

ORBIS MAPS & TRAFFIC

RESILIENT INFRASTRUCTURE



JC

MAPPING UNDER PRESSURE

in a rapidly changing world

URBAN COMPLEXITY

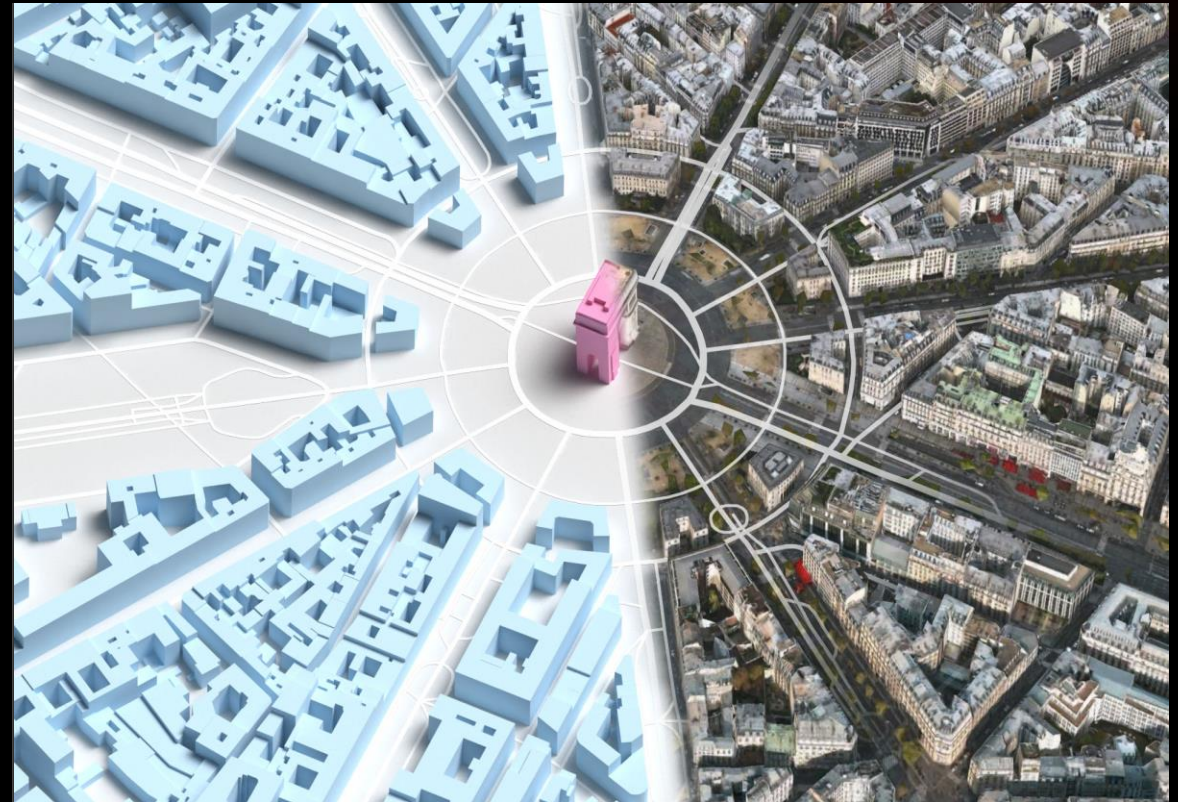
Post-Covid cities introduce complex mobility constraints: LEZ / ZEZ / ZTL, truck bans, bike-streets, HOV, "knips", car ban ... creating high-frequency change detection requirements.

DATA EXPLOSION

Massive availability of open, commercial, and imagery sources. Qualitative conflation at global scale is a critical costly challenge. Duplicated efforts by many actors, AI analysis & UI

UBERIFICATION

E-commerce, food delivery, fleets, rideshare drives demand for Route & ETA optimization and Stable IDs across freq updates
GeoINT decisions (insurance, geomarketing, depot locations)



→ much higher need for complex restr data, conflation, faster updates and consistent global coverage far beyond traditional cartography

THE MILITARY TO COMMODITY SHIFT

detailed maps widely accessible, but ...



DATA SOURCES SHIFT

Transition from institutional high-expertise proprietary sources to

- active volunteer-sourced,
- passive probe and social signals.



CORP. INVESTMENT

Large investment (upd & SOTM) in OSM by tech corporations



NEW THREAT VECTORS

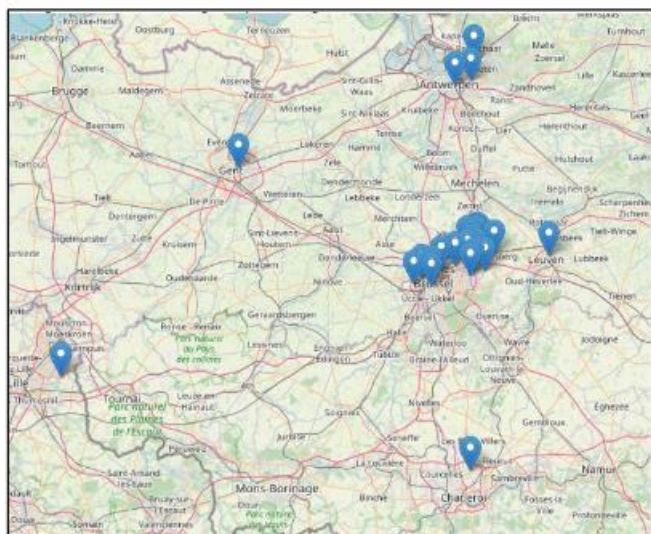
Geopolitical tensions (UKR IRN ISR ...) increase

- fake spatial data,
- OSM vandalism and
- supplier censoring/embargoing.

→ pure reliance on US & Open providers creates systemic risk
Strong push for EUR resilience/autonomy, expertise and interoperability

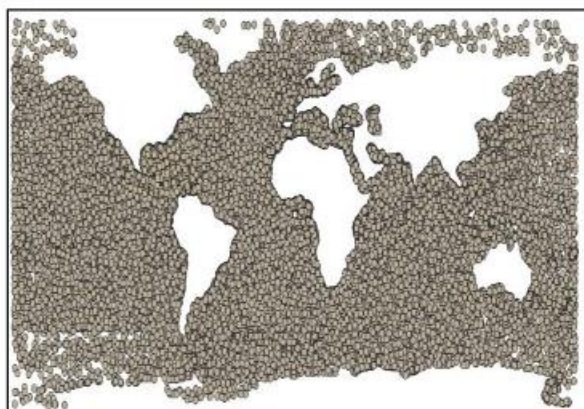
Open data increases coverage, but requires diligent quality validation

Duplication Superfluosness

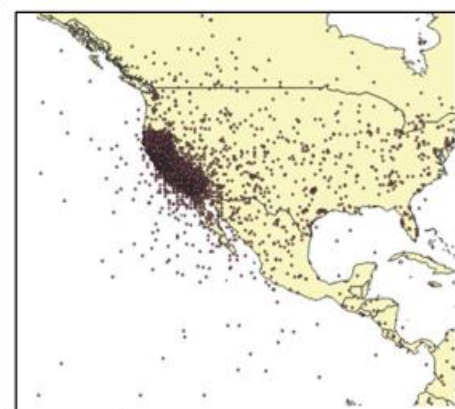


Multiple Brussels Airports in Belgium

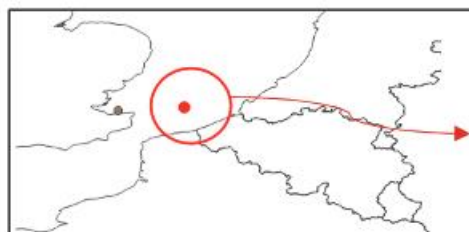
Wrong POI Location



POIs in water: 130k+



California POIs +
POIs outside state boundaries



London Heathrow Airport
in the North Sea

Missing Categories

Wrong Categories

Wrong POI Naming

Out of Business

Quality Control and Validation Process

Orbis quality filtered

RESILIENCE & PUBLIC SECTOR IMPACT

GEOSPATIAL CAPABILITY: RESILIENCE

building a more resilient public sector



Critical Resources Continuity Prepare, *Study*, Train, Defend, Resist, *Recover*.

Essential for energy, food, healthcare, transport, finance and R&D sectors.



Climate Impact Management floods, wildfires, storm events

Managing evacuations & refugee flows, deploying & tracking of emergency assets

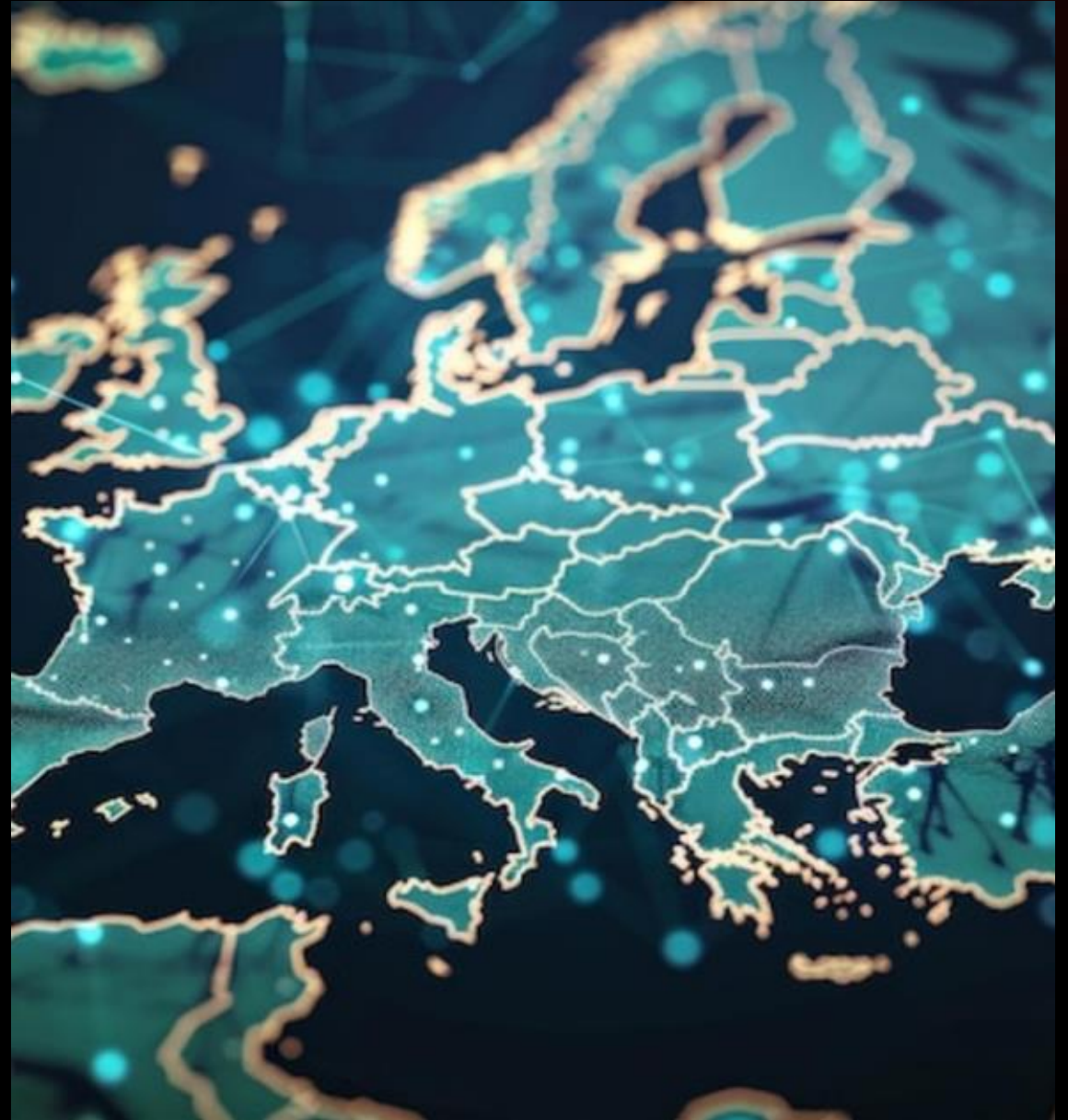
Defense & Disaster Management EU Military Mobility "MIL Superhighway", ref layers for SAT/AIR/UAV imagery and damage assessment (houses, agriculture, school/hospital/energy infrastructure, industrial buildings).

→ GeoSpatial intelligence is the backbone of effective resilience, locating risk zones, available roads, bottlenecks, alternative routes ...

A SOVEREIGN EUR GEO PLATFORM

- ✓ Combines open and proprietary data sources.
- ✓ Operated by EU-owned specialists with decades experience.
- ✓ High-precision automation & vandal protection using AI
- ✓ Open standards & StableIDs
to persist private data across updates
- ✓ Global coverage with near-real-time impact (edit/deliver).
- ✓ Supports preparation & recovery through
historic & live traffic insights

→ Maps are no longer just navigation tools, it is strategic resilience infra
enabling security, mobility, economic continuity & crisis response
ensuring trusted sovereign interoperable fresh geospatial data



TECHNICAL FOUNDATIONS & ENABLERS

ORBIS MAP

Technical foundations

ENABLERS & GOVERNANCE

Stable GERS IDs enabling private data links across updates

Feature/Country separation for ODBL alignment

Standard formats PBF, FGDB, OGP (GeoParquet)

AI

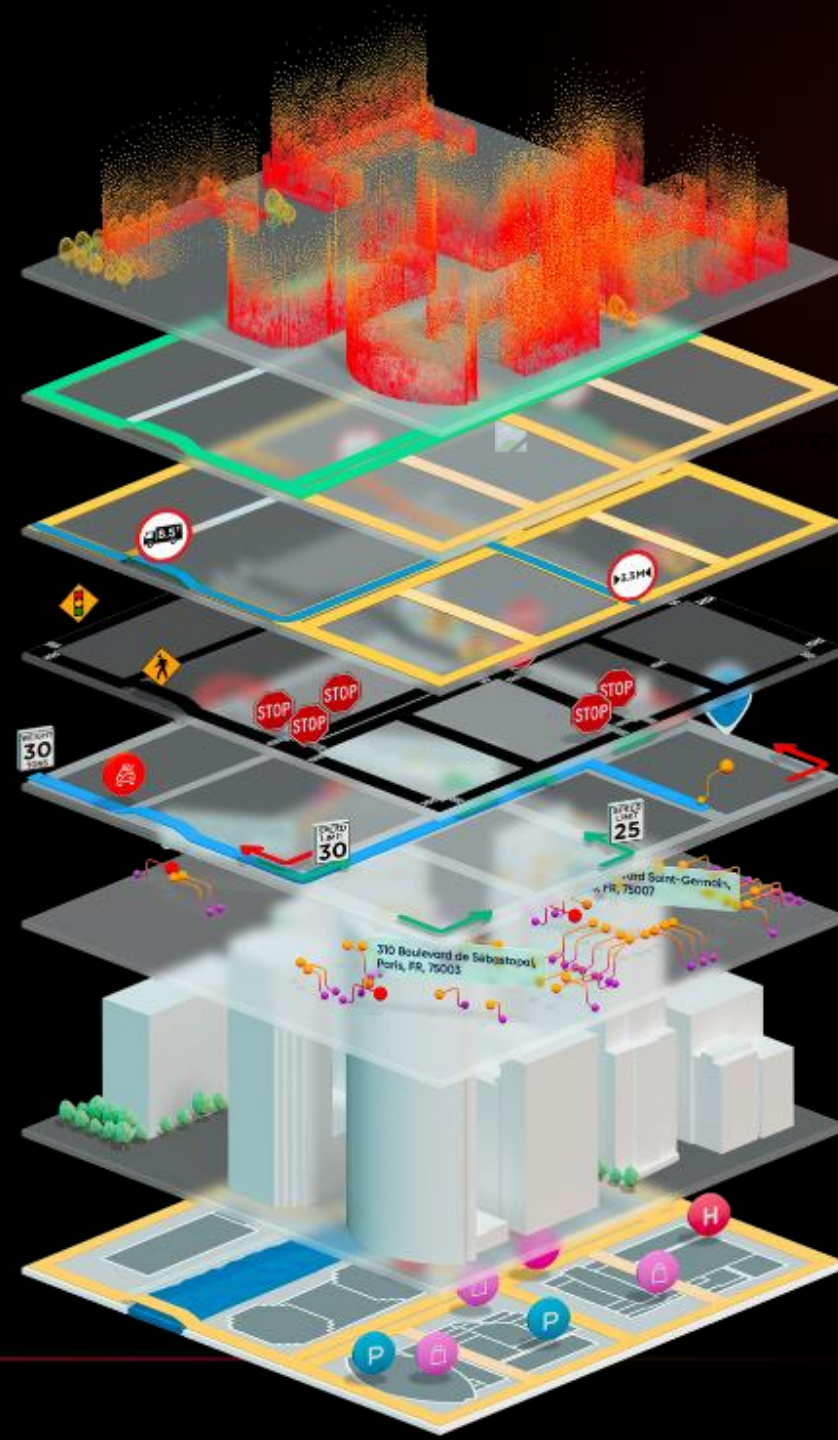
MCP server for APIs (search,route,traffic,analytics)

Enabling map/traffic-aware & voice-based agentic workflows

ML pipelines, NavAI (TAIA), Assistants & DEV (Kapa,Chatty,CoPilot)

REPRESENTATIVE BIGTECH USERS

TT-APP, NGA, EAS, MSF, KAP, PTV, THT ...



QUESTIONS?

Building a Resilient Geospatial Future Together

JC

tomtom.com

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Advisory Speed Limit, Allowed Access, Covered...

cycleway:left	share_busway		i
cycleway:left:oneway	-1		i
cycleway:right	no		i
divider:lanes	long_dash		i
emission_regulation	yes		i
enforcement:operator	Police nationale		i
gers_identifier	f5400346-d35d-4848-8...		i
gradient:linear	0#17;6626#10		i
highway	residential		i
house_numbers:range...	167 173 odd		i
house_numbers:range...	170 178 even		i
lanes	2		i
lanes:taxi:forward	yes no		i
lit	yes		i
maxspeed	30		i
maxspeed:bus	30		i
maxspeed:hgv	30		i
maxspeed:hgv:conditi...	30 @ (weight>12)		i
maxspeed:motorcar	30		i
maxspeed:motorcar:c...	30 @ trailer		i
maxspeed:origin	explicit		i
maxspeed:origin:bus	explicit		i
maxspeed:origin:hgv	explicit		i
maxspeed:origin:hgv...	explicit @ (weight>12)		i
maxspeed:origin:mot...	explicit		i
maxspeed:origin:mot...	explicit @ trailer		i
maxspeed:verification	yes		i
maxweight:hgv:condi...	3.5 @ (08:00-20:00);no...		i
name	Rue du Faubourg Saint...		i

