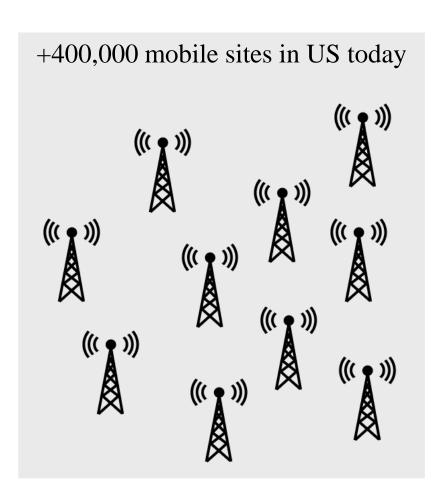
OpenRAN and Private 5G – New Opportunities and Challenges....



John W. Strand

www.strandreports.com

Everything will be connected in the future....





The telecommunications market is undergoing a huge transformation ...

- Telecommunications companies are split into infrastructure companies and service companies.
- Divestment of towers is the first step on the road to a total separation between infrastructure and services.
- Today, about 30% of European tower are listed on the stock exchanges (Cellnex, Vantage and Inwit), and they represent €55bn in market cap. In practice, between 2015 and 2021, European mobile operators, by reclassifying their towers, have created a value added of €165bn of which €55bn can be found on the European stock exchanges.
- Over the last 3 years, European operators have bought radio access network (RAN) equipment for €7.3bn (about €2.4bn annually). With the added value that has been with the operators due to their tower sales, they have created enough values to cover their RAN costs for 68 years,
- January 1, 2022 the Danish incumbent TDC is finish the split in to a net company (TDC NET) and a service company (Nuuday)

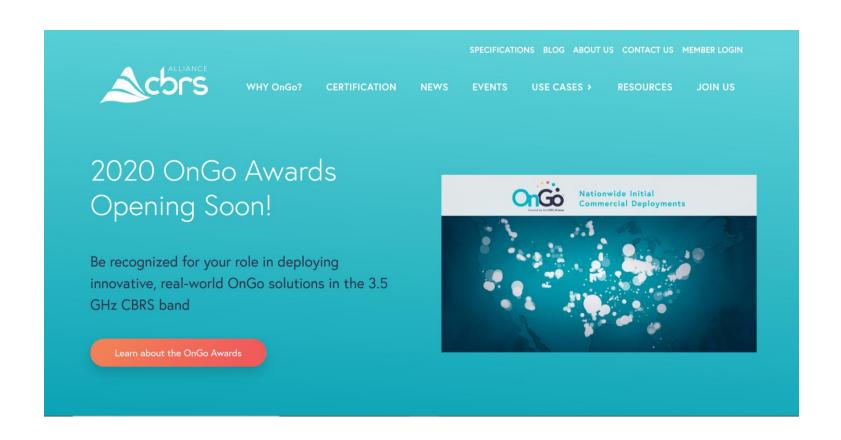
OpenRAN is **not** an alternative to Huawei, Ericsson or Nokia in Latin America and a lot of other markets ...

- If OpenRAN gets the growth its proponents predict, it will account for less than 1 percent of the 5G mobile sites in 2025; not more than 3 percent in 2030 (installed base). It looks like OpenRAN is too little, too late to make a difference in a world in which operators are deploy 10,000 classic 5G sites every month.
- OpenRAN and O-RAN are 4G/5G technologies. They are not solutions that can replace existing networks in Latin America 1 to 1. It is not a technology that can substitute 2G and 3G. It is not the solution for low income Latin Americans.
- GSMA predicts that even by 2025 there will still be a <u>substantial 2G and 3G</u> penetration in several regions. In Latin America GSMA predicts 21 percent 3G phones and 5 percent 2G phones in 2025 totaling 26 percent of the market.
- Overall, there will be over 1 billion 2G and 3G customers by 2025 who do not have a phone that supports 4G or 5G. In many emerging countries, most people will continue to use 2G and 3G for years.

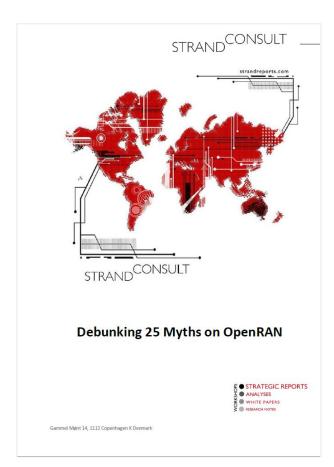
How can Open RAN survive on the market for 5G private networks

- OpenRAN players will experience that it is difficult so sell there solutions to classic mobile carriers.
- Many OpenRAN players will go after the market for 5G private networks - a crowded market
- 5G private networks is not a new market; it mainly replaces existing Wi-FI and fixed infrastructure
- The three important question to OpenRAN providers. What can you do better, cheaper, and with more value than Classic RAN and Wi-Fi?
- Who are the competitors: Mobile carriers, Classic infrastructure manufacturers, WI-FI players, other OpenRAN players etc

Ton's of innovation....



Debunking 25 Myths of OpenRAN....



- Lack of objectivity and/or empirical support
- Preconceived notions, assumptions, and assertions about theeconomics of infrastructure, competition, and innovation
- Little to no discussion of the infrastructure value chain beyond the large infrastructure equipment providers
- Ignorance or failure to disclose that OpenRAN is not a technical standard. The O-RAN Alliance develops technical specifications for 4G and 5G RAN internal functions and interface, not for 2G and 3G. The O-RAN Alliance is not a standards development organization (SDOs) like the 3GPP.
- Ignorance or failure to disclose that OpenRAN only supports 4G and 5G and therefore it is not a 1:1 commercial alternative for 5G networks.
 Moreover OpenRAN does not support 2G and 3G, the prevailing network generation in many developing countries, and yet OpenRAN is reported as a solution for developing countries.
- Ignorance or failure to disclose that 182 commercial 5G networks have been launched globally. These are classic RAN installations that support 2, 3, 4 and 5G in one base station. There is only 1 commercial OpenRAN installation, Rakuten in Japan.
- Ignorance or failure to disclose how small expectations are for the OpenRAN install base by 2025 and 2030 compared to the entire market. This is likely just 1 percent in 2025 and under 3 percent in 2030.
- Ignorance or failure to disclose the role of Chinese vendors in OpenRAN ecosystem and their leading role in OpenRAN governance and specification setting

For more info, go to StrandConsult.dk

