

# **SDR IN ORBIT**

## **SOFTWARE LTE PROJECT**

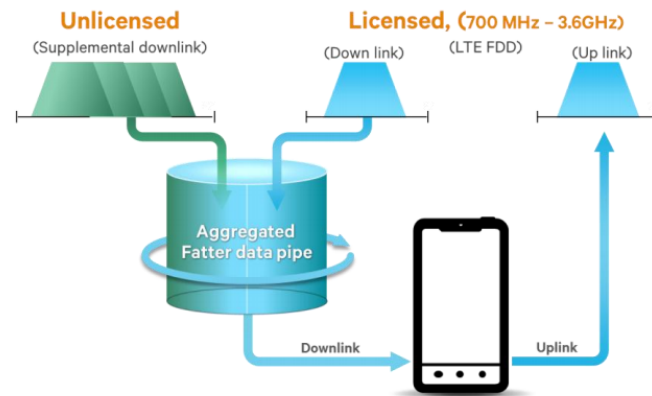
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# WHAT IS LTE?

Long-term Evolution (LTE) is standard for high-speed data in wireless communication.

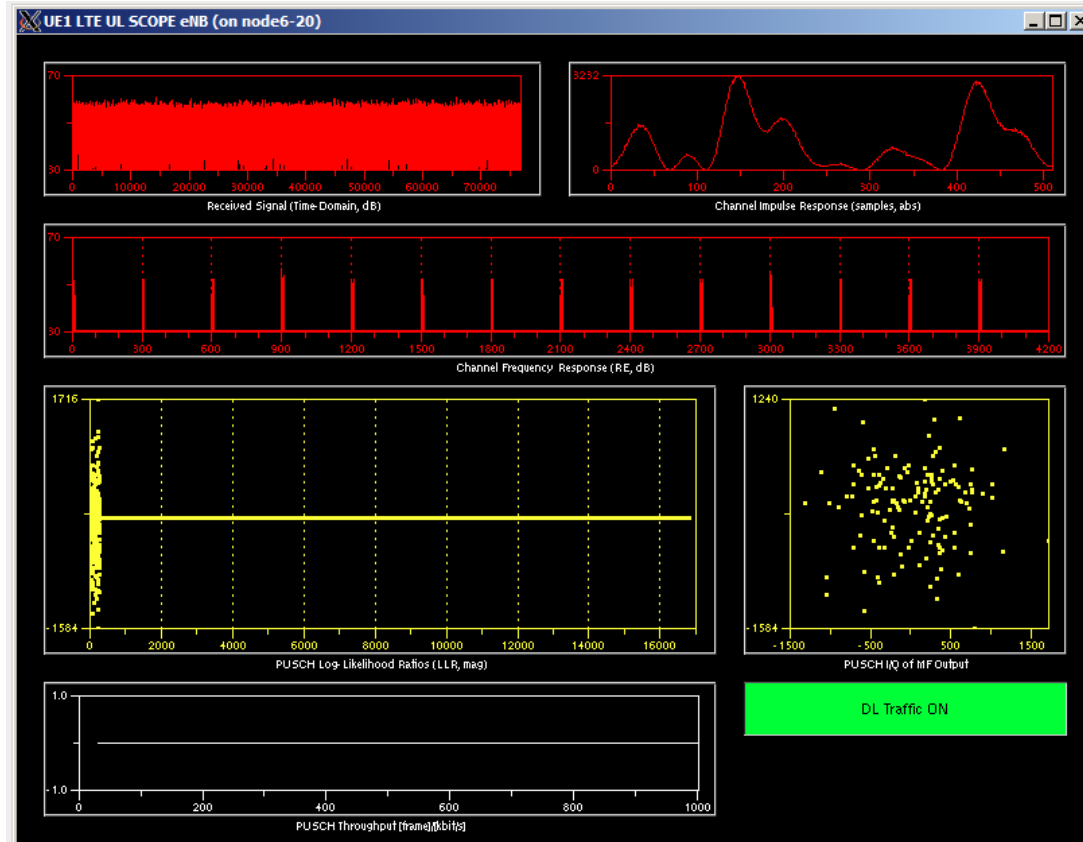
**LTE in Unlicensed Spectrum (LTE-U)** is LTE that operates in any unlicensed frequencies and aggregated with normal LTE.

- need to avoid interference when using the same channel with Wi-Fi
- target to have up to 500MHz of available spectrum in 5GHz bandwidth.



# OPEN AIR INTERFACE LTE

OpenAirInterface is an open source implementation of an LTE base station.



# PROJECT

- Learn about LTE and LTE-U
- Engage with Open Air Interface
- Become familiar with using ORBIT using OMF (ORBIT Management Framework)
- Experiment with LTE code and corresponding performance

# NEXT WEEK

- Learn and experiment with ORBIT OMF
- Learn more about LTE and DSP (digital signal processing)