IT and Telecom Infrastructure Inspections

Assuring Physical Integrity, Functional Readiness, and Operational Safety

Innovio e.U. provides specialized inspection services for IT infrastructure and telecommunication systems. Our role is to verify that all installed components — from cabling and power to server racks and telecom towers — meet project specifications, safety regulations, and operational requirements.

With a background in hands-on implementation and technical audits, our team understands both the installation side and the end-user functionality. We deliver independent inspection reports that help our clients validate vendor work, reduce risk, and ensure their digital systems are ready for deployment or certification.

🔧 **1. Server Room and Data Center Infrastructure**

- Inspection of rack installation, positioning, labeling, and anchoring

- Verification of PDU setup, voltage allocation, and outlet accessibility

- Cable routing inspection (horizontal and vertical management)

- Fiber patch panel setup, polarity, bend radius, and connector integrity

- Copper cabling checks (CAT6/CAT7 termination, patch panels, shielding)

- Inspection of UPS systems (capacity, wiring, bypass configuration)

- Environmental control systems: air conditioning units, ducting, and airflow direction

- Fire suppression and detection systems: nozzles, sensors, warning signage

- Grounding and bonding system verification across equipment

- Equipment layout conformity to design plans and accessibility standards

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📊 **2. Telecommunication Equipment and Network Rooms**

- Visual and structural inspection of telecom towers (anchor bolts, welds, corrosion)

- Inspection of antenna alignment, mounting hardware, and coaxial feedlines

- Lightning protection and grounding systems for towers and masts

- Cabling verification for microwave, fiber, and cellular backhaul

- Rack installation for BBU, RRUs, and transmission equipment

- Power supply connection validation, voltage checks, and circuit labeling

- Review of cable trays, fiber ducts, and termination enclosures

- Wireless AP mounting height and orientation checks (indoor/outdoor)

- Switch, firewall, and router equipment installation inspection

- Cooling and airflow path validation in network distribution points

⚡ 3. Power and Redundancy Systems

- Visual and conformity inspection of power distribution boards

- Backup system validation: UPS switchover tests and inverter output checks

- Generator connection inspection (manual and automatic transfer switch wiring)

- Voltage measurement confirmation at equipment input terminals

- Verification of grounding path continuity for racks, equipment, and enclosures

- Battery bank layout, voltage levels, and connector integrity

📄 4. Labeling, Documentation, and Technical Compliance

- Verification of labeling for cables, racks, devices, and distribution points

- Cross-checking installed components against BOM, layout, and network schematics

- Inspection of test reports (OTDR, Fluke tests, power readings)

- Verification of conformity with IEC, ANSI/TIA, and EN standards

- Checking cabinet ventilation spacing and manufacturer compliance clearances

- Handover file review: as-built drawings, test logs, calibration reports

🔍 5. Final Inspection and Handover Readiness

- Complete walkthrough based on the approved inspection test plan (ITP)

- Operational readiness checklist validation before network commissioning

- Punch list creation for minor defects, missing items, or correction points

- Client witnessing and documentation of final visual and functional results

- Sign-off support for acceptance certificates or third-party validation