

Nokia Siemens Networks

Network sharing

Executive Summary



Delivering mobile broadband more efficiently and at lower cost

Communications service providers (CSPs) are looking to increase efficiency and cut the cost per bit of delivering mobile broadband. With rising data traffic, “all you can eat” pricing regimes and strict terms for coverage and capacity laid down by regulators, even fierce competitors are increasingly turning to network sharing as a possible solution.

Provided regulators don't see it as uncompetitive, CSPs can remain competitors in other aspects of their businesses but generate major savings by sharing network resources. It may be awkward for rivals to work together effectively, so setting up a separate joint venture entity is often the favored solution. Some joint venture partners go further and bring in a neutral third party to deploy and operate the shared network in a managed services deal.

Shared networks can provide an answer for CSPs facing very diverse market conditions. For instance, coverage is the primary consideration for radio network deployment in remote or rural areas, and significant CAPEX savings are easily achievable for CSPs ready to share the radio access network (RAN). Network roll-out and time-to-market also speed up, since only one set of new sites needs to be acquired and built. Restricted site availability is a big driver for CSPs in urban areas, where sharing sites can be the only feasible way to increase capacity.

Different approaches to network sharing suit different situations.

Passive sharing means sharing the physical sites and passive elements such as masts and power supplies.

Active RAN sharing goes further and requires joint decision-making on investments and operations. In roaming-based sharing, the customers of one CSP roam seamlessly in a “host” operator's network in order to plug gaps in coverage. Nokia Siemens Networks provides network sharing solutions for all three scenarios, based on 3GPP open standards wherever possible.

Services play a pivotal role in any network sharing scenario, from consulting and network planning services in the early stages to full, turnkey implementation services for greenfield projects and consolidation services for sharing established networks. However, maintaining and operating a shared network is a sensitive area for natural competitors. So, bringing in a managed services

provider can reduce friction and ensures that commercially sensitive data need not be shared. The Nokia Siemens Networks Build-Operate solution for greenfield sharing and the Outsourcing solution for sharing established networks provide governance and operational models to suit both scenarios.

When setting up a joint venture, staff from the participating CSP organizations are shifted into the new joint venture. The managed services

partner should have the outsourcing experience to transfer staff and set up an organization that is truly neutral with respect to the parent companies. Nokia Siemens Networks has a proven track record of running and operating networks successfully as a trusted third party. Experience in shared networks ensures that operational efficiencies and total cost of ownership targets are met.

The benefits of combining shared networks with managed services go

even further, however. That's because an experienced managed services provider like Nokia Siemens Networks uses standardization, automation and a proven operations model to deliver best-in-class solutions. A managed services approach can also reduce costs by off-shoring some operations and exploiting economies of scale that few CSPs could muster.