5G Network Edge Use Case Descriptions

No.	Use Case	Industry	Description
1	Cloud Gaming	Media	Provision of remote processing for low latency gaming and virtual PCs
2	XR for Training	Media	Corporate training via AR/VR/XR especially in health and safety procedures
3	Edge CDN & ADN	Media	Improved (interactive) content delivery by caching and processing content / workloads at the edge
4	Live Video Broadcast	Media	Stream events in real time with low latency and minimal buffering close to the viewer
5	Temporary Compute for Events	Media	On-demand edge processing at venues (e.g. festivals, sports) to support high-bandwidth, low-latency services like live video, crowd analytics, or AR without permanent infrastructure.
6	Contextual DOOH Advertising	Media	Provision of content to outdoor advertising
7	AGVs + Humanoid robots	Manufacturing, Automotive	Real-time coordination and navigation of AGVs
8	Industrial IOT / Smart Manufacturing	Manufacturing, Automotive	Large-scale sensor networks in factories and supply chains, with local analytics and control. Can also be used for predictive maintenance and asset tracking
9	Connected Car	Automotive	Collecting real-time data from commercial vehicle fleets to monitor performance
10	Autonomous Driving	Automotive	Enablement of real-time driving decisions and hazard detection
11	Smart Traffic Management	Public	Optimization of traffic flow and congestion from video analytics and sensor data
12	Environmental Hazard Detection	Public	Identify dangerous conditions such as gas leaks, air pollution, radiation, or chemical spills in real time to enable rapid response and protect public safety.
13	Smart Grid	Public	Distributed energy monitoring and control to balance load, detect faults, and optimize grid efficiency in real time
14	Virtualized & Cloudified Network (vRAN)	Telecommunications	Virtualization and cloudification of RAN elements via COTS servers
15	Intelligent Network (AI RAN)	Telecommunications	Intelligent management of Networks (via RIC)
16	Private Mobile Networks	Telecommunications	Dedicated cellular networks (e.g. 4G/5G) deployed for a specific organization or site
17	Gen AI / Agentic AI	Various	AI systems that act autonomously, make decisions, and pursue goals with minimal human intervention
18	Computer Vision (asset monitoring)	Various	Analysis of assets and their behavior to identify faults before they impact production
19	Computer Vision (flow analysis)	Various	Analysis of the behavior of people and machines to infer outcomes e.g. store traffic
20	Computer Vision (safety and security)	Various	Development of security and video surveillance monitoring to improve safety
21	Drone inspection and navigation	Various	Processing of route, communication and imagery from drone inspection services
22	Remote Healthcare	Healthcare	Remote patient monitoring (using wearables and sensors), High-definition virtual consultations and telemedicine, Real-time remote diagnostics and video-enabled prescription management, Remote robotic-assisted surgery and AI-assisted imaging