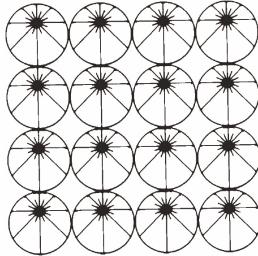


# Foreword



## 2030 Agenda for Sustainable Development

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The September 2015 UN Summit adopted 17 Sustainable Development Goals (SDGs), and 2017 was the year when many businesses and organizations started taking up and working actively toward these SDGs. I'm not going to speak about these goals one-by-one, except to say that, as members of our spaceship earth, all peoples and societies should recognize these goals. Anritsu too is working towards achieving the UN SDGs.

One key phrase describing our efforts is "technology innovation." This is a driving force for changing from the 20th century economic model of growth by consuming and wasting resources to a new society based on regeneration and recycling. Today, we can see many things related to technology innovation, including fifth-generation mobile communications systems (5G), the Internet of Things (IoT), Artificial Intelligence (AI), robotics, self-driving vehicles, Electric Vehicles (EV), renewable energy, block-chain based cryptocurrencies, to name a few. Implementing and spreading these technologies can be the base for achieving the SDGs.

Looking from the technical viewpoint, it seems like we face never-experienced-before challenges in achieving our goals by 2030, which may be the start of a society when people and robots co-exist on a daily basis. Until now, many robots have been used in separated spaces, replacing people doing simple repetitive work for long periods. However, the appearance and widespread use of smartphones has been revolutionary in facilitating the development of low-cost, high-performance sensors; the expansion of low-latency broadband networks such as Long Term Evolution (LTE) mobile; the appearance large-scale data centers and

expanding application of AI for speech and face recognition, search engines, etc.; and the spectacular upgraded performance of low-power application processors, all combining to give autonomous cognitive abilities to machines. One recent example is self-driving vehicles using cameras, radar, etc., to gather data about the surrounding world for driving autonomously in coordination with other nearby vehicles. Undoubtedly, many other new applications will be proposed and implemented. A major future issue will be the creation of rules facilitating co-existence between people, robots, and AI to secure safety and reliability.

I hope Anritsu's products and services will not only support "technology innovation" but will also play a key role in building a safe and secure society.

This edition of Anritsu Technical Review No. 26 describes product development and research themes related to 5G mobile, IoT, and safety and security. Please read it and enjoy learning about our work and technology strengths.

Lastly, I shall be happy if you recognize us as a partner candidate to cooperate in helping achieve the SDGs needed to transform our world.

