



WHITE PAPER · SEPTEMBER 2026

5G, cloud and AI

Network, edge and artificial intelligence: the platform for vertical services

Summary

- 5G delivers value when network, cloud, edge and AI are designed together: latency, security and data location depend on the architecture, not on the radio alone.
- 5G-Advanced (3GPP Releases 18 and 19) brings improvements for industry, positioning and AI in the network; Release 20 starts the 6G studies.
- Rules change contracts: AI Act transparency obligations from 2 August 2026, high-risk AI obligations moved to 2 December 2027 by the May 2026 agreement; cloud switching charges removed from 12 January 2027 under the Data Act.
- Supervised AI agents cut the time needed for design, testing and documentation. Decisions stay with people.

01

Context

Many companies have a 5G network or a cloud project, but few services in production. The reason is often integration: data stays in suppliers' systems, processing is far from the field, and security is not designed for the new flows.

A shared platform for network, edge and AI lets new services be added without rebuilding the infrastructure each time. EU rules on AI, data and security should be treated as design requirements, because they determine where data lives and who can use it.

02

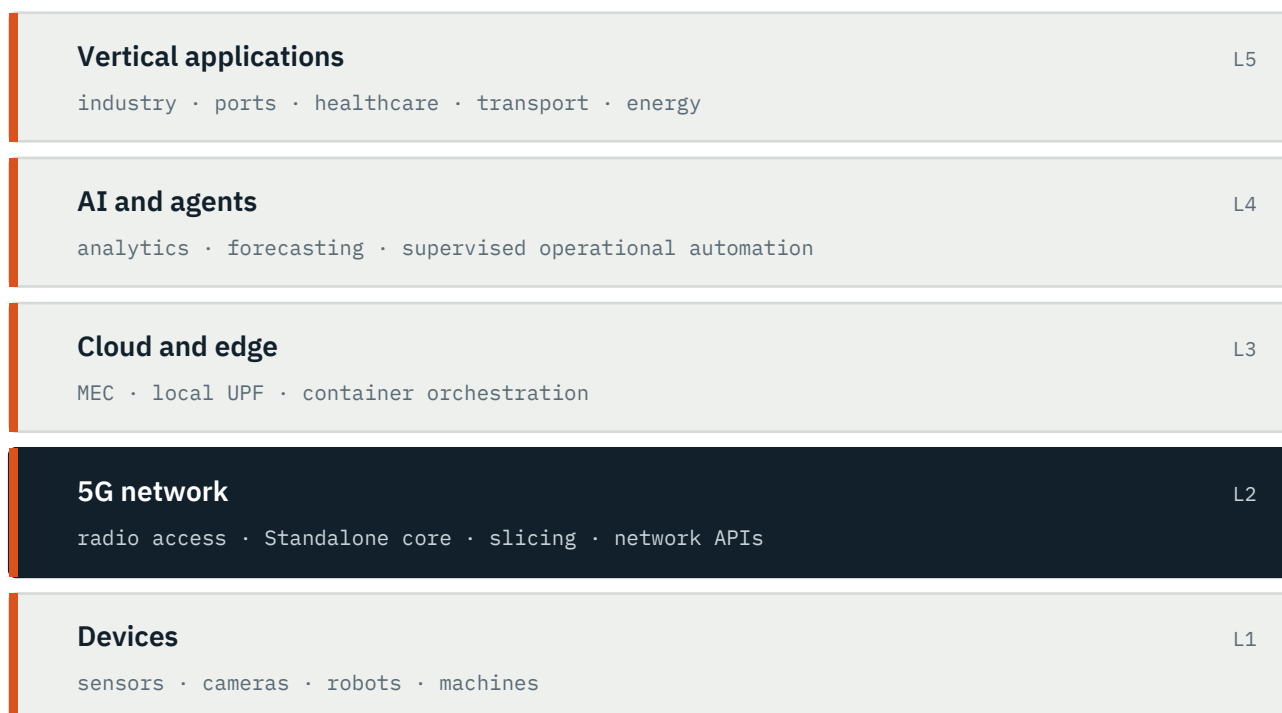
Regulatory framework

Regulation or standard	What it requires	Dates
AI Act – Regulation (EU) 2024/1689	Obligations by risk level; general-purpose AI; transparency	GPAI from 2/8/2025; Art. 50 from 2/8/2026; high-risk 2/12/2027 and 2/8/2028 (omnibus agreement)
Data Act – Regulation (EU) 2023/2854	Cloud switching and portability; access to connected-product data	From 12/9/2025; switching charges removed from 12/1/2027
NIS2 – Italian Legislative Decree 138/2024	Cloud and data-centre providers in scope	In force; baseline measures by October 2026 (2025 cohort)
Cyber Resilience Act – Regulation (EU) 2024/2847	Security of software and products with digital elements	Reporting from 11/9/2026; full from 11/12/2027
3GPP TS 23.501, TS 23.548	5G architecture; edge computing support	Technical references

This document is for information only and is not legal advice. Regulatory dates and obligations must be checked against official texts at the time of application.

03

Reference architecture



Each layer has its own performance, security and management requirements: acceptance testing is done layer by layer and end to end.

04

Use cases

Use case	Technology	KPIs to measure
In-line quality control with machine vision	Edge + 5G uplink	Latency, accuracy
Predictive maintenance	Cloud + AI	Lead time before failures
Robots and AGVs	5G + edge	Latency, reliability
Remote assistance with augmented reality	5G	Uplink, latency
Automated network acceptance testing	AI agents	Report turnaround time

05

Getting started in 90 days

- 1 Choose two services with measurable benefits.
- 2 Decide where data lives: on premise, at the edge, in the cloud.
- 3 Define the network and slices needed, with acceptance KPIs.
- 4 Build the first service with supervised AI agents.
- 5 Measure results and add the second service on the same platform.

06

How Conection works

Conexion supports public bodies and companies as independent engineers: we write measurable requirements and specifications, check suppliers' designs, run field acceptance tests and train staff. We do not sell equipment, so we can stay on the side of the people who use the network.

07

Sources

Regolamento (UE) 2024/1689 – AI Act — <https://eur-lex.europa.eu/eli/reg/2024/1689/oj>

Gibson Dunn – EU AI Act Omnibus agreement (maggio 2026) —

<https://www.gibsondunn.com/eu-ai-act-omnibus-agreement-postponed-high-risk-deadlines-and-other-key-changes/>

Faegre Drinker – September 2026 EU deadlines for connected products — <https://www.faegredrinker.com/en/insights/publications/2026/9/september-2026-eu-compliance-deadlines-for-connected-product-manufacturers>

ICT Security Magazine – NIS2, adempimenti fino a ottobre 2026 —

<https://www.ictsecuritymagazine.com/notizie/nis2-adempimenti/>

Commissione europea – CRA reporting obligations — <https://digital-strategy.ec.europa.eu/en/policies/cra-reporting>