



# Enea: 5G Data Management



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## Enea: strategy overview

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

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

Enea's 5G Data Management suite stores and manages 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 to move from single-vendor, closed data management environments to more-open and best-of-breed, cloud-native 5G SBA networks.

Figure 1: Key data

<b>Company details</b>	<ul style="list-style-type: none"> <li>Public company headquartered in Stockholm, Sweden</li> <li>R&amp;D sites and offices in 16 cities around the world</li> <li>~650 employees (2019)</li> </ul>
<b>Revenue</b>	<ul style="list-style-type: none"> <li>Total revenue (2019): SEK1 billion (~USD110 million)</li> <li>Network Solutions product group revenue (2019) (where 5G Data Management portfolio sits): SEK 607.4 million (~USD66 million)</li> </ul>
<b>SDM products</b>	<ul style="list-style-type: none"> <li>Enea Unified Data Manager provides UDM functions in 5G networks and supports interworking with HSS in 4G networks.</li> <li>Enea Stratum Cloud Data Manager provides the 5G data layer (UDR, UDSF) functionality.</li> <li>Smart Identity Manager (SmartIDM) is a digital identity solution for mobile operators.</li> <li>Enea 5G Equipment Identity Register (5G-EIR) provides a mechanism to restrict malicious user terminals in a mobile network.</li> </ul>
<b>Key SDM customers</b>	<ul style="list-style-type: none"> <li>A tier-1 North American operator and a tier-1 European operator headquartered in Germany.</li> </ul>
<b>Key SDM Partnerships</b>	<ul style="list-style-type: none"> <li>Affirmed Networks (Microsoft), Cisco and Mavenir</li> </ul>

Source: Analysys Mason

## Enea: analysis

**5G and SBA will create new opportunities for software-focused vendors such as Enea to challenge the domination of NEPs. However, this will require market education, robust partner ecosystems 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,<sup>1</sup> but the increasing demand for separate 5G SDM databases and applications with open interfaces and orchestration is helping Enea to expand its market share.

Enea 5G Data Management has a flexible and cloud-native architecture with standard APIs that offer the possibility to assemble various combinations of both Enea and third-party solutions by supporting Nnssf interfaces 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 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 spaces, in conjunction with multi-access edge and public clouds, which will define new competitive dynamics. It will be important for Enea to have a broad range of platform and vertical partnerships and to deliver use case-/service-oriented solutions by combining its data management, identity and policy assets.

<sup>1</sup> For more information, see Analysys Mason's [Video and identity platforms: worldwide market shares 2018](#).

**Figure 2: Key strengths and weaknesses**

Strength	Description
Independent SDM vendor	Enea is an independent software vendor (ISV). This gives it the advantage of being a neutral third party, which enables multi-vendor deployments and interworking scenarios in mobile core with an open SDM solution.
Complete SDM portfolio	The 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, containerised functions that share a common software platform and development framework.
Partnerships	Its partnerships with packet core vendors helps Enea to grow its footprint and position itself as a relevant player in 5G packet core transformations.
Weakness	Description
Competition from NEPs	NEPs dominate the SDM market with large, established customer bases. They can deliver their SDM solutions as part of packet core deals.
Competition from others	HPE is a strong competitor to Enea; it has a similar position in terms of SDM and digital identity.
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.

Source: Analysys Mason

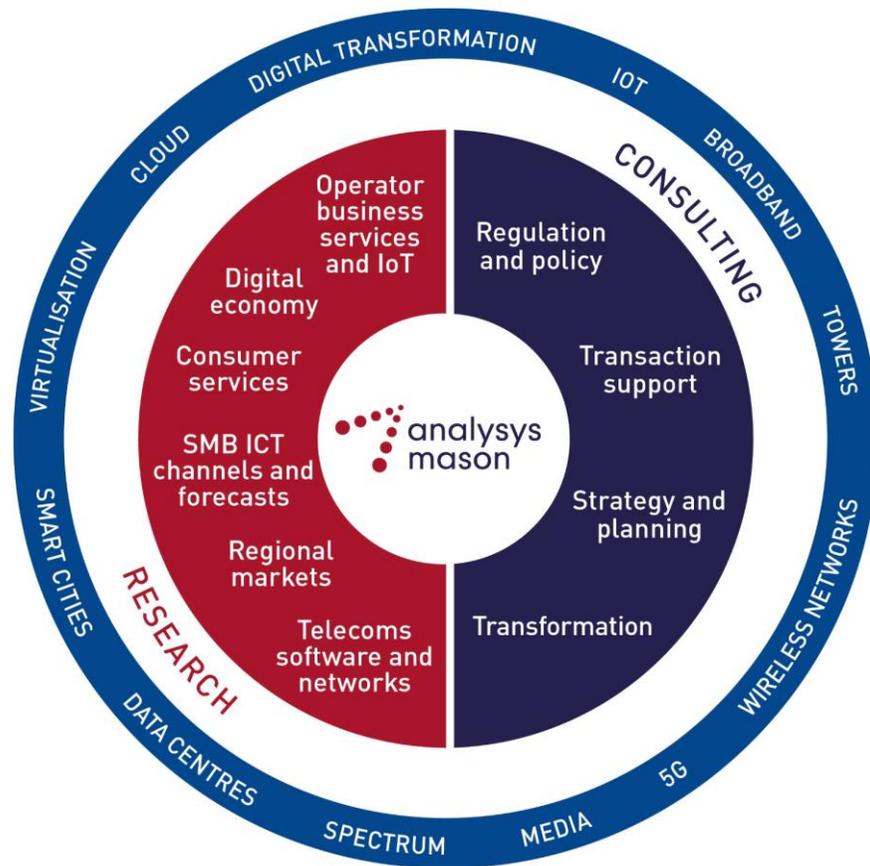
## About the author



**Gorkem Yigit** (Senior Analyst) is the lead analyst for the Digital Infrastructure Strategies and Video and Identity Platforms research programmes. His research focuses on the building blocks, architecture and adoption of the cloud-native, disaggregated and programmable digital infrastructure and networks that underpin the delivery of 5G, media and edge computing services. He also works with clients on a range of consulting projects such as market and competitive analysis, business case development and marketing support through thought leadership collateral. He holds a cum laude MSc degree in economics and management of innovation and technology from Bocconi University (Milan, Italy).

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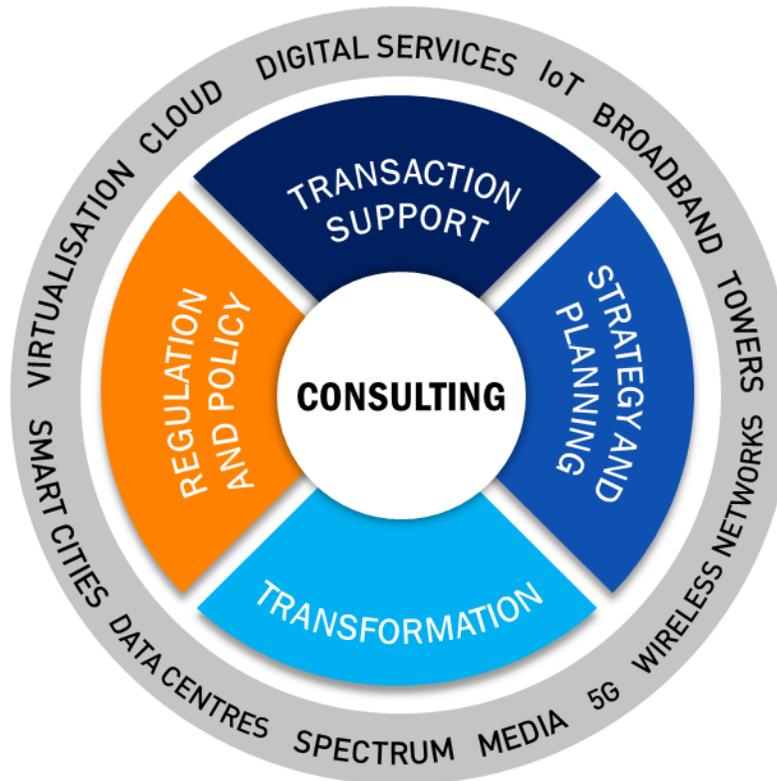
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