Open and virtualised RAN, Open vRAN, refers to a disaggregated approach of deploying virtualised mobile networks by using *open and interoperable protocols and interfaces*, implemented over a common propose hardware in a multi-vendor software environment, allowing an **increased flexibility** over traditional RAN architectures, aiming to provide **OPEX and CAPEX savings** while fostering innovation.

**Traditional RAN**

- Protocol stack that runs on proprietary hardware
- Radio Unit and BBU are connected via proprietary interfaces
- Single vendor provides both Radio Unit and BBU

**Open RAN**

- Standardized SW-centric approach based on commoditized hardware
- Open standard interfaces that ensure deployment of multi-vendor RU and CU/DU ecosystem, powered by an open-source AI/ML based platform designed for non and near-RT network functions (RIC)

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**Openness in RAN**

There is a wide recognition of Open RAN’s **potential to disrupt the existing marketplace.** At the same time, the low maturity of the technology presents challenges that need to be addressed.

**Benefits**

- TCO Efficiencies
- Player diversity
- Fosters innovation
- Reduce Time-to-Market

**Challenges**

- Performance & feature parity
- Interoperability challenges
- Skills and capabilities
- Legacy technologies