

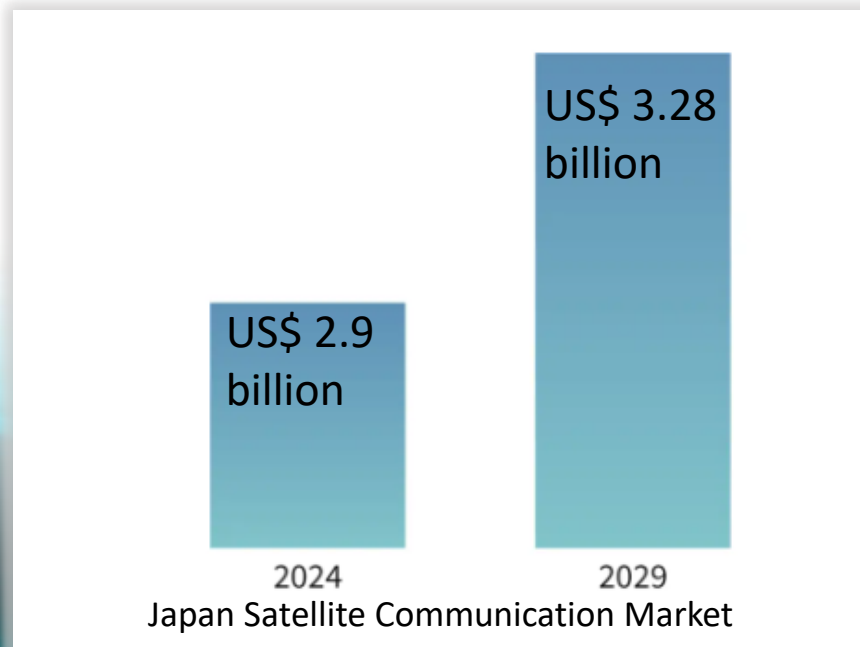
The Potential of Satellite Communication in Great Disasters

Kozo Ibata

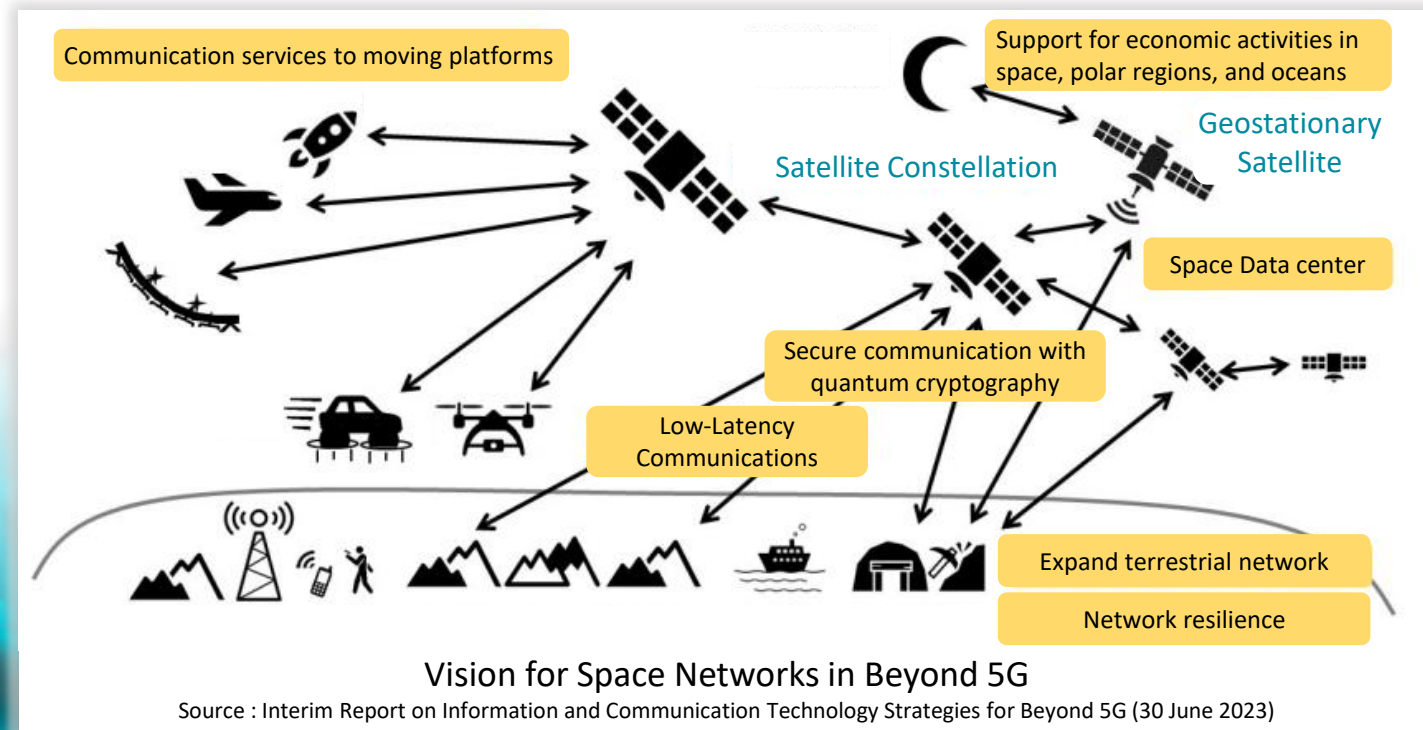
Deputy Director-General for Global Strategy,
Ministry of Internal Affairs and Communications, Japan

Satellite Communication in Japan

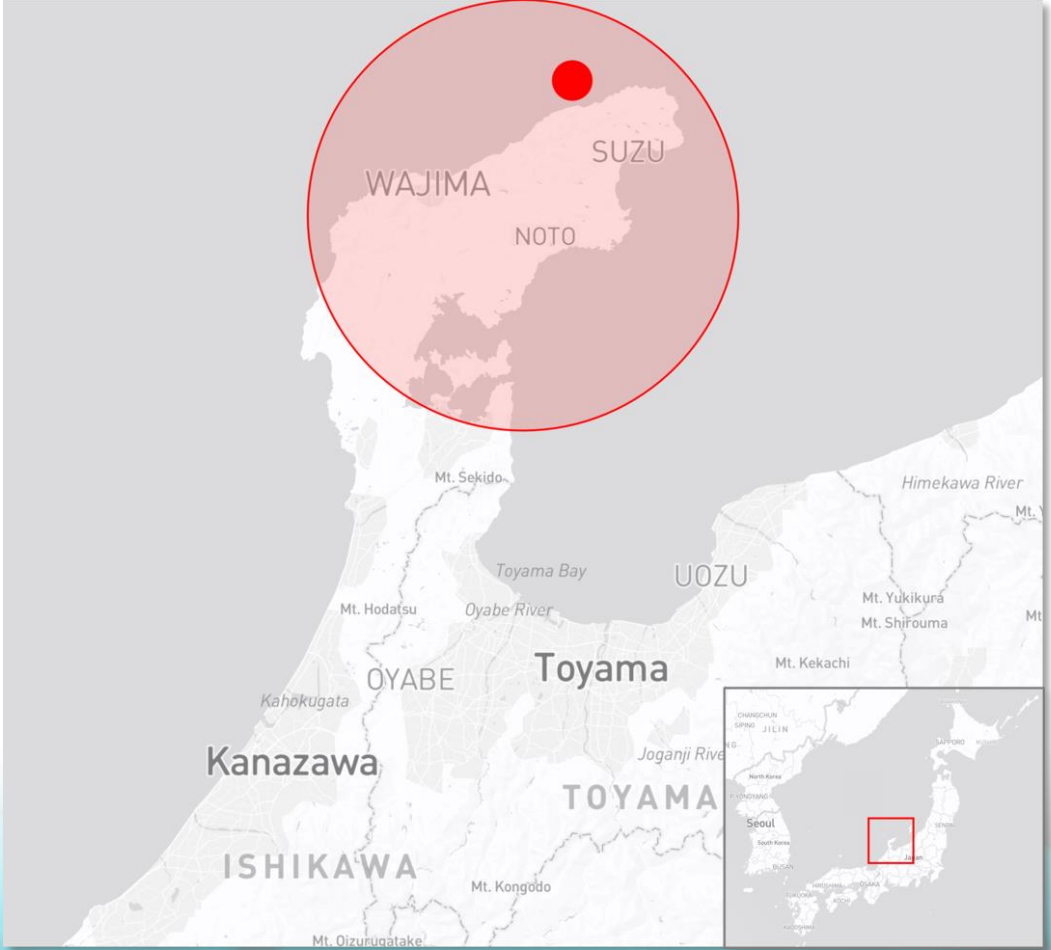
- Satellite communication services were launched by the Nippon Telegraph and Telephone Public Corporation in 1984 using the Communications Satellite-2, which was launched in 1983.
- Japanese satellite communications market is valued at US\$ 2.9 billion in 2024 and is expected to grow to US\$ 3.28 billion in 2029.
 - ◆ Leading operator : SKY Perfect JSAT Corporation
 - 17 geostationary satellites, US\$429 million sales(FY3/2023)
- Main fields of use: Broadcast transmission, remote monitoring and control, provision of high-speed Internet access in aircraft, ships, etc.
- Vision for Space Networks in Beyond 5G: Seamlessly connect land, sea, air and space through the integrated operation of terrestrial and non-terrestrial networks. Expand communications coverage and service reach.



Source : Mordor Intelligence
<https://www.mordorintelligence.com/ia/industry-reports/japan-satellite-communication-market>



Noto Peninsula Earthquake on January 1, 2024



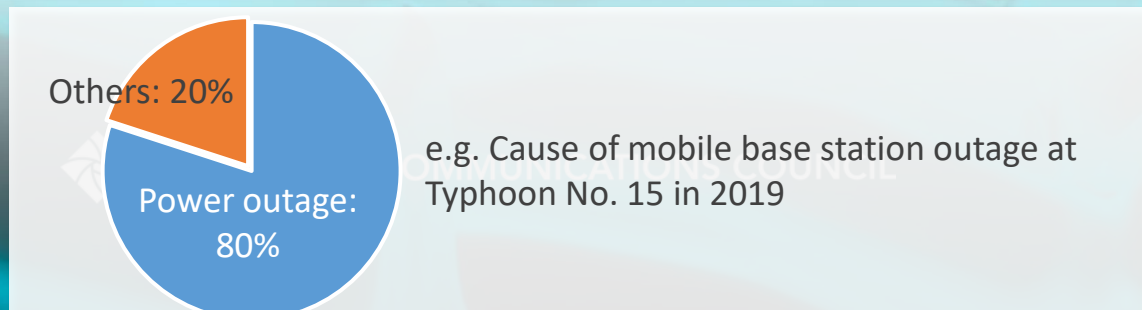
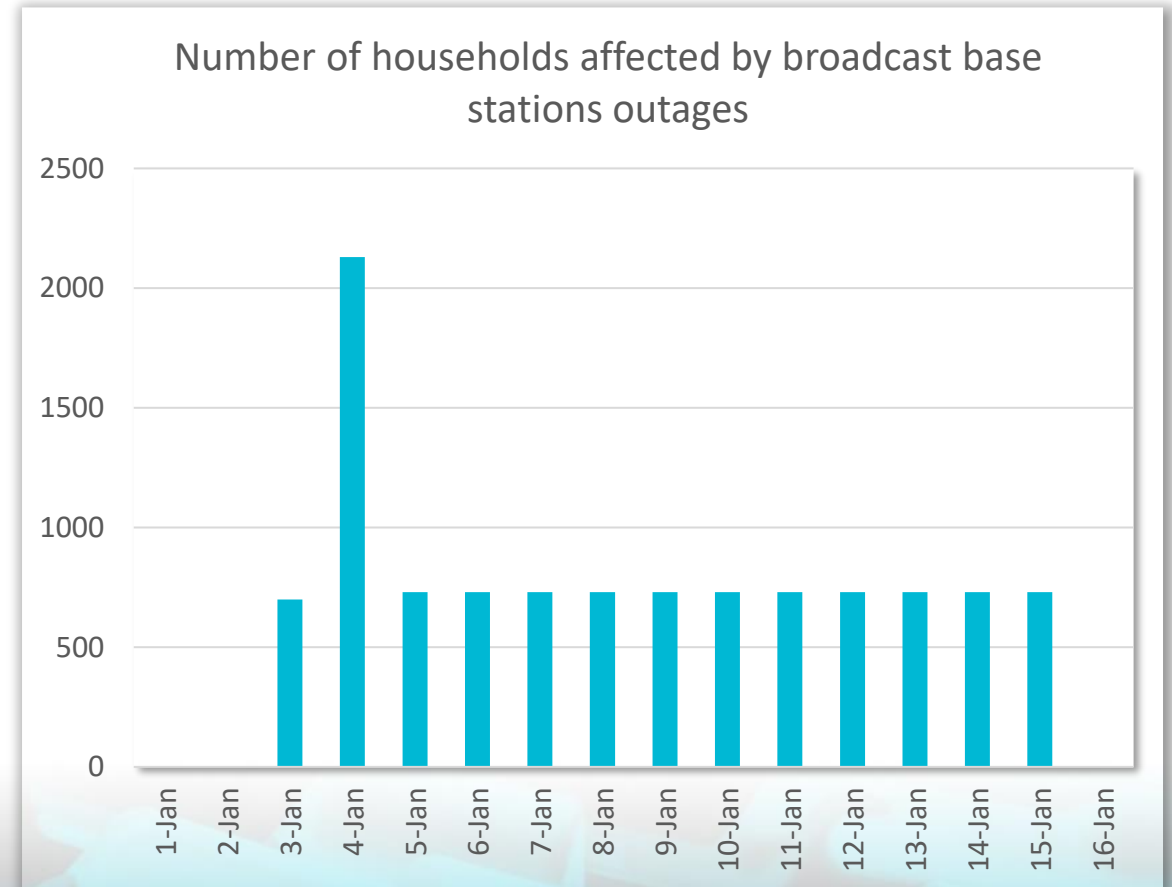
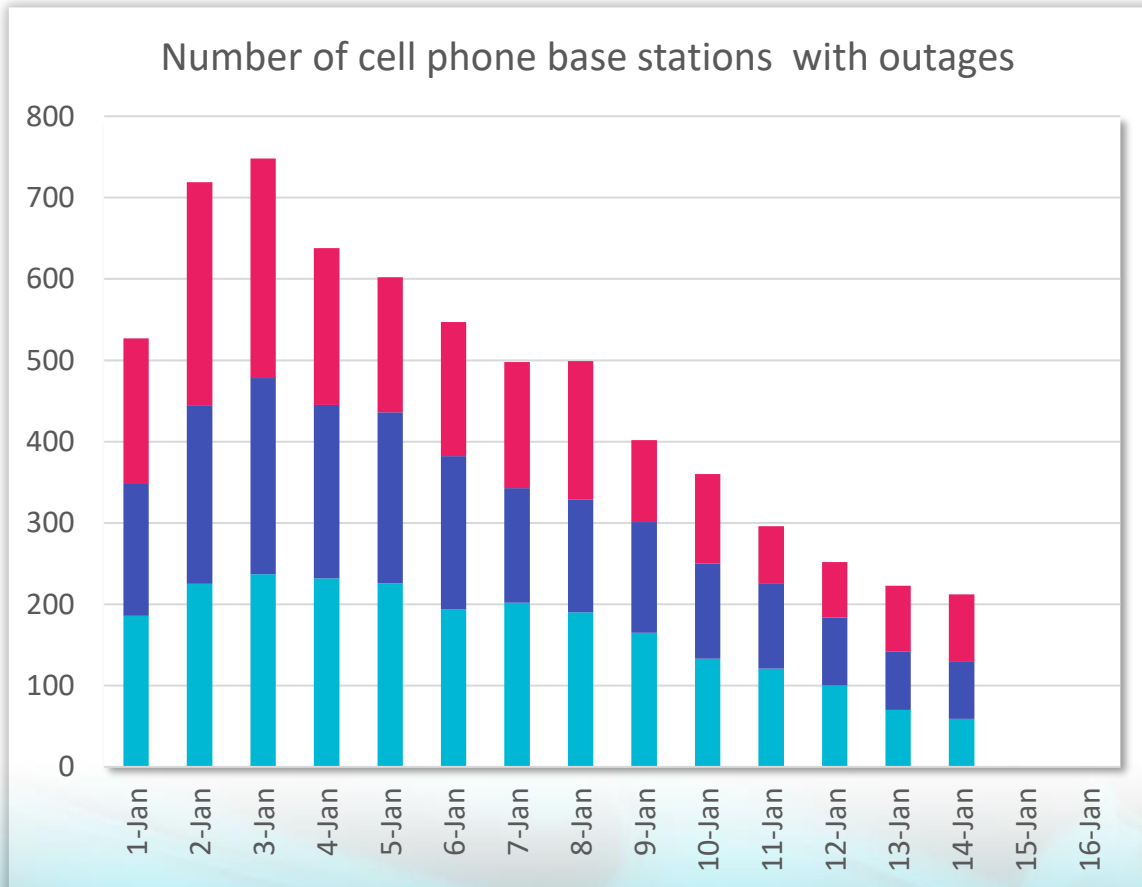
Source: The Japanese Red Cross Society
<https://www.jrc.or.jp/english/relief/2024NotoPeninsulaEarthquake.html>

XXX fatalities
XXX buildings partly or totally destroyed



Source: NHK
<https://www3.nhk.or.jp/news/html/20240108/k10014313221000.html>

Damages to Communication Infrastructure



Satellite Communications during Disaster



Cell Phone base station on board using Starlink

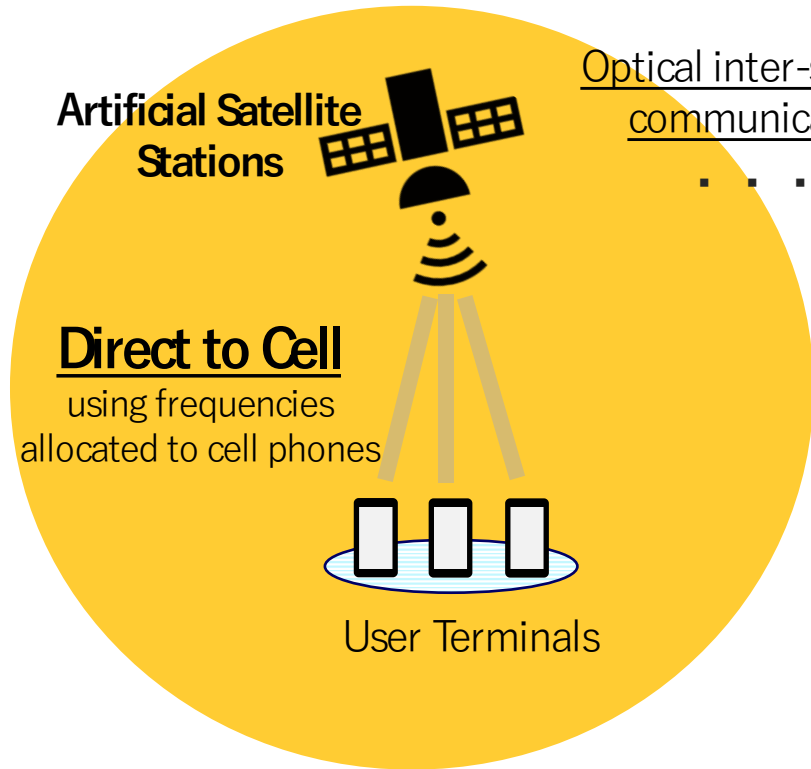
Source: KDDI press Release
<https://news.kddi.com/kddi/corporate/newsrelease/2024/01/06/7170.html>



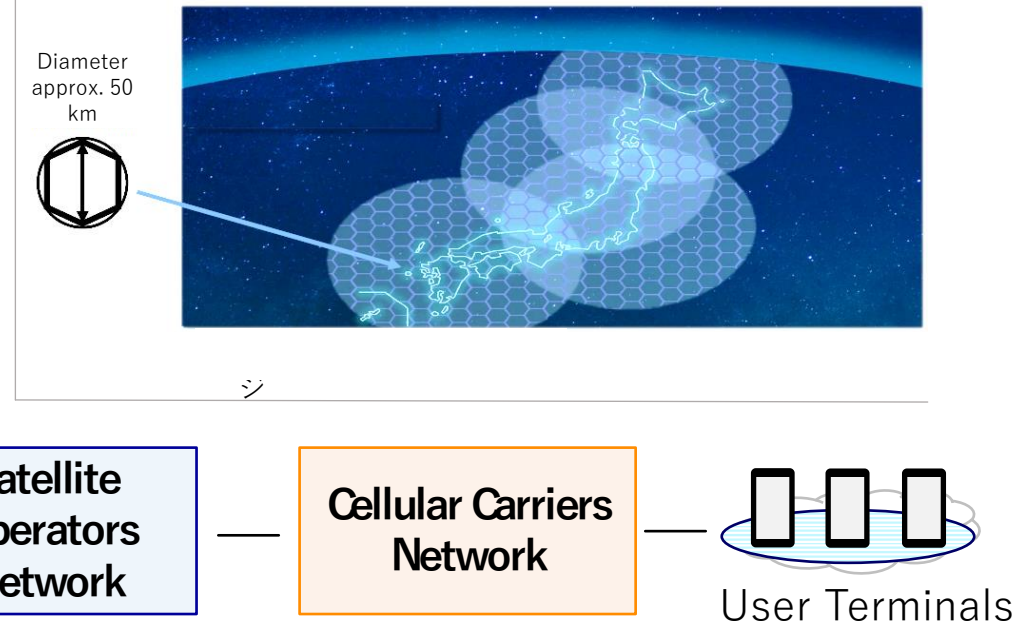
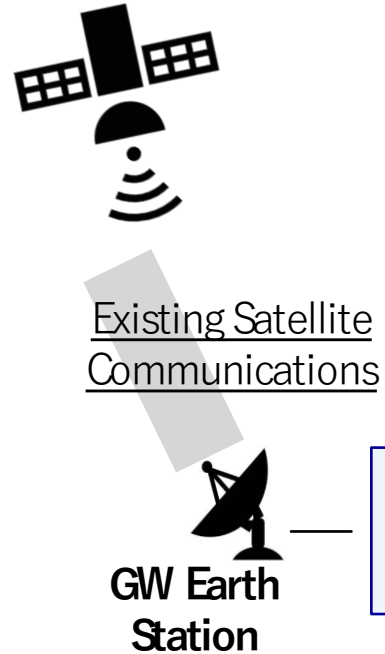
Disaster Medical Assistance Team using Starlink

Source: KDDI press Release
<https://news.kddi.com/kddi/corporate/newsrelease/2024/01/12/7179.html>

Needs for the Direct-to-Cell



Optical inter-satellite communication



Thank You

Kozo Ibata

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