

Chairman Report of the 15th Global Symposium for Regulators



SUMMARY



The 15th edition of the Global Symposium for Regulators (GSR-15, 9-11 June 2015) which took place at the Stade de l'Amitié Sino-Gabonaise in Libreville, Gabon, welcomed over 400 international policy makers from regulatory authorities and leading companies of the information and communication technology (ICT) sector around the world.

The event was organized by the International Telecommunication Union (ITU) in collaboration with the government of Gabon, at the kind invitation of Gabon's *Autorité de Régulation des Communications Electroniques et des Postes* (ARCEP), under the patronage of President Ali Bongo Ondimba, with the theme of 'Mind the Digital Gap – Regulatory Incentives to Achieve Digital Opportunities'.

Chaired by ARCEP President Mr Lin Mombo, the packed 3-day programme of key topics facing the regulatory community included interactive debates on mobile payments; investment strategies; network sharing models; taxation and the digital economy; the 'Internet of Everything'; interoperability; regulation and broadband uptake; and ways regulation can help promote accessibility for all.

GSR-15 on 8 June 2015 featured a series of meetings among which two hosted by partners, the GSMA and the Global VSAT Forum, a meeting of Chief Regulatory Officers of Industry and a meeting of Regulatory Associations.

TUESDAY 9 GLOBAL REGULATORS-INDUSTRY DIALOGUE (GRID) SESSIONS



The **GSR-15 opening ceremony** on Tuesday 9 June 2015 welcomed a number of distinguished guests including Gabon's Minister of Justice, H.E. Mr Séraphin Moundounga, Minister for Digital Economy and Posts, H.E. Mr Pastor Ngoua Nneme, and President of the National Council and of Communication, Mr Jean-Francois Ndongou, who were joined by Mr Abdoulkarim Soumaila, Secretary-General of the African Telecommunications Union (ATU) and Mr Brahima Sanou, BDT Director, ITU and Regional Director for Africa, Mr Andrew Rugege.

After having welcomed and warmly thanked participants for their presence at this 15th edition of GSR, GSR-15 Chair Mr Lin Mombo, said that thanks to the enlightened vision of His Excellency Mr Ali Bongo Ondimba, President of the Gabonese Republic, Gabon embarked on a vast programme of modernization and construction of telecommunications infrastructure and broadband in order to achieve full connectivity of the country in the near future.

In his opening remarks to delegates, BDT Director, Mr Brahima Sanou, noted that "All countries need not just a solid base of ICT infrastructure, but the appropriate legal and regulatory frameworks to foster investment and innovation."

Before proceeding with the opening of the 15th Symposium, H.E. Mr Séraphin Moundounga, Minister of Justice, speaking on behalf of the President, praised GSR as an excellent platform for exchange of information and experiences and to enhance one's knowledge on topical and relevant issues in the area of telecommunications and ICTs. Broadband, he said, has been tranformational to society and an engine of development of many sectors. Gabon, too, recognizes the importance of ICTs, which stand at the core of the Emerging Gabon Digital Strategy - Vision 2025 (le Plan Sectoriel Gabon Numérique du Plan Stratégique Gabon Emergent (PSGE)).

Funding an inclusive digital society – from infrastructure to data



The Global Regulators-Industry Dialogue (GRID) component of the event began with the **Leadership Debate** around 'Funding an Inclusive Digital Society – From Infrastructure to Data'.

The discussion was moderated by BDT Director, Mr Brahima Sanou and featured Mr Lin Mombo; ARCEP President; Mr Bocar Ba, Chief Executive Officer, Samena

Telecommunications Council; and Mr Christian de Faria, Managing Director, Airtel Africa. Mr Kemal Huseinovic, Chief of ITU IEE Department, set the tone by reminding the audience that 2.3 billion people still live outside 3G coverage zones – a level of 'digital exclusion' that is unacceptable in today's connected world. Industry Leaders, Regulators and Policy Makers attending GSR are ICT leaders, and the network of brains that have changed completely the ICT world, but still have work to do. The panel examined the various investment opportunities and funding challenges in deploying ICT networks, providing access and supporting the development of new services and applications to bolster access to knowledge in the digital world and reduce the digital gap. They also discussed how regulators, including through regional and international cooperation, could address investment gaps while enabling the development of the knowledge society.

Innovative investment strategies: what's new?



Session One looked at innovative investment strategies developed to support the deployment of broadband and access to the digital economy, recognizing that continued investment is key to deployment and service. A presentation by Mr Iqbal Singh Bedi, Principal with Analysys Mason, led into a stimulating debate moderated by ATU's Secretary General, Mr Abdoulkarim Soumaila.

Panelists included Dr Natee Sukonrat, Vice Chairman, NBTC, Thailand, Ms Ebele Okobi, Head of Public Policy, Africa, Facebook, and Mr Steve Collar, CEO, O3b Networks Limited.



Mobile payment debate: an empowering tool

Session Two, the mobile payment debate, explored the regulatory implications of emerging digital financial services. The debate was moderated by Ms Adrienne Klasa, Executive Editor, This is Africa, Financial Times, with panelists Prof. John Nkoma, Director General, TCRA, Tanzania, Mr Sunil Kanti Bose, Chairman, BTRC, Bangladesh, Mr Fabrice Djossou, Senior Sales Director, ABS Africa, Mr Sacha Polverini, Senior Program Officer, Bill & Melinda Gates Foundation,

and Mr Mortimer Hope, Director Spectrum and Public Policy Africa, GSMA – representing regulators, telecommunications providers, donors and associations – discussing the role of different stakeholders in this emerging ecosystem. Panelists also provided a holistic view of m-payments as an enabler of financial inclusion and a tool for empowerment, particularly for women.

WEDNESDAY 10 GRID SESSIONS



Day Two started with a speech by ITU Secretary-General, Mr Houlin Zhao, who emphasized the importance of fostering the growth of technology-based small and medium enterprises in growing each country's national digital economy. He also urged countries to invest in youth through education and ICT training. "Young people are natural innovators, and today's youth are also 'digital natives' – using ICTs to solve problems and create useful new services comes naturally to them, so they can become major drivers of socio-economic change," said Mr Zhao. "Far-sighted governments should look to ways of harnessing this energy and creativity to transform their economies through ICTs and help bridge the digital gap."

Spotlight on network sharing business models



Session Three, moderated by Mr Marafu Antony Chigaazira, Executive Secretary CRASA, with a presentation by Mr Malcolm Webb, and panelists Mr Jacques Stern, Board Member, ARCEP, France, Mr Mike Jensen, Internet Access Specialist, APC, Mr Peter Pitsch, Executive Director, Intel, and

Mr Mongi Marzoug, Vice President, Internet Governance and Digital development, Orange, examined network sharing models that have been developed among various utilities, looking at existing models such as sharing, and co-ownership, as well as at the variety of infrastructure owners and how they too can contribute to infrastructure build out. The moderator set the tone of the discussion by stating to the audience: "To share or not to share – that is the question!" He reminded participants of the context, which is that today some four (4) billion people are still unconnected, and yet there is the realization that ICTs are a key pillar for economic and social development. Participants agreed that network sharing is key. However, the level of sharing is still being discussed. There is a need for regulatory clarity and guidelines, and regulatory and global platforms can be useful to discuss best practices and come to common solutions which can encourage more effective use of infrastructure and ultimately reach the goal of connectivity for all.

The impact of taxation on the digital economy



Session Four, moderated by Mr Serge Essongue, Executive Secretary, ARCEP, Gabon kicked off with a presentation by Dr Raul Katz, President, Telecom Advisory Services LLC and Director, Business Strategy Research, Columbia Institute for Tele-Information. Panelists included Mr Souleymane Tamboura, Member of the Board, ARCEP, Burkina Faso, Prof. Hichem

Besbes, President, INTT, Tunisia, and Ms Cynthia Reddock-Downes, Executive Officer, TTAT, Trinidad and Tobago. The session examined how taxation affects the deployment and take-up of services in a digital environment, questioning whether taxation is a tool for social development or a business inhibitor. Participants agreed that it is imporant to consider and understand the impact of fiscal charges on competition and innovation in a digital economy, since the reality is that taxes can affect demand and broadband uptake. The debate also questioned what, if any, fiscal regime applies to overthe-top (OTT) services and applications.

Day Two also featured a special lunchtime information session led by ITU's Radiocommunication Bureau Director Mr François Rancy on the agenda for the upcoming World Radiocommunication Conference (Geneva, 2-27 November 2015).

Afternoon sessions covered new challenges emerging with the Internet of Things, and the implications of interoperablity requirements on regulatory frameworks.



Internet of Everything: are we ready?

Session Five, moderated by Mr Hodge Semakula, Executive Secretary/CEO, EACO, started with a presentation by Prof. Ian Brown, Associate Director of Oxford University's Cyber Security Centre and Professor of Information Security and Privacy at the Oxford Internet Institute. Panelists included Mr Alain Billerot, Regional Director, IBM Central and West Africa, Mr Shiv Bakhshi,

Vice President, Industry Relations, Ericsson, Mr Eric Loeb, Vice President, AT&T, and Mr Abderrahim Koumaa, Director General, Gabon Telecom, and debated the implications of the convergence of

Internet of Everything on policy and regulatory matters. With the rapid proliferation of IoT, the landscape of telecommunication and ICT is changing fast. Driven by the convergence of big data, cloud services, sensors, data analytics, the ICT and telecommunication markets are experiencing tremendous change with new challenges as well as opportunities for individuals, businesses, and society. The benefits, according to some conservative estimate will be in trillions of dollars per year of new opportunities. In the next decade, billions of devices are also expected to be deployed to provide innovative new solutions for both developed and developing markets. The value of IoT is greatest when many technologies and solutions are combined to provide new innovative services in industries as low tech as agriculture, to smart homes.

Interoperability in the digital ecosystem: a layered approach



Session Six, discussed the importance of interoperability to prevent consumers from being locked-in when using apps and services and understand its effects on innovation and competition. Moderated by Eng. Mohammad Al

Taani, Chairman of the Board/Chief Executive Officer, Telecommunications Regulatory Commission (TRC), Jordan, panelists included Mr Jean-Louis Beh Mengue, Director-General, ART, Cameroon, Mr Sonam Phuntsho, Director, BICMA, Bhutan, and Ms Patricia Cooper, Vice President, Government Affairs and Policy, Intelsat. The panel kicked off with a presentation by Prof. Dr Urs Gasser, Professor and Executive Director, Berkman Center for Internet & Society, Harvard University. Mr. Al Taani opened the session by asking participants to think of interoperability as the cornerstone of IoT. Although it has been around for very long, it seems to have been invisible until now, he said. He asked panelists to talk about the advantages and disadvantages of interoperability, including cost benefits. Governments, they said, can encourage interoperability because there is a public requirement – cases include first responder and disaster management – regulators have a real role to play since systems must be able to function together in emergency situations. The other area is national security – where multiple countries are involved and proprietary national systems are not enough –systems need to be able to work together. Participants also urged manufacturers to build interoperability into networks so that when OTT services are offered, the cost can be better determined.

A second information session was held at the end of the day, led by Mr Cosmas Zavazava, Chief of ITU PKM Department, on the value of data in the regulatory environment, ahead of the World Telecommunication / ICT Indicators Symposium, which will take place in Hiroshima, Japan, from 30 November – 2 December 2015.

THURSDAY 11 REGULATORS' DAY Day Three was 'Regulators' Day', that started with a session moderated by Mr Ronald Box of TTR Vanuatu on promoting e-accessibility, followed by a session on how smart regulation can facilitate m-services and applications moderated by Mr Dražen Lučić of the Croatian regulator HAKOM. The symposium's final session, led by Ms Magdalena Gaj of UKE Poland, looked at how regulatory frameworks can drive broadband uptake.

Fostering e-accessibility: The regulator as an enabler



Session Seven, moderated by the Regulator of TTR Vanuatu, Mr Ronald Box, debated how e-accessibility is important in order to foster an all-inclusive digital society which includes persons with specific needs, the disadvantaged, disabled, blind, deaf and elderly people in society, people that are unable to join the digital world by conventional means. The panel kicked off with

a presentation from ITU's Ms Sofie Maddens-Toscano followed by a panel discussion with Mr Eng. Hesham El Alaily, Executive President, NTRA, Egypt, Ms Mignon Clyburn, Commissioner, FCC, United States, and Mr Sanjeev Banzal, Adviser, TRAI, India on behalf of Dr Vijayalakshmy K. Gupta, Member, TRAI, India. The session examined measures regulators can take to foster accessibility to ICT services for all, to achieve digital inclusion.

Smart regulation to facilitate m-services and applications for all



Session Eight, moderated by Dr Dražen Lučić, President of Council, Croatian Post and Electronic Communications Agency (HAKOM), kicked off with a presentation by Ms Mercy Wanjau, Assistant Director, Communications Authority of

Kenya. Panelists included Ms Kathleen Riviere-Smith, Chief Executive Officer, Utilities Regulation and Competition Authority (URCA), Bahamas, Ms Katharina Pillay, Councilor, ICASA, South Africa, and Mr Collins Chomba, Manager Interconnection and Competition, on behalf of Ms Chalwe-Mudenda, Director General, ZICTA, Zambia. The panel examined regulatory measures needed to facilitate the deployment and diffusion of m-services and applications to achieve social development goals, discussing what issues are at stake and what the key services are to achieve this goal (e.g. m-health, m-education, m-payment, etc). The panel further examined how to address regulation in a cross-sectoral environment, collaboration and coordination measures requested, how to include m-applications and services within universal service policies and ICT/digital broadband plans and how to stimulate uptake. Panelists argued that m-services are tools allowing people to stay informed, help governments and policy makers develop overall social goals and encourage economic and social development. Others underlined that in many countries mobile operators have a significant share of the market, and that this is something regulators need to look at, together with competition authorities, so that markets can flourish and a wide range of services can be available. Recognizing that regulation is a balancing act, it is important for countries to share success stories, so that others may learn from their experiences and knowledge can be shared. Broadband access is a prerequisite, and high quality mobile broadband networks are part of that equation.

How does regulation impact broadband uptake?



The concluding discussion,

moderated by Ms Magdalena Gaj, President, UKE, Poland, with panelists H.E. Mr Seng Kong, First Member, TRC, Cambodia, Mr Manuel Emilio Ruiz, Board Member, Sutel, Costa Rica, and Mr René Doenni Kuoni, Director of Telecoms and Board Member, OFCOM, Switzerland, offered regulators the opportunity to share

their experiences on regulatory measures taken to foster broadband access, ensure quality of service and stimulate broadband uptake. To start the discussions, the moderator reminded participants about the goal and mission of the regulator being to provide country citizens with broadband Internet access. She noted that broadband can be compared to the bloodstream in the human body. Broadband is not a luxury, it is a basic human need. The services and what the citizens in any given country can do with broadband is essential, however, having the basic infrastructure in place is a pre-requisite. How to boost investment in infrastructure is therefore very important. Countries need to look ahead, to 2020 and beyond, have long-term strategies, to see how they can enable their people to become mobile citizens of the world. In addition to a broadband strategy, countries will need to have the appropriate laws and legislation in place, and with this create predictability in the market.

Way forward and closing



The GSR-15 way forward and closing ceremony was presided over by BDT Director, Mr Brahima Sanou; GSR-15 Chair Mr Lin Mombo; and Gabon's Minister for Digital Economy and Posts, H.E. Mr Pastor Ngoua

Nneme. During the Way Forward, the GSR-15 Best Practice Guidelines on facilitating the uptake and widespread use of mobile applications and services through targeted regulation were adopted. The Guidelines invite telecom/ICT regulators to identify pro-active policy and innovative regulatory measures to: raise awareness about the potential of m-services and applications to achieve socioeconomic opportunities by empowering citizens; lift regulatory and technical barriers and foster access, development and take-up of apps and m-services; to ensure ease of use, trust, privacy and confidence as well as basic security in the use of m-services and applications taking into consideration their transnational nature; and, identify the roles and responsibilities of the government, the telecom/ICT regulator, the industry and consumers to facilitate and stimulate uptake and use in a safe and secure manner. The coordination on the GSR-15 best practice guidelines was led by Mr Lin Mombo, GSR-15 Chair, who accepted the role of Ambassador of the GSR-15 Best Practice Guidelines, stating that "They respond to the current needs of ICT development in bridging the digital divide."

Closing addresses:

H. E. Mr Pastor Ngoua Nneme, Minister for Digital Economy and Posts, Gabon said: "Today, telecommunication/ICT is a strategic sector in the creation and distribution of national wealth, and contributes significantly to the improvement of the main macroeconomic indicators and the development of socio-economic activity in Gabon. The ambition of the Gabonese government is to ensure that ICTs not only contribute to the growth of GDP, but are accessible, available and affordable. I assure you that the Gabonese Republic under the leadership of President Ali Bongo Ondimba will take the necessary steps to implement the outcomes of your work. I would also like to reaffirm the commitment and will of my government to support and assist the ITU in its mission to connect the world and transform Africa."

Mr Brahima Sanou, BDT Director, emphasized the role that ITU can play in fostering innovation. "In today's increasingly globalized ICT markets, regulators and policy makers have a need to get together to find common ground and identify innovative ways of working together. Innovation is becoming central to the policy frameworks that will create the right enabling environment to drive growth – and ITU serves as the ideal neutral platform for those discussions." He thanked the Government of Gabon and the ARCEP team for hosting the symposium, and congratulated Mr Mombo on his remarkable leadership of the event. Mr Sanou nominated Mr Mombo Ambassador for the GSR15 Best Practice Guidelines.

Mr Lin Mombo, President of the Regulatory Council of the Autorité de Régulation des Communications Electroniques et des Postes (ARCEP) and GSR -15, accepted the role of Ambassador of the GSR-15 Best Practice Guidelines, stating that "They respond to the current needs of ICT development in bridging the digital divide." He thanked the ITU and further said: "By hosting this meeting, Gabon has shown its commitment to international cooperation in working towards an inclusive information society in the world in general, and in Africa in particular. I would like to express our satisfaction with regard to the excellent results which we have reached after three intensive days of work. I do not doubt for a moment that these results will benefit all actors in the ICT sector. I am particularly delighted with the relevance and quality of the Best-Practice Guidelines that we have just adopted. They respond to the current needs of ICT development in bridging the digital divide."

GSR-15 BEST PRACTICE GUIDELINES FACILITATING THE UPTAKE AND

WIDESPREAD USE OF MOBILE APPLICATIONS AND SERVICES THROUGH TARGETED REGULATION Access to, and the use of, mobile ICT services bring innumerable social opportunities and help stimulate economic growth of nations thereby benefiting the daily lives of all citizens. With such powerful technology and such unprecedented computing power in the palm of our hands it is imperative that we respond to the ongoing dynamic changes in ICTS and markets, craft new regulatory paradigms, and address the challenges relating to infrastructure, spectrum, and privacy. Such "fourth-generation regulation" will create a more enabling environment for the use of ICTs, while ensuring legal certainty and technical reliability thereby enhancing trust of end-users and allow people around the world to harness the opportunities yielded in health, education, public administration, agriculture, commerce, finance, and in everything that will serve humanity and help us achieve sustainable development.

We, the regulators participating in the 2015 Global Symposium for Regulators, recognize that targeted fourth-generation regulation based on a light touch approach promoting healthy (active and sustainable) competition, innovation, consumer protection and empowerment can go a long way towards responding to the dynamic transformation of ICT markets and achieving social and economic goals. Therefore, we have identified and endorsed these regulatory best practice guidelines to facilitate the uptake and widespread use of mobile services (m-services) and applications (apps) in order to foster digital and financial inclusion.

I. Stimulating demand

Recognizing the potential of m-services and apps for improving the transparency, accountability and efficiency of public services, governments can benefit from the knowledge and experience of stakeholders to draw up holistic strategies to allow users to use m-services and apps. Governments should also innovate and become lead users in this field. Initiatives for connecting public administrations and institutions such as schools, libraries and hospitals can create significant market opportunities and stimulate both the supply of and the demand for m-services and apps.

We recognize the role regulators can play in supporting and encouraging partnerships to facilitate the development of m-services and applications and raise awareness on how they can help increase economic productivity. In particular, social apps for the disadvantaged or unconnected populations can enhance quality of life across all sectors of the economy. Joint efforts with government agencies from other sectors could also generate win-win opportunities, inter alia for promoting education, digital skills, financial inclusion and integration in health-related programmes.

We further stress the importance of promoting the development and distribution of appropriate digital content, including multi-language content and content in local languages.

II. Facilitating availability, access and use of m-services and apps

New generation networks are the foundation of innovation in the ICT sector and the engine for the development of m-services and applications. Therefore, we believe that unified rules for facilitating infrastructure deployment and open access to networks at national and regional level can strongly contribute towards stimulating the development of m-services and apps. Cooperation among all public authorities involved at the international, regional, national, and local levels is key to rapid, smooth and efficient implementation.

Policy makers and regulators must be mindful of the importance of designing flexible, incentivebased and market-oriented policy and regulatory frameworks with regard to spectrum allocation and assignment for mobile broadband services, so as to create trust and provide the necessary conditions for m-services and apps markets to thrive.

The development of new markets and the industry for mobile devices need to be sustained through adequate regulatory measures, in particular in developing countries.

Revisiting and reviewing, where necessary, current Government policies to make sure that they are still valid and appropriate for the new environment and ensuring privacy and security of government, business and consumer data may be necessary while open and collaborative regulatory frameworks are needed to promote the development of cross-cutting services such as m-commerce, m-banking and mobile money, as well as m-health.

We recognize that creating a converged reference framework for competition, interconnection and interoperability can effectively facilitate the relationships among the various providers of infrastructure and services, as well as among them and apps and content providers.

Recognizing that it may be commercially attractive to share network elements between service providers to avoid duplication costs, and provide opportunities for more m-services to be made available, regulators may consider promoting network sharing practices in all network and value chain layers while maintaining healthy competition between network providers.

We believe that innovative, out-of-the-box measures should be put in place to stimulate the take-up of m-services and the creation of locally-relevant apps in remote and rural areas. Among other measures, universal service strategies can be defined and the appropriate mechanisms used to create ICT incubators or for funding local developers and locally-relevant apps.

We call for regulatory measures, private initiatives and partnerships to reduce the cost of m-services and apps in order to ensure equal and universal access.

We further recognize that acquiring digital skills is essential for the wide take-up and efficient use of m-services and apps, and inclusive training programmes for different target groups need to be established.

We reiterate the relevance and value of the GSR13 Best practice guidelines on the evolving roles of both regulation and the regulators in a digital environment; and of the GSR14 Best practice guidelines on consumer protection in a digital world.

III. Protecting consumers and suppliers

We recognize the importance of adopting cross-sectoral regulatory frameworks which address the specificities and requirements of m-services and apps providing for consumer protection, freedom of choice as well as the proper exercise of consumer rights.

We recognize the importance of educating and empowering consumers by various measures and initiatives, including through providing platforms for user-friendly and up-to-date comparisons of service offers and tariffs; informing consumers about legal provisions and complaint/redress

procedures as well as by promoting a culture of cybersecurity. Furthermore, consumers should not be bound to a specific m-service provider or app, and should retain their ability to choose and switch between providers.

We further recognize that regulators should encourage the adoption of measures aimed at enhancing the security of m-services and apps, creating reliable digital identities, using subscriber identification and registration to protect consumers, to safeguard consumer personal data, protecting minors and vulnerable groups, and promoting transparency of online communications and transactions in particular. Multi-stakeholder collaboration is therefore essential for ensuring that the rights and best interests of both consumers and suppliers are protected.

In addition, we recommend the adoption of a privacy policy with enhanced measures to alert users and give them control over data practices that are not related to the app's basic functionality or that involve sensitive information.

IV. Roles of ICT stakeholders

Regulators and policy makers should work with government agencies, private sector and nongovernmental structures to mainstream ICTs, and m-services and apps in particular, into their national social and economic strategies and design holistic policies and regulations allowing for synergies and cross-pollination to occur between the m-services and apps economy and the other sectors. Such policies and regulations should focus on increasing the social well-being of consumers while facilitating the coordination and partnerships among government agencies, private sector and nongovernmental structures.

ICT regulators should adopt targeted regulatory measures to promote the development of broadband networks and services and provide for affordable and widespread access to m-services and apps by consumers, guarantee healthy competition between market players while promoting innovation, and ensure consumer protection in a digital environment.

M-services and apps providers should strive to innovate and diversify the range and content of services and apps on offer and make them affordable and accessible to large segments of the population.

Consumer associations also have a role to play in defining a framework for dialogue with other stakeholders, conducting independent research and getting involved in awareness raising campaigns, so as to contribute to the elaboration of informed policies and strategies for the digital economy.

Given the global nature of online services and apps, cross-border harmonization of relevant regulatory policies as well as enhanced collaboration among national government agencies, regional and global organizations is essential for creating a global digital ecosystem while putting in place effective safeguards against fraud and abusive practices.



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