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# CNFs and VNFs in Cellular Telephony RAN: Pre and Post Covid19 Analysis

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## Abstracts

CNFs in RAN present the ultimate frontier in network function engineering. Insight Research forecasts a jump of about 9 percent in the share of RAN CNFs. The jump is indicative of the enormous potential that CNFs have for RAN, especially in the DU segment. At the same time, the path towards cloud nativity is paved with real challenges surrounding concerns related to latency and performance management. RAN VNFs or vRANs, on the other hand seem to be headed towards stability as shoots of consensus begin to emerge among the multiple RAN virtualization and cloudification initiatives. In the long run, it is clear that telcos and RAN product engineers need to crack the challenge surrounding expensive but reliable existing fronthaul technologies such as CPRI. This challenge has to be met head on either at the physical level or at the protocol design level or in a combination of the two.

Chapter 1 is the Executive Summary

Chapter 2 compares and contrasts the origins, morphologies and features of the principal actors in this report – CNFs and VNFs.

Chapter 3 places VNFs and CNFs in the realms of the network function covered in the report – the RAN.

Chapter 4 highlights, analyses and chronicles the CNF and VNF-related initiatives of the most important stakeholders – the telcos

Chapter 5 identifies and categorises the vendors or solution providers; and analyses their initiatives in the context of the network functions covered.

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Chapter 6 covers the quantitative forecasts in providing ringside as well as inside views of the VNF and CNF markets for the core by breaking them along morphology, geographical region, deployment methodology, hosting mode, end-user and application criteria.

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