

## Geonet Internet Ltd

### Company Overview

Geonet Internet Ltd is a technology SME based in Ireland, focused on designing, developing, and operating secure and scalable digital platforms. Our mission is to transform innovative ideas into production-ready systems that can be used by citizens, researchers, public authorities, and enterprises. While we have previously developed the Orbis geo-social mapping platform, our expertise and current activities go far beyond this, covering a wide spectrum of advanced software engineering, applied artificial intelligence, and inclusive digital design.

### Core Areas of Expertise

- 1. Platform and Software Engineering.** We build robust end-to-end solutions — from requirements gathering and UX/UI design to backend development, APIs, DevOps pipelines, and deployment. Our team has extensive experience with: cloud-native microservices (Docker, Kubernetes, Terraform); scalable web and mobile applications (React/Next.js, iOS/Android native, cross-platform frameworks); API-driven architectures and systems interoperability. Production-grade full-stack development — scalable cloud microservices, APIs and cross-platform apps (Android/iOS/Web) — is core to our work.
- 2. Applied AI and Data Analytics.** Proprietary AI algorithms (Natural language processing and multilingual text mining; predictive analytics; machine learning for clustering, recommendation, and anomaly detection; retrieval-augmented search and knowledge extraction) turn large-scale social and sensor data into actionable insights. We extract patterns and trends from public input to support decision-making.
- 3. Geospatial and Real-Time Systems.** Our team has developed advanced spatial modeling and real-time mapping capabilities: geospatial data modeling and map rendering services; real-time event layers, geofencing, and territorial clustering; vector tiles and interactive maps for mobile and web interfaces
- 4. Security, Privacy and Compliance.** We build GDPR-by-design systems with end-to-end data protection. Features include encrypted data-at-rest/in-transit, audit trails and secure authentication. Our architecture is continuously tested and optimized for safety.
- 5. Accessibility and Inclusion.** Inclusive UX is integral to our process. We follow WCAG 2.1 guidelines and internationalization best practices (support for 18+ languages and assistive interfaces) to ensure broad access.

## Relevant Project Experience

- **Brazilian R&D Grants:** We have led national research projects in geospatial AI and cultural mapping. Notably, the Orbis platform itself was born from FAPESP PIPE2 funding. We also participated in EMBRAPII and Lei Rouanet projects on AI-driven recommendation systems and cultural inclusion.
- **International Pilots (EU and Beyond):** Geonet partners in cross-border pilots on civic technology. For example, we contributed expertise to EU-funded trials of voice-assisted and accessible digital tools (exploring inclusive UX design for diverse user groups). These initiatives align with the growing Horizon emphasis on digital inclusion.
- **Innovation Programs:** Our work has been showcased in startup accelerators (Startup Brasil, Rio) and cultural-tech events, validating our approaches to community-based mapping and social engagement.

## Collaboration Interests

**EU Funding and Collaboration.** We actively seek partnerships across Horizon Europe and other EU/national programmes (e.g., Digital Europe, Interreg, LIFE, CEF Digital). Geonet contributes as a technical partner to design, build, and operate research-grade software platforms, data pipelines, and AI services. Where relevant, we draw on prior geo-social mapping experience (including the Orbis initiative) while prioritizing fit-for-purpose, project-specific solutions—for example: cultural heritage mapping, sustainable urban development, citizen-centric public services, environmental/climate analytics, mobility and spatial data services, health and social care tooling, and education/training platforms.

**Partner Roles.** We offer R&D co-development, software engineering, system integration, and data/AI capabilities. Geonet is adept at turning research prototypes into robust, maintainable platforms, with clear APIs, documentation, and observability. We can lead technical work packages (architecture, platform development, AI/data pipelines, integration/testing) or support consortium-wide dissemination and exploitation with technical assets (developer portals, reference implementations, open repositories).

**Work Package Leadership.** Proven capacity to lead technical WPs end-to-end: requirements and system architecture, API/spec governance, security and privacy by design (GDPR), quality assurance and CI/CD, documentation (including DMPs), and KPI tracking. We align engineering cadence with EU project governance (milestones, risks, deliverables) to keep workstreams on schedule and auditable.

**Scaling and Performance.** Platforms delivered by Geonet have been load-tested to thousands of concurrent users and engineered for high availability and horizontal scaling. We implement SLOs/SLIs, tracing and logging, caching strategies, autoscaling, and performance budgets—so research outputs operate reliably in production.

## Contact Information

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Geonet provides consortium partners with deep expertise in AI, geospatial systems, security, and inclusive design to accelerate future EU projects.