An industrialized solution for deploying a full core network for mobile broadband and VoLTE in weeks

Ericsson Compact Core is an industrialized solution targeting service providers, MVNOs and mission critical networks that need a rapid and simple launch of mobile broadband, VoLTE and Wi-Fi calling for up to 300k subscribers.

Ericsson Compact Core features a verified design of 17 VNFs for User Data Management, Packet Core and IMS plus a carrier-grade network design for local redundancy and two geo-redundant sites. To make the deployment a straightforward and predictable project, Ericsson Compact Core includes the infra-structure and an experienced delivery team that guides the customer through all preparation, deployment and acceptance activities with the purpose to make the activities both smooth and safe.

Ericsson Compact Core is ideal for a service provider that wants to deploy a full core network with mobile broadband and voice services in a single project with little risk and complexity.

Ericsson Compact Core is equally useful when a small core network is needed to address other segments. It becomes possible to experiment with fully standardized offerings to niche segments like youth, families, achievers or industries. As the existing consumer network is not affected by the configuration changes in the compact core, the new business and the existing business can move ahead at their own pace and be driven solely by their own business priorities.

Benefits of deploying VoLTE with Ericsson industrialized cloud-based solutions

- Single VNF SW track
- Enables extension to other Ericsson solutions
- Move VNFs easily between data centers
- Hardened in large deployments
- Cloud agnostic
- Standard open interfaces
- Carrier grade solutions
- All customer input collected in a single round increasing quality and shortening TTM
- Delivery made easy through automation
- Minimized integration to external nodes
- Professional services to support site engineering, VNF onboarding, integration, and test
- Specialized delivery team leveraging global experiences
- One delivery team - no project handovers

Deploy VoLTE in weeks
Launch mobile broadband and voice in one go

Green-fielders and MVNOs will be able to be “on air” in record time. Ericsson Compact Core will allow them to have a functional core network early in the launch process to be able to address radio optimization for VoLTE, terminal certification and marketing.

Three times quicker with a single project
With Ericsson Compact Core it will take only a third of the time to launch mobile broadband, VoLTE and Wi-Fi calling compared to launching them separately. The reason is, that you will save on integration and test effort for the intermediate steps.

Ericsson has industrialized the network design and the configuration between the three domains. All integration between VNFs has been done and the whole deployment is automated for consistent results. The acceptance testing is executed directly on the consumer services.

The rapid deployment is the base for further efficiency gains. A single fast project reduces the number of sub-projects, hand-overs between them and reduces the overhead for project management and steering. With this technique modern LTE-based consumer services become economical for all service providers.

The comprehensive package is matched by a single team. All professional services are delivered, either on site or remotely, by dedicated and specialized staff with wide experience in this field. This central delivery team will guide the service provider through all steps of the installation, deployment and acceptance to ensure speed and quality.

This makes Ericsson Compact Core an obvious choice for anybody who needs to launch a complete service in a given time as it frees up time from managing a complex deployment project to more business-related activities.

Freedom to act with no impact on other organization
Business agility is one of the big promises of NFV. Given the completeness of the Ericsson Compact Core, the dependencies on coordination with other organizations are minimal.

Ericsson Compact Core is the perfect choice, when switching radio standards for example from CDMA to LTE. The complete core can be created in weeks. Only a connection to eNode-B and the Internet is needed before a first call can be experienced. There are no dependencies on external systems being ready or available. After this initial step, the Ericsson Compact Core can immediately be used to start limited commercial operation. The existing network continues to run unchanged. Users can be moved to the new LTE-based services, while the back-end systems are adapted. A simple and robust way to migrate the customer base.

Ericsson Compact Core is equally useful when a core network needs to be replaced because one or several components have reached end-of-life. Instead of running a series of single node upgrade projects the service provider can in the same time leap to a fully modernized core network that is ready for the opportunities of 5G.

Ericsson Compact Core benefits

- Speed
  - Three times quicker with a single project
- Simplicity
  - All-you-need-package with expert delivery team
- Agility
  - Freedom to act with no impact on other businesses

Launch mobile broadband and VoLTE in one go
Ericsson Compact Core

You have ... | We deliver ... | You launch

Central delivery team

Internet

Radio

Wi-Fi calling
VoLTE
Signaling Routing
User data management
Mobile Broadband
NFV - Infra structure

VoLTE in service
Wi-Fi calling in service
MBB in service

Included products
The Ericsson Compact Core includes the following:

- Ericsson BSP 8100 Cloud infrastructure HW platform
- Ericsson Cloud Execution Environment
- Ericsson VNFs:
  - User Data Management (User data base, HSS, Provisioning gateway)
  - Mobile Broadband (MME, EPG, PCRF and external DNS)
  - Diameter Signaling Routing
  - VoLTE (vCSCF, vSBC, vMTAS, vMRF, Authentication Gateway, ENUM)
  - Interworking with other VoLTE networks (vSBC as I-BCF and TrGW)
  - SMS over IP (vEMe)
  - Wi-Fi Calling (Wi-Fi Mobility Gateway, AAA)

From the smallest reference configuration, the solution can easily scale to meet the capacity demands from a growing VoLTE market.

Included functionality
The Ericsson compact Core solution baseline includes integration and support of the following:

- VoLTE Supplementary Services
- Single Radio Voice Call Continuity (SRVCC)
- IMS Centralized Services (ICS)
- SMS support (SMSoSGs)
- Offline charging enablement
- Fault and Performance Management enablement
- IMS/MSS interworking
- Mobile Number Portability (MNP)
- Self-Service management
- Single Subscriber provisioning integration (Mobile Broadband, VoLTE, Wi-Fi Calling)
- Lawful interception interfaces
Do you want to know more about how to deploy Ericsson VoLTE?

Find some examples of what other service providers have done:

More about Ericsson Voice Services:

More about Ericsson VoLTE: