

“Recent Advances in O-RAN”

Marcin Dryjanski, Ph.D.

Rimedo Labs

ABSTRACT

Since its establishment in 2020, the O-RAN ALLIANCE has undergone significant updates to the specifications of O-RAN. There have been notable advancements in the architectural aspects, interface details, and function definitions. Technical documents are released approximately every six months by the working groups, new focus groups are formed, and emerging topics of interest are addressed. In line with the research advancements towards 6G in the field, the O-RAN ALLIANCE is also considering this aspect. Additionally, recent trends such as security and energy efficiency in mobile networks are being incorporated. In addition to this, the integration work is being undertaken within the O-RAN Global PlugFests. This presentation will provide an overview of the current status of standardization efforts and highlight the ongoing focus of the O-RAN ecosystem as per the abovementioned aspects.

BIO

Marcin Dryjanski received his Ph.D. (with distinction) from the Poznan University of Technology in September 2019. Over the past 15 years, Marcin served as an R&D engineer and consultant, technical trainer, technical leader, advisor, and board member. Marcin has been involved in 5G design since 2012 when he was a work-package leader in the FP7 5GNOW project. Since 2018, he is a Senior IEEE Member. He is a co-author of many articles on 5G and LTE-Advanced Pro and a co-author of the book „From LTE to LTE-Advanced Pro and 5G” (M. Rahnema, M. Dryjanski, Artech House 2017). From October 2014 to October 2017, he was an external advisor at Huawei Technologies Sweden AB, working on algorithms and architecture of the RAN network for LTE-Advanced Pro and 5G systems. Marcin is a co-founder of Grandmetric, where he served as a board member and wireless architect between 2015 and 2020. Currently, he serves as CEO and principal consultant at Rimedo Labs working with O-RAN systems.