

Connecting the Future

By M. Kaddoura



Mustafa Kaddoura,
Vice President for Fixed
Access Network Planning
and Business Solutions, du

The best hotel in the world¹... The largest man-made islands in the world ... Dubai and the United Arab Emirates are fast becoming one of the world's most advanced business, financial and resort centers.

In the drive to create one of the most advanced living and working environments on the planet, state-of-the-art communications will form a key part of the infrastructure that will underpin the business transactions and lifestyles of the UAE's future residents.

The Need to Innovate

du set a target to become the region's first integrated telecom supplier, serving business and domestic customers with fixed, mobile, data, video and fully managed services from a single source.

This would require an upgrade to our network: a blessing in disguise, because new network deployments could accompany the new civil developments to ensure that high-speed telephone and data services are built into the new residential and business complexes. Fiber-to-the-Home (FTTH) and Fiber-to-the-Premises (FTTP) will be the norm in du's new network deployments.

However, competition from incumbent fixed and mobile operators as well as from cable/satellite TV broadcasters meant that du could not simply deploy a new network, offer services and hope to increase market share; we would not be able to compete with the incumbent cable TV operators on price, for example, unless our business model changed.

Market forces dictated that du undergo a business transformation, rather than just a network transformation.



Dubai's Burj-al-Arab hotel

We could see that the old models, based on subscriber revenues, would not be enough on their own to sustain our business long-term. We then looked at how deploying the infrastructure and technologies able to support next-generation IPTV services could help us sustain and increase revenues. We are now exploring new business models and customer segments for our IPTV products, to enable us to succeed in this highly competitive market.

Enhancing the IPTV Value Chain

du is targeting specific segments, such as hotels and businesses, to provide IPTV services and channels focused on their individual business and customer communication needs. Our new business model for the hotel industry, for example, will eventually provide these customers with a virtual head-end and a managed infrastructure right to their doorstep.

¹ World Travel Awards 2007

Our offer will differ significantly from the established approach. End-customers in the hotel and business communities would traditionally have expected to build a video-on-demand or pay-per-view service using an independent supplier. This approach can be very expensive because it is often built and maintained on a per-hotel basis.

du's offer, in contrast, will be bundled as a telecom service and therefore be very easy to implement.

We have aggressive plans to build up a premium asset library targeted at the mass market, complete with all the latest blockbusters, bestsellers and regional interest titles, such as Bollywood movies. Since we will acquire the content, hotel management can easily offer a huge selection of movies to customers (branded by the hotel, rather than by du). du will manage the logistics of delivery and billing, which does not require any significant investment, rendering the service extremely competitive.

Our company is also actively engaged with real estate developers and residential communities to offer community-based solutions, such as walled-garden TV portals and customized content for individual communities.

The walled-garden TV portal is simply a window – available to a subscriber via his remote control – to a suite of interactive applications managed by du. Any subscriber can visit these applications without exiting the du environment, which ensures the quality of the subscriber experience. These applications are built on top of a browser, which allows the applications to be ported over from the world of IP/Internet, making it cost-effective to build, maintain or modify the content of the walled garden. In the context of real estate developers and residential communities, what we envisage in the medium-term is a multitude of landlord-to-tenant communications services (information bulletins, security services and so on) and tenant-to-tenant applications (such as chat and gaming) to encourage community development.

du is also engineering new IPTV products and services. This approach has allowed us to target new business areas – for example serving advertising content via dedicated IP streams (TV channels) to power digital signage for shopping malls, retail outlets and real estate agents.

This idea, which we are aiming to roll out in Phase 2 of our deployment, consists of a discrete loop channel for each customer, which will deliver that customer's daily (or weekly) customized content to large screens that will be seen by members of the public visiting those locations.

The result will be a range of innovative services and applications that will start to roll out this summer. du is working closely with Alcatel-Lucent to develop targeted applications that meet our customers' needs. du and its partners have committed to a roadmap that will develop and deploy a wide range of customized, community-based IPTV services to entertain and inform the members of the new business and residential communities being created in the UAE.

Part of this new, user-centric business model will feature personalized advertising services in a later phase of deployment. du plans to use its next-generation IPTV platform to tailor advertising to specific communities and groups, using the resultant revenues to supplement subscription income.

This will enable us to compete effectively in the new world of services, where subscriptions and usage charges will gradually be eroded and must be replaced by new revenue streams.

In terms of quality content, du plans to go beyond what other deployments have delivered. The UAE is extremely culturally diverse: more than 80% of its population is comprised of expatriates from more than 150 different countries. It is therefore a challenge to ensure that du's services offer something for everyone.

Our company has alliances with all the leading Direct-to-Home (DTH) platforms in the region, enabling us to provide our customers with access to all the pay TV channels available in the Middle East. du also offers its own billable TV packages that provide diverse programming in 15 different languages – adding further custom offerings and additional revenue streams to the mix.

New Business Models Demand New Technologies

While du had been offering basic IPTV services for a few years, the infrastructure underpinning the service was not sufficiently scalable to allow the levels of service and flexibility of application design demanded by the leading-edge environment that the UAE is becoming.

A next-generation IPTV platform, with the ability to scale seamlessly and the flexibility to deliver new applications and targeted advertising, was the only solution that would fit the bill. To function effectively with guaranteed quality of service, the platform would need to be underpinned by a carrier-grade, all-IP backbone network with the capacity to evolve over time to keep pace with new technologies and bandwidth requirements.

After detailed evaluation, du chose to partner with Alcatel-Lucent to integrate our selected IPTV platform – Microsoft’s Mediaroom – with the du legacy environment. Alcatel-Lucent’s experience with supplying IPTV services and platforms to Tier 1 and 2 customers worldwide (BT, NBC and Telecom Italia among others) was a persuasive argument, coupled with the company’s ability to supply the right applications and infrastructure roadmap to meet our needs.

As systems integrator, Alcatel-Lucent is responsible for the very specialized job of integrating the IPTV application into our existing telco infrastructure. To do this, it is using the Alcatel-Lucent OBI platform, which links the application to the company’s operational support systems, customer care systems and billing systems. Alcatel-Lucent is also responsible for connecting the IPTV application to the revamped head-end, which du is upgrading in parallel to support MPEG-4 streams and, at a later stage, high-definition television. Video-on-demand and pay-per-view content will be introduced to the platform to provide a differentiated television experience for du’s customers.

With this service mix, a combination of broadcast and unicast flows need to be mapped from the head-end to the application servers and finally to the set-top boxes. All this traffic is delivered as packets over our IP network. The key component to perform this traffic routing reliably is the Alcatel-Lucent 7750 Service Router, which ensures that the various broadcast and unicast streams are prioritized for transport through the IP network.

The benefits of this new platform include improved interactivity with the end user to provide a variety of entertainment options and a fully-fledged electronic programming guide. The new platform also provides support for customized subscriber communities, which can be treated differently according to our marketing and business requirements. The end-user experience itself will also be improved through a better user interface.

du is the latest entrant into the UAE telecoms marketplace: the company has been offering mobile, fixed and IPTV services in the UAE for just seven years. Its mobile network covers 90% of the UAE’s population, with 25% penetration, representing some 1.5 million subscribers. Uniquely in the region, du already has some 30,000 IP telephony subscribers.

The Future is Now

Deployment of the next-generation IPTV network to cover 15,000 customer locations will take just six months. du plans to go live with its new services this summer and will migrate existing customers and services to the new network shortly thereafter.

Longer-term plans include extending the coverage of our IPTV network beyond the newly-developed areas where FTTH and FTTP will be deployed as standard. du is already investigating the possibility of broadening its footprint, using satellite or WiMAX technologies, or both in parallel, to increase our potential audience.

Conclusion

UAE's ambitious developments mean new opportunities. When plans were announced to transform the region into a world-class business and residential center, we had to take stock of our existing infrastructure and product offerings in view of the massive changes to come. Not only have the bandwidth and connectivity needs multiplied enormously, new, cutting-edge real estate developments also demand equally cutting-edge services and technologies.

Our mission at du is to lead the industry, not only in the UAE but across the world, with personalized services that meet the needs of our diverse and innovative customers. We look to Alcatel-Lucent, with its years of experience in these and other technologies, to accompany us as we break from traditional models and continue to offer our customers highly personalized and innovative communications solutions. ☒

Mustafa Kaddoura is Vice President for Fixed Access Network Planning and Business Solutions, du.

To contact the author or request additional information, please send e-mail to enrich.editor@alcatel-lucent.com.

du: Emirates Integrated Telecommunications Company PJSC

du is the new telecommunication services provider in the UAE. It is an integrated service provider offering voice, data, video and content services over fixed and mobile networks to residential and business customers.

du has three broad target segments:

- Consumers: Focusing on individuals and households by offering mobile and fixed voice calling, Internet, data services and television.
- Businesses: Focusing on small to very large corporations and government agencies by offering integrated fixed and mobile business solutions including voice, data, content and applications as well as professional services.
- Carriers: Focusing on providing carrier, international data networks and wholesale services to international operators, multinational corporations and telecom carriers.

The company has an authorized, issued and paid-up capital of 4 billion United Arab Emirates Dirhams (\$1.09 billion USD/ €700 million). The federal government owns 40% of the company; 40% is divided equally between Mubadala Development Company and TECOM Investment; and the remaining 20% is owned by public shareholders. The company trades on the Dubai Financial Market (DFM) under its trade name du.

Alcatel, Lucent, Alcatel-Lucent and the Alcatel-Lucent logo are trademarks of Alcatel-Lucent. All other trademarks are the property of their respective owners. The information presented is subject to change without notice. Alcatel-Lucent assumes no responsibility for inaccuracies contained herein. © 2008 Alcatel-Lucent. All rights reserved.