

27th IAA SYMPOSIUM ON SMALL SATELLITE MISSIONS (B4)
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Kyushu Institute of Technology, JapanMASSIVE IOT SMALL SATELLITE ACCESS AND MONITORING BY USERS AND SERVICES FOR
CUSTOMERS**Abstract**

IoT satellites are necessary which could solve our daily problems. IoT technology become popular and help farming, tracking, monitoring, and smart life. Today, our communication technology become a revolution of speed and network infrastructures too. 5G network a major role in IoT technology because of its massive customers supports. IoT devices could become accessed by multiple end users through a IoT platform. In this concept, what if we could access IoT satellites by multiple end users. IoT satellite coverage network involves various users and system. We could handle multiple satellites and devices in monitoring. Today, small satellites provide agriculture, surveys, farming, forest fire or natural disasters and etc by different ground stations. However, using IoT platform, massive IoT satellite network communication benefits the real time communication such as star link satellites. For example, the missions of satellites are different but using those multiple communication link via each other using IoT could be easy access for real time monitoring for end users through communication link. In fact, using small satellites could save not only the cost compared to the cost for large satellite but also service prices for users. Many users could access the low-cost voice, data, or tracking ships, etc because of the affordable cost. In recent years, satellite services are aimed for military, governments, scientists, broadcasting channels, telecommunications, and private companies. Today, because of the low-cost building small satellite, the services could be tended to individual users for their smart house, smart cars, smart phones, internet, or voice. Therefore, the trends should be changed or become tends to individual users. People could able to start smart life using modern technologies. They can know charging percent of their electric cars by monitoring on their smart phones even they are in the sea or on their private yacht or boat. Today, everything is on the cloud. Telecommunication technologies changed because of the 5G. Every gateway is software defined function on the cloud. In this concept, satellite technology should be like that. Therefore, individual users could be easy access and faster data flow. Satellite operator could handle massive small satellite at the same time using cloud terminal. In recent, the sensors used in farming are connected as IoT devices and transmitted via satellite. Then, user can monitor the framing. Now, small satellites are used as IoT devices and they are monitored by ground stations. And individual customers can access service.