# AFRICA & THE MIDDLE EAST TELECOM

Monthly Newsletter Covering Telecom Developments in Africa and The Middle East

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#### **BAHRAIN**

### Bahrain's TCCM is the second-highest in the Arab region

A recently released report has said that Bahrain has the second-largest number of telecom subscribers in the entire Arab region. Jordan-based Arab Advisors Group said that Bahrain's total country connectivity measure (TCCM) has reached 210.4 percent.

The TCCM, which denotes the telecom (fixed-line, mobile, and Internet) connectivity of people in a given country, is arrived at by adding up the household fixed-line penetration rate and mobile phone/Internet penetration rate of a country. The UAE bagged the first position, reporting a TCCM of 329.5 percent. Bahrain was followed by Saudi Arabia (207.9 percent), while Qatar (193.1 percent) took the fourth spot. It was followed by Kuwait (164.7 percent) and Oman (153.7 percent).

#### **BERLIN**

#### NSN conducts field trials of LTE in Berlin

Nokia Siemens Networks is conducting trials of LTE (long-term evolution) and MIMO (multiple-input, multiple-output) technologies in Berlin. The company, which aims

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to achieve mobile Internet speeds of 173Mbps, is carrying out the trial in alliance with the Heinrich-Hertz Research Institute. NSN is using an LTE base station using 20MHz spectrum in the 2.6GHz band. Road vehicles powered by LTE terminals are driving within one kilometer radius in order to gauge the base station's throughput. In 2007, NSN had showcased LTE/MIMO mobile transmission at speeds of 160Mbps.

#### **EGYPT**

## Vodafone Egypt unveils ADSL services in the country

Mobile service provider Vodafone Egypt is venturing into the fixed-line segment by launching its ADSL service.

The operator, which is a joint venture between Vodafone Group and Telecom Egypt, announced that it is committed to providing high-speed services for business as well as residential customers.

The ADSL service comes with free installation and a locally made router. Telecom Egypt is the incumbent operator in the country, with more than 260,000 users.

### Orascom Telecom Rekindles Interest in Sub-Saharan Africa

Five years after selling off its empire of mobile operators in sub-Saharan Africa, the chairman of Egyptian operator Orascom Telecom, Naguib Sawiris, said this week that "we believe that within the next twelve months we could add up to six more countries, all in Africa." Through its February 2000 acquisition of an 80% stake in Telecel, Orascom once had the largest footprint of all mobile operators in sub-Saharan Africa: Benin, Burkina Faso, Burundi, the Central African Republic, Chad, Congo, Côte d'Ivoire, the Democratic Republic of Congo, Gabon, Togo, Uganda, Zambia, and Zimbabwe. However, the operator restructured to focus on the larger more lucrative markets of

North Africa and the Middle East, broke up Telecel, and succeeded in selling off all but one (Zimbabwe) of its subsidiaries in the region.

Significance: Orascom approximately 74 million customers in six countries as at 31 March 2008 (Algeria, Bangladesh, Egypt, Pakistan, Tunisia, and Zimbabwe), with an average penetration of 41%. The operator looked for new expansion into the Middle East during 2007, but struggled to match the financial strength of other major Middle Eastern operators, which consistently outbid it and won the licences that became available. Rival Middle Eastern operators including Etisalat, Warid Telecom, and Zain have expanded dramatically into sub-Saharan Africa, even acquiring some of Orascom's former assets. During May 2008 Orascom then created a new subsidiary called "Telecel Globe" to look into small-sized acquisitions in Asia and Africa, according to Dow Jones newswire. The plan is to bid for new mobile licences that will become available in the region during the year. The target of six more countries within a year, however, hints at the potential acquisition of a smaller operator, which could scoop so many countries in one go.

#### **GHANA**

#### Vodafone to buy GT for \$960 million

According to the Daily Guide, Vodafone will acquire Ghana Telecom (GT) for \$960 million in July 2008. The newspaper reported that Vodafone has finished its talks with the Ghana government for buying 66.7 percent holding in the state-run telecom operator, which has been lined up for privatization since 2007.

Vodafone was reportedly the only firm that was holding talks with the Inter-Ministerial Committee. The Ghana Investment and Promotion Council (GIPC) and the committee were quite happy with the bid submitted by Vodafone. Communications Minister Benjamin Aggrey Ntim said that the new owner of the firm

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will be announced this summer. Earlier, France Telecom emerged as the victorious bidder for Ghana Telecom. Firms like South Africa-based Vodacom and Portugal were the other bidders. But the government intervened and demanded a revised price of \$1 billion, which was unacceptable to the French operator.

#### **MALAWI**

## Celtel Malawi to spend \$90 million for upgrading its network

Celtel Malawi, an affiliate of the Middle East and African (MEA) telecom service provider Zain Group, has announced its decision to invest around \$90 million in the financial year 2008/09 for boosting its network and expanding its coverage to all areas of Malawi. The service provider intends to use a portion of this amount to reduce the price of its mobile handsets. Celtel Malawi's decision to slash the cost of handsets comes after the government recently announced an initiative to roll out new tax norms. The government said in the national budget presentation that it planned to abolish a 25 percent excise and customs duty on imported mobile phones. However, it will also introduce a 10 percent domestic excise tax on airtime.

#### **NIGERIA**

#### NCC to conduct auction of 2.5GHz spectrum

According to IDG News Service, the Nigeria Communications Commission (NCC) is planning to conduct an auction of spectrum in the 2.5GHz band for boosting the broadband penetration rate in the nation. NCC chief executive officer Ernest Ndukwe said that the issuance of licenses in the 2.5GHz spectrum band makes sense as this band is allocated for establishing broadband infrastructure. Currently, the Nigeria Broadcasting Commission (NBC) owns some spectrum in this band. However, NCC said that the spectrum, once released, would be provided to telecom operators. The

spectrum could also be used for providing WiMAX services.

### Nigeria's Phase 3 Telecom has spent \$100 million on fiber-optic project

Nigeria-based telecommunications carrier Phase 3 Telecom said that it has spent more than \$100 million on an optical fiber project that could drastically improve the range and quality of telecom services in the country. The company's chief executive officer, Mr. Stanley Jegede, has said that the company remains committed to boosting its telecom services and is willing to invest another \$200 million to expand its fiber-optic coverage across Nigeria. He said that Phase 3 invested \$100 million to deploy fiber-optic cables in various cities of the country. The firm currently provides international voice services to GSM, PSTN, pan-European calling card players, and Tier 1 traffic carriers. Phase 3 also provide international connectivity via SAT3 in the city of Lagos, where a gateway links to its PoP in London, thereby establishing connectivity with more than 370 carriers.

### Celtel Nigeria unveils new fixed payphone service

Celtel Nigeria has unveiled a new fixed payphone service for Nigerians who either cannot afford mobile phones or are residing in areas where the usage of mobile phones remains restricted. The new fixed payphone comprises a fixed-payphone terminal in addition to a SIM card that can be recharged like any other prepaid SIM card. According to the operator, the new service will greatly help the cause of the government's Universal Access Initiative, which was formed to boost telecom penetration in the country.

## Nortel signs \$45 million deal to upgrade Multi-Link's network in Nigeria

Telecommunications company Nortel Networks Corp. announced that it has entered into a three-year agreement with Nigeria-based

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Multi-Links Telecommunications Ltd. for expanding and upgrading the latter's network. The company said that this deal is initially worth \$45 million. The enhanced network would use Nortel's CDMA 1xEV-DO Rev A solution to provide high-speed cellular broadband access to Multi-Link's users in the city of Lagos.

#### **OMAN**

### Omani Government starts process to sell 25 percent stake in Omantel

The Omani government, acting through the Ministry of Finance, announced its intention to explore the partial sale of its shareholding in Oman Telecommunications Co. S.A.O.G (Omantel).

The government invited the submission of expressions of interest from suitably qualified strategic investors in respect of participating in a process leading to the sale of an interest representing 25 percent of Omantel's issued shared capital. In conjunction with such a sale, the government may also consider providing the selected strategic investor with certain rights enabling it to increase its economic and voting exposure to Omantel.

While Omantel has maintained leadership across all telecom segments, the government is seeking a strategic partner to further strengthen Omantel's market position and establish Omantel as a world-class provider of telecommunications services both in the Sultanate and internationally.

Darwish Bin Ismaeel Bin Ali Al Balushi, secretary general of the Ministry of Finance, said, "The further privatisation of Omantel is another example of the Government's commitment to liberalising the economy and seeking to support the creation of world class Omani companies.

The Omani telecom market still has excellent growth potential and Oman offers an attractive economic environment which we are certain will appeal to bidders."

Citigroup Global Markets Limited, as lead advisor, and National Bank of Oman, as local advisor, are acting as financial advisors to the government in connection with the proposed sale. The government expects the sale to be concluded by the end of 2008.

### Omantel signs agreement to extend MENA cable to Oman

Oman Telecommunications Company (Omantel) and Middle East and North Africa Company (MENA) of Egypt have recently signed an agreement on the landing of a submarine fiber-optic cable on the Omani coast to enhance international telecommunications traffic between the Sultanate of Oman and the world.

Dr. Mohammed Bin Ali Al-Wohaibi, the chief executive officer of Omantel, signed the agreement on behalf of Omantel, while Dr. Nagi Anis, the director of Middle East and North Africa Cable Project, signed the agreement on behalf of MENA Company.

In a statement, Dr. Mohammed Bin Ali Al-Wohaibi stressed the importance of the agreement, as it would introduce huge capacities for submarine cables in the Sultanate. The project would provide great services for international telecommunications traffic, especially the Internet, through fiber optics in case of any cable cutoffs. It would provide alternative lines for international telecom network, as well as upgradeable transmission facilities in support of Internet, e-commerce, video, data, and voice.

Dr. Al-Wohaibi said that Omantel constantly seeks to make the Sultanate an important hub for international telecom traffic through a submarine cables network that guarantees uninterrupted telecom traffic between the Sultanate and world countries on one hand and between world countries themselves on the other. This was made possible in view of the strategic location of the Sultanate. Therefore, many companies endeavor to exploit the Sultanate's secure

location between the East and the West to facilitate the international telecom traffic.

Omantel's CEO indicated that the MENA Cable Project, which is implemented by the Middle East and North Africa Company, an affiliate of Orascom Telecom, is vital for the telecom sector as a whole because the cable passes through many countries besides the Sultanate of Oman, including Mazara in Sicily, Italy; Crete in Greece; Alexandria and Suez in Egypt; Jeddah in Saudi Arabia; and India.

The cable landing point will be executed in Wilayat Al Seeb, where Omantel Submarine Cables Center is located. This center is used as the main hub for submarine fiber-optic cables landing in the Sultanate. Dr. Al-Wohaibi added that the total cost of the MENA Cable project is about US\$400 million. The 8,000-kilometer-long cable, which would provide a total capacity of 5.7Tbps, will arrive at Wilayat Al Seeb during the third guarter of 2009.

Omantel would achieve great benefit from the MENA cable, as it will enable the company to provide its subscribers with large capacities, besides the fact that it would provide new tracks in case of any mishaps in any submarine cable lines. Dr. Al-Wohaibi indicated that Omantel is always seeking to diversify its income mix through the agreements it concludes with international companies, especially in the area of submarine cables, which have become of great importance to telecom traffic. Submarine cables have also gained great interest of world companies and countries, being the most important element to facilitate the international telecom traffic in the next stage, the company said in its statement.

Omantel CEO noted that the company has recently jointed 15 international telecom companies in signing the Europe-India Gateway project for the building of an international broadband fiber-optic submarine cable extending from the United Kingdom to India and passing through the Sultanate of Oman and other countries. The US\$700 million EIG project

would enhance diversity in the service of these fast-growing regions in the telecom sector and investment environment.

Dr. Al-Wohaibi added that the submarine cable system is designed to provide a range of communications up to 2.88Tbps using dense wavelength division multiplexing (DWDM) technology to provide upgradeable transmission facilities that support Internet, e-commerce, video, data, and voice.

Oman Telecommunications Company (Omantel) is the sole integrated telecommunications services provider in Oman. The Sultanate of Oman, through its strategic location on the crossroad of the Gulf, Middle East, and Indian subcontinent, has become a major landing point for global cable connections including FALCON, SEA-ME-WE-3, and TW-1. In addition, Omantel has established direct links with its adjacent neighbors in the region. Omantel is currently working on additional cable landings to extend its reach to all continents. Furthermore, it possesses a resilient network that is capable of providing uninterrupted service to its customers.

#### **PAKISTAN**

## Warid Telecom's investment in Pakistan to reach \$2.5 billion by end of 2009

Warid Telecom (Pakistan) chief executive Mr. Marwan Zawaydeh said in an interview that the firm's investment in Pakistan would touch \$1.5 billion by this current year's end. He added that the telecom operator will put in an additional \$1 billion next year for expanding and improving its services in the country. Mr. Zawaydeh also spoke about Warid Telecom's expanding business in Pakistan. He said that the number of destinations of the telecom operator in the country is likely to increase from 5,000 to 8,000 by the end of next year. Warid Telecom is one of the biggest international roaming networks globally and has roaming alliances with 200 worldwide operators.

## Pakistan Mobile Communications Ltd. company profile

Pakistan Mobile Communications Ltd. is the leading GSM cellular provider in Pakistan. It provides its services under the brand name of "Mobilink." It was incorporated in December 1990 as a private limited company and commenced operations in August 1994. As at June 30, 2007, it had more than 26 million subscribers, of which approximately 98 percent were prepaid subscribers.

Mobilink is now wholly owned by Orascom Telecom, which operates GSM cellular networks in the Middle East, Africa, and Asia. This is after Orascom Telecom acquired the remaining 11.3 percent stake for US\$290 million from Saif Telecom Ltd. in June 2007. Mobilink currently has 10 directors on its board.

With total assets of about US\$10 billion as at June 30, 2007, Orascom Telecom's most significant operations are in Algeria (forming 48 percent of first-half 2007 consolidated group EBITDA), Pakistan (24 percent), Iraq (12 percent), and Egypt (14 percent). Mobilink has obtained extensive operational benefits from its parent.

These include cost-efficiency — particularly in the negotiation and procurement of network equipment from suppliers, technological and management assistance, and management know-how — all of which support Mobilink's competitive advantage. Orascom Telecom's strategy is to continue exploring opportunities in markets with low telecom penetration rates and high growth potential, many of which are perceived to be high risk. The group is still acquisitive and open to new ventures.

Mobilink benefits from Pakistan's large population of over 165 million and low wireless penetration rate of only 40 percent. Domestic wireless subscriber growth has been supported by improvement in regulatory policies, such as the introduction of "calling party pays" and reduction of regulatory charges (activation tax).

In addition, the entry of new players, significant investments by large foreign players, and availability of used handsets have increased competition, lowered charges, and made handsets more affordable.

The market remains propelled by voice applications on the second-generation (2G) network. Nevertheless, Mobilink may be faced with a weaker operating environment and reduction in spending on telecommunication services due to potential economic slowdown as a result of the heightened and prolonged political uncertainty in Pakistan.

Mobilink's market position is strong, controlling more than 40 percent of the domestic wireless segment as of June 30, 2007. There are currently six players in the market, and the second-largest operator — Pakistan Telecom Mobile Ltd., a wholly owned subsidiary of Pakistan Telecommunications Co. — holds about 22 percent market share.

Competitive pressure intensified after the entry of Telenor Pakistan Ltd. and Warid Telecom Ltd. in April 2004. Both have captured about 17 percent each in about three years since they commenced operations, following extensive promotions. Moreover, the competition is expected to heighten with the entry of foreign players in the domestic market. In January 2007, China Mobile Ltd. acquired an 89 percent stake in Paktel Ltd., the fifth-largest operator in Pakistan.

China Mobile plans to invest about US\$700 million to establish 2,500 base stations over the next three to four years. In addition, Singapore Telecommunications Ltd. acquired a 30 percent stake in Warid Telecom. These foreign players are leading service providers in their respective domestic markets, and apart from infusing funds required for capital expenditure, they are also expected to contribute the required expertise to operate in a competitive market.

Nonetheless, these competitors are unlikely to pose a significant competitive threat

to Mobilink in the near term, given their limited network coverage. However, aggressive pricing competition by all other players to gain market share would continue, and this could exert downward pressure on all operators' profitability and cash flows.

Mobilink's key competitive strengths over its competitors include its established brand name and extensive network coverage, which is almost double that of its competitors. In addition, Mobilink has a strong distribution network, and the company has expanded rapidly in the past few years. The size of its network presents Mobilink with significant on-net traffic advantage. The company continues to spend significant capital to strengthen its competitive advantages, especially as existing operators build up their network capability. To date, more than half of the domestic population is covered by Mobilink's network.

The country's regulator, the Pakistan Telecommunication Authority (PTA), is becoming more pro-competition and continues to experiment with policies relating to licenses, open access, and other market structure issues. Nevertheless, the direction of Pakistan's telecommunications policy is largely positive. This follows the establishment of a licensing framework that comprises six national mobile licenses, 14 long-distance international licenses, and 51 regional local loop licenses (including wireless local loop). Several regulatory decisions made in past two years were as follows:

- Further reduction of activation tax for new cellular connection by 50 percent to PKR500 (US\$8), effective in June 2006. Before the reduction, the tax was US\$16 in 2004 and US\$33 before that.
- Reduction in mobile termination rates to PKR1.60 per minute from PKR2, effective from August 2005.
   Termination rates have been lowered further to PKR1.25 per minute.

 Implementation of mobile number portability in March 2007.

Overall, the impact of the new developments is neutral for the company, as they promote further growth for the industry. In 2006, Mobilink renewed its cellular license for 15 years to 2022 at a cost of US\$291 million. This fee is payable in stages.

Despite intense competition, Mobilink's profitability measures have improved slightly to 40 percent for the half-year ended June 30, 2007, compared to 38 percent in fiscal 2006 mainly due to continued subscriber growth and realization of economies of scale. In addition, Mobilink has started using its own backbone for long-haul rather than relying on the leased lines from fixed-line operators. The full impact of savings is expected to be incurred in fiscal 2008. Despite its leading market position, Mobilink's profit margins are lower than some of the leading players in the emerging market due to the management fees that the company needs to pay to the parent company. Going forward, increased competition is expected to result in moderate subscriber growth and further declines in average revenue per user (ARPUs). However, the margins are expected to remain in the range of 35 percent-38 percent, given improvement in economies of scale.

Mobilink is suffering from weak cash flowprotection measures, increased competition, and high distributions to shareholders. But the company is considered to be in a strong market position, enjoys first-mover advantage, and sees a daily flow of strategic benefits from its parent company.

Mobilink's cash flow-protection measures are expected to remain weak due to high capital expenditures, which will be financed mostly by debt. To accommodate significant increase in traffic driven by subscriber additions and to improve its network coverage, the company plans to spend about US\$1 billion in capital expenditures in the next two years to expand its network; 51 percent of the capital outlays will

be spent in 2007. Mobilink's ratio of funds from operations (FFO) to debt is expected to be about 20 percent-25 percent in the near term, with total debt to EBITDA to peak at about 3x. In the first half of 2007, FFO to debt was an annualized 24 percent, and total debt to annualized EBITDA was about 2.7x.

Competition in Pakistan's six-player wireless market has heightened after the entry of newer players to take advantage of strong demand due to low penetration of telecommunications services. This is expected to intensify further with large foreign players supporting some of the players.

However, the competitors are unlikely to pose a significant threat to Mobilink, at least in the near term, given their limited network coverage. With wireless penetration rate reaching 40 percent as at June 30, 2007, pricing pressures will continue to emerge as existing operators pursue aggressive pricing and promotions in order to build market share. This could lead to margin pressure and affect Mobilink's profitability and cash flows.

Mobilink has historically delivered high distributions to its shareholders in the form of management fees and dividend payouts. This policy is expected to continue in the near to medium term, subject to Mobilink's cash flow position.

These weaknesses are offset by the following strengths:

- Leading market position: Mobilink controls more than 40 percent of Pakistan's wireless market. At June 30, 2007, the company had more than 26 million subscribers, compared with its nearest competitor, which had about 14 million subscribers. As a result, Mobilink has maintained its operating margins relative to its peers while retaining its dominant position in the sector.
- First-mover advantage: Mobilink has established brand names and the widest network coverage of over 6,000 towns, cities, and villages as of June 30, 2007 about double

that of its key competitors. These are driven by its strong distribution network and the company's rapid expansions over the past few years. Its network coverage has reached 60 percent of the total population of Pakistan and 95 percent of the urban population. The size of its network presents Mobilink with significant onnet tariffs advantages.

- Strategic benefits from Orascom Telecom Holdings: Operational benefits from the shareholder include cost-efficiency — particularly in the negotiation and procurement of network equipment from suppliers, technological and management assistance, and management know-how, all of which support Mobilink's competitive advantage.

Mobilink's near-term liquidity seems to be adequate. As of June 30, 2007, the company had about Pakistan rupee (PKR) 28 billion (US\$462 million) of debt (including equipment payables and Export Credit Agency [ECA] loan amounting to US\$180 million) due in one year, as against a cash balance of more than PKR7 billion and expected average FFO of PKR18 billion-PKR20 billion. Liquidity is also supported by committed credit facilities of up to US\$234 million, which is expected to be used mainly for funding the company's capital expenditure plans and refinancing existing ECA loan.

The company recently completed refinancing about US\$100 million of short-term borrowings. In addition, Mobilink is currently working on restructuring some of its local debt to lengthen its maturity profile and reduce cost of funds to mitigate the refinancing risk.

Recovery prospects in the event of a default are low. This is mainly because of the relatively illiquid nature of Mobilink's fixed assets and high debt levels. Enforcing creditor rights under Pakistan's legal system could be difficult, given that the process is not very well defined and there are very few precedents.

The timing and amount of any ultimate recovery would also be influenced by market conditions at the time of a default.

About 45 percent of total assets of the company were pledged as collateral as of June 30, 2007.

Mobilink's negative outlook reflects the potential adverse impact on its credit profile as a result of the heightened and prolonged political uncertainty in Pakistan and its potential impact on economic growth, fiscal performance, and external vulnerability. Most of the company's cash flow is generated from domestic assets. Mobilink may be faced with increased exposure to funding risks, weaker operating environment, and reduction in spending on telecommunication services due to potential economic slowdown. The outlook may be revised to a more positive position if the operating environment returns to normal, and any adverse impact on Mobilink's credit profile is limited.

#### PALESTINIAN AUTHORITY

### Wataniya Palestine allocated spectrum to start operations of mobile network

Wataniya Palestine Mobile Telecommunications Company (WPT) and its shareholders Wataniya Telecom (National Mobile Telecommunications Company – NMTC; 51 percent owned by Qatar Telecom QSC [Qtel]) and the Palestine Investment Fund (PIF), have announced the receipt of an official communication from the Palestinian Ministry of Telecommunications Information and Technology (MTIT) confirming that an agreement has been reached for spectrum to be allocated to the Palestinian National Authority (PNA).

The spectrum agreement, which provides for a staged release of radio frequencies over the next several months, meets key requirements to enable construction and commercial launch of WPT's mobile network. The released spectrum frequencies will be allocated by the PNA to WPT, which was established in December 2006 as a joint venture between Wataniya Telecom and the PIF.

Commenting on this development, the chairman of Qtel and Wataniya Telecom, Sheikh Abdullah Bin Mohammed Bin Saud Al Thani, said, "WPT represents one of the most significant foreign investments in the history of Palestine. Despite delays in securing the required frequencies, Wataniya Telecom and Qtel have always been fully committed to this venture. We look forward to launching commercial operations in Palestine and we are very confident that WPT will be a success story that will attract other foreign investors to the Palestinian market."

On behalf of the Palestinian shareholders, the CEO of the PIF, Dr. Mohammad Mustafa, said, "The PIF partnered with Wataniya Telecom to establish WPT with a common understanding of the strategic importance of the telecommunications sector for our economy. With the resolution of the frequency allocations we now look forward to the more than 2,500 new direct and indirect jobs that the company is expected to help create in the next few years, and the millions of dollars that will be poured into the economy on business services."

Also commenting on this development, the CEO of WPT, Mr. Allan Richardson, said, "With the forthcoming launch of WPT, a new chapter of competition in the Palestinian market will be opened, in which the consumer will be the ultimate winner. Our team in Palestine already includes more than 75 Palestinian professionals, working side by side with telecommunications experts from around the world, to build a world-class telecommunications company that will work tirelessly to exceed Palestinian consumers' expectations. Our team will now begin to focus on building our network and other components of our operational infrastructure in preparations for our commercial launch. WPT would like to extend its gratitude to all who supported the company since its establishment, especially the Ministry of Telecommunications and Information

Technology, and looks forward to working with all stakeholders for the successful launch of the company."

#### **QATAR**

## Qatar Telecom decision to hike its stake PT Indosat is against the court's ruling

According to a Reuters report, Indonesia's antitrust body has alleged that Qatar Telecom's decision to hike its holding in Indonesia's second-biggest cellular service provider, PT Indosat, has violated the country's court directive. Indonesia's state enterprises minister, Sofyan Djalil, had stated that the government would not become an impediment for the Qatari telecom company.

### Qtel acquires ICLS and ICLM; gets 40.8 percent stake in PT Indosat

Qatar Telecom (Qtel) said that it has acquired Indonesia Communications Pte. Ltd. (ICLS) and Indonesia Communications Limited (ICLM), which own a combined 40.8 percent stake in PT Indosat Tbk (Indosat). Following the earlier share-acquisition deal with STT Communications Ltd. the share ownership of ICLS and ICLM has been transferred to Qtel from Asia Mobile Holdings Pte. Qtel believes that it will be required to prepare a tender offer to buy the outstanding stake of Indosat in order to comply with Indonesia's mandatory tender offer norms. The Qatar-based company is in talks with the Indonesian Capital Market and Financial Institution Supervisory Board (Bapepam-LK) over this issue. It will announce its future plans only after concluding its talks with Bapepam-LK.

#### **RWANDA**

### Rwanda to build a high-speed broadband network

According to the minister of science, technology, scientific research, and ICT,

Professor Romain Murenzi, the Rwandan government is holding discussions with telecom service providers like MTN Rwanda and Lapgreen to launch high-speed broadband Internet in the nation by 2009.

Under the government's plan, a countrywide optical fiber network would be installed for launching broadband services by December 2009.

### Rwanda to issue third telecom concession soon

Rwanda's minister for science, technology, and scientific research, Romain Murenzi, said that the government will soon issue the country's third telecommunications concession. He said that the government has agreed to issue the third licenses in accordance with the 20-year IT (information technology) plan.

The third licensee would be competing with Rwanda's two existing telecom service providers: MTN Rwanda and Rwandtel. Mr. Murenzi expressed his happiness with Rwandtel's progress after its acquisition by Lap Green in 2007.

He said that the company is in compliance with the contract that was signed prior to the acquisition.

#### **SYRIA**

### Huawei wins \$1.36 million deal to install 33,000 ADSL lines for STE

According to the Syria Report Newsletter, Chinese telecom equipment vendor Huawei Technologies has been awarded a \$1.36 million deal by Syrian state-run Internet and landline operator Syrian Telecommunications Establishment (STE) for installing 33,000 new ASDL lines in the country.

STE currently provides dialup as well as ADSL broadband service via two 100 percentowned Internet service providers, Syrian Computer Society and 190.

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The number of broadband users in the country increased to 16,500 by the end of 2007, while the dialup user base reached 300,000.

#### **SOUTH AFRICA**

#### South Africa's Naspers decides to auction Mweb

South Africa-based media group Naspers is planning to auction its Mweb Internet service provider after receiving offers from interested parties.

Naspers has said that the ISP's decision to make an investment in broadband wireless is not part of Naspers' strategy of focusing on online communications, content platforms, and commerce.

Although Naspers does not own any ISP anywhere in the world, it has holdings in several Internet portals and e-commerce ventures. Citigroup has bens chosen for advising on the issue of handling the interest expressed by interested investors.

Mweb is one of the biggest residential ISPs in South Africa.

## AudioCodes Collaborates With Intelleca to Deploy VoIP Services

AudioCodes, a leading provider of Voice over IP (VoIP) technologies and Voice Network products, and Intelleca, a division of the Bytes Technology Group and South Africa's fastest growing call center specialist, announced their collaboration to deploy AudioCodes Mediant(tm) 8000 Media Gateway in conjunction with Genesys' VoiceGenie system for contact centers into a Tier 1 South African, network operator.

The Mediant 8000 Media Gateway bridges the gap between the IP and TDM networks, allowing centralized SIP based IVR to service all calls initiated in the Operator's nationwide switching centers.

The combination of VoIP media gateways and the VoiceGenie Call Center

Solution gives the Operator the ability to introduce a cost-effective SIP based IVR service for their broad spectrum of contact centers.

This deployment is a step forward in the transition from a legacy network to VoIP.

#### **TURKEY**

### Turkey's new communications satellite launched

Binali Yildirim, the transportation minister of Turkey, announced that its new communications satellite Turksat 3A was launched from French Guiana.

The launch of this satellite had been delay because of a technical problem. Turksat 3A, which is equipped with Ku-band transponders, will enable Turksat to provide telecom services in addition to direct television broadcasting services across Turkey, North Africa, the Middle East, Europe, and Central Asia. Switchable transponders would allow Turksat to be a bridge between Asia and Europe.

Moreover, Turksat 3A's coverage is also expected to be beneficial for broadband applications including VSAT services.

#### **UGANDA**

### Uganda Telecom launches 3G-based Internet service worth millions of euros

Uganda telecom (utl) has announced the launch of an Internet service powered by 3G technology.

The 3G modem of the multimillion-euro service would cost \$197.19, with the monthly fee being \$135.53. According to Farouk Kiwala, the business solution manager, this service was the first of its kind in East Africa, adding that the company would continue to launch newer mobile broadband services to allow Ugandans to enjoy Internet access on the go.

He said that the 3G mobile broadband is extremely user-friendly, explaining that the

3G mobile broadband modem does not require any installation.

#### **UAE**

### Du, Alcatel-Lucent and RIM launch BlackBerry solution in the UAE

Du, Alcatel-Lucent, and Research In Motion announced the launch of the BlackBerry solution in the United Arab Emirates (UAE).

Du customers will now be able to enjoy the benefits of enhanced communications and increased productivity by using a Blackberry smart-phone to access email, browse the Web, make phone calls, and send and receive text and picture messages, as well as access a wide variety of business and leisure applications on the move.

"As an integrated telecom services provider, our goal is to offer our customers the most advanced telecom solutions and the best possible user experience. Integrating email services and data on the mobile phone is a natural step for du.

We selected BlackBerry smartphones because they provide the leading wireless email solution used by millions of customers around the world," said Osman Sultan, CEO of du.

"Access to email and calendar information on the go has become essential for business people.

Launching the BlackBerry solution is an integral step to enrich our portfolio of integrated communication solutions to meet the market needs in the UAE," he added.

### Thuraya eyes opportunities in Asian maritime segment

Mobile satellite service provider Thuraya said that it is exploring new business opportunities in the Asia-Pacific region and is carefully eyeing the maritime business of Inmarsat.

Thuraya has completed the tests on the Thuraya-3 satellite, which will enable the UAE-

based firm to expand its coverage in Asia and double its market share.

Thuraya CEO Yousuf Al Sayed said that this allows new customers in the region to access its satellite phone service. Thuraya has signed partnerships with network service providers in Korea, Australia, Taiwan, Hong Kong, Macau, and Mongolia.

It is intending to capitalize on the maritime segment with its new ThurayaMarine service.

But Inmarsat, which provides its handheld MSS services in the Asian region, dominates the existing maritime communications system.

#### **ZAMBIA**

### Celtel Zambia's initial public offering raises ZMK 666 billion

Celtel Zambia's recently concluded IPO (initial public offer) has raised ZMK 666 billion (\$206.19 million) following the sale of 1.04 billion shares for ZMK 640 each (\$0.198) This IPO was around 150 percent oversubscribed by the Zambian public and FIIs (foreign institutional investors). Certain foreign institutional investors and domestic institutional investors were allotted 51.5 percent and 88.2 percent, respectively. According to Pangaea Renaissance Securities, the impressive demand of IPO amounted to ZMK 2.04 trillion (\$631.57 million). Of this demand, ZMK 1.7 trillion (\$526.31 million) were accounted for by international institutions. Zambian public and applicants qualifying as the employees of Celtel were allocated the entire amount of shares they applied for while the remaining shares were allotted to domestic as well as select foreign institutional investors. Celtel had offered 20 percent of its 5.2 billion shares in the IPO.

Celtel International BV will now own 78.9 percent stake in Celtel Zambia, while the international Finance Arm (IFC) will hold 1.1 percent.

#### **ACROSS THE REGION**

Alcatel-Lucent signs new contract to build the Atlantic-Mediterranean segment of the Europe India Gateway submarine cable network

Alcatel-Lucent has signed a contract to deploy the Atlantic-Mediterranean segment of the 15,000km (9,000-mile) Europe India Gateway (EIG) submarine cable system. EIG is the first direct, high-bandwidth optical-fiber submarine cable system from the United Kingdom to India, and will significantly enhance capacity and diversity between the countries and territories of three continents.

With completion scheduled in the second quarter of 2010, EIG will deliver an ultimate capacity of up to 3.84 terabits per second (Tbps) to provide upgradeable transmission facilities that support Internet, e-commerce, video, data, and voice services.

EIG was announced in May 2008 in London by the EIG Consortium. Currently EIG Consortium members include AT&T; Bharti Airtel; BT; C&W; Djibouti Telecom; du; Gibtelecom; Libyan Post, Telecom, and Information Technology Company (LPTIC); MTN Group Ltd.; Omantel; PT Comunicações, S.A.; Saudi Telecom Company; Telecom Egypt; Telkom SA Ltd.; and Verizon Business.

Alcatel-Lucent is one of two submarine cable network suppliers for the project, which has a total value of over US\$700 million.

EIG will connect three continents, with landings planned in the United Kingdom, Portugal, Gibraltar, Monaco, France, Libya, Egypt, Saudi Arabia, Djibouti, Oman, United Arab Emirates, and India.

Providing much-needed diversity for broadband traffic currently relying largely on traditional routes from Europe to India, EIG will also provide seamless interconnection with other major cable systems connecting Europe, Africa, Asia, and North America. Alcatel-Lucent will provide complete turnkey work for its portion

of the EIG system. Alcatel-Lucent will have responsibility for the design, manufacture, installation, and commissioning of the Atlantic-Mediterranean submarine segment, which spans 7,100km.

The company will also use the 1678 Metro Core Connect, and deploy its latest-generation 1626 Light Manager (LM) DWDM (dense wavelength division multiplexing) transmission equipment to provide seamless connectivity across the two terrestrial links in the UK and Egypt at 40Gbps.

The Alcatel-Lucent offering across the EIG system provides terabit transmission capabilities to accelerate the delivery of broadband services and applications.

"EIG utilises the most advanced submarine cable system technology to provide a high quality solution to help meet the continued growth of broadband adoption rates around the world," said Mr. John Russell, chairman of the EIG Consortium Management Committee. "Alcatel-Lucent's turnkey expertise and technological lead in the build of submarine networks will help us deliver a highly flexible and scalable infrastructure that will support the delivery of innovative applications across the regions."

"EIG further confirms the need for cable route diversity and enhanced capacity to meet end-users' demands for bandwidth to support broadband traffic," said Etienne Lafougère, president of Alcatel-Lucent's submarine network activity. "This new contract is recognition of the reliability of our submarine, terrestrial and network solutions, as well as of our end-to-end ability to provide every part of a global transport network."

#### MARKET INTELLIGENCE

### Middle East leads the way in improving networked readiness

The Global Information Technology Report 2007-2008 underlines the substantial

progress the Middle East is making in ICT, spearheaded by the Gulf States. The Gulf States are increasingly emphasizing the role of ICT for national development, both as a key infrastructure and as a promising sector in view of diversifying their economies away from oil. As a whole, the Middle East stands out as having made the most progress in networked readiness over the last seven years and having recorded the largest growth in Internet users as citizens accessing the Web soared by more than 600 percent, three times the world's average increase.

Published for the seventh consecutive year with record coverage of 127 economies worldwide, the report has become the world's most comprehensive and authoritative international assessment of the impact of ICT on the development process and the competitiveness of nations. The findings of the report highlight significant improvement in the rankings of most of the Middle Eastern countries, with Qatar (32nd), Bahrain (45th), and Jordan (47th) at the forefront. Kuwait (52nd) also climbed four positions in a constant sample from last year.

The United Arab Emirates (UAE), unchanged from last year at 29th place, continues to lead the Gulf States in networked readiness, owing to a leading government role in ICT promotion as witnessed by the excellent

marks the country obtains in government readiness and usage.

Four newly included countries from the region were included this year. Saudi Arabia and Oman enter the rankings at 48th and 53rd, respectively, while Libya and Syria are ranked at 105th and 110th, respectively.

"The findings of this Report mark a 'step change' for the region, illustrating a continuing shift towards dynamic and sustainable economic development," said Soumitra Dutta, dean, external relations and Roland Berger Chaired Professor in Business and Technology at INSEAD in France. "But, even more important, they indicate that if the Middle East maintains its current trajectory it will reap the benefits of increasing competitivity; able to take on other world economies, attract investment and create the millions of jobs necessary for a fast-expanding population and improving standards of living."

Some Gulf States, such as the UAE, stand out in their efforts to promote and take advantage of ICT. For instance, Dubai's e-Government Initiative, started in 2000 and fostering ICT implementation in the country, has been recognized as a success story by practitioners and is an integral part of Dubai Vision 2010, which aims to establish Dubai as a knowledge-based economy by taking advantage of tourism, ICT, media, trade, and services.

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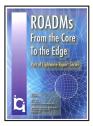


#### **Advanced Access Architectures 2008**

In addition to providing complete background on Advanced Access Architectures (AAAs), this report is going to focus on the progress to date of AAAs (or in some cases the lack thereof), changes in architecture, and especially how we are changing our forecasts (and why) for Advanced Access Architectures (AAAs) development. It is also introducing for the first time extensive cost analysis of the various forms of AAAs, and comprehensive traffic (bandwidth) requirements analysis and forecasts affecting AAAs.

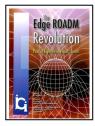
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#### ROADMS FROM THE CORE TO THE EDGE

To date, the ROADM revolution has been largely confined to the core, and to some extent to the major metro parts of the network. As we see the need for more and more wavelength services such as Internet Protocol television (IPTV). Video on Demand (VOD), high-speed data, business services, etc., the carriers are experiencing a need for wavelength control out to the edge of network. This need has given rise to a new class of ROADMs-Edge ROADMs. These are less capable than the core variety-smaller and, most importantly, cheaper. This report revises the market deploys, and technologies of edge ROADMs and is a complete rewrite of previous studies Print Copy -\$4795/\$5595 Single User PDF/Corporate Lic. User PDF \$9995



#### **New!! R-OADM Revolution**

This report details where the industry is in beginning the new ROADM revolution from the "core to the Edge." This revolution will bring ROADMs to virtually every central office and head end in the US, and in many parts of the world. The forecast included herein detail that expansion. A number of component vendors are leading the way in this sea change for the networks as well as a few leading system vendors already selling products which are profile in this report Print Copy -\$2400/\$3995 Single User PDF/Corporate Lic. User PDF \$5595



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This report focuses on the component and subassembly market impact from R-OADNs. It contains ROADM system lavel forecasts,, discussion of the ROADM concept,technical material describing how the components are used in ROADMs, and listing and description of many vendors in this market. The report also includes market forecast of components/subassembliessuch as wavelength, blokers, mux/splitters, WSSs, demux/combiners, tunable lasers, tunablefilters, switches, and monitoring devices. Obviously many, or all, of these have other uses, but this report only includes their use in R-OADMs.

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The Plastic Optical Fiber (POF) data business is going through a period of extraordinary growth driven by the Most automotive manufacturers standards in Europe and 1394b Standard. Industrial Controls and Medical Applications continue to be the bedrock of the industry and they too are experiencing healthy growth. Unlike the Telecommunications field, the POF business covers several industries and is not as vulnerable to individual industry downturns. New technological developments in sources and fibers are expanding the bandwidth-distance limits into new applications. After many years of playing second fiddle to the Glass Optical Fiber and copper industries POF is now starting to get the recognition it deserves. Some even are saying that POF could be a "disruptive technology". Print Copy -\$2995/\$4595 Single User PDF/Unlimited-User PDF \$5995



#### Top 25 Actual & Potential Plastic Optical Fiber (POF)

This brand new market study from IGI Consulting will illumniate the top opportunities for POF in the coming year, including: data centers, super computers, SAN/LAN, medical applications and fabrics. Each market sector is described in detail, reasons for the potential of using POF, standards, technology, key players and market forecasts.

This report is intended for both those companies in the market and those considering or planning to enter the market.

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