

Enea claims first 4G, 5G user-based congestion management solution

Telecoms software provider launches solution based on proprietary algorithms to take pre-emptive action to boost QoE for individual sessions before subscribers experience congestion



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Enea has launched [Session Congestion Manager](#) (SCM), offering the assurance that the development can lead to reductions in mobile cell congestion by as much as 15%, and create additional radio access network (RAN) capacity to deliver 25% more streaming video, without operators having to invest in new infrastructure.

The telecoms software provider said the service represents the mobile industry's first mobile optimisation solution that can dynamically boost 4G and [5G subscriber quality of experience](#) (QoE) for each individual user session.

SCM monitors multiple traffic and network parameters in real-time and creates a per-user session congestion score to take proactive and automatic remedial action based on its severity. By applying optimisation to the whole individual session, SCM is designed to deliver network efficiency without requiring any control plane or RAN integration. This, said Enea, is a key consideration for operators who want to maximise their existing 4G infrastructure while prioritising [5G investments](#).

By use of [Session Congestion Manager](#), Enea said the result will be that mobile operators can now deliver outstanding QoE with pinpoint accuracy to specific anonymised subscribers – before they experience congestion. Enea's proprietary algorithms identify specific sessions that require QoE improvement and deliver pre-emptive optimisation.

In what it said was an important feature, Enea added that SCM "fiercely" combats the darkening of networks providing critical visibility to cut through encrypted traffic flows in real time. It intelligently adjusts encrypted adaptive bitrate streams to reduce impact on the RAN, meaning that subscribers benefit from consistent video quality.

Explaining the need for such solutions, Analysys Mason principal analyst Gorkem Yigit said: "4G networks will still carry more than half of the world's mobile traffic in 2024. Operators will need to squeeze more from their 4G networks to get some breathing space while they ramp up on 5G. Meanwhile, video is on track to be nearly three-fourths of mobile network traffic by next year. That means mobile operators must provide a consistently great video experience over existing infrastructure, or risk losing customers – and money."

SCM is part of Enea's Congestion Management solution suite that also supports cell-based congestion detection using proprietary machine learning technology. SCM has already been deployed by EMEA mobile operators to maximise their 4G network and boost QoE.

Commenting on what the solution will be able to do, Roland Steiner, senior vice-president of Enea's telecom business unit said: "Operators are busy investing and priming their 5G deployments, but 4G will do much of the heavy lifting for years to come – so operators need to sweat their 4G assets.

"Traditional [traffic management](#) solutions react to signs of congestion on a per-flow basis," he said. "We use additional intelligence to manage congestion consistently through the user session and help operators manage subscribers' insatiable appetite for video."