Next gen, 'lightning' fast global communication network on track for 2020 entry — UN agency

23 February 2017 — A working group of the United Nations agency which coordinates telecommunication operations and services throughout the world completed today a cycle of studies on the key performance requirements of the next generation mobile networks (5G technology) for the International Mobile Telecommunications (IMT)-2020 systems.

According to the UN International Telecommunication Union (ITU), 5G mobile systems would provide lightning speed, ultra-reliable communications for broadband and the Internet of Things (IoT).

"IMT-2020 will be the global cornerstone for all activities related to broadband communications and the Internet of Things for the future — enriching lives in ways yet to be imagined," said the ITU Secretary-General, Houlin Zhao, in a news release.

The draft report — describing key requirements related to the minimum technical performance of IMT-2020 candidate radio interface technologies, including data rate, bandwidth, latency, area traffic capacity, energy efficiency and reliability — is expected to be approved at the ITU Radiocommunication Sector (ITU-R) 5G meeting in November.

Underscoring the importance of the IMT-2020 standard, François Rancy, Director of ITU's Radiocommunication Bureau said: "The standard is set to be the global communication network for the coming decades and is on track to be in place by 2020." "The next step is to agree on what will be the detailed specifications for IMT-2020, a standard that will underpin the next generations of mobile broadband and IoT connectivity," he added.

According to ITU, early technical trials, market trials and deployments of 5G technologies based on the foreseen developments slated for IMT-2020 are not anticipated.

These systems may not provide the full set of capabilities envisaged for IMT-2020, but the results of these early activities will flow forward into, and assist the development of, the final complete detailed specifications for IMT-2020, noted the UN agency.

ITU added that IMT is the on-going enabler of new trends in communication devices — from the connected car and intelligent transport systems to augmented reality, holography, and wearable devices, and a key enabler to meet social needs in the areas of mobile education, connected health and emergency telecommunications.

Members of the working group responsible for IMT systems, include key actors

from the technology industry, national and regional standards development organizations, regulators, network operators, equipment manufacturers, academia, research institutions and ITU member States.