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FED Award 2024: forum@comunicaredigitale.it

Application Category: BEST PLATFORM

Motivation:

These days we are increasingly approaching the use of 5G Technology in the production contexts. The application of an IP orchestration platform ([Sony Neveion VideoIPath](#)) is related to bandwidth allocation management for 5G broadcast.

Sony Neveion VideoIPath

Sony group Company has extended the capabilities of its flagship media orchestration platform VideoIPath to address the solution. VideoIPath, which has been widely deployed in a variety of applications including facilities, OB-trucks, remote production and contribution, now has a special feature that allows it to control the bandwidth bidirectionally. 5G signal is dynamically managed through a Sony API to the Network Exposed Function (NEF) or to CAMARA interface of the mobile network operator (MNO).

Due to high performance of 5G networks, the volume of data that needs to be transported over the network in real-time often far exceeds its capacity. Furthermore, the “best effort” nature of IP-based networks, is not best suited for transporting video reliably and with consistent low latency. The challenge becomes even more acute when there is high contention for bandwidth in the network, as many devices, including multiple cameras, are connected – as it is often the case in sports events.

VideoIPath receives information about the available 5G bandwidth, which can change depending on circumstances, and adjusts the QoS for individual flows based on signal priorities (e.g. controlled by the Tally activation of the on air device). Where 5G operator slicing cannot ensure 100% reliable delivery for the quality of the streams, **this unique feature of VideoIPath allows A/V streams** not to be affected by overcrowding of network usage in live situations: low latency and high quality is constantly managed and guaranteed for on-air program.

This new feature was first used by the BBC during the [Coronation of King Charles III](#) in London in May 2023, and has also been used in several [proof of concepts](#) including in a studio deployment for TV 2 Denmark.

Effectively, this unique feature of VideoIPath is opening a whole new world of opportunities for broadcasters to use 5G in a variety of live productions, radically improving their workflows.

