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Enea: 5G Data Management

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RESEARCH

Enea 5G Data Management: strategy overview

Enea is a nimble, independent software-focused company that positions itself for 5G and service-based architecture (SBA) with a cloud-native, open subscriber data management (SDM) architecture and robust support for 4G/5G interworking scenarios.

Enea created its 5G Data Management portfolio through the acquisitions of Openwave Mobility (in Feb 2018) and Atos Convergence Creators (in March 2019). These acquisitions provided Enea with a complete set of products and expertise in SDM and policy and access control layers and expanded its offerings and addressable market in the mobile core.

Enea's 5G Data Management suite stores and manage data across all 5G core and edge network functions and allows access to data through open APIs. The portfolio spans the common data layer (CDL), the user plane and the control plane. It includes functions such as Unified Data Management (UDM), Unified Data Repository (UDR), Authentications Server Function (AUSF), Policy Control Function (PCF), and Equipment Identity Register (EIR).

Enea designed its 5G Data Management suite based on cloud-native principles and built support for a variety of interworking options for 4G/5G co-existence and migration. This underpins the vendor's strategy to help operators move from single-vendor, closed data management environments to more open and best-of-breed, cloud-native 5G SBA networks.

Figure 1: Key data

Company details	▪ Public company headquartered in Stockholm, Sweden ▪ Sites with R&D and offices in 16 cities around the world ▪ ~650 employees (2019)
Revenue	▪ Total revenue (2019) - SEK1 billion (~USD110 million) ▪ Network Solutions product group (2019) (where 5G Data Management portfolio sits) - SEK 607.4 million (~USD66 million)
SDM products	▪ *Enea Unified Data Manager (UDM)* provides UDM functions in 5G networks and supports interworking with HSS in 4G networks. ▪ Enea Stratum Cloud Data Manager provides the 5G Data Layer (UDR, UDSF) functionality ▪ Smart Identity Manager (SmartIDM) digital identity solution for mobile operators ▪ Enea 5G Equipment Identity Register (5G-EIR) provides a mechanism to restrict malicious user terminals in a mobile network.
Key SDM customers	▪ Tier 1 North American operator, Tier 1 European operator headquartered in Germany
Key SDM Partnerships	▪ Affirmed Networks (Microsoft), Cisco and Mavenir

Source: Analysys Mason

Enea 5G Data Management: analysis

5G and SBA will create new opportunities for software-focused vendors such as Enea to challenge the domination of NEPs. However, it will take market education, robust partner ecosystem across multiple clouds and flexible packaging and support for various 5G, enterprise and IoT use cases.

Major NEPs control the bulk of the SDM market[1] but increasing demand for separating 5G SDM databases and applications with open interfaces and orchestration is helping Enea to expand its market share compared to that achieved in previous generations.

Enea 5G Data Management has a flexible and cloud-native architecture with standard APIs that offers the possibility to assemble various combinations of both Enea and 3rd party solutions by supporting Nhss interface and other 3GPP options. This puts the vendor in a strong position to grow its footprint by supporting the deployment of multi-vendor and multi-generation interworking scenarios. In addition, it can provide a roadmap for future migrations to a unified, streamlined 5G SBA architecture through a UDM that also serves EPC/IMS diameter interfaces.

5G core will open up new opportunities in many enterprise verticals (including private 5G networks) and IoT space, in conjunction with multi-access edge and public clouds, which will define new competitive dynamics and landscape. It will be important for Enea to have a broad range of platform and vertical partnerships and deliver a use-case/service-oriented solutions by combining its data management, identity and policy assets.

Figure 2: Key strengths and weaknesses

Strength	Description
Independent SDM vendor	Enea is an independent software vendor (ISV) which gives them the advantage of being a neutral third-party that enables multi-vendor deployments and interworking scenarios in mobile core with an open SDM solution.
Complete SDM portfolio	5G Data Management suite includes all front-end functions and back-end databases needed for 5G SBA, NSA and 4G data management. Enea also provides complementary policy/access management solutions.
Cloud-native architecture for SBA	The SDM portfolio consists of stateless, micro-services based, containerized functions which share a common software platform and development framework.
Partnerships	Its partnerships with packet core vendors such as Affirmed Networks (Microsoft), Cisco and Mavenir helps Enea grow its footprint and position itself as a relevant player in 5G packet core transformations.
Weakness	**Description**
Competition from NEPs	NEPs such as Ericsson, Nokia and Huawei dominate the SDM market with large, established customer bases and can deliver their SDMs as part of packet core deals.
Competition from others	HPE is a strong competitor to Enea with a similar positioning on SDM and digital identity fronts.
Small SDM market share	Older generations of single-vendor networks limited the market opportunities for Enea but its 5G deals with tier 1 operators shows that it's a serious challenger to NEPs.

[1] Video and identity platforms: worldwide market shares 2018

About the author

Gorkem Yigit (Senior Analyst) is the lead analyst for the *Video and Identity Platforms* and the *Digital Infrastructure Strategies* programmes, focusing on producing market share, forecast and research collateral. He started his career in the telecoms industry with a graduate role at a leading telecoms operator, before joining Analysys Mason in late 2013. He has published research on NFV/SDN services business cases, identity management in the digital economy, and has been a key part of major consulting projects including Telco Cloud Index and IPTV/OTT procurement. He holds a cum laude MSc degree in Economics and Management of Innovation and Technology from Bocconi University (Milan, Italy).

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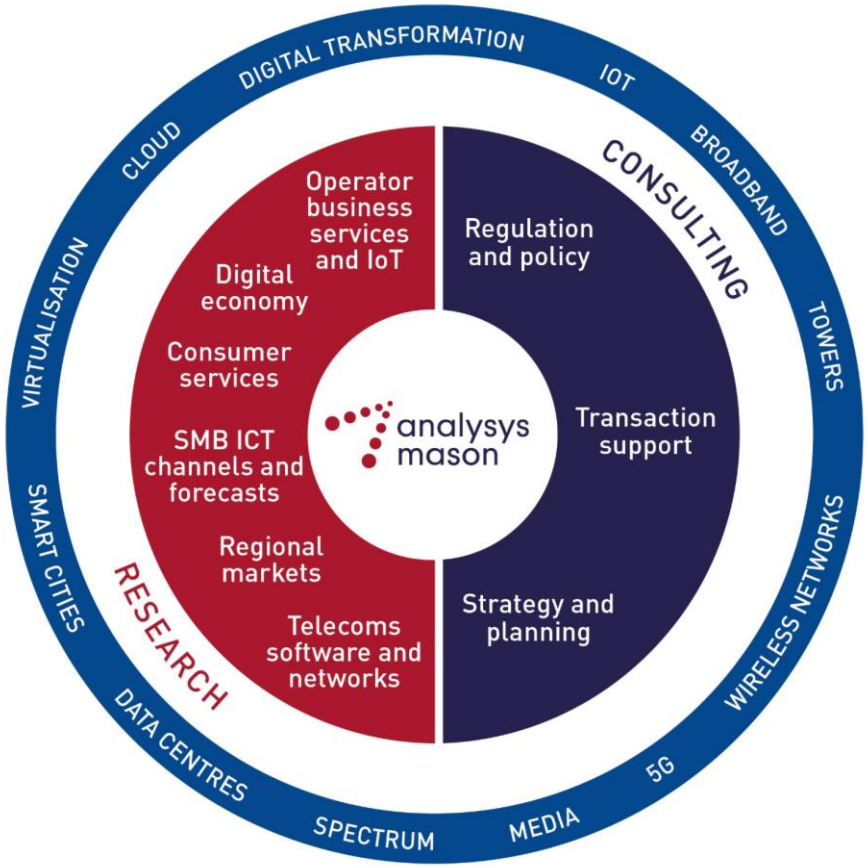

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