BULLETIN FROM BANGKOK

The IIC's annual conference in Bangkok, Thailand, in the autumn focused on regulatory and policy transformation for the digital economy and all its aspects. Report by Intermedia editor, **MARC BEISHON**

The IIC's 47th annual conference, part of the Communications and Regulation Week held each year, took place in Bangkok, Thailand, at the Eastin Hotel. It was preceded as usual by the International Regulators Forum (IRF), this year hosted by Thailand's regulator, the National Broadcasting and Telecommunications Commission, at its headquarters in the city (and as always, the IRF is a 'closed doors' meeting for regulators only, held under the Chatham House rule – see page 8).

TOWARDS DIGITAL THAILAND

The opening keynote on the first day of the conference was delivered by Vichaow Rakphongphairoj, managing director of True Corp, a converged telecoms operator in Thailand. He described how Thailand has made substantial progress in communications growth and reducing the digital divide in recent years during a period of political and regulatory stability. The country now lies in third position in the region according to the World Economic Forum's Networked Readiness Index, behind Singapore and Malaysia, and is up to 120% mobile penetration, and internet use exceeds 50%, driven by low-cost smartphones. The government, he added, is pushing a Digital Thailand agenda, which has six pillars, only one of which, the workforce, is lagging by much. There is also a programme for business start-ups.

> **Technology convergence needs to also be understood by other regulators and government agencies.**

Although Thailand was late in adopting 3G mobile, said Rakphongphairoj, the country has now made rapid progress in opening up more spectrum, with two 4G auctions in 2015 for the 900 MHz and 1800 MHz bands, and is also angling for more international connectivity in an aspiration to be the leading digital hub in South-East Asia. To support this, there needs to be full connectivity on both sides of the Pacific and Atlantic, he added, as currently much traffic in the region comes east from the US.

REGULATOR ADAPTION

The first main session focused on objectives and priorities for regulators in adapting to digital transformation. IIC president, Chris Chapman, said that legislatures and policymakers are not providing sufficient intellectual leadership, regulatory frameworks, and joined-up roadmaps that are required in the face of unprecedented change. There have already been several digital 'tipping points' in areas such as data storage, pervasive communication, computational power, and social media and he posed the question: "What are the next tipping points, and are they just compound effects of previous tipping points, or are they again of an entirely different dimension?"

Shri Sudhir Gupta, secretary of the Telecom Regulatory Authority of India (TRAI), gave viewpoints from a developing country perspective, homing in on the broadband access challenge for many millions of people. Among the issues he raised are regulations that could hamper the deployment of public WiFi, and its interoperability with mobile networks, with interconnection and tariffing also to the fore, along with the promotion of cloud computing and critical applications such as mobile banking in a bid to give all Indians access to a bank account. This also means working with the financial regulator, he noted, adding that technology convergence needs to be understood by other regulators and government agencies.

Gupta also highlighted net neutrality – an issue he said is 'haunting' most of the regulators across the world, noting that India was among the first to regulate on prohibiting discriminatory tariffs for data services. Broadcasting is also a concern – there has been a long effort to gain an holistic view of the regulations in the broadcasting sector, and "we are working on a framework that would ensure equitable distribution of revenue to different stakeholders in the value chain". Concluding, Gupta said: "One cautionary note I would like to put is, though access is a priority, this must not be at the expense of competition at the network level as it could lead to undesirable social outcomes."

Adriana Labardini, a commissioner at Mexico's

regulator, IFT, spoke about the goals for regulation and competition policy and keeping a firm eye on net social benefits. To this end, Mexico has addressed a number of supply side issues, including opening up more spectrum and embarking on a wholesale mobile access network that will aim to cover areas that competition has failed so far to serve. While there are challenges in deploying next-generation networks, competition has already seen much more affordable prices, she said.

But the bigger picture lies in realising the promise of the digital economy for more people, where many other issues come into play, such as cybersecurity, big data, cloud computing, artificial intelligence and automation, skills, and integration with other sectors such as transport and health. New tools and laws will be needed for coordination and the ability to act with more speed, said Labardini, and there will probably be more than the six pillars in Digital Thailand to be accounted for in future for an increasingly complex digital ecosystem.

Rabha Zeidguy, council member of the High Authority of Audiovisual Communication (HACA) of Morocco, added a content perspective, identifying pluralism as a key issue in her country – "Not only political pluralism, but also linguistic and cultural pluralism," she said. There is a new law that has given civil society a greater stake in media pluralism – but with many active civil associations and a new route to complain to the regulator there is a challenge in managing a big flow of complaints.

Pluralism is only one part of wider access, and also includes connectivity, coverage and special needs access – and Morocco is doing well in both public and private sectors overall, said Zeidguy, and there is also an important provision of the new law to make audiovisual operators comply with a right to access information.

The last perspective in this session came from Stephen Unger from the UK regulator, Ofcom. Connectivity is at the heart of most debates, he said, certainly in the current strategic review in the UK and the proposed new regulatory code from the European Commission. But there are different

perspectives for telecoms and media regulators. For telecoms, the roadmap to gigabit speeds is a big civil engineering challenge, especially in a country like the UK with old infrastructure, and also making sure that some people are not excluded. This is where good universal service obligation policy is still needed, said Unger. On mobile, there is the question whether 5G is needed before people can truly consume video on the move; and for the internet of things, he said that the debate is less about spectrum and more about security and privacy. Underpinning these issues is oversight of industry structure, such as mobile operator mergers.

Ofcom is also a media regulator, and connectivity drives change in accessing content. Unger noted that young people are going online and are unlikely to watch conventional TV. For the regulator, this transformation raises concerns about child protection, given that traditional broadcasting rules no longer work, and he also highlighted the role of public service broadcasting (and the BBC in particular), and the importance of not crowding out commercial offerings. Media plurality is also a hot topic, he added.

> **The roadmap to gigabit speeds is a big civil engineering challenge, especially in a country like the UK with old infrastructure.**

In concluding, he identified two key issues – how to achieve the vision of ubiquitous mobile connectivity, and the lack of regulatory levers for this (and so new tools are needed); and the investment climate in the new era of Brexit (the exit of the UK from the European Union).

GOALS FOR DEVELOPMENT

The conference moved on to the topic of linking ICT policy and regulation with the new Sustainable Development Goals (SDGs). Chairing the session, Rohan Samarajiva of think tank LIRNEasia, and a former regulator, set the scene by saying that ➡

connectivity is a clear aim for ICT policy but there should be a much wider agenda for issues such as innovation, resilience, trust building and security. Natasha Beschorner, an ICT policy specialist at the World Bank, said that along with connectivity there is a focus at the bank on digital innovation, collaborating with teams working on trade and competitiveness issues, macro-economic management and finance, and legal and regulatory reforms, which in many countries are still very much underdeveloped – "Legal protections for electronic transactions in particular."

A third strategic area is what she termed digital platforms, but one that interfaces with many of the SDGs, ranging from e-health and e-education to road safety and intelligent transport systems.

Beschorner mentioned several World Bank initiatives, including connectivity in the Pacific islands, telecoms reform in Myanmar, and a digital platform in Mongolia. Her own specialism is transport, where the World Bank is working in countries such as Malaysia and the Philippines on traffic congestion and road safety projects using big data analytics.

Siope Vakataki 'Ofa, from the UN Economic and Social Commission for Asia and the Pacific (ESCAP), described the huge increase in broadband connectivity in the region, but there is also an increasing digital divide as the top rated countries in both connectivity and digital economy activities pull away from the lowest ranked – there are 20 countries in Asia Pacific that have very low broadband internet penetration and some are still missing undersea fibre-optic cable links. Prices are also too high in some countries. He said that ESCAP is promoting the Asia-Pacific Information Superhighway initiative, which is aiming to increase regional broadband connectivity.

There are actually only two ICT targets in the new SDGs, pointed out Basheerhamad Shadrach, at the Alliance for Affordable Internet, World Wide Web Foundation, although one on connectivity is wide ranging (but not specific) and the other concerns women, who often contribute more than men in economic activity. He picked up the theme of accessing and analysing information, noting that there is a long way to go in contextualising data for use by communities.

Cost of broadband access is still a major issue, he added, and the targets of the UN Broadband Commission should be challenged, and this is where the Alliance for Affordable Internet comes in, by widening the number and type of large and small organisations in the effort. What is needed are coalitions of industry, governments, regulators, civil society and the media that can address issues such as taxation, tariffs and universal access, and introduce initiatives such as universal service funds that are designed to overcome limitations exposed in the past concerning other such funds.

Syed Ismail Shah, who heads Pakistan's telecoms regulator, said that the SDGs are helpful in showing the 'big picture' as regulators can get weighed down with day to day firefighting. There are though barriers in rolling out supply side connectivity to

From top: Richard Bean, acting director of Australian regulator ACMA, talks about his country's National Broadband Network; an impassioned intervention from the floor; equally impassioned was Robert Pepper, now working for Facebook, making two points (at least); delegates from South East Asia during a coffee break

underserved areas not connected to the internet, and while ICT clearly plays a big role in many SDG targets such as education and health, there are competing demands – people in remote areas may well need clean drinking water as well as broadband access, for example. "We need to work in parallel though – we can't wait until all other problems are solved," he said.

Shah said that regulators need to embrace a new era of collaborative regulation that has the big picture in mind and that can promote and not inhibit new technologies, and this means the kind of broad coalition emphasised in this session, including with the big players such as Facebook and Google, and recognising that the internet has no country boundaries.

A lot of detail was picked up in the discussion, such as where universal service funds have gone astray, and why taxation of digital devices and services can be harmful.

AUSTRALIA'S NATIONAL BROADBAND NETWORK

One of the world's major initiatives on next-generation broadband is taking place in Australia, and this year's conference devoted a session to examining the issues for the National Broadband Network (NBN), as introduced by Peter Lovelock, director of Singapore-based think tank, TRPC. The project is a government owned wholesale network with a spend of about AUS$50 billion that is used by internet service providers, (or retail service providers, as called there). It is also a combination of networks and technologies. Early efforts to proceed with a partnership with the incumbent operator, Telstra, foundered over regulatory concerns, before it was decided that the government alone would build a fibre network, with a deal reached with Telstra on infrastructure.

The first years though didn't go well until a turnaround team with telecoms experience was appointed and a 'NBN 2.0' was born that has compromised on the full fibre rollout. Delegates heard that if a country is contemplating building a big new network – as many are – it's important to separate the executional network and engineering from the regulation. They are of equal importance but conflating them can create difficulties.

Michael Cosgrave, general manager of the infrastructure regulation division, Australian Competition and Consumer Commission (ACCC), gave his appraisal of the NBN, noting the inclusion of satellite may well be seen as one of the successes, and that if ambitious rollout targets are met Australia is on track to deliver 25 mbps download to 100% of consumers and 50 mbps to 90%.

Focusing then on affordability and cost, he said it is far from clear how the network will operate after construction is finished, and he warned that infrastructure markets such as communications, "inevitably have the potential to be concentrated", and there is a "need to take dynamic, long-term impacts of competition and balance them against shorter term cost considerations". Embedding social policy objectives and particularly universal service obligations in a primary provider of network

services can have significant distortionary effect, he added.

The incumbent in question, Telstra, was represented by Jane van Beelen, executive director of regulatory affairs. She outlined the implications for her company, including disconnecting copper and coax access networks and handing over certain assets to the NBN, so that Telstra will become a retail service provider. This has come at a loss of value for the company, she said, and Telstra still deploys copper to estates where the NBN won't reach and it also has an obligation to supply fixed line voice.

The disconnection programme in this structural separation process is complex, added van Beelen, and there have been many challenges – "It really needs a multi-stakeholder exercise to make sure that the providers of the various services all play their role in making sure that the customer can have as simple and seamless as possible migration to the NBN." She also said that removing the vertical integration can place retail suppliers further away from customers, and raises issues such as how cross-subsidies for serving low-income and vulnerable people will work.

Finally, Richard Bean, acting chair of the Australian Communications and Media Authority (ACMA), said the NBN is "creating a new technical and commercial environment – not only in terms of the multiple access technologies, but the fundamental change to the supply chain between the provider of various components of the services and the consumers". There are early signs, he said, of consumer confusion about who is responsible for services and problems that arise, which the ACMA is working to keep on top of. There are safety issues such as voice becoming mains powered and interoperability with emergency services. On the universal service obligation, he added: "The current legislation is all about the legacy fixed line telephone service and it's a very interesting and big question as to what it should be, if anything, in the future." Above all, he concluded, a high level consumers' view is needed on a project of this scale.

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DIGITAL TRENDS

The second day of the conference kicked off with a panel on the digital economy, including the internet of things. Chair Andy Haire suggested that discussion revolve around the key words, transformation, value and opportunity, and embrace all forms of communications and models, including the sharing economy.

Delegates heard an example of transformation – a tailor in a Vietnamese market using a website and social media to establish a global presence as a ➡

◄ micro-business – such businesses have more to gain than almost any other. A study by Deloitte has shown that small businesses that are online are twice as likely to be growing, and four times more likely to be hiring staff. Another transformation is in mobile use – there are now more Google searches on mobile than desktop in key markets such as the US and Japan, and the multinational nature of reach for businesses is also apparent in traffic, as with the tailor. Key enablers are connectivity, digital skills, and regulation and trade rules that allow small players the freedom to move data and goods.

> ❝ **IoT should largely be left to the market at this stage, but regulators should always watch out for consumer protection.** ❞

Vodafone's senior legal and regulatory counsel, Agne Makauskaite, mentioned the findings of a study with Arthur D Little on the 'gigabit society' in Europe, and homed in on the internet of things (IoT), where companies are now no longer questioning its adoption but see it as critical to business, and the vast majority have increased IoT spend recently. She echoed the point about cross-border data flows, adding that data localisation requirements can be a huge restriction on cloud services. Numbering and roaming also remains as an obstacle to IoT, and Makauskaite said she was happy to see BEREC, the body of European

regulators, conclude that IoT should largely be left to the market at this stage, but regulators should always watch out for consumer protection.

Ki-Joo Lee, commissioner at the Korea Communications Commission (KCC), said that IoT shouldn't be seen as just another technology development but a possible industrial and socioeconomic revolution that can lead countries towards much more growth. He described how South Korea is forging ahead towards the 'smart society' with various IoT projects and 5G. He recognised that regulating innovations such as self-driving cars can be difficult and mentioned a public-private committee that will focus on regulation, and there is a big emphasis on security with an IoT security alliance. Korea has also made important moves in protecting personal data.

Muhammad Aslam Hayat, head of corporate affairs at Telenor Pakistan, described the pressures on telecoms operators, including needing to cut costs and innovate while competing with over the top (OTT) players, and how regulation often lags behind and can introduce artificial barriers.

Finally, Johan Adler, Ericsson's head of government and industry relations, South East Asia and Oceania, picked up the innovation theme, mentioning technologies such as artificial intelligence, and systems such as Blockchain that could radically change a whole industry (in this case banking), and also commented on ethical dilemmas in innovations such as driverless cars. There will be need to be a step up in regulatory and moral thinking, he reckoned.

IN BRIEF: OTHER EVENTS IN THE IIC'S BANGKOK WEEK

The International Regulators Forum (IRF), held at Thailand's National Broadcasting and Telecommunications Commission, and involving 39 countries, focused on the following themes:
● Pressures of convergence – merging telecoms and media regulators, regulating market failure with an eye on the public interest, citizen protection, and modernising regulation were just some of the topics in this in-depth session.
● Cross-sectoral collaboration – clash of regulatory cultures (e.g. with financial over mobile money), the division between competition and regulatory oversight, regional coordination, and more.
● The level playing field – are we regulating with old rules in net neutrality vs traffic management? What are society's needs? Should the rules (which might include regulations or licence requirements) be based on what is consumed,

rather than how it is supplied?
● Connecting the unconnected – how effective are universal service obligations? Is there a lack of incentives to lay cables where mobile is dominant?
● Spectrum and 5G – sharing continues to be a key topic, and discussion also took in hoarding, incentive auctions, and not least, pinning down a definition of 5G.
● Streamlining regulation – how regional regulator groups are working, and issues such as roaming and the jurisdiction of the cloud.

Breakout groups
The annual conference also has a set of breakout groups that are often very lively – this year's topics included the future of universal service obligations (a recurring theme throughout the conference); smart cities; tackling piracy (which was especially lively); spectrum allocation; and cybersecurity. The

spectrum group heard that it is easy to get sucked into the 'mobile broadband bubble', but there are many other users of radio spectrum and other important systems such as satellite to consider.

Workshops
Two workshops took place during the annual conference.
● The first, on building a responsible advertising policy framework, examined issues such as ads in the 'burgeoning' digital ecosystem and collaboration among countries and with other national agencies.
● Eliminating spam and nuisance communications was the topic of the second workshop, run by the Canadian Radio-television and Telecommunications Commission. It included a number of case studies, including Canada's new anti-spam legislation, and discussed how to bridge the gap between policy and enforcement.

DIGITAL CONTENT

A key question addressed by the next panel was: In a highly competitive OTT world, what is being done to ensure high quality, market driven, accessible content with local culture and language also preserved? Moe Thu Zar Aung, director at Myanmar Radio and Television (MRTV), gave insight into how the country is opening up broadcasting with more content, including from private companies, and the transition to digital, and is also setting up a new content regulatory body, although like other countries there is debate about how online internet content fits in.

Joe Welch, who heads government affairs, Asia, for 21st Century Fox, pulled no punches in saying that there is a 'tilted' playing field, where traditional broadcasters are subject to content regulation, licensing and taxation, whereas the OTT players have less of all of these. Fox, said Welch, is also "playing in the OTT space" and would like less regulation for existing players, but "we do not wish for more regulation of the [OTT] guys". Welch said that the 'tilt' will probably sort itself out over time, country by country, but in the meantime: "Don't make it worse." He also touched on piracy, malware and pornography, saying that "the legal framework to deal with all this is totally outdated".

Kuek Yu-Chuang, managing director, Netflix Asia-Pacific, followed by saying that all can agree that more choice for consumers is a good thing. He said that Netflix has reached a global scale where it can invest in local content in local languages, and the OTT players are now adding such value in a number of countries. On piracy, he added that when Netflix enters a new market piracy rates come down. A recent OTT entrant, iflix, was represented by Michelle Landy, head of commercial and corporate affairs. The company is targeting online entertainment in emerging markets with a low-cost service, and she said a key barrier to take-up is lack of locally relevant content, and western content needs to be subtitled. Entering new markets also needs careful liaison with regulators on factors such as censorship guidelines, she added. As for piracy: "It is our biggest competitor."

Lastly, Tran Tuan Anh, director of policy and regulation, Vietnam Telecommunications Authority, described the current boundaries between telecoms and content regulation, and the challenges of maintaining a competitive environment given that much traffic and bandwidth originates from outside the country.

THE DIGITAL CITIZEN

The final main session of the conference was about the rights and priorities of people in a digital world. As chair Ann LaFrance commented, privacy and cybersecurity have become dominant issues recently and both government and industry face having to balance consumer protection with making use of data for various ends.

Cordel Green, executive director of the Broadcasting Commission of Jamaica, made a powerful case for new thinking about regulation and the need to act quickly, as new technologies

A panel at the International Regulators Forum gets underway

such as artificial intelligence and machine to machine communications are fast undermining conventional rules, while massive global apps such as Pokémon Go are busy collecting vast amounts of personal data. Green said that digital literacy is crucial and regulators could look to working with industry on technical privacy fixes. Above all, regulators cannot afford to sit and wait before intervening conventionally, he said – "That's outdated thinking."

Detailed analysis of privacy was provided by Christine Runnegar, director, security and privacy policy, at the Internet Society. Let's talk about 'meaningful privacy', she said, which is really vital for reinforcing trust in the internet and in society and a way forward is through 'data ethics', which allows people to exercise effective control and choice over their personal data. Runnegar went on to discuss a 'second wave' of data portability and the implications of Europe's new data protection regulation.

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Monica Desai, director of public policy at Facebook, highlighted that progress is being made in several areas of regulatory concern, including catering for people with disabilities and safety checks in emergencies, both of which Facebook now has tools for.

Donald Connor, group director for regulatory affairs at VimpelCom, noted the huge surge in cross-border data flows and that many countries do not have data protection regulation.

Rounding off the panel, Kyung-Sin Park from the Korea University School of Law, and director, Open Net Korea, said data protection laws are vital to protect powerless individuals who enter into data transactions with powerful agencies and companies. He also reiterated the need for companies to practise 'data ethics', which companies such as Google are doing, unlike some firms in traditional industries.