

5G & VHCN ECOSYSTEM · SUMMARY STUDIES

Guidelines for Sharing Communication Infrastructure

A practical roadmap for operators and infrastructure holders to share networks — and accelerate 5G and gigabit rollout across the EU

AT A GLANCE These Guidelines map a simplified, practical route through existing Czech and EU law for sharing passive and active communication infrastructure, radio spectrum and wholesale services — and for building new public networks. The goal is to cut the cost and time of deploying 5G and very-high-capacity networks (VHCN), in line with the EU Connectivity Toolbox and the Gigabit Infrastructure Act (Regulation (EU) 2024/1309).

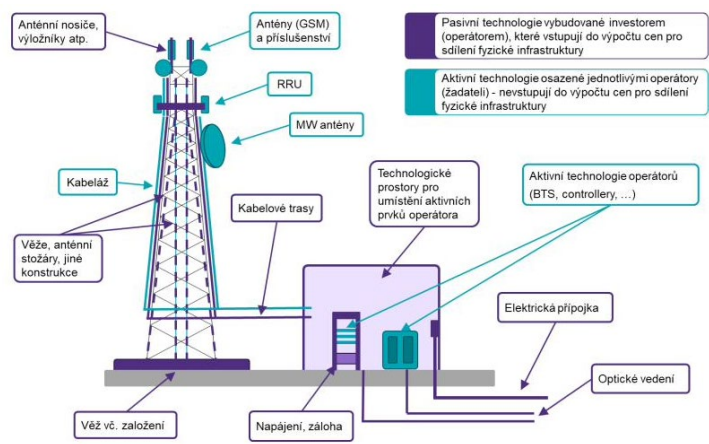
What the Guidelines cover

They are written for two parties — **applicants** and **obliged entities** — and offer both a maximally simplified guide to the correct procedure under current legislation. The aim is to ease the preparatory phase of establishing a new public electronic-communications network (or part of one) and starting to provide services. They cover every type of public network — fixed and mobile (5G) — and add a concise overview of network construction. Non-public networks are out of scope.

<p>Applicant (<i>žadatel</i>) An operator that wants to deliver its own public services using another party's existing infrastructure or wholesale services.</p>	<p>Obliged entity (<i>povinná osoba</i>) An owner or operator of physical infrastructure — or wholesale services — that is required to grant access on fair terms.</p>
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Why it matters

Re-using poles, ducts, fibre, masts and spectrum avoids costly, slow and disruptive duplication of civil works — typically the largest share of network rollout cost. Clear, predictable access rules give applicants a low-risk on-ramp to the market and give infrastructure holders a fair return, while supporting the EU's gigabit and 5G connectivity targets.



Source figure — passive infrastructure built by the investor (mast, ducts, cabling, power) is shared and priced; active operator technology (antennas, RRU, BTS) is not.

Fixed-network sharing

For fixed high-capacity networks the study identifies five sharing models — **joint venture, joint construction, mutual (reciprocal) access, infrastructure access, and passive-infrastructure sharing**. In practice the costs are most often shared through construction coordination, a purchase agreement, or co-deployment (“přípolož”). Reciprocal-access deals — operators opening their own fibre networks to each other — are already used in the Czech market to extend coverage to around a million households.

Ways to share — and to build

Each combination of obliged entity, sharing variant and network type maps to a specific contract. The applicant first identifies who owns the infrastructure and whether it is a public or non-public network, then selects the variant below.

Sharing variant	What is shared	Typical contract
Physical non-comms infrastructure	Land, buildings, masts, ducts, street furniture (municipalities, utilities)	Lease agreement (§ 2201 Civil Code)
Physical comms infrastructure	Poles, masts, ducts, conduits, racks, colocation space	Lease agreement
Passive network elements	Dark fibre, cables, antennas — long-term (10–30 yrs)	IRU agreement
Active network elements	Shared radio access / core — MORAN, MOCN, access points	Network access agreement
Radio spectrum	Two or more users sharing the same frequency bands	Spectrum access agreement
Wholesale services	Fixed: LLU, VULA, BSA · Mobile: L-/F-MVNO, national roaming	Network access / reference offer
Co-deployment & coordination	Joint build along other infrastructure (“přípolož”)	Co-deployment + joint-build agreement



Source figure — how much of the operator stack (RAN, core, network elements, billing, customer care, sales) each wholesale model requires the applicant to run.

Building networks

All public networks fall under the new Building Act (NSZ, Act 283/2021) with simplifications in the Line Act. Works are graded as **minor, simple or other** builds; co-deployment along existing infrastructure is treated as a separate, lighter-regime build, and construction coordination follows GIA Art. 5. Fixed builds split into standalone builds and co-deployment; mobile builds depend on the trigger — a commercial decision, 5G-auction obligations, NRP-funded coverage of remote areas and rail corridors, or licence-renewal duties.

Contract essentials

Three contract types carry the whole framework: the **lease agreement**, the **network-access agreement** and the **co-deployment agreement**. Whichever applies, the parties should pin down the term and exit, price and valorisation, quality parameters (SLA), maintenance and site access, liability, transfer of IRU rights on sale or merger, and continuity of service for end-users if the contract ends.

EU FRAMEWORK FOR INFRASTRUCTURE SHARING

GIA — Gigabit Infrastructure Act

Regulation (EU) 2024/1309

- Directly applicable across the EU from 12 Nov 2025
- Replaces the Broadband Cost Reduction Directive (2014/61/EU)
- Stricter, more harmonised minimum requirements
- Access pricing may reflect investment risk, fair return & co-investment

BEREC report on infrastructure sharing

Evidence base across EU markets

- 16 mobile-sharing cases across the EEA + 6 national-roaming deals
- Passive sharing: 16–35% savings on CAPEX and OPEX
- Active sharing: 33–45% CAPEX and 25–33% OPEX savings
- Mostly commercial deals; neutral-to-positive for competition

KEY TAKEAWAY Sharing existing infrastructure — rather than duplicating it — is the fastest, lowest-cost route to nationwide 5G and gigabit coverage. These Guidelines turn a fragmented legal landscape into one clear, step-by-step path for applicants and infrastructure holders alike.