

**Gobal Symposium for Regulators (GSR) 2019 Best Practice
Guidelines Consultations
Fast forward digital connectivity for all**

**Contributions of ICTA-Turkey
“5G Studies and the Changing Role of the Consumers”**

Regulatory role and responsibilities overlap with every sector, every industry in today’s world. ICTs promise benefits to every individual’s lives and every business model.

An important issue that the new generation mobile communication technologies that we generally refer as 5G or 5G and beyond will change first the communication sector and then shape all vertical sectors such as energy, manufacturing, healthcare, automotive, transportation and finance. With 5G, not only people, but also things from the biggest to smallest will communicate each other. It is forecasted that in the year 2025, there will be a hundred billion (100 billion) different communications around the world and only ten per cent (10%) of these will be inter-personal. The emergence of 5G technology will play an important role in strengthening socio-economic transformations by increasing productivity, sustainability and general prosperity by triggering innovation in the vertical sectors using the communication sector and communications technology infrastructure.

Turkish mobile operators began to offer IMT-Advanced services. IMT-Advanced frequency tender held by ICTA is staged as a technology-neutral tender. Thanks to this tender, operators are free to offer 5G services in these frequency bands without any other legal obligation. Of course, this would not be enough for such a big endeavour, and new spectrum demand will come from operators.

In this sense, we can say that Turkey’s legal and regulatory framework is in a good point to evolve through 5G. In Turkey, public authorities have a commitment to be at the forefront of the change. To streamline 5G and beyond efforts in Turkey, we have established “Next Generation Mobile Communication Technologies Turkey Forum” also known as 5GTR Forum. 5GTR Forum brings together Turkey’s prominent academics, R&D firms, vendors and operators. Taking this opportunity, I would like to thank all organizations that take part in 5GTR Forum.

5GTR Forum members organized in 4 different working groups. After various long and tense meetings, they prepared 5G and Beyond White Paper. This White Paper shows the way forward for Turkey in the road to 5G. White Paper gives us a general perspective and gives insights for operators, vendors and public authorities. All members should take what they could learn from this general strategy and harmonize their efforts.

To open possibilities for everyone in 5G research and development, 5G Valley Open Test Bed, open to all developers, is also established. ICTA Headquarters is located just across three leading universities in Ankara which are Middle East Technical University, Bilkent University

and Hacettepe University. The area between these three universities and ICTA headquarters is a developing region with a dynamic population and various vertical sector components such as hospitals and shopping malls. An open test-bed located in these university campuses and around developing commercial investments will be an important boost for 5G research. This open test-bed provide all interested in this ecosystem such as researchers, start-ups with an enabling environment in that sense.

Also within the 5G Valley, we established 5G and Beyond Joint Graduate Program. This program will drive distinguished master and PHd students to 5G topics.