



TÜRKIYE SMART MOBILITY & INTELLIGENT TRANSPORT SYSTEMS

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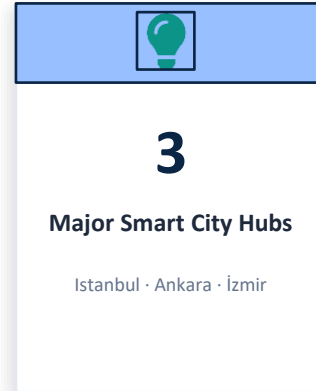
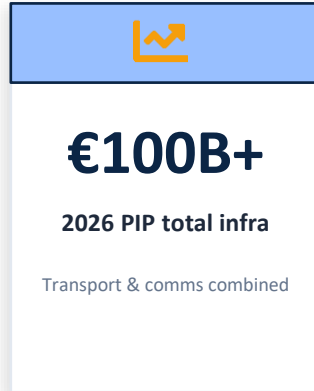
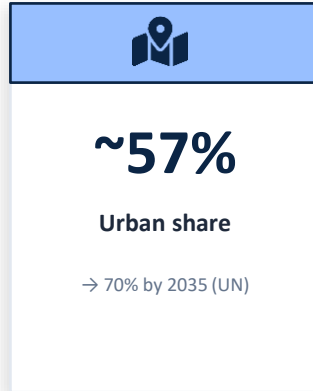
Finnish Opportunities & Entry Playbook

Where Finnish firms win · Routes to
market

Why Türkiye, Why Now



A convergence of urbanisation, policy ambition, and investment scale



Key Insight: Türkiye is simultaneously executing a national ITS strategy, a National Smart Cities Strategy, and the largest-ever public investment programme — 13,887 projects, €1.92 trillion total — creating a multi-year, multi-sector procurement window that peaks 2026–2028.

National ITS Strategy











Ministry of Transport & Infrastructure — framework, priorities, and technology pillars

Strategy Overview

- ✓ Structured framework for digital technologies across road, rail, maritime and air transport
- ✓ Priorities: interoperability, safety, efficiency, environmental sustainability
- ✓ Coordinated implementation at national and local levels
- ✓ National ITS Architecture — all public procurement must conform
- ✓ Autonomous & connected vehicle infrastructure under preparation
- ✓ AI-based data analytics and decision support integrated into operations
- ✓ 5G-supported communication networks as backbone infrastructure

8 Key Technology Areas

-  Cooperative & Connected ITS (C-ITS)
-  Traffic Management & Control Systems
-  Mobility-as-a-Service (MaaS) Platforms
-  Autonomous & Connected Vehicle Infra
-  AI-Based Data Analytics & Decision Support
-  IoT-Enabled Sensing & Monitoring
-  5G-Supported Communication Networks
-  Secure Data Exchange Platforms

National Smart Cities Strategy 2024–2030



Ministry of Environment, Urbanisation & Climate Change — six strategic axes

2024 Launch & governance	2025 Pilot cities	2026 Scale-up phase	2027	2028 Mid-term review	2029	2030 Full implementation
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1

Smart Governance

Digital public services, open data portals, e-participation, interoperable databases

2

Smart Economy

Smart manufacturing zones, startup ecosystems, digital trade facilitation

3

Smart Mobility

MaaS frameworks, EV infrastructure, autonomous vehicle corridors, integrated ticketing

4

Smart Environment

IoT air/water quality networks, waste digitalisation, energy efficiency

5

Smart People

Digital literacy, smart health, connected education campuses

6

Smart Living

Safe city platforms, heritage digitisation, cultural data infrastructure

Istanbul: Mega-City Testbed for Integrated Mobility



16M+ people · 30M daily trips · Target 450 km metro by 2026

Key Figures

16M+	Metro population
30M	Daily trips (→38M by 2040)
6–7M	Vehicle movements / day
65 km	New rail added (past 5 yrs)
3.6M	Daily rail passengers
450 km	Metro target by 2026

ITS Components Deployed

- AI-based traffic management
- Adaptive signal control
- Real-time multimodal data platforms
- Video analytics & incident detection
- Integrated mobility applications
- Smart parking & demand management

Sustainable Urban Mobility Plan Priorities

- Low-emission zones & congestion pricing
- Electrified public transport fleet
- Micromobility system integration
- Maritime transport integration
- Park-and-ride facilities
- Demand management tools
- Vision 2050: 750 km metro network

Ankara: Public-Sector-Led Mobility Planning Hub



Capital city · 5.5M population · EU-supported SMART Ankara programme

SMART Ankara — Programme Overview

Ankara implements the EU-supported SMART Ankara Sustainable Urban Mobility Plan, aligning urban transport with European sustainability standards. As the national capital, Ankara's solutions often become a policy template for other municipalities — making it a strategic reference market.



Demand modelling & scenario analysis



Digital mobility solution development



Expansion of public transport systems



Active mobility — cycling & pedestrian integration



Institutional capacity building



Adaptive traffic signal systems



Real-time monitoring & control platforms



Data-driven transport policy development

Strategic Significance



Policy template role

Ankara solutions replicated across Turkish municipalities



Controlled test environment

Regulatory frameworks refined before national deployment



EU alignment

SMART Ankara directly connected to European Sustainable Urban Mobility Plan standards



Central procurement

Ministry-level contracts emanate from Ankara

İzmir: Climate-Neutral Urban Transformation Model



3rd largest city · EU 100 Climate-Neutral Cities Mission member · SUMP underway

4.4M

Metro population

25.1M

tCO₂e total emissions/yr

5.78M

tCO₂e transport sector

€2B+

Planned metro line invest.



Rail & Public Transport

- ✓ Metro, suburban rail (İZBAN) and tram systems
- ✓ New metro line ~22 km, est. €2B+ investment
- ✓ Lines designed for automated operation
- ✓ Expansion of tram network under construction
- ✓ SUMP integration targeting reduced car dependency



ITS & Traffic Management

- ✓ Intelligent traffic management to reduce emissions
- ✓ Integrated ticketing and payment systems
- ✓ Extensive fiber-optic infrastructure backbone
- ✓ Large-scale sensor network deployment
- ✓ Data-driven urban mobility planning platform

Climate & Decarbonisation

- ✓ EU 100 Climate-Neutral Cities Mission member
- ✓ Transport sector: 5.78M tCO₂e targeted
- ✓ 21.7M MWh/yr transport energy consumption
- ✓ EU-standard SUMP preparation underway
- ✓ Citizen participation embedded in planning

ITS Applications Across Transport Modes



Current deployment landscape — what is active in Türkiye today



Road Transport

- Urban traffic management centres
- Highway monitoring systems
- Electronic toll collection (ETC)
- Incident detection & response
- Freight & logistics optimisation



Public Transport

- Real-time passenger information (RTPI)
- Integrated ticketing platforms
- Fleet tracking & scheduling systems
- Demand-responsive services
- AI-based signal priority for buses



Logistics & Freight

- Corridor management systems
- Port & intermodal integration
- Digital supply chain monitoring
- Weigh-in-Motion (WIM) systems
- Cross-border data exchange platforms



Emerging Technologies

- Connected vehicle infrastructure
- Autonomous vehicle testing potential
- Electrified mobility management
- Micromobility integration platforms
- 5G-V2X communication pilots

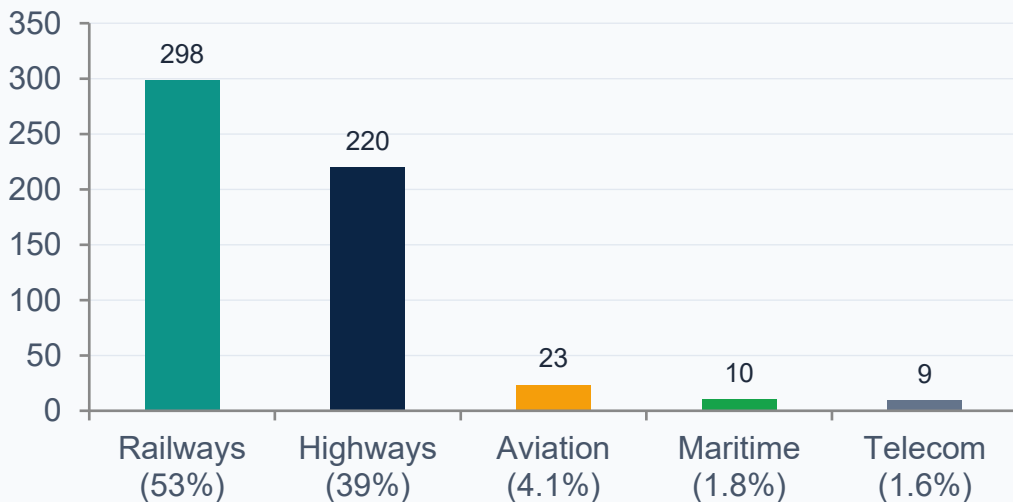
2026 Public Investment Programme



₺1.92 trillion total · Transport & communications ₺508 billion · 91 rail projects · €100B+ macro context

2026 PIP: Transport & Infrastructure Allocation by Mode (Ministry of Transport & Infrastructure)

₺562.7B total



₺298B

€5.2B+

Railway investments

53% of budget — '2026 declared Railway Year'

₺219B

€4.2B+

Highway investments

39% share, ₺219.5B allocation

91

projects

Rail projects active

Spanning HSR, commuter rail, metro, freight

\$6.75B

USD

Istanbul N. Ring Rail

World Bank-financed; largest foreign-funded rail project

World Bank: Strategic Financing Partner



Active portfolio of \$9B+ across rail connectivity, green urban mobility, and corridor logistics

World Bank Country Partnership Framework (CPF) for Türkiye: enhance logistics efficiency · boost rail freight capacity · resolve network bottlenecks · support green urban mobility



Major Rail Interventions

Istanbul North Rail Crossing (INRAIL)

\$2.0B WB · \$6.75B total

Approved 31 March 2026 · Total cost \$8.3B

127 km electrified railway via Yavuz Sultan Selim Bridge, bypassing Istanbul metro. Connects both airports to national rail. Freight capacity: 3M to 50M tons/yr (15x). WB leads 6-MDB coalition: ADB, AIIB, EBRD, IsDB, OPEC Fund. Links Trans-Caspian Middle Corridor, Iraq Development Road, and Türkiye–EU corridor. Up to 414,000 jobs.

Eastern Türkiye Middle Corridor Railway

\$660M

Dec 2024

Modernises Divriği–Kars–Georgia border rail. Scales low-carbon rail. Bolsters Trans-Caspian Middle Corridor for EU–Central Asia freight.

Rail Logistics Improvement Project

\$350M

Ongoing

Targets freight corridor bottlenecks. Links industrial zones to national ports and rail grids. Improves intermodal connectivity.



Urban & Green Mobility

Green & Future Cities Project

EUR 191.5M (\$219.4M)

Approved June 2026

Managed via İlbank. Finances public transport upgrades in Antalya and Konya: low-emission tramlines and modern bus networks. Also covers water and sanitation infrastructure.

Sustainable Urban Mobility Plans (SUMPs)

EU co-financed

Ongoing

World Bank + EU collaboration with Turkish municipalities. Designs long-term public and non-motorised transit plans. Targets reduced gridlock, lower noise, fewer GHG emissions.

Finnish angle: IFI-financed projects use international procurement rules — lower barriers for Finnish companies than domestic Turkish tenders. INRAIL 4 lots (RFP May-Jun 2026) and Green Cities project are the immediate entry points.

ITS Infrastructure Value Chain & Stakeholder Ecosystem



How projects flow from policy to procurement to implementation — and where value is created



Value Chain Deep-Dive: Roles, Relationships & Contract Flows



How money and responsibility move through an ITS infrastructure project

Procurement Pathways

Open International Tender

Published on EKAP & Official Gazette. ITS technology lots tendered separately from civil works. Bid in Turkish; surety bond required.
 → **Direct bid — Finnish company as vendor**

World Bank / IFI-Financed Projects

International procurement rules apply (STEP/BSTDB). Often more accessible for European suppliers. INRAIL is current example (\$6.75B).
 → **Direct bid or consortium**

EPC Integrated Contract

Single contractor wins full civil + ITS contract. ITS sub-lots awarded by EPC to tech specialists. Speed to market faster.
 → **Subcontractor to Limak/Kalyon/Rönesans**

Framework / Call-off Agreement

Municipal operators (IETT, EGO, ESHOT) use framework agreements for O&M, system upgrades, and data services.
 → **Direct contract with operator**

Key Contracting Bodies

AYGM

Infrastructure Investments DG

Mega rail & highway projects, World Bank lots

TCDD

Turkish State Railways

Signalling, comms, rolling stock, station tech

KGM

General Directorate of Highways

Traffic mgmt, tolling, highway ITS, WIM systems

IBB / IETT

Istanbul Metro & Bus Operator

Fleet tracking, passenger info, EV integration

EGO / ABB

Ankara Transport & Municipality

Signal control, demand modelling, data platforms

ESHOT / İBB

İzmir Bus & Municipality

Ticketing, RTPi, tram/metro systems

Typical ITS Sub-Lots

L1

SCADA & Control Systems

High

L2

Comms & Telecom Backbone

High

L3

Passenger Info Systems (PIS)

Med

L4

Electronic Fare Collection

Med

L5

Video Surveillance & Analytics

Med

L6

Traffic Management Platform

High

L7

Environmental Monitoring IoT

Med

L8

Data Integration / MaaS API

Low

Opportunity Matrix: Nordic Strengths vs Turkish Procurement Demand



Where Finnish competencies intersect with confirmed procurement categories

Technology Segment	Nordic Strength	Urgency	Market Value	Notes
Traffic Management Systems	\\ \\ \\ \\ \\	HIGH	€25B+	Direct fit with National ITS Architecture requirements
Railway Signalling & Comms (SCADA)	\\ \\ \\ \\ \\	HIGH	€298B rail pool	91 active rail projects; INRAIL \$6.75B flagship
EV Charging Infrastructure	\\ \\ \\ \\ \\	HIGH	Growing	Fortum, Kempower; İzmir & Istanbul fleet electrification
Fleet Electrification Software	\\ \\ \\ \\ \\	HIGH	Bundled	Depot mgmt, route planning, charging optimisation
Environmental IoT / Sensors	\\ \\ \\ \\ \\	MED	€5B+	Vaisala — road weather & air quality benchmark in TR
Real-time Passenger Info (RTPI)	\\ \\ \\ \\ \\	MED	€3B+	All 3 cities active; integrated with ticketing platforms
MaaS / Mobility Platform Software	\\ \\ \\ \\ \\	MED	Emerging	MaaS Global (Whim) model actively studied by Istanbul
C-ITS / V2X Infrastructure	\\ \\ \\ \\ \\	MED	Pilot phase	European C-Roads standards apply; pilot corridor active
Smart Tolling Systems	\\ \\ \\ \\ \\	LOW	€8B+	KGM highways; Kapsch & Swarco dominant; JV route

Dots = Finnish competitive strength (1–5 filled) · Urgency = procurement readiness · Market value based on 2026 Public Investment Program allocations



Where Nordic Companies Should Focus: Technology Priorities 2026–2030

Tier 1 – Immediate Revenue Opportunities

- Rail Signalling & SCADA
- Traffic Management Systems
- EV Charging Infrastructure
- Fleet Electrification Software

Tier 2 – Strategic Growth Opportunities

- Environmental IoT
- C-ITS / V2X
- Digital Twin Platforms
- MaaS Solutions

Tier 3 – Long-Term Watch List

- Autonomous Mobility
- Hydrogen Mobility

Priority Opportunity Segments for Nordic Companies



Where Nordic companies have the strongest competitive differentiation



KEY OPPORTUNITY SEGMENTS

Traffic Management Systems

Sitewise, Swarco Finland, Kapsch Finland: deep DATEX II, TMC architecture, and motorway management expertise. Turkish motorway expansion and national ITS architecture conformance requirements create direct tender opportunities. Entry via direct bid or Tier-1 EPC partnership.

Value: €25B+ · **Route:** Direct tender or Tier-1 JV · **Timeline:** 2026–2027

Environmental Monitoring — Vaisala Anchor

Vaisala is the global reference in road weather and air quality sensing. Turkish ITS-G5 roadside unit procurement includes embedded weather sensors — a near-perfect product fit. Active Ministry of Transport procurement team engagement recommended now.

Value: €5B+ · **Route:** Direct OEM supply + service contract · **Timeline:** 2026 onwards

Railway ITS — Signalling & Control

With €298 billion allocated to 91 rail projects and the \$6.75B INRAIL flagship under tender, demand for SCADA, communications backbone, and train control systems is at a historical high. Finnish systems integration expertise (including Thales, Alstom partnerships) is directly relevant.

Value: €298B pool · **Route:** Consortium / Tier-1 subcontractor · **Timeline:** 2026–2030

EV Charging Infrastructure & Management

Fortum Charge & Drive and Kempower bring EV charging infrastructure expertise combined with smart charging management software. Izmir ESHOT fleet electrification and Istanbul bus depot charging are the primary procurement targets. IFI-financed projects offer accessible entry.

Value: €12B+ · **Route:** Direct bid + local installation partner · **Timeline:** 2026–2028

Market Entry Playbook for Nordic Companies



Three routes to market — aligned with the value chain structure

Route A Direct Tender Bid

Best for: Finnish companies with EU-certified products, Turkish-capable bid teams, or established brand recognition in TR (e.g. Vaisala)

- Register on ekap.kik.gov.tr — Türkiye's central procurement portal
- Monitor AYGM tender notices for IFI-financed projects (World Bank STEP system)
- Obtain Turkish equivalency certificates for technical documentation
- High budget requirements for first major tender preparation
- Engage Turkish legal firm for bid compliance & surety bond
- ITS Türkiye membership strengthens credibility

Risk: HIGH — language, regulation, bonding

Reward: HIGHEST — full margin, reference project

Route B Tier-1 EPC Subcontractor

Best for: Technology specialists without Turkish sales presence; fastest revenue path; aligns with value chain structure shown on slides 11–12

- Target Limak, Kalyon, IC İctaş, Rönesans as primary JV partners
- Also engage Alstom, Siemens, CRRC for rail-sector projects
- Approach technology sourcing teams 12–18 months ahead of tender
- Structure: technology licence + local integration support + O&M
- Negotiate IP protection, step-in rights, and audit access in JV agreement
- Use INRAIL World Bank tender as first

Risk: MEDIUM — margin sharing, IP exposure

Reward: HIGH — scale, speed, local network built

Route C Team Finland Trade Mission

Best for: Companies entering market for first time; public-sector solution providers; those needing gov-to-gov trust building

- Finnish Embassy Ankara actively supports transport sector introductions.
- Team Finland delegation to Istanbul & Ankara
- Engage Business Finland Programs
- Finnvera export credit facility — structure before signing any TR contract
- Cooperation with ITS Türkiye for joint events for sector networking
- Delegation to COP 31 in Antalya

Risk: LOW — supported by bilateral frameworks

Reward: MEDIUM — slower but anchor relationship built



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Thank you

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