INF⦿CUS

CYPRUS 2016

ICT

THE NEXUS OF EASTERN MEDITERRANEAN CONNECTIVITY

Cyprus is poised to start building on its traditional role as the Eastern Mediterranean's trading post by attracting foreign direct investment, and setting up research and development centres to establish itself as an Information and Communications Technology (ICT) hub.

The island is emerging from the chaos caused by the near-collapse of its banking system in 2013, officially exiting recession after recording growth in the first two quarters of 2015. The government intends to issue a long-maturity ten-year bond before the end of the year – a bellwether for how financial markets view the country's creditworthiness.

President Nicos Anastasiades said on a recent visit to the United States that Cyprus is well on track to complete the 'troika' of international lender's bailout programme within the next few months, and that one of his government's critical growth-enhancing reforms is its digital strategy.

A crucial part of the troika bailout programme is the privatisation of the Cyprus Telecommunications Authority (Cyta), one of the few remaining 100% state-owned telecommunications companies in Europe.

"I believe that Cyprus has great potential to develop in the ICT industry, it can play a pivotal role and our great values are our geographic position and our people," said Kyriacos Kokkinos, a member of the executive board of the Cyprus Investment Promotion Agency (CIPA) and an IBM executive for Europe, the Middle East and Africa.

"Over the past five to seven years we saw a lot of economic complexities, but now the government realises that the recovery of the economy needs digital investments," he added.

The government's digital strategy states that the use of ICT in all vital sectors of the economy, including education, health, tourism, and transport, is of paramount importance to the development of Cyprus as a regional service centre and to the attraction of foreign investment.

STRONG INFRASTRUCTURE

Cyprus already has very strong telecommunications and IT infrastructure, it has a fully digital network with high-speed international connectivity through ten fibre optic submarine cables, including the world's longest optical submarine telecommunications cable, SEA-MEWE-3, which links directly with South East Asia, the Middle East and Western Europe.

Cyprus' network has 100% broadband coverage, with DSL network capacities of at least 2Mbps, and the mobile phone market is almost saturated. Internet access for households in Cyprus rose to 68.6% in 2014 compared with 64.7% in 2013, according to the statistical service Cystat.

As part of its digital strategy, the government has undertaken to give all households and businesses capacities of at least 30Mbps by 2020, and 50% of them at least 100 Mbps, to be achieved through extension of Fibre to the Home networks (FTTH).

Cyta's cable network is complemented by a satellite network with two teleport sites providing connectivity with Intelsat, Eutelsat, SES World Skies, AsiaSay, ABS, Arabsat and other major satellite systems.

SUBMARINE CABLE & SATELLITE NETWORK
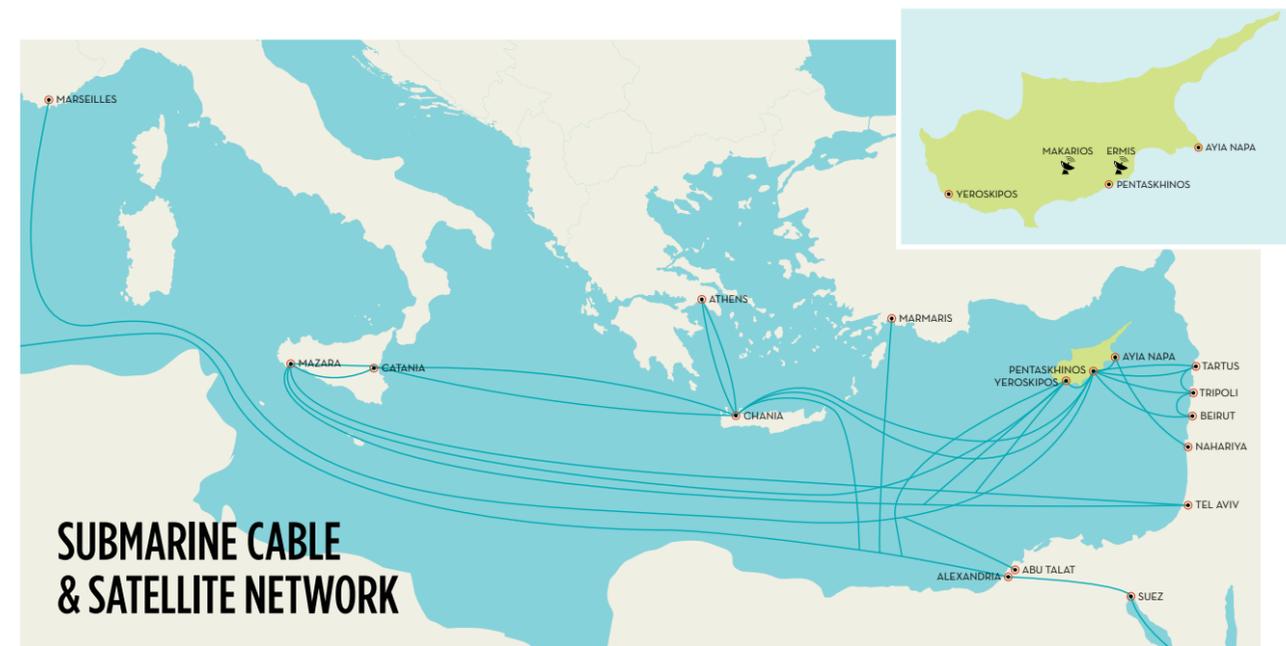
Services offered through Cyta's teleports include terminal TC transmission on a permanent and occasional basis, international telephony, monitoring services, data and internet connectivity, hosting and co-location.

The company is continuously upgrading its existing submarine cables and introducing new ones, according to its CEO Michalis Achilleos. "We are in discussions for the introduction of three new submarine cables with the latest technology, as well as two satellite stations that offer services covering all the satellite systems in the area," he added.

SCIENCE PARK AND RESEARCH AND DEVELOPMENT

The establishment of a Science and Technology park in Pentakomo, on the southern coast of the island, and initiatives to encourage collaboration between companies and universities to promote entrepreneurship are aimed at establishing Cyprus as an ICT development centre.

Minister for Energy, Commerce, Industry and Tourism Yiorgos Lakkotrypis highlighted the opportunities the technology park will offer when he spoke at the Cyprus-UK Business Forum in London in October. And in September Lakkotrypis signed a bilateral agreement to jointly promote innovation, science and research with the Chinese Minister of Science and Technology Wan Gang.

The Chinese minister said that ICT is one of the priorities of the agreement, along with renewable energy and nanotechnology, adding that the first China-Cyprus science, technology and innovation commission meeting will be held in Beijing later this year.

Kokkinos said that discussions are already underway to establish cloud computing and research facilities in Cyprus. "There is a need for the triple helix," he explains, "academia, government and the private sector to work together to develop the IT industry.

We can establish Cyprus as a development sector and attract Microsoft, Oracle or IBM to set up a division of their research and development centres here," Kokkinos says, noting that Israel has already boosted its economy in a direct and indirect manner in this way. "Cyprus is in a better position geographically, education wise and security wise to develop this industry and there are ongoing initiatives."

Lakkotrypis said the tender for the science park is expected to launch in October 2015, and that the government is seeking a strategic investor with relevant experience and know-how. He added that there are tax and work permit incentives to be offered to investors. "The government's interest in developing the technology park shows that this sector is of real importance to them," said Charis Papacharalambous, CIPA's Director General.

CRUCIAL PRIVATISATION IS UNDERWAY

Cyprus' telecommunications industry complies with the EU's regulatory framework, but Cyta is the main provider, holding about 66% of market share, according to the latest figures from the Office of Electronic Communications and Postal Regulations.

The other two main players are MTN, part of the South African-registered MTN Group, which entered the market in 2007 and holds about 30% of the market, and Cypriot company PrimeTel PLC with less than 3%. Two tiny bit players – LemonTel and Callsat – hold less than 1%.

While Cyta undoubtedly dominates the market, its share was over 80% in 2009 and critics have called it bloated and said that privatisation is long overdue. Cyta's 2014 operating profit dropped to €42.6 million from €66.1 million the previous year, while profit before tax rose to €56.9 million from €54.8m in 2013, results the company called satisfactory given the 2013 financial crisis.

"Cyta is a very capable company with huge intellectual capital and I believe that its status today as a state-owned company does not put its full strength in market," said IBM's Kokkinos.

"This industry is moving extremely fast and you need to be agile and fast to respond. As a state company you cannot do that because you are always under scrutiny, so I think that it's a matter of survival for Cyta to become privatised," he added.

MTN and Primetel both announced earlier this year that their networks are now running on 4G technology,

which offers 10 times faster mobile broadband internet access, leaving Cyta snapping at their heels with its plans to launch 4G in December 2015.

Cyta's CEO Michalis Achilleos said the company should adapt to evolving competition and changing consumer habits. "Key to success is reframing mindsets and adding agility to our execution. The legal status of the organisation and the established

institutional framework is constraining the operation and the reforms that are promoted to seek flexibility and speed in favour of fast decision making and efficiency," he said.

The privatisation of Cyta should be complete by the end of March next year, according to Cyprus' Commissioner for Privatisations Constantinos Herodotou. There are three phases in the privatisation process – request for expressions of interest, non-binding offers and binding offers.

Cyta is currently at the preparation stage before the launch of the request for expressions of interest. According to the terms of the law on privatisations, the government will decide when the launch should happen. The law also states that the privatisation will take the form of a strategic investor acquiring a majority stake, rather than a listing.

"It's not about privatisation per se, it's about bringing in a strategic investor to enhance the organisation, that's what we're targeting," Herodotou said.

The sole financial advisor and lead for the Cyta sale is Citigroup. Accounting and due diligence is coming from PwC and the technical advisor is Roland Berger. Legal advice is being provided by a consortium comprising local law firm Antis Triantafyllides & Sons LLC and multinational Shearman & Sterling LLP.

The privatisation law specifies that employees' rights must be secured through consultations between the interministerial privatisations committee and unions, and the committee has already held a number of meetings with the Cyta unions. The government has said employees will have a 12-month transition period after Cyta is privatised.

After the 12 month period has passed, they will have the option of moving to the new private organisation run by the investor with a package of free shares to sweeten the deal, work in the new company but retain their position at Cyta on unpaid leave until either the employee or the employer decide to scrap either of the posts, apply for a voluntary exit plan that will be made available in the meantime, or be seconded to the civil service.

Interview with

MICHALIS ACHILLEOS

CEO, Cyta

As an island nation, connectivity is essential for Cyprus' continued growth and competitiveness. What opportunities has this opened for Cyprus, and what plans are in place to expand the network?

Cyprus has become a vital telecommunications hub in the Eastern Mediterranean. We take full advantage of Cyprus' privileged geographical location at the crossroads of three continents, and are particularly active in the submarine cable business, as we are currently connected to 10 submarine fibre optic cable systems in the region.

Our cable network is complemented with an extensive satellite connectivity, with two teleport sites, providing connectivity with Intelsat, Eutelsat, SES World Skies, AsiaSat, ABS, Arabsat and other major satellite systems.

Our network capacity, alongside our customer-oriented solutions, constitute a sound base that allows us to play a key role in global telecommunications. Enhancing this role is a key priority, and the reason we maintain three landing stations for submarine cables. We are continuously upgrading our existing cables, introducing new ones and are in discussions to introduce three new cables with the latest technology, as well as two satellite stations that offer services covering all the satellite systems in the area.

Can Cyprus become a regional centre for cloud computing and hosting?

International connectivity and direct links with eastern Mediterranean and Middle-East countries have played an important role in supporting the trend towards cloud and hosting services, favouring Cyprus as a regional player.

Our IP VPN service, which is available as an international connectivity option integrates the high capacity TIER III capable data centre infrastructure directly with the wide area networks of customers, helping us achieve low latency, predictable performance and enhanced security. Besides resilient connectivity, Cyprus' EU membership allows for the application of European legislation, alongside the reassuring local presence and the sovereignty of data, a valued asset when companies choose a data centre.

As the domestic sector leader, how do you perceive Cyta's role within the wider telecoms context?

Cyta has always been characterised by its ability to develop and maintain state-of-the-art infrastructure, boosting the technological capacity of Cyprus, placing us in the list of countries with the highest instrumental infrastructures. Recently, an independent opinion by the Technical Advisors to the Commissioner for Privatisations stated that Cyta's networks are among the best in Europe, in terms of design, construction and resilience. For this achievement I give credit to our excellent personnel, who have proven they can deliver large projects under demanding conditions. This is the role we play, and we are working hard to further raise our standards.

Cyta is currently undergoing preparations for privatisation. What is the focus of the organisation at the moment in terms of restructuring?

Our foremost aim is to provide customer-centric, reliable solutions to Cypriot consumers and businesses. We are facing new challenges, evolving competition and changing consumer habits, so we must remain relevant and deliver value to our customers.

Key to success is reframing mind-sets and adding agility to our execution. The current legal status of the organisation and the established institutional framework are restricting our operations, so reforms are being enacted to address this, and increase our flexibility and responsiveness, favouring fast decision-making and increased efficiency.

Cyta has been competing in a liberalised market for over a decade, to what degree has this prepared the company for its current transformation?

The fact is that we are the only telecommunications company in the European Union owned 100% by the state and still among the top 20% in terms of profitability. We face fierce, and I would say sometimes unfair competition, stringent regulation as the incumbent, but we have always stayed ahead, with proactive customer orientation, supported by quality infrastructures of the highest international standards.

We differentiate ourselves by investing in the business intelligence necessary to understand consumer wishes before our competitors, and then build products that customers want. We focus on adding value whether it is through enhanced performance, uptime or exclusive content.

What are your plans for 2016 in terms of rolling out new technology and products?

High-end networks to support fourth generation mobile technology and fixed broadband fuelled by fibre are well underway, constituting a sound base for integrated communication offerings, both on technical and commercial terms.

We also seek markets beyond current boundaries. We have new partnerships and innovative business models making our way to establishing solid ground in new ecosystems, for instance, electronic payments, e-health and smart home initiatives which introduce new revenue streams.

135
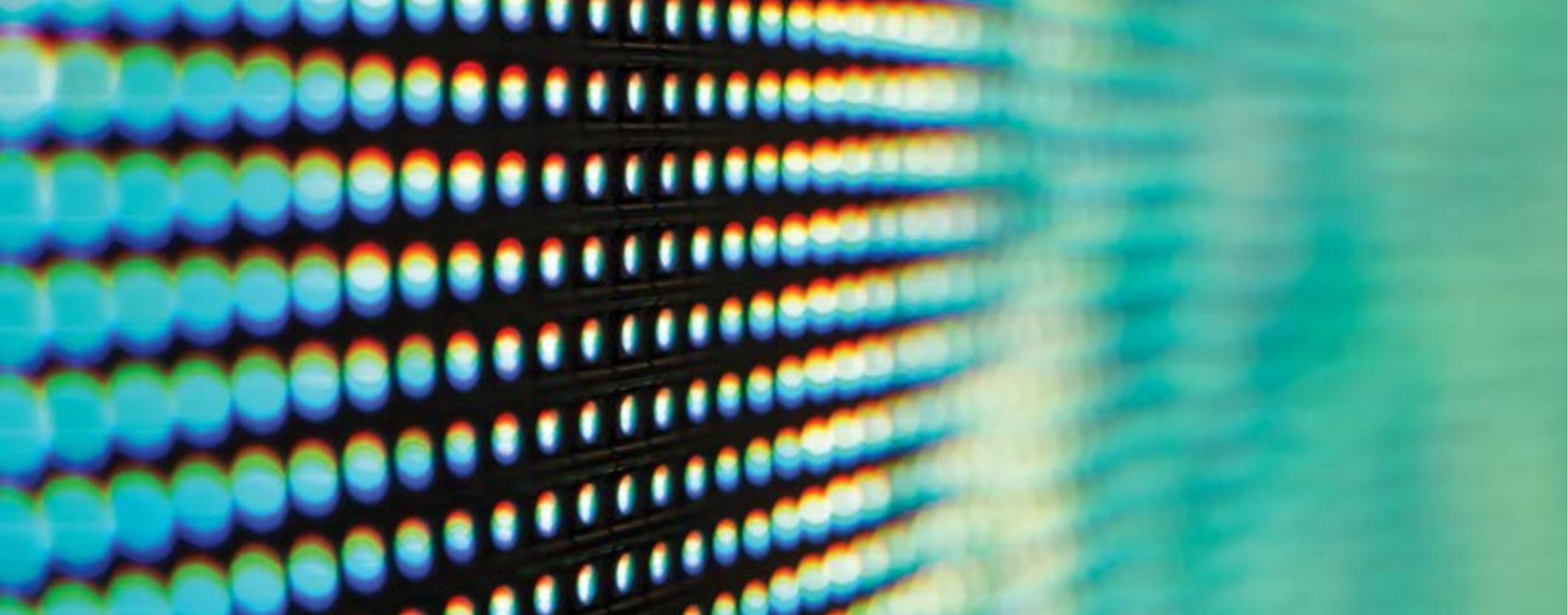
SILVER-LINED CLOUDS OVER CYPRUS

Cyprus is a latecomer to the cloud computing party, but EU membership and extensive regional connectivity have opened a window of opportunity

The market for cloud-based services – storing and managing corporate and private data – is still relatively young, and currently dominated by players such as Google, Amazon, Microsoft, and Apple. However, telecommunications companies like Cyprus's incumbent Cyta are developing strategies to enter into this fast growing market.

"Cyta's international connectivity and direct links with countries in the Eastern Mediterranean and the Middle East have played an important role in supporting the trend towards cloud and hosting services, favouring Cyprus as a regional player," said the company's CEO Michalis Achilleos.

Achilleos said Cyta's IP VPN service, which is available as an international connectivity option, integrates its high capacity TIER III-capable datacentre infrastructure with customers' wide-area networks. This provides the low latency, predictable performance and enhanced security, which are prerequisites for cloud workloads.

"Besides resilient connectivity, Cyprus's EU membership means the application of European legislation, whilst providing the reassurance of the local presence and the sovereignty of data, which is valued as an asset when companies make their choice for a datacenter," Achilleos added.

Giants like Microsoft and IBM are looking at Cyprus as cloud centre, Cyta said in a report on the market. Middle Eastern countries have been underwhelmed by cloud applications hosted by Amazon and other US companies because of latency problems, causing distinct lag between cloud servers and local terminals, and therefore place high value on locally based cloud servers.

Cyprus offers direct connectivity to most countries in the Middle East, and more manageable conditions for technology than the majority. In addition, its status as an EU member state could be an advantage as regards the legal and regulatory framework surrounding the cloud market as it develops over the medium term.

Analysts estimate that the cloud market shows a compound annual growth rate of 30%, and that the global market for "Internet of Things" (IoT) – the concept of connecting

everyday devices to the Internet – will nearly triple to $1.7 trillion by 2020, placing Cyprus at the forefront of the burgeoning IoT subsector.

Cyta estimates that the Cypriot cloud market is immature, with a service adoption rate lagging behind other European countries by as much as two to three years. It also believes the lag could be a strength, allowing it to hit the ground running when the market opens up.

"Cloud will hit the Cypriot market with a clearly defined value and market proposition, therefore accelerating uptake in Cyprus relative to other first-mover markets such as the US, and mainstream EU markets like the UK and Germany," the Cyta report said.

It added that the 2013 financial crisis in Cyprus, when the country was forced to take a €10 billion bailout to save its banking system, could end up boosting cloud adoption because the aftermath of the turmoil is forcing decision makers to reevaluate their capital investment decisions.

Cyprus's strategic placement at the crossroads of Europe, the Middle East, Africa and Asia is both advantageous and influential within the industry. "Cyprus is seen by many cloud service providers, for example Microsoft, PowerSoft and Logicom, as a 'guinea pig' test market for the region. This market entry strategy will also have some impact on the competitive landscape," the report concluded.

Cyta is currently undergoing a privatisation process, so its cloud development strategy will fall to the strategic investor that takes over the company next year.

Although Cyta dominates the Cypriot market with its 66% share, the smaller players, MTN and PrimeTel, have been faster on the uptake with 4G than Cyta and are positioning themselves well as regards their development of cloud services.

In April this year MTN bought Intelligent Business Solutions Ltd (IBS), a Cypriot IT company founded in 2004 that was the first in the country to offer cloud services. "MTN is changing and Cyprus is changing with it, assuming its position in the forefront of ICT evolution, providing the Cypriot company with state-of-the-art telecommunications and IT services which help them curb their costs and increase their growth potential," said MTN CEO Philip Van Dalsen.

PrimeTel is a partner in the European Commission-funded T-Nova project on Network Functions Virtualisation (NFW). NFW uses commodity servers and storage – including cloud platforms – to enable rapid deployment, reconfiguration and elastic scaling of network functionalities.

Kyriacos Kokkinos, a member of the executive board of the Cyprus Investment Promotion Agency (CIPA) and an IBM executive for Europe, the Middle East and Africa, estimated that by 2020 70% of the IT industry will be cloud-based. That means new players are likely to emerge, and existing small ones to grow.

"Cloud players are like the Facebook and Google of the early 2000s. You will see companies growing from nowhere to great institutions in five years time," he said.

PHOTO: Olexandr Taranukhin/Shutterstock.com