysis
- Business Case Development
- RF Engineering
- Radio Planning
- Network Engineering and Dimensioning
- Backhaul Engineering
- Site Acquisition (We dispose of a large site database)
- Construction of Sites as General Contractor
- Commissioning and Maintenance of the Sites
- Development of Individual Hard- and Software-Solutions
- Temporary Sites
- Mesh-Networks

Technologies

- WLL
- WIMAX (802.16 and Prestandard Proprietary Solutions)
- GSM/UMTS/Paging
- WLAN (802.11 a/b/g)
- Point to Point Microwave Networks
- Point to Multipoint Microwave Networks