

Saudi Arabia Virtualized Evolved Packet Core Market Segmented by Component Type (Solution (MME, HSS, S-GW, PDN-GW), Service (Professional Services, Managed Service, Consulting, Integration & Development, and Training & Support)), By Deployment Mode (Cloud, On-Premises), By End User (Telecom Operator, Enterprises), By Region, Competition, Forecast and Opportunities, 2018-2028F

<https://marketpublishers.com/r/S9E0FDE4050DEN.html>

Date: November 2023

Pages: 82

Price: US\$ 3,500.00 (Single User License)

ID: S9E0FDE4050DEN

Abstracts

Saudi Arabia virtualized evolved packet core market was valued at USD 169.16 million and is anticipated to project robust growth in the forecast period with a CAGR of 19.53% during the forecast period. The Saudi Arabia virtualized evolved packet core (vEPC) market is undergoing a significant transformation, mirroring the global shift towards virtualization and the evolution of telecommunications networks. Within the context of Saudi Arabia's ambitious "Vision 2030" plan, which aims to diversify the country's economy and promote technological innovation, the adoption of vEPC technology plays a crucial role in achieving these objectives. vEPC represents a shift from traditional hardware-based network infrastructure to a software-driven, virtualized architecture, and it holds the key to unlocking enhanced network capabilities, greater scalability, and agility in the face of burgeoning data demands.

At the core of this transformation is the telecommunications sector, which is instrumental in driving Saudi Arabia's digital transformation. The Kingdom's rapid urbanization and the increasing popularity of smartphones and data-intensive applications have resulted in a surge in mobile data traffic. To meet this ever-growing demand for high-speed, low-latency networks, Saudi Arabian telecom operators are

turning to vEPC technology. vEPC enables these operators to allocate network resources dynamically, ensuring that users can access seamless and responsive online experiences, whether they're streaming high-definition videos, conducting video conferencing, or utilizing IoT devices.

Furthermore, the adoption of vEPC extends far beyond the telecom sector. As part of Vision 2030, Saudi Arabia seeks to digitalize various industries, including healthcare, manufacturing, smart cities, and education. vEPC technology plays a pivotal role in these digitalization efforts by providing the foundation for efficient and secure connectivity. In healthcare, for instance, vEPC enables remote patient monitoring, telemedicine services, and the integration of healthcare IoT devices. In manufacturing, it supports the deployment of IoT sensors and real-time data analytics for process optimization. The versatility and flexibility of vEPC make it a critical enabler for the Kingdom's broader digital transformation initiatives.

One of the driving forces behind the Saudi Arabia vEPC market is the relentless expansion of 5G networks. As 5G technology promises ultra-fast speeds, low latency, and support for a massive number of connected devices, the virtualized infrastructure provided by vEPC is essential to realizing these capabilities. Saudi Arabian telecom operators are investing significantly in deploying vEPC solutions that can efficiently manage the complex traffic patterns and diverse use cases associated with 5G networks. This includes supporting applications like autonomous vehicles, smart cities, augmented reality, and virtual reality, which require instantaneous data processing and low-latency connections.

Moreover, security and data privacy are paramount concerns in the Saudi Arabia vEPC market. As network functions become increasingly virtualized and distributed, the attack surface for cyber threats expands significantly. Service providers and enterprises alike are investing heavily in advanced security solutions to protect both their network infrastructure and sensitive data. Compliance with stringent data privacy regulations is also a top priority, with a focus on adhering to the Kingdom's data protection laws and international standards. Robust security measures, including encryption, threat detection, and access control, are integral components of vEPC solutions, providing a secure foundation for digital services.

In summary, the Saudi Arabia vEPC market is in a transformative phase, closely aligned with the Kingdom's Vision 2030 goals of diversification and technological advancement. The adoption of vEPC technology empowers Saudi Arabian telecom operators to meet the escalating demands of consumers and industries for high-performance networks

and innovative services. As Saudi Arabia continues to lead in 5G deployment and digital transformation, the vEPC market will play a pivotal role in shaping the future of telecommunications, technological innovation, and economic diversification in the Kingdom.

Key Market Drivers

Vision 2030 and Digital Transformation Initiatives

Saudi Arabia's ambitious "Vision 2030" plan serves as a powerful catalyst for the growth of the Virtualized Evolved Packet Core (vEPC) market in the country. This visionary roadmap aims to diversify the Kingdom's economy and reduce its dependency on oil by fostering a vibrant and innovative digital landscape. As part of Vision 2030, extensive digital transformation initiatives are underway, encompassing various sectors, from healthcare and education to smart cities and industrial automation. The vEPC market directly benefits from these efforts, as virtualized network infrastructure is essential for enabling the high-speed, low-latency connectivity required by digitalization projects. Telecom operators and businesses in Saudi Arabia are investing heavily in vEPC solutions to support the Kingdom's transformation into a digital powerhouse, making Vision 2030 a pivotal driver for the vEPC market's growth.

Surging Mobile Data Demand and 5G Expansion

The exponential growth in mobile data usage, driven by the proliferation of smartphones and data-hungry applications, is a formidable driver for the Saudi Arabia vEPC market. With the advent of 5G technology, which promises ultra-fast speeds and low latency, the demand for virtualized network infrastructure becomes even more pressing. vEPC solutions are integral to 5G networks, as they enable the efficient management of complex traffic patterns and the diverse use cases that 5G technology supports. Saudi Arabian telecom operators are actively deploying vEPC to accommodate the surge in data traffic while ensuring a seamless and responsive user experience. The expansion of 5G networks across the Kingdom amplifies the importance of vEPC, making it a critical driver for the market's growth.

IoT Proliferation and Industry 4.0

The rapid proliferation of Internet of Things (IoT) devices across various industries is a significant driver for the Saudi Arabia vEPC market. Industries such as manufacturing, healthcare, logistics, and agriculture are increasingly adopting IoT solutions to enhance

efficiency, productivity, and decision-making. vEPC technology plays a pivotal role in supporting the connectivity and data processing requirements of these IoT deployments. In manufacturing, for instance, vEPC enables the deployment of IoT sensors and real-time data analytics for predictive maintenance and process optimization. As Saudi Arabia advances towards Industry 4.0, vEPC becomes a fundamental enabler for smart factories, autonomous systems, and real-time control, driving the market's growth through the integration of IoT solutions.

Network Scalability and Flexibility

The need for network scalability and flexibility is a critical driver propelling the Saudi Arabia vEPC market forward. Traditional hardware-based network infrastructure struggles to keep pace with the dynamic demands of modern telecommunications. Virtualized EPC solutions provide the agility to scale network resources up or down rapidly, optimizing resource utilization and meeting changing network requirements. This flexibility is especially important in accommodating the surging data demands, varying quality of service requirements, and the deployment of new services and applications. Saudi Arabian telecom operators recognize the significance of vEPC in ensuring that their networks remain adaptable to evolving customer needs and industry trends. The drive for network scalability and flexibility positions vEPC as an indispensable technology in the Kingdom's telecommunications landscape, serving as a strong driver for its market growth.

Key Market Challenges

Legacy Infrastructure Integration and Transformation

One of the primary challenges facing the Saudi Arabia Virtualized Evolved Packet Core (vEPC) market is the integration of virtualized solutions with existing legacy network infrastructure. Saudi Arabian telecom operators have substantial investments in traditional hardware-based networks, including physical evolved packet core (EPC) systems. Transitioning to a virtualized EPC environment while maintaining seamless connectivity and service continuity poses a formidable challenge. Legacy network elements often lack the flexibility and scalability of vEPC solutions, making integration complex and resource intensive. Ensuring interoperability between old and new components and migrating existing services to the virtualized environment requires careful planning and execution. The integration challenge is further compounded by the need to maintain the performance and reliability of existing services during the transition. Disruptions or downtime can have detrimental effects on customer

satisfaction and revenue for Saudi Arabian telecom operators.

Additionally, telecom operators in Saudi Arabia must address the challenge of retraining their workforce to manage and operate virtualized networks effectively. The skill sets required for managing virtualized infrastructure differ significantly from those needed for traditional networks. Therefore, investing in training and development programs is essential to bridge the skills gap and ensure a smooth transition to vEPC technology. Overall, the integration of vEPC with legacy infrastructure remains a complex and multifaceted challenge in the Saudi Arabian context.

Security and Data Privacy Imperatives

Security and data privacy concerns represent another critical challenge in the Saudi Arabia vEPC market. The virtualization of network functions, combined with the increased attack surface presented by distributed infrastructure, has made networks more susceptible to cyber threats. Ensuring the security of both the network infrastructure and the sensitive data transmitted over it is of paramount importance. Saudi Arabian telecom operators and businesses are investing significantly in advanced security solutions to protect against evolving threats and vulnerabilities. This includes robust encryption, threat detection and prevention systems, and access control mechanisms. Compliance with stringent data privacy regulations, both at the national and international levels, adds complexity to the security landscape. Saudi Arabia has its data protection regulations and is subject to international data privacy standards.

Failure to address security and data privacy concerns can result in severe legal and financial consequences, including significant fines and damage to the reputation of Saudi Arabian operators and businesses. Therefore, cybersecurity measures are integral components of vEPC solutions in the Kingdom, and continuous monitoring and threat intelligence are essential for identifying and mitigating emerging security threats. Moreover, given the Kingdom's strategic importance and its position as a potential target for cyberattacks, the need for robust security measures is even more critical. Saudi Arabian telecom operators and businesses must strike a delicate balance between network security and the demand for efficient, high-performance vEPC solutions to ensure the integrity and security of their network infrastructure.

Key Market Trends

Integration of Edge Computing and vEPC

One prominent trend shaping the Saudi Arabia Virtualized Evolved Packet Core (vEPC) market is the integration of edge computing and vEPC technologies. Edge computing is gaining momentum globally, and Saudi Arabia is no exception. The Kingdom's digital transformation efforts are driving the adoption of edge computing to support low-latency applications, such as autonomous vehicles, augmented reality, and IoT-driven solutions. This trend positions vEPC as a crucial enabler, as it allows telecom operators and businesses to extend their virtualized network capabilities to the edge. By deploying vEPC at the edge, organizations in Saudi Arabia can deliver high-performance network services with minimal latency, unlocking new possibilities for innovative applications and services that demand real-time data processing and rapid decision-making.

Moreover, the integration of vEPC and edge computing aligns with the Kingdom's Industry 4.0 initiatives, particularly in the manufacturing sector. Smart factories and industrial automation leverage the combination of vEPC and edge computing to enhance production efficiency, monitor equipment in real-time, and reduce downtime. As this trend continues to gain traction, it reinforces the importance of vEPC as a critical component in the evolution of Saudi Arabia's digital ecosystem.

Network Slicing for Customized Services

Network slicing is emerging as a transformative trend in the Saudi Arabia vEPC market. This technology allows telecom operators to partition a single physical network into multiple virtual networks, each tailored to specific use cases or customer segments. Network slicing is a game-changer, enabling service providers to offer differentiated services with varying quality of service (QoS) requirements. In Saudi Arabia, this trend is particularly significant as it allows operators to cater to diverse industry verticals, including healthcare, finance, and smart cities, each with unique network performance needs.

For example, in healthcare, vEPC-enabled network slicing enables dedicated slices for telemedicine, ensuring high-quality video consultations and patient data transmission. In the financial sector, secure and low-latency slices can support real-time trading and financial transactions. This customization extends to smart city initiatives, where slices can prioritize data from IoT sensors for efficient traffic management or environmental monitoring. The trend of network slicing positions vEPC as a pivotal technology for Saudi Arabian telecom operators, allowing them to offer tailored services to industries and enterprises while optimizing resource utilization and ensuring a consistent quality of experience for users across diverse use cases.

Open and Standards-Based Architectures

The adoption of open and standards-based architectures is gaining momentum in the Saudi Arabia vEPC market. Historically, proprietary solutions dominated the telecommunications industry, leading to vendor lock-in and limited interoperability. However, the industry is shifting towards open architectures based on standard interfaces and protocols. Saudi Arabian telecom operators and businesses are embracing this trend to achieve greater flexibility, reduce costs, and foster innovation. The adoption of technologies like Open Network Automation Platform (ONAP) and Open Platform for Network Functions Virtualization (OPNFV) is becoming prevalent. These open platforms enable Saudi Arabian service providers to build vendor-agnostic solutions, mix and match components from different suppliers, and promote collaboration among industry stakeholders. The shift towards open architectures also aligns with the Kingdom's digital transformation goals, as it encourages innovation and the development of a diverse ecosystem of virtualized network functions and services.

Segmental Insights

Deployment Mode Insights

Based on deployment mode, the cloud segment emerges as the predominant segment in the Saudi Arabia virtualized evolved packet core market, exhibiting unwavering dominance projected throughout the forecast period. Cloud-based deployment of vEPC solutions offers Saudi Arabian telecom operators and businesses a host of compelling advantages. It provides unparalleled scalability, flexibility, and cost-effectiveness, aligning perfectly with the Kingdom's aspirations for digital transformation. With the ability to easily scale network resources up or down based on evolving demands, cloud-based vEPC solutions ensure efficient resource utilization and rapid network provisioning. This flexibility is paramount in meeting the surging data traffic, the demands of 5G technology, and the proliferation of IoT devices in Saudi Arabia. Furthermore, cloud deployment streamlines network management, allowing for efficient orchestration of resources and ensuring the delivery of high-performance network services. As Saudi Arabia continues its journey towards a digitally driven future, the cloud segment's dominance reflects its pivotal role in shaping the Kingdom's telecommunications landscape and supporting its technological aspirations.

End User Insights

Based on end user, the telecom operator segment in the Saudi Arabia virtualized

evolved packet core market emerges as a formidable frontrunner, exerting its dominance and shaping the market's trajectory throughout the forecast period. Telecom operators in Saudi Arabia play a pivotal role in the deployment and management of vEPC solutions, as they are at the forefront of providing network services to consumers, businesses, and industries. The relentless demand for high-speed data, low latency, and seamless connectivity, driven by the advent of 5G technology and the proliferation of IoT devices, places Saudi Arabian telecom operators in a strategic position to harness the capabilities of vEPC to meet these evolving network demands. By embracing virtualized EPC solutions, these operators can enhance network performance, optimize resource allocation, and efficiently manage the surging data traffic while ensuring the delivery of innovative and differentiated services to their customers. As such, the dominance of the telecom operator segment underscores its pivotal role in shaping the future of telecommunications in Saudi Arabia and its commitment to meeting the dynamic needs of the digital age.

Regional Insights

Eastern Region firmly establishes itself as a commanding presence within the Saudi Arabia virtualized evolved packet core market, affirming its preeminent position, and highlighting its pivotal role in shaping the industry's course. This region, comprising bustling cities such as Dhahran, Al Khobar, and Dammam, serves as the epicenter of economic vitality and technological prowess in the Kingdom. Its unwavering dominance within the vEPC market not only reaffirms its preeminent position but also underscores its pivotal role in shaping the trajectory of Saudi Arabia's telecommunications industry.

The Eastern Region's prominence in the vEPC market can be attributed to several key factors. It hosts a multitude of forward-thinking telecom operators and enterprises that recognize the transformative potential of vEPC technology. With the relentless surge in data consumption, the advent of 5G networks, and the rapid expansion of IoT applications, vEPC has become indispensable. These entities in the Eastern Region have been at the forefront of adopting vEPC solutions to ensure network agility, scalability, and the delivery of cutting-edge services. Furthermore, the Eastern Region's strategic geographic location along the Arabian Gulf positions it as a vital gateway for global connectivity and trade, making it a natural nucleus for innovative telecommunications solutions. Its resounding presence in the vEPC market emphasizes its integral role in propelling Saudi Arabia towards a digitally driven future and shaping the course of the telecommunications industry in the Kingdom.

Key Market Players

Ericsson Telecommunications K.S.A.

Huawei Technologies Saudi Arabia Company Limited

Nokia Saudi Arabia Limited Liability Company

Cisco Systems Saudi Arabia Co. Ltd.

Affirmed Networks KSA

Mavenir Systems Saudi Arabia Limited Liability Company

Red Hat Saudi Arabia Limited Liability Company

Samsung Electronics Saudi Arabia Limited Liability Company

NEC Corporation Saudi Arabia Limited Liability Company

Dell Technologies Saudi Arabia Limited Liability Company

Report Scope:

In this report, the Saudi Arabia virtualized evolved packet core market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

Saudi Arabia Virtualized Evolved Packet Core Market, By Component Type:

Solution

MME

HSS

S-GW

PDN-GW

Service

Professional Services

Managed Service

Consulting

Integration & Development

Training & Support

Saudi Arabia Virtualized Evolved Packet Core Market, By Deployment Mode:

Cloud

On-Premises

Saudi Arabia Virtualized Evolved Packet Core Market, By End User:

Telecom Operator

Enterprises

Saudi Arabia Virtualized Evolved Packet Core Market, By Region:

Northern & Central Region

Eastern Region

Southern Region

Western Region

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the Saudi Arabia Virtualized Evolved Packet Core Market.

Saudi Arabia Virtualized Evolved Packet Core Market Segmented by Component Type (Solution (MME, HSS, S-GW, PDN...

Available Customizations:

Saudi Arabia Virtualized Evolved Packet Core market report with the given market data, Tech Sci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).

Contents

1. SERVICE OVERVIEW

- 1.1. Market Definition
- 1.2. Scope of the Market
 - 1.2.1. Markets Covered
 - 1.2.2. Years Considered for Study
 - 1.2.3. Key Market Segmentations

2. RESEARCH METHODOLOGY

- 2.1. Objective of the Study
- 2.2. Baseline Methodology
- 2.3. Key Industry Partners
- 2.4. Major Association and Secondary Sources
- 2.5. Forecasting Methodology
- 2.6. Data Triangulation & Validation
- 2.7. Assumptions and Limitations

3. EXECUTIVE SUMMARY

4. IMPACT OF COVID-19 ON SAUDI ARABIA VIRTUALIZED EVOLVED PACKET CORE MARKET

5. VOICE OF CUSTOMER

6. SAUDI ARABIA VIRTUALIZED EVOLVED PACKET CORE MARKET OVERVIEW

7. SAUDI ARABIA VIRTUALIZED EVOLVED PACKET CORE MARKET OUTLOOK

- 7.1. Market Size & Forecast
 - 7.1.1. By Value
- 7.2. Market Share & Forecast
 - 7.2.1. By Component Type (Solution, Service)

- 7.2.1.1. By Solution (MME, HSS, S-GW, PDN-GW)
- 7.2.1.2. By Service (Professional Services, Managed Service, Consulting, Integration & Development, and Training & Support)
- 7.2.2. By Deployment Mode (Cloud, On-Premises)
- 7.2.3. By End User (Telecom Operator, Enterprises)
- 7.2.4. By Region (Northern & Central Region, Eastern Region, Southern Region, and Western Region)
- 7.2.5. By Company (2022)
- 7.3. Market Map

8. NORTHERN & CENTRAL REGION SAUDI ARABIA VIRTUALIZED EVOLVED PACKET CORE MARKET OUTLOOK

- 8.1. Market Size & Forecast
 - 8.1.1. By Value
- 8.2. Market Share & Forecast
 - 8.2.1. By Component Type
 - 8.2.2. By Deployment Mode
 - 8.2.3. By End User

9. EASTERN REGION SAUDI ARABIA VIRTUALIZED EVOLVED PACKET CORE MARKET OUTLOOK

- 9.1. Market Size & Forecast
 - 9.1.1. By Value
- 9.2. Market Share & Forecast
 - 9.2.1. By Component Type
 - 9.2.2. By Deployment Mode
 - 9.2.3. By End User

10. SOUTHERN REGION SAUDI ARABIA VIRTUALIZED EVOLVED PACKET CORE MARKET OUTLOOK

- 10.1. Market Size & Forecast
 - 10.1.1. By Value
- 10.2. Market Share & Forecast
 - 10.2.1. By Component Type
 - 10.2.2. By Deployment Mode
 - 10.2.3. By End User

11. WESTERN REGION SAUDI ARABIA VIRTUALIZED EVOLVED PACKET CORE MARKET OUTLOOK

11.1. Market Size & Forecast

11.1.1. By Value

11.2. Market Share & Forecast

11.2.1. By Component Type

11.2.2. By Deployment Mode

11.2.3. By End User

12. MARKET DYNAMICS

12.1. Drivers

12.2. Challenges

13. MARKET TRENDS AND DEVELOPMENTS

14. COMPANY PROFILES

14.1. Ericsson Telecommunications K.S.A.

14.1.1. Business Overview

14.1.2. Key Financials & Revenue

14.1.3. Key Contact Person

14.1.4. Headquarters Address

14.1.5. Key Product/Service Offered

14.2. Huawei Technologies Saudi Arabia Company Limited

14.2.1. Business Overview

14.2.2. Key Financials & Revenue

14.2.3. Key Contact Person

14.2.4. Headquarters Address

14.2.5. Key Product/Service Offered

14.3. Nokia Saudi Arabia Limited Liability Company

14.3.1. Business Overview

14.3.2. Key Financials & Revenue

14.3.3. Key Contact Person

14.3.4. Headquarters Address

14.3.5. Key Product/Service Offered

- 14.4. Cisco Systems Saudi Arabia Co. Ltd.
 - 14.4.1. Business Overview
 - 14.4.2. Key Financials & Revenue
 - 14.4.3. Key Contact Person
 - 14.4.4. Headquarters Address
 - 14.4.5. Key Product/Service Offered
- 14.5. Affirmed Networks KSA
 - 14.5.1. Business Overview
 - 14.5.2. Key Financials & Revenue
 - 14.5.3. Key Contact Person
 - 14.5.4. Headquarters Address
 - 14.5.5. Key Product/Service Offered
- 14.6. Mavenir Systems Saudi Arabia Limited Liability Company
 - 14.6.1. Business Overview
 - 14.6.2. Key Financials & Revenue
 - 14.6.3. Key Contact Person
 - 14.6.4. Headquarters Address
 - 14.6.5. Key Product/Service Offered
- 14.7. Red Hat Saudi Arabia Limited Liability Company
 - 14.7.1. Business Overview
 - 14.7.2. Key Financials & Revenue
 - 14.7.3. Key Contact Person
 - 14.7.4. Headquarters Address
 - 14.7.5. Key Product/Service Offered
- 14.8. Samsung Electronics Saudi Arabia Limited Liability Company
 - 14.8.1. Business Overview
 - 14.8.2. Key Financials & Revenue
 - 14.8.3. Key Contact Person
 - 14.8.4. Headquarters Address
 - 14.8.5. Key Product/Service Offered
- 14.9. NEC Corporation Saudi Arabia Limited Liability Company
 - 14.9.1. Business Overview
 - 14.9.2. Key Financials & Revenue
 - 14.9.3. Key Contact Person
 - 14.9.4. Headquarters Address
 - 14.9.5. Key Product/Service Offered
- 14.10. Dell Technologies Saudi Arabia Limited Liability Company
 - 14.10.1. Business Overview
 - 14.10.2. Key Financials & Revenue

14.10.3. Key Contact Person

14.10.4. Headquarters Address

14.10.5. Key Product/Service Offered

15. STRATEGIC RECOMMENDATIONS

16. ABOUT US & DISCLAIMER

I would like to order

Product name: Saudi Arabia Virtualized Evolved Packet Core Market Segmented by Component Type (Solution (MME, HSS, S-GW, PDN-GW), Service (Professional Services, Managed Service, Consulting, Integration & Development, and Training & Support)), By Deployment Mode (Cloud, On-Premises), By End User (Telecom Operator, Enterprises), By Region, Competition, Forecast and Opportunities, 2018-2028F

Product link: <https://marketpublishers.com/r/S9E0FDE4050DEN.html>

Price: US\$ 3,500.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/S9E0FDE4050DEN.html>