# Intel® Processors Enable Private 5G Platforms for Wireless UHD Video and Photo Transfer

Wireless, live UHD broadcast at an event of global scale
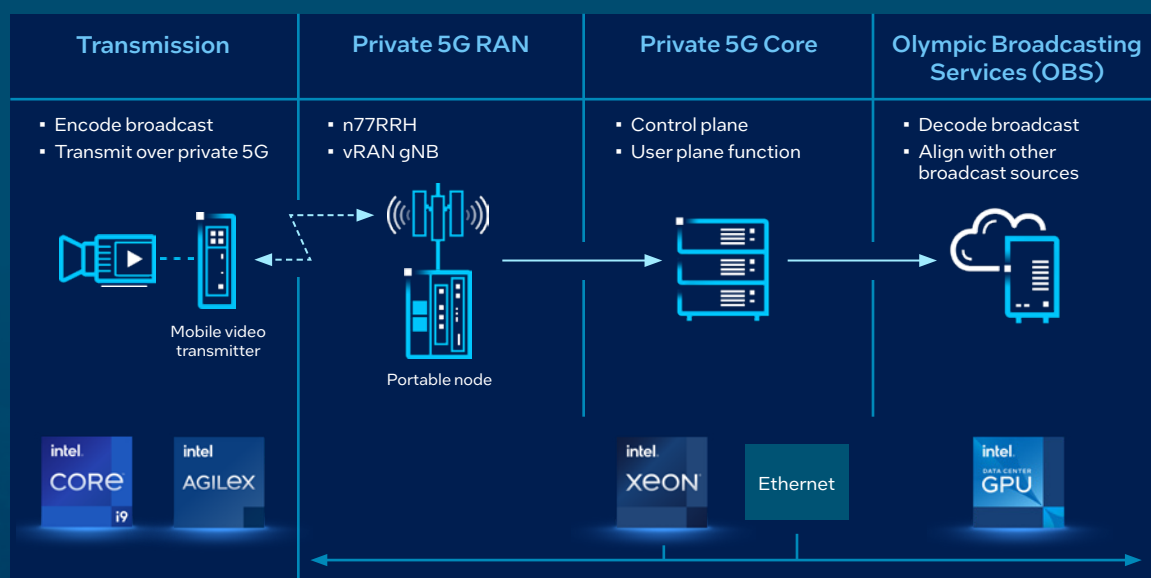

At the Olympic Games Paris 2024, Intel® processors enable a private 5G virtual radio access network (vRAN) platform that is cost-effective, scalable, and easy to use. Network nodes receive and transmit UHD footage with enhanced security to the Olympic Broadcasting Services (OBS) for distribution to rights holders worldwide.
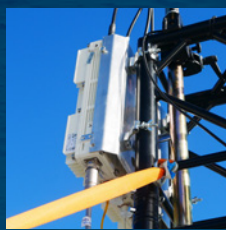
Components

Intel® Xeon® Scalable processor-enabled vRAN nodes at select venues receive, decode, and transmit 1K HD video from content capture devices, along with UHD live video streams driven by Intel® Core™ processor-enabled encode modules.

Transmission	Private 5G RAN	Private 5G Core	Olympic Broadcasting Services (OBS)
• Encode broadcast • Transmit over private 5G	• n77RRH • vRAN gNB	• Control plane • User plane function	• Decode broadcast • Align with other broadcast sources

Mobile video transmitter

Portable node

intel CORE i9   intel AGILEX

intel XEON   Ethernet

intel DATA CENTER GPU

Benefits

Performance and reliability
Intel® processors support real-time delivery of UHD video streams and press-quality images.

Control
Intel processor-enabled private 5G connections prioritize video streams to comply with service level agreements (SLAs).

Ease of use
Portable vRAN nodes can be set up in minutes to bring connectivity to hard-to-reach venues.

Scalability
Intel processor-enabled private 5G platforms can scale easily to reach more terminals and expand the coverage area.

Sustainability
Private 5G platforms consume significantly less power than traditional implementations while eliminating the need for large trucks and other heavy equipment.

Opportunity

Simplify wireless connectivity for live broadcasting in hard-to-reach venues while avoiding the pitfalls associated with congested public platforms or Wi-Fi coverage gaps.

Up to 5
UHD live ultralow-latency video streams per private 5G vRAN node.

Up to 2X
vRAN capacity gain vs. previous-generation processors.[1]

Up to 20%
compute power savings vs. previous-generation processors.[1]

Learn more at intel.com/olympics and intel.com/5G