

The NFV, SDN & Wireless Network Infrastructure Market: 2014 - 2020

https://marketpublishers.com/r/N968460A1D3EN.html

Date: March 2014

Pages: 1105

Price: US\$ 4,000.00 (Single User License)

ID: N968460A1D3EN

Abstracts

Global wireless CapEx is on the rise, as operators deploy LTE and Heterogeneous Network (HetNet) infrastructure, amid growing demands for high-speed mobile broadband connectivity. By eliminating reliance on expensive proprietary hardware platforms, Network Functions Virtualization (NFV) and Software Defined Networking (SDN) promise to reduce the CapEx burden on wireless carriers. In addition, both technologies can significantly slash OpEx due to a reduction in physical space, labor and power consumption. Driven by the promise of Total Cost of Ownership (TCO) reduction, wireless carriers are aggressively jumping on the NFV and SDN bandwagon, targeting integration across a multitude of areas including Radio Access Network (RAN), mobile core, OSS/BSS, backhaul and CPE/home environment. By 2020, SNS Research estimates that NFV and SDN investments on the RAN segment alone will account for over \$5 Billion. These investments will primarily focus on cloud RAN (C-RAN) deployments, based around the idea of replacing traditional base station nodes with a centralized baseband processing pool serving a number of distributed radio access nodes. Spanning over 1,105 pages, the 'NFV, SDN & Wireless Network Infrastructure Bible: 2014 – 2020" report package encompasses three comprehensive reports covering the conventional 2G, 3G and 4G wireless network infrastructure market as well as the HetNet and NFV/SDN markets:

<u>The Wireless Network Infrastructure Bible: 2014 – 2020 - Macrocell RAN, Small Cells, RRH, DAS, Cloud RAN, Carrier WiFi, Mobile Core & Backhaul</u>

<u>The HetNet Bible (Small Cells and Carrier WiFi) - Opportunities, Challenges, Strategies and Forecasts: 2013 – 2020 – With an Evaluation of DAS & Cloud RAN</u>



The SDN, NFV & Network Virtualization Bible: 2014 - 2020

This report package provides an in-depth assessment of NFV, SDN, network virtualization, 2G, 3G and 4G wireless network infrastructure, HetNet and mobile backhaul. Besides analyzing the key market drivers, challenges, commercial commitments and vendor strategies, the report package also presents forecasts for NFV, SDN, wireless network infrastructure, small cell, WiFi offload, Distributed Antenna Systems (DAS), C-RAN the mobile backhaul markets from 2014 to 2020 at a regional as well as a global scale. Historical figures and vendor shares are also provided for 2010 till 2013. The report package comes with an associated Excel datasheet suite covering quantitative data from all numeric forecasts presented in the three reports.



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LIST OF COMPANIES MENTIONED

21 VIANET GROUP

2K TELECOM

3 AUSTRIA

3 DENMARK

3 HK

3 IRELAND

3 ITALIA

3 SWEDEN

365 MEDIA

3ROAM

4IPNET

6CONNECT

6WIND

A1 Telekom

A10 Networks

Aalborg University

Aalto-University

Ablaze



Accedian

Accedian Networks

Accel Partners

Accelleran

Accton

Accuris Networks

Acer

Acme Packet

Actelis

ActionPacked Networks

Active Broadband Networks

Actix

Adams NetWorks

ADARA Networks

Adara Venture Partners

ADLINK

ADTRAN

ADVA

ADVA Optical Networking

Advanced RF Technologies

Advanced Wireless Technology Group (AWTG)

Advantech

Aepona

AEPONYX

Aero2

Aerohive

Aeronet

Affirmed Networks

Agilent Technologies

AICENT

Aircel

Aircell (Gogo Inflight Internet)

Aircom International

AirHop Communications

Airspan

Airtel Nigeria

Airvana

AIS/DPC Thailand

AJ Telecom Group



Al Madar

Alaska Communications

Albis Technologies

Albtelecom

Alcatel-Lucent

Alfa

Algar Telecom

Algar Telecom (CTBC)

Algerie Telecom

Alibaba

Allot Communications

Alpha Networks

Altaro

Altel

ALTEN Group

Altera

Altera Corporation

Altobridge

Alvarion

AlwaysOn

Amadeus Capital Partners

Amartus

Amazon

Amdocs

American Tower Corporation

Andorra Telecom

Andrew Corporation

Andrew/CommScope

Anite

Anixter

Anritsu

Antares Group

Antel

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Apple

Applied Communication Sciences



Aptilo

Aptilo Networks

Aqiva Wireless

Aquafon

Argela

Aria

Aricent

Aricent Group

Arieso

Arista Networks

ARItel

ARM Limited

Armentel

Arnold Consulting

Arqiva

Aruba Networks

Asahi Kasei Microdevices

Asiaspace

Askey

Askey Computer Corporation

ASOCS

Association of Radio Industries and Businesses (ARIB) – Japan

Astellia

ASUS

AT&T

AT&T Mobility

aTAC Initiatives

Athena Wireless Communications

Atomico

Atrica

Augere Bangladesh

August Capital

Avanti

Avaya

Avea

Aviat Networks

Axell Wireless

Axerra Networks

Axis Teknologies



Azercell

Azerfon

b-lite

Babilon Mobile

Babilon-T

Bakcell

Bakrie Telecom

BandwidthX

Batelco

Bayan Telecommunications

BayRICS

Beeline

Beeline Lao

Beijing Internet Institute (BII)

BelAir Networks (Ericsson)

BelCel

Belgacom

Belgacom / Proximus

Belgacom International Carrier Services (BICS)

Bell Canada

Bell Mobility

BendBroadband

Benu Networks

BeST (Life)

Best Western

BH Telecom

Bharti Airtel

Bhutan Telecom

Big Switch Networks

BigAir

BII Group

Birdstep Technology ASA

BL Companies

Black & Veatch

Black Box Corporation

BLiNQ Networks

Bluegrass Cellular

Blueline

BluWan



BMW

Boingo Wireless

Bollore Telecom

Boundary

Bouygues Telecom

Brazil Army

Brazil Sao Paulo Military Police

BridgeWave Communications

Broadband Forum

Broadcom

BroadHop

BroadSoft

Brocade

Browan

BSG Wireless

BSkyB

BSNL

BT

BTC

BTI Systems

BTI Wireless

BTL

BUCD

Bulgaria Vivacom

BURCO

Byers Engineering Company

C Spire Wireless

C&S

Cable & Wireless Communications

Cable and Wireless

CableLabs

Cablevision

Calient Technologies

Calsoft Labs

Cambium Networks

Cambridge Broadband Networks (CBNL)

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Cellular Specialties Inc. (Now CSI Solutions Group of Goodman Networks)

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Ceragon Networks

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Check Point Software Technologies

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China Mobile

China Mobile (US Research Center)

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DESS GmbH and Co Consulting

Deutsche Telekom

Devicescape Software



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Е	therReach
Е	thertronics
Е	thio Telecom
Е	thos
Е	tisalat
Е	tisalat Misr
Е	TRI
	European Telecommunications Standards Institute (ETSI)
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	Exalt
	EXFO
	ExteNet Systems
	Extreme Networks
	eye-Fi
	Zchip
F	5 LineRate Systems



F5 Networks

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Firemon

Firetide

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Flanagan Consulting

Flash Networks

Flash Wireless

FON Wireless

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PTS

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Xilinx

XIUS

XL Axiata

Xpliant

Xplornet

Xsigo

Yahoo

Yoigo

Yokogawa

Yota

Yota (Russia)

YTL Communications Yes

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Zain Bahrain

Zain Jordan

Zain Kuwait

Zain Saudi Arabia (Zain KSA)

Zamtel

Zhone



Zhone Technologies Ziggo Zinwave

Ziiiwavc

Zoda Fones

ZON Portugal

ZTE



About

Software Defined Networking (SDN) is new networking model where control of the network is decoupled from the physical hardware allowing a logically centralized software program to control the behavior of an entire network. This results in reduced reliance on proprietary networking hardware, increased network efficiency, centralized traffic engineering, faster time to troubleshooting and new feature deployment. SDN also complements network virtualization by facilitating the creation of multiple virtual networks running over a common physical network fabric.

Network functions virtualization (NFV) is a service provider initiative that is often linked to SDN. NFV aims to virtualize and effectively consolidate many network equipment types onto multi-tenant industry-standard servers, switches and storage to lower cost, improve efficiency and increase agility.

While the benefits of SDN and network virtualization are well known in the enterprise IT and data center world, both technologies also bring a hosts of benefits to the telecommunications service provider/carrier community.

Not only can SDN and NFV help address the explosive capacity demand of mobile traffic, but they can also reduce the CapEx and OpEx burden faced by service providers to handle this demand by diminishing reliance on expensive proprietary hardware platforms.

SDN has been widely deployed in data center and enterprise environments, and many service provider deployments are already underway. While NFV is still a developing technology with its first set of specifications published in October 2013, many vendors have already developed commercial-grade solutions that align well with the NFV initiative.

Driven by the thriving ecosystem, SNS Research estimates that the SDN, NFV and network virtualization market will account for nearly \$4 Billion in 2014 alone. Despite barriers relating to standardization and co-existence with legacy networks, SNS Research estimates further growth at a CAGR of nearly 60% over the next 6 years.

This report presents an in-depth assessment of the global SDN, NFV and network virtualization market. In addition to covering underlying technology, key market drivers, challenges, future roadmap, value chain analysis, deployment case studies, expert



interviews, company profiles, product strategies and strategic recommendations, the report also presents comprehensive forecasts for the market from 2013 till 2020. Historical revenue figures for 2010 - 2012 are also presented. The forecasts and historical revenue figures are individually segmented for 3 individual submarkets, 2 user base categories, 7 use case categories, 6 geographical regions and 34 countries.



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