

A photograph of a server rack with multiple units, some with blue lights, and yellow cables. The background is blurred, showing more server racks and lights.

5GSC Mobility WS Project 5GACE

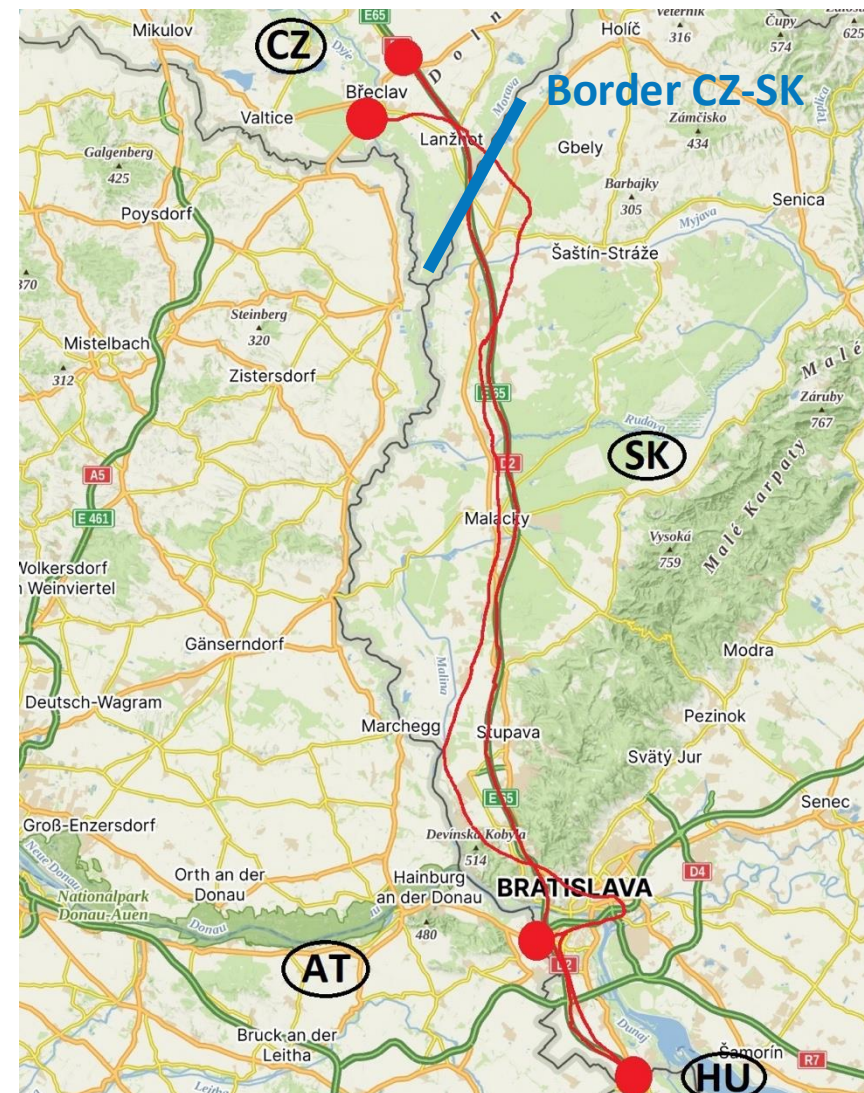
Current Version  



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5GACE: Cross-Border 5G SA Mobility Pilot (SK–CZ)

- **5G Across Corridors in Europe (5GACE)** is a CEF Digital large-scale pilot to demonstrate **seamless cross-border mobility on 5G Standalone (SA)** along a TEN-T corridor section.
- **Core objective:** validate **inter-PLMN handover** between **Slovak Telekom** and **T-Mobile Czech Republic** at the **Břeclav–Kúty (CZ–SK)** border.
- **Pilot segment & scope**
 - ✓ TEN-T Corridor: **Rhine - Danube**
 - ✓ Corridor section: **Bratislava (SK) – Břeclav (CZ)**
 - ✓ Length: **Road 80 km | Rail 68 km**
 - ✓ Radio: **3.6 GHz (C-band) 5G TDD** expansion
- **Project facts: 36 months (Jan 2026–Dec 2028) | €3.4m EU grant**



What We Validate: Inter-PLMN Handover & FRMCS-Aligned Connectivity



- **Primary validation: 5G SA inter-PLMN handover** delivering service continuity across the SK–CZ border for users/applications.
- **Railway-aligned use cases (on public 5G SA)**
 - ✓ **FRMCS Performance Communication: *staff communication*** (as safety on railway with simulated priority) with cross-border continuity
 - ✓ **FRMCS Business Communication: *passenger communication*** with high throughput / low latency expectation across the border section
- **Traffic differentiation (pilot approach)**
 - ✓ Prioritization using **network slicing** and **dedicated SIMs** (simulated) for staff communications.
- **Scope boundary**
 - ✓ **Mission-critical FRMCS is out of scope**; focus is on validation of selected non-Mission Critical connectivity services.



How We Deliver: Deployment, KPI Testing & Replicable Blueprint



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- **Delivery model:** two-party consortium
 - Slovak Telekom (Coordinator)
 - T-Mobile Czech Republic
- **Deployment & integration highlights:**
 - ✓ New/extended **C-band sites** and **fiber backhaul** (SK side).
 - ✓ **Edge capability** via **MEC / Remote-UPF node(s)** to support low-latency / high-throughput services
 - ✓ Design + integration of **inter-PLMN handover on 5G SA**, validated through **KPI-based testing (incl. drive tests)**.
- **Public outcome:**
 - ✓ Publish a **5G SA Inter-PLMN Handover Blueprint**: architecture overview, procedures, KPIs, lessons learned, recommendations — enabling replication at other EU borders.
- **Funding & governance:** **CEF Digital**, periodic reporting for auditable progress.

