

# Project Concept Note

Platform Infrastructure for Municipal Resilience Innovation

**Till:** Social Innovation Team, Vinnova

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**Ämne:** Funding Request - Technical Infrastructure for TAK-405 & Future Municipal Pilots

**Datum:** December 23, 2025

**In Brief:** We submitted **TAK-405 "Regionens Nervsystem"** to Region Stockholm (December 2024)—a concrete pilot integrating psychological resilience into public transit infrastructure. It addresses **3+ billion SEK in annual stress-related costs** while meeting MSB's totalförsvär requirements. We're seeking Vinnova funding to build the underlying technical platform that enables TAK-405 implementation and creates reusable infrastructure for Swedish municipal innovation.

## PROVEN DEMAND: TAK-405

**The Problem:** Region Stockholm pays twice for the same citizens—first for stress-inducing commute infrastructure (Trafiknämnden), then for stress-related healthcare (Hälso- och sjukvårdsnämnden). Annual cost: **3+ billion SEK** in stress-related sick leave.

**The Solution:** Four concrete interventions:

<b>1. Vila-vagnen</b> Recovery spaces on Roslagsbanan (low-traffic hours). Passive design: dimmed lighting, natural soundscapes.	<b>2. Återhämtningslinjen</b> Biophilic bus design (Järva/Söderort). Living plants, circadian lighting—equity focus.
<b>3. Friskvårdspunkter</b> Digital incentives for walking last stop. Peak shaving without infrastructure costs.	<b>4. 7-minutersregeln</b> Timing adjustments to activate parasympathetic response. Zero-cost A/B test.

**Status:** Submitted to Region Stockholm, December 2024

**Funding Strategy:** 80% external (MSB 40% + EU 40%), 20% regional innovation fund

**Municipal Cost:** Budget-neutral

## THE TECHNICAL GAP

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TAK-405 demonstrates policy demand, but current municipal IT infrastructure cannot support:

- **Privacy-preserving activity tracking** (earning Hearts for walking—GDPR-compliant)
- **Verifiable citizen contributions** (academic research requires data integrity)
- **Offline resilience** (totalförsvär requirement: must function during internet disruption)
- **Rapid deployment** (traditional municipal IT procurement takes 18-24 months)

**Commercial platforms** create data sovereignty concerns and vendor lock-in. **Traditional municipal IT** is too rigid for innovation pilots.

**What's needed:** Open-source, reusable platform infrastructure that municipalities can deploy without reinventing the wheel each time.

## THE SOLUTION: GGF PLATFORM

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**Global Governance Frameworks (GGF)** provides the missing technical layer—a "parallel operating system" for municipal innovation that runs alongside (not replacing) existing infrastructure.

### Technical Architecture

- **Hybrid Design:** Holochain (agent-centric data sovereignty) + PostgreSQL (municipal integration)
- **Privacy-First:** No central identity database; Web of Trust model
- **Offline-Capable:** Functions during internet disruptions (critical for totalförsvär)
- **Modular:** Reusable components for diverse municipal use cases

### Immediate Application: TAK-405

- Hearts currency mechanism for Friskvårdspunkter incentives
- Verified activity tracking for pilot evaluation
- SL-app integration interface
- Anonymous data aggregation for academic partnerships (KI/KTH/SU)

### Future Applications Beyond TAK-405

Once built, this platform enables a pipeline of municipal innovations:

- **Care Economy:** Valorizing unpaid care work (addressing demographic aging)
- **Ecological Restoration:** Verifiable climate adaptation tracking
- **Community Resilience:** Crisis preparedness networks at neighborhood level
- **Circular Economy:** Local economic multiplier enhancement

## WHY THIS MATTERS: GLOBAL CONTEXT

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### G20 Global Inequality Report (November 2025):

- 83% of countries face high inequality affecting 90% of global population
- Inequality driven by policy choices (neoliberal deregulation, privatization, austerity)
- Recommended solutions include: **valorizing unpaid care work** and **expanding public investment**

### Peer-Reviewed Science (Nature Food, 2024):

"Dietary change interventions must be coupled with **economic system transformation** to achieve meaningful climate impact."

→ Behavioral shifts fail without structural mechanisms (Hearts currency provides this)

## Swedish Context

- **MSB Totalförsvar (2024:1032):** Requires psychological resilience infrastructure
- **Municipal Budget Pressure:** Need for budget-neutral innovation
- **Demographic Aging:** Care gap traditional systems cannot fill
- **Digital Sovereignty:** Open-source, data-stays-in-Sweden architecture

## FUNDING REQUEST: MVP DEVELOPMENT

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**Timeline:** Q3-Q4 2026 (6 months)

**Project Start:** August 1, 2026

**Budget Request:** 1,500,000 SEK **Deliverable:** Functional MVP ready for TAK-405 alpha testing (Q3 2026)

## Development Phases

- **Months 1-2:** Core infrastructure (Holochain/PostgreSQL integration, GDPR-compliant data layer, basic Hearts implementation)
- **Months 3-4:** TAK-405 integration (SL-app interface, verified activity tracking, municipal dashboard)
- **Months 5-6:** Academic research platform (anonymous data aggregation, open API, documentation for municipal adoption)

## Success Criteria

- Functional MVP enabling TAK-405 alpha testing
- Technical documentation for other municipalities
- Published architecture specifications (open source)

## STRATEGIC ALIGNMENT WITH VINNOVA

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### Social Innovation

Valorizes unpaid care work, enables citizen participation in welfare provision, creates reusable social infrastructure.

### Sustainable Systems

Reduces healthcare costs systemically, enables ecological tracking, strengthens local resilience.

### Digital Sovereignty

Open-source (no vendor lock-in), data stays in Sweden, citizen control over personal data.

### Dual-Use Innovation

Civilian wellness + totalförsvär preparedness, crisis-ready offline capability.

## WHY NOW

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### Window of Opportunity:

- MSB funding cycle aligns with our external funding strategy
- EU Wellbeing Economy programs actively seeking pilots
- TAK-405 demonstrates concrete municipal demand
- Post-COVID innovation appetite remains high

**Risk of Delay:** Without platform infrastructure, TAK-405 implementation delayed even if Region Stockholm approves. Every quarter lost = **750+ million SEK** in continued stress costs.

## NEXT STEPS

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We would welcome the opportunity to:

1. Present detailed technical specifications (30-min technical review)
2. Share the full TAK-405 proposal (submitted to Region Stockholm)
3. Discuss integration with existing Vinnova-funded municipal innovation initiatives
4. Explore partnership models (funding, technical support, dissemination)

**In Summary:** We have proven demand (TAK-405), identified funding strategy (MSB/EU), and clear technical gap. Vinnova support would build reusable infrastructure that transforms TAK-405 from a single pilot into a platform for Swedish municipal innovation leadership.

**The choice:** Build once, reuse everywhere. Or rebuild infrastructure for every municipal innovation.

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## Global Governance Frameworks

Mobilizing Resilience. Designing for Life.

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