

DIGITAL DOHA

The IIC's first TMF of 2017 was held in Doha, with OTT and IoT issues to the fore, as **CRISTINA MURRONI** reports

The IIC's first Telecommunications and Media Forum (TMF) of 2017 was hosted in Doha by the Communications Regulatory Authority (CRA) of Qatar, with a focus on the Gulf region. The CRA's president, Mohammed Ali Al-Mannai, gave a keynote presentation that highlighted the country's decision to develop the digital sector, currently responsible for 1.7% of GDP. As a key enabler of the country's economic diversification and its sustainable growth, the sector is now regulated by a converged agency that is also charged with promoting its growth. He noted the need for greater harmonisation to push the region and the industry forward.

Speakers from other regulators in the region argued for a variety of regulatory objectives with connectivity a key focus, differentiated according to the needs of geography (such as deploying fibre in cities and wireless broadband in rural areas). One common objective is stimulating investment and innovation in the digital industries, and a panel

discussion focused on the best way to achieve this. James Bellis (Frontier Economics) highlighted that telecoms operators are a major contributor to government revenues, through royalties, spectrum fees and corporate taxes, and this

may be difficult to sustain in the long term.

Nezih Dincbudak (Orange, Middle East and Africa) argued that policy needs to look at public and even international support to complement private investments in rural areas, and for long distance submarine cables. The regulatory focus, he reasoned, should be on digital inclusion of the population.

Amr Eid (Gulf Bridge International) illustrated how his company shifted from being just a communications carrier to a cloud-based operator that works with telecoms providers and over the top (OTT) players. He claimed that regulation should work to help networks integrate instead of imposing ex ante rules. Regulators should promote collaboration so that quality can increase even without new investments.

In turn the discussion pointed to progress in spectrum to inspire effective ways to invest, which in the future may have more to do with 'sharing' and less with 'building'.

DRIVING COMPETITION

Francesco Liberatore, head of the new IIC Brussels chapter, chaired a discussion on the best ways to manage the transition from ex ante to competition-based regulation. Alexandre Serot (Vodafone Qatar) reiterated that this is best done by giving operators access to passive infrastructure: countries that have led the way in duct access, such as Portugal and Spain, are now reaping the rewards in terms of industry dynamics.

Leong Keng Thai (Infocomm Media Development Authority, Singapore) reported on his country's holistic vision for the development of a digital economy, in which regulation is just one of several tools and competition is a key ingredient. He said that the digital economy needs three enabling layers to flourish: the infrastructure layer – a necessary but not sufficient condition; the 'soft' infrastructure layer (security protocols, ID and payment systems, data policies etc.); and an agency collaboration layer to overcome the vertical organisation of the government.

Ikram Jebabli (Tunisian Telecommunications Regulatory Authority) showed how different cycles of regulation have evolved across the world, from regulating monopolies to aiming for social goals in the digital society.

WHAT TO DO WITH OTT SERVICES

Robert Pepper (Facebook) discussed research from the World Economic Forum, which found that telecoms operators need to embrace a major cultural change and focus more on software and on customers, exploiting the huge amount of data analytics they have, if they want to seize the new opportunities such as the internet of things (IoT). To do this, partnerships are essential, as well as widespread connectivity.

Ola Bergström (Swedish Post and Telecom Authority) provided the EU perspective on OTT and regulation, adding that these issues are currently hotly debated. The lesson from the Swedish experience (a strong digital market, with much infrastructure and heavy use of social media, where operators are profitable) is that you need to be careful not to stifle investment in a new market. Andrew White (Zain, Saudi Arabia) explained that since the telecoms sector provides the third largest income to the Saudi government, the country has a vested interest in ensuring the stability of telecoms revenues. The likely solution is for regulators to designate a dominant operator and ensure that data



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prices are able to generate a sensible economic return for the industry.

Rob Middlehurst (Etisalat) explained that for companies to have an economic return on a business that provides connectivity for IoT, they need to move towards software-defined networks and exploit economies of scale. Regulation needs to shed old schemes and help companies build relationships with providers of applications, and those that are innovating at the edge of the system, as this is where most innovation comes from.

IOT IN SMALLER EMERGING MARKETS

Brahim Ghribi (Nokia) argued that telecoms began with connecting places (fixed line telephony), then shifted to connecting people (mobile telephony) and now devices (IoT). Citizens have to be engaged and empowered as technology will generate huge transformation. While IoT applications are currently still built on a vertical approach, this will gradually have to change towards a horizontal one that is about sharing infrastructure and managing a platform for analytics as well as processing the huge amounts of data that will be generated by connected devices. There will need to be robust, pervasive connectivity and latency; standardisation; and robust privacy and security measures.

The conversation explored how the shift from vertical to horizontal policy may happen: a major horizontal approach that tries to regulate IoT in every sector is probably impossible, due to the huge complexity of detailed regulation in many sectors. A more likely approach is one that starts from each vertical and has ICT as the mesh that connects them all, but which retains vertical-specific policymakers and regulators.

Ali Cheema (Ericsson) argued that 5G will mean not only quality of service differentiations within the same network, but also public policy differentiation, regulatory differentiation, even access differentiation, while trying to address multiple industries. It is a challenge, but one that needs to be addressed from the outset. Johann Adjovi (Analysys Mason) illustrated the value chain of IoT for telecoms operators. Currently, the sector is expected to grow by 20% a year, and the total value of 'connected things' is presently \$200 billion. However, only 10% of it is about connectivity, while the greatest value is actually in applications, with devices in the middle.

Operators can decide to only focus on connectivity – and even there the requirements will vary hugely depending on the vertical sector. Some operators have opted for connectivity with added value; that is, providing platforms on which others can quickly develop services, and other operators are providing a complete end-to-end solution for selected sectors. But in the next ten years, IoT is not going to be a game changer for telecoms operators, as it will only account for 10-12% of revenues.

Inevitably, this presentation was followed by questions on whether IoT will be worth the investment, and delegates were asked to look at the same question from the opposite extreme – is there really an option to ignore these developments?



Top: the setting at Doha; below: IIC president Chris Chapman with regional regulators

It comes down to understanding what new business model makes sense in the world of IoT – for example selling connectivity as a managed service.

Finally, Robert Pepper presented research that aimed to answer the question: can IoT support the Sustainable Development Goals (SDGs)? The research found that IoT could support 12 out of the 17 SDGs, but the spread of connected sensors, for



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example, is uneven across the world, and both the Middle East and North Africa, and Sub-Saharan Africa trail well behind the global average of 43% of IP-enabled sensors actually connected.

MEDIA AND COMMUNICATIONS CONVERGENCE

Reema Traynor (Media Zone Authority, Abu Dhabi) opened the convergence panel discussion with a presentation about converged regulators and the free trade Media Zone. Rainer Schnepfleitner (Communications Regulatory Authority, Qatar) argued that convergence has not just posed new problems for regulators, but has meant a complete paradigm shift for the industry, with new players and new products, especially global ones. He called for regulators to 'think outside the box' and to

← cooperate to find solutions not just for regulation, but also to enable the wider interconnected society (see also his article on the challenges of setting up a framework for regulation, *Intermedia*, April 2017).

A progressive regulatory framework, which can look at the wider emerging picture, rather than just adding the ‘media’ silos to its remit, is the way forward for Ammar Hamadien (GSMA) as well. He said that convergence requires a new approach that seeks cooperation across agencies.

The panel went on to discuss the need for legislation to deal with all converged sectors, so regulators can have clear remits and frameworks to work with.

PROTECTING THE DIGITAL CONSUMER: BALANCING PRIVACY AND CYBERSECURITY

Ramez Dandan (Microsoft) discussed how the cybersecurity landscape is changing and how security threats were initially a hobby, but have now morphed into organised crime that is increasingly sophisticated. IoT dramatically expands the opportunities for entry into systems. We need to use ‘big data’ to protect ourselves, and we need industry and governments to collaborate, he said. Microsoft has called for a sort of Geneva Convention for the digital world, proposing six principles to limit the potential effects of cyberwar.

Kelly Tymburski (Dentons) presented the new Qatari law on data privacy, a first in the region. The law requires consent from the point of collection and, when dealing with sensitive personal data, prior authorisation from government. Special provisions apply to minors’ websites, and transfers to other countries are authorised only if the recipient country is deemed to have appropriate safeguards. There are heavy fines for non-compliance, but also a six month grace period to become organised.

Ashraf Ali Ismael (Ministry of Transport and Communications, Qatar) illustrated the Qatar National Information Assurance Framework, a tool developed to govern and build the digital ecosystem. This framework is the foundation on which all other relevant laws are issued. There are also plans to establish a privacy commission.

Aziz Mohamed (Cisco) showed how the Middle East and North Africa region is leading in terms of growth rates in connected devices, and, like the rest of the world, is seeing IoT and video as the main drivers of demand. Security is a pressing issue that requires every stakeholder to work together to guarantee it without sacrificing innovation.

Bharat Vagadia (Ooredoo) stated that the value of data may increase further if the same data can be used for other purposes. In fact, the value of the whole ecosystem depends largely on our ability to cross-reference different datasets; that is, on governments opening up their datasets to industry and making sure that they are interoperable.

This in turn requires anonymisation techniques and brings the issue of consent into question – if the data is not personally identifiable, do you need express consent for someone to derive value from it?

Finally, Travis LeBlanc, (Boies Schiller Flexner)



Making points, clockwise from top left: Howaida Nadim, Foresight; a question from the floor; Amr Eid, Gulf Bridge International; Facebook’s Robert Pepper

reported on his experience as chief enforcement officer at the FCC, the US regulator, with the reminder that many of the data breaches are low tech, for example a lost laptop, and simply require good training. Companies also need to be accountable for any breach, making security an issue not just for consumers, but also for companies.

The question arose of how to create a culture of online security within a company. It was felt



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that although technology solutions provide protection for ‘click happy’ users, there is still a need to create a culture of security inside (and outside) companies that goes beyond mere compliance.

While large companies have the means to ensure security, the big issue is data security for SMEs, where entrepreneurs and staff may not have the time or skills to deal with it. Incentives may be a good idea, for example establishing minimum security protocols as a necessary condition to enter public tenders. Or taking action to ensure that company policies on IT security are truly understood and followed by everyone.

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MIAMI HOTSPOT

The IIC's second TMF of the year took place at its now regular Miami location, focusing on Latin America. There was also a regulators' forum. By **CRISTINA MURRONI**

The IIC's TMF and Regional Regulatory Forum in Miami focus on the Latin American and Caribbean region. Regulators and leading industry players again convened to discuss a range of topical issues, which this year included a workshop on policies for responsible and sustainable advertising.

INVESTMENTS AND COMPETITION FOR COVERAGE AND CONSUMER PROTECTION

A keynote presentation by AT&T's Robert Quinn opened the first session. Consumers demand flexible, portable services that are often free at the point of use, he said. Companies, in turn, require the flexibility to experiment with new business models as well as incentives to support the large investments needed for new networks and infrastructure.

Lindsey Fussell (Ofcom, UK) echoed the view that consumers have increasingly higher expectations and explained that Ofcom helps consumers shop around by making price and quality comparisons easier and is formulating a policy for operators to offer compensation to customers when faults and complaints are not redressed in a timely manner. André Müller Borges (Ministry of Science, Technology, Innovation and Communications, Brazil) explained that the heavily regulated Brazilian market will soon see a complete overhaul of the current law, placing broadband, rather than telephony, at the heart of regulation and promoting infrastructure investment.

Fernando Borjón Figueroa (Telecommunications Investment Promotion Agency, Mexico) gave an overview of Promtel, the new public-private partnership set up to offer wholesale-only 4G mobile connectivity, entirely funded by private money.

The Q&A session highlighted the positive effect of published quality of service league tables on consumer choice and competition, and the need to address coverage issues with a range of policy instruments.

ROADMAPS FOR URBAN AND RURAL DIGITAL INFRASTRUCTURE

Allan Ruiz (Regional Technical Commission of Telecommunications) described a roadmap for the Latin American region that has begun by compiling and comparing some 90 indicators (which include more sectors than just ICT) for each country. He highlighted the importance of concluding the transition to digital television in the region, and providing more spectrum to industry.



The setting for the Miami TMF, held at the Palms Hotel, Miami Beach

The complexity of regulating the digital sector was emphasised by Maria Paola Levati (Ministry of Communications, Argentina). The country recently signed an agreement to finance fibre optic deployment and coverage for towns with fewer than 2,000 residents, using universal service funds that had reached \$350m but had remained unused until now.

In small island states, coverage issues are solvable, but it is more difficult to ensure there is enough capacity and education to exploit digital infrastructure to the advantage of the entire country, according to Gerry George (National Telecommunications Regulatory Commission, Saint Lucia). Iván Antonio Mantilla Gaviria (National Planning Department, Colombia) argued that while Colombia has had a successful digital strategy (75% of adults use a computer), the future is more

uncertain, because convergence is changing the competitive game, there is no unifying policy goal and, in particular, the private sector has experienced lower growth rates in the past few years.



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CONTENT FUTURES AND LOCAL CONTENT

The content panel focused on piracy, a significant factor affecting investment in content in the region. Ernesto Orozco (National Television Authority, Colombia) said that enforcement of anti-piracy rules is a major issue, adding that the government is offering financial incentives to produce audiovisual content in Colombia, up to 40% of the budget spent (above \$500,000). Sonia Gill (Caribbean

◀ Broadcasting Union) stressed that Caribbean TV markets rely heavily on imported content because it is much cheaper than producing it locally. Low broadband penetration, fragmented markets and costly digital data plans are additional challenges to the development of local digital content.

The discussion highlighted that protectionism has not been effective at promoting local production, but where broadcasters have given priority to local content, they have been well rewarded in audience numbers. An interesting proposal is to use universal service funds to support local production. Karim Lesina (AT&T), concluding, added that piracy directly affects the ability to create content and fosters the kind of skills needed for cyber attacks. Cybersecurity should be viewed as an even bigger problem than piracy, requiring joint efforts in the region, and educating the public about piracy and security.

SPECTRUM AND LICENSING UPDATES

Michael O’Rielly (Federal Communications Commission, US) reported on several current spectrum topics at the FCC, remarking how all regulators in the region are grappling with similar issues: devising auctions to allocate resources efficiently, opening up public buildings and facilities as passive infrastructure, and increasing the number of poles.

Martha Suárez (Agencia Nacional del Espectro, Colombia) explained that the agency makes long-term plans for the use of spectrum, based on its assessments of spectrum needs, which are regularly updated. Colombia is part of the ITU’s task group that seeks to identify which bands can be used for 5G. Mario Rangel (Federal Institute of Telecommunications, Mexico) reported that Mexico is clearing the 600 MHz band for use as a common band for mobile broadband 5G services in the North American region, and is supporting the harmonised use of this band for 5G worldwide. The idea is to spearhead common regulation in this area and thus attract more investment in a new generation of services.

ADVERTISING WORKSHOP

A workshop in Miami debated the regulatory challenges posed by the advertising industry, chaired by Ricardo Maguiña Pardo of the National Council of Self-Regulation in Advertising (CONAR) in Peru with panellists Laura Brett of the Advertising Self-Regulatory Council (ASRC) based in New York, and Vanessa Vilar, Brazilian Association of Advertisers (ABA). The session examined the effectiveness of self-regulation, and the ASRC reports that owing to industry support, 95% of ASRC cases result in compliance. Similarly, in Brazil, 99% of cases that are brought to the courts confirm the agency’s initial ruling and in Peru broadcasters will usually refuse to carry ads from a company that does not comply with CONAR’s rulings. Issues such as profiling, advertising auctions and the role of influencers were discussed.

But Argentina and Guatemala have failed to release any new spectrum for over 15 years, while user numbers have boomed. Héctor Huici (Ministry of Communications, Argentina) said that the objective now is to complete a spectrum plan and auction frequencies to increase competition and widen coverage. Cristian Aguilar (Ministry of Communications, Infrastructure and Housing, Guatemala) reported that a new auction is expected by the end of this year to increase coverage and bring the internet to rural areas. The transition to digital TV is also on the agenda, which will free up frequencies in the 700 MHz band.

THE NEW POLITICAL AND TRADE PARADIGM AND THE DIGITAL TRANSATLANTIC AGENDA

The free movement of data across borders is key to value creation, as it brings together intertwined value chains and supports access to global markets, according to Emma McClarkin (Member of the European Parliament, Committee on International Trade), and the UK plans to make digital trade a priority in its new trading positions after Brexit. Luis Lopez (Inter-American Development Bank) echoed the view that trade today is mostly about increasing the efficiency of value chains, arguing that to provide a competitive edge to their countries, governments should engage in agreeing



Over the top (OTT) poses serious difficulties for protection from potentially harmful content, especially for minors.



and enforcing legal frameworks and safe trade operations.

Alfredo Rafael Deluque Zuleta (Congress of the Republic of Colombia) called for governments to establish a set of core rules for the

protection of information flows across countries. These should become a minimum legal standard to include in trade deals when they are discussed.

OTT SERVICES AND CONTENT

David Geary (Digicel) argued that the debate on over the top (OTT) has evolved and it has now been accepted, on one hand, that practices such as zero rating can be pro-competitive and, on the other, that OTT players can be subject to the same rules as anyone else. This evolution means that OTT players can begin to engage in conversations on how to achieve regulatory objectives. Oscar Reyes (Plataforma de Reguladores del Sector Audiovisual de Iberoamérica) commented that while OTT services are a great development for freedom of expression and media plurality, they pose serious difficulties for protection from potentially harmful content, especially for minors.

Robert Pepper (Facebook) confirmed that Facebook has nearly doubled the number of staff it hires to monitor extreme content on its platform. He then focused on the symbiotic relationship between the OTT companies and network providers. The consensus is that the collaboration of global

platforms is crucial for content controls. The path that is emerging now is one of regulation that relies on 'self-reporting' – which needs to be made easier – and ensuring that content remains legal (according to the national laws of each country), and respectful.

ENABLING THE INTERNET OF THINGS

Juan Alemán (Commission on Digital Agenda and Information Technology, Mexico) argued that any detailed roadmap for the internet of things (IoT) should be the work of an open and transparent multistakeholder model, so that every aspect can be understood and debated by all parties, including civil society. IoT should be viewed as the tip of a pyramid, under which issues like connectivity and investment, rules and public policy must be established to secure a solid base, argued Sebastián Kaplan (Millicom). There should be public roundtables on these issues, including government, multilateral agencies, and civil society.

Jacquelynn Ruff (Verizon) reported that the US approach to IoT is rooted in the principle that the private sector should lead development, with the government enforcing a legal environment for commerce. Regulation should focus on easing cross-border flows of information.

Elizabeth Rojas (Nokia) noted the opportunities that IoT brings to companies and society, while the challenges are overlapping regulatory agencies, confusion, insufficient spectrum and, for now, the lack of replicable business models. For sustainable models, enablers will be harmonised protection of consumer rights and similar rules for data monetisation.

DIGITAL ECONOMY, DATA PROTECTION AND CLOUD

Clete Johnson (Wilkinson Barker Knauer) reported that interference by countries tops the list of data security concerns, followed by criminal syndicates, activist community groups, and then, possibly, terrorist groups. Mario de la Cruz Sarabia (Cisco) argued for a holistic and wide ranging approach to security, which should acknowledge the need to balance the benefits of digital connectivity with the



Attention grabbed, points made and lunch served, Miami style

threats to public safety and economic stability. It should touch on all the areas that need to work towards this goal, for example training product designers to work with privacy and security in mind. Any collaborative approach must begin with a common understanding of the challenges and roles that different players play, and be based on multilateral talks about what government intelligence does and what businesses do.

The panel agreed that policy should give priority to awareness campaigns and education on what IoT will mean both for individual citizens and for the country.

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REGIONAL REGULATORS FORUM: A BRIEF SUMMARY

The Miami RRF gathered regulators from the US, Latin America (LatAm) and the Caribbean, with some participants from Europe and Africa. Government representatives from LatAm also attended.

The converged regulatory model seems to be prevailing with some countries already there and others on their way. Main themes in LatAm are as in Europe: encouraging network investment (with support from the Inter-American Development Bank), supporting 5G, and regulating over the top (OTT) and fake news (one regulator

is planning a media campaign on online safety/fake news).

Net neutrality (and zero rating) top many agendas and remain controversial, and the forum heard a detailed account of why the current chair of the US FCC wants to rollback the open internet order put in place last year.

Regulators are conscious of the need to adapt or fail, the importance of being flexible and pragmatic (particularly with online services) and to ensure effective enforcement both formally and also indirectly (e.g. naming and shaming, reporting on worse/best performers).

On universal service, there were varied views about how to support it and whether setting a speed is the right approach. Some countries are exploring public-private partnership models. A warning was sounded about using USO funds to subsidise other services such as digital literacy programmes.

Concerning spectrum, there was agreement on the benefits of auctions but also the need to avoid using them to raise revenue. Not all countries conduct competition assessments, and in some the clearing process can be complex.