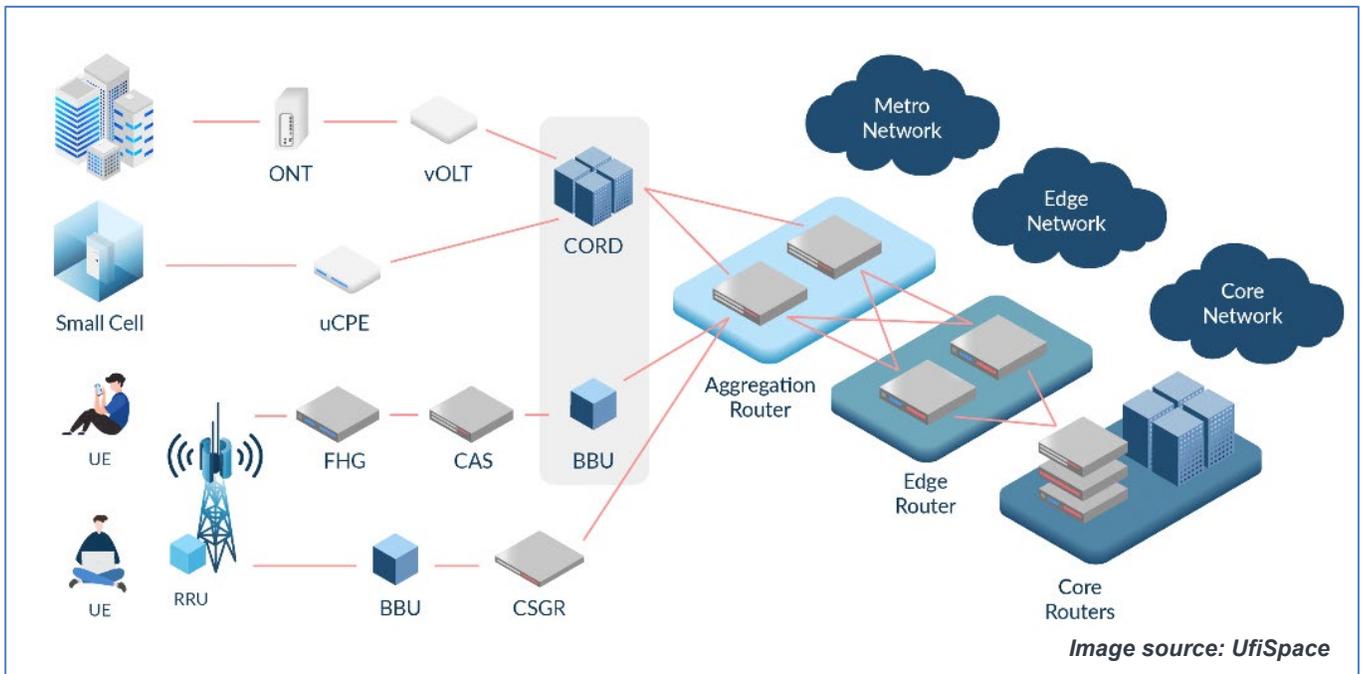


## DISAGGREGATED OPEN ROUTERS – MARCH 2021

When all disaggregation routes lead to core network



## Table of Contents

**ABSTRACT** .....3

**KEY TAKEAWAYS** .....4

**IF ALL ROADS LEAD TO ROME, ALL DISAGGREGATION ROUTES LEAD TO CORE NETWORKS** .....5

LIGHTCOUNTING SEES 4 FUNDAMENTAL DISAGGREGATION ROUTES ..... 5

THE OPEN RAN ASCENSION BROUGHT ROUTER DISAGGREGATION TO THE SPOTLIGHT ..... 6

TIP REMAINS A MAJOR FORCE IN PUSHING THE DISAGGREGATION AGENDA..... 7

*TIP now wants the FCC to broaden the scope of a proposed inquiry on the status of open RAN to also include other open network elements..... 7*

*TIP literally paved the way for access to core network disaggregation with many routes..... 7*

THIS NEW DOR ECOSYSTEM COMPRISES A FLURRY OF SPECIALISTS, EACH STRONGLY OPINIONATED ABOUT DISAGGREGATION 8

*Removing DCSGs leads to a tiny roster.....10*

*Arrcus transforms networks for the 5G era with software-powered routing and multi-cloud solutions.....10*

*DriveNets is in the DDC NOS driver seat.....11*

*Edgecore Networks is heavily involved in DCSGs and aggregation.....11*

*Exaware’s NOS addresses all router segments.....12*

*Infinera found that its DCSG can also be configured as a disaggregated aggregation router.....12*

*IP Infusion’s NOS covers all mobile network domains.....13*

*UfiSpace is in the DDC hardware driver seat.....13*

*Volta Networks’ NOS acts as a cloud-based router.....13*

THE DISAGGREGATED ROUTER MARKET IS ABOUT TO TAKE OFF .....14

*Meanwhile, CSPs are cautiously optimistic about router disaggregation but have yet to see more maturity and the full benefits.....14*

*Lowest cost possible for high performing disaggregated routers is what CSPs seek the most.....15*

*This is a no brainer: Lower hardware cost leads to lower capex.....15*

*But booked as opex, software can drive total cost up.....15*

*Unfazed by potentially higher opex, AT&T took the plunge anyway.....16*

*Our forecast model starts with our DCSG one and adds aggregation and core routers to the mix.....16*

*The access market is the low hanging fruit with the largest volumes.....17*

*In China’s absence, North America takes the DOR market lead.....18*

*The disaggregated aggregation router market is the largest opportunity.....19*

*The disaggregated core router segment is the high-end market.....20*

BOTTOM LINE: DISAGGREGATION HAS JUST STARTED AND IS HERE TO STAY BUT REQUIRES MORE CSPs TO TAKE THE PLUNGE AND DRIVE VOLUMES .....20

## Abstract

This report explores the emergence of the Disaggregated Open Routers (DOR) market. Disaggregated open routers are white-box routers based on separated white box hardware and software with cloud enabled software functions for existing 2G/3G/4G and future 5G network architectures. The report analyzes the disaggregated open routers' (aggregation and core) architectures and implementations in wireless infrastructure, including the emerging vendor ecosystem, and tracks white box hardware units and sales, and software sales, all broken down by region including North America, Europe Middle East Africa, Asia Pacific, and Caribbean Latin America. It includes the total number of cell sites worldwide and a 5-year market forecast. As this market is just emerging, it is too early to publish vendor market shares.