

Service Definition Document

HappyIoT – IoT Device Management, Monitoring & Automation Platform

1. Service Overview

HappyIoT is a cloud-based IoT monitoring, automation and predictive-insight platform designed for public sector organisations—especially housing providers responding to new regulatory pressures including **Awaab’s Law**, the **Social Housing Regulation Act**, and the increasing requirement to proactively manage **28 of the 29 HHSRS hazards** using data, devices and automation.

HappyIoT enables organisations to:

- Capture **real-time environmental data** from resident homes
- Identify conditions that allow **damp and mould to develop** before harm occurs
- Detect early indicators of faults such as **boiler pressure drops** that may indicate leaks
- Automate alerts and workflows for Repairs, Compliance and Wellbeing teams
- Consolidate IoT data across homes, schemes and estates
- Support compliance with new regulatory and safety duties

Sector Context.

Across sector-wide consultations, housing providers agreed that IoT and automation are **no longer optional**, but “not *if* but *when*” technologies that will soon become standard tools for safe, compliant property management. Leaders in the sector stressed that **better data processes are the key to meeting new regulations**, safeguarding residents and modernising operations.

Social Telecoms Capability

Social Telecoms CIC has delivered **Digital Inclusion, Community WiFi and IoT** since 2012, supporting over **200 housing and public sector organisations** with:

- Large-scale IoT deployments in homes and estates
- Community WiFi used as a foundation for in-home IoT ecosystems
- Digital inclusion programmes enabling residents to interact digitally

- Practical delivery models for environmental monitoring, safety compliance and telecare alternatives

Our ethos as a Community Interest Company ensures that we reinvest into community benefit, aligning IoT programmes with social value outcomes.

2. Key Features & Capabilities

IoT Device Management

- Secure onboarding and authentication of IoT devices
- Device grouping by home, building, neighbourhood or asset class
- Remote configuration and firmware updates
- Device lifecycle management (provision → active → dormant → retired)

Real-Time Monitoring & Telemetry

- Continuous readings: temperature, humidity, CO₂, VOCs, air quality, movement, vibration
- Real-time detection of hazardous conditions linked to Awaab's Law and HHSRS
- Damp & mould risk modelling using dew-point calculations
- Historical trend analysis enabling predictive interventions

Alerts, Automation & Rules Engine

- Automatic alerts via SMS, email, or platform notifications
- Multi-condition automation rules (e.g., “humidity >70% + low temperature for 4h = damp alert”)
- Escalation to Repairs, Compliance, Wellbeing or Customer Services teams
- Automated follow-up alerts if the issue persists

Integrations & Data Sharing

- API integration with Housing Management Systems (HMS)
- Integration with repairs systems and ticketing platforms
- Power BI and analytics platform connectors
- Webhooks for automation and workflow engines

Reporting & Insights

- Damp & mould compliance dashboards (Awaab's Law aligned)
- Estate-wide sensor coverage and property-level insights
- Early hazard detection for 28/29 HHSRS categories (e.g., cold homes, fire, CO₂, water leaks)

- Environmental health insights for vulnerable residents
- Exportable dashboards, compliance packs and MI

User Features

- User-friendly interface designed for housing teams
 - Role-based access control (RBAC)
 - Custom dashboards per department (Repairs, Assets, Wellbeing, Customer Services)
 - Mobile-friendly access for field teams
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3. Service Scope

Included as Standard

- Access to cloud IoT platform
- Device provisioning and onboarding
- Rules and thresholds configuration
- Real-time dashboards and alerting
- Standard API access
- Social Telecoms account management

Optional Add-Ons

- Supply of IoT sensors, hubs and gateways
- Professional installation and large-scale deployments
- Advanced analytics and predictive modelling
- Managed IoT alert triage service
- Custom integrations and workflow automation

Not Included

- Device installation unless purchased
 - Onsite engineering (optional)
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4. Service Constraints

- Device function dependent on WiFi, LoRaWAN, LTE or wired connectivity
- Sensors require battery replacements depending on model
- Gateways required for some device types
- Alerts subject to network latency
- Third-party system integrations depend on API availability

5. Onboarding & Offboarding

Onboarding

- Requirements gathering and asset/property mapping
- Device supply and gateway deployment
- Configuration of alert rules, dashboards and teams
- User training for housing officers, compliance teams and customer services
- End-to-end testing and validation
- Early-life support after go-live

Offboarding

- Device and gateway deactivation
 - Export of telemetry history and dashboards
 - Removal of integrations
 - Account closure and full data extraction
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6. Service Levels (SLA)

- High-availability cloud platform
- 24/7 P1 emergency support
- Response:
 - P1 <1 hour
 - P2 <4 hours
 - P3 <1 business day

Additional Assurance

- Optional managed monitoring service
 - Quarterly performance reviews
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7. Pricing Model

- Monthly per-device licensing
 - Optional device purchase or rental
 - Optional managed monitoring fees
 - Installation/integration services on request
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8. Technical Requirements

- Connectivity (LoRaWAN / WiFi / LTE depending on sensor type)
 - Supported sensors and gateways
 - Web browser for access
 - Optional on-premise gateways
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9. Data Security & Compliance

- End-to-end encryption
 - GDPR-compliant storage
 - RBAC management
 - Secure API endpoints
 - Aligned with public sector data governance expectations
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10. User Roles & Permissions

- **Viewer:** read-only dashboards & alerts
 - **Operator:** device management and alert handling
 - **Administrator:** configuration, groups, rules
 - **Super Admin:** full control including integrations
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11. Reporting & Analytics

- Real-time dashboards
 - Damp & mould risk scoring
 - Compliance and environmental health reporting
 - Battery and service-life monitoring
 - Exportable MI packs
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12. Integration Capabilities

- HMS and repairs integrations
 - Power BI connectors
 - Secure webhooks
 - CSV/JSON export
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13. Service Roadmap (Non-Binding)

- Expanded sensor range (e.g., legionella, smart meters)
 - Predictive analytics powered by AI
 - Automated compliance reporting
 - Smart buildings integrations
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14. Accessibility Statement

HappyIoT follows GOV.UK accessibility standards:

- Clear dashboards and simple navigation
 - High-contrast modes
 - Keyboard accessibility
 - Mobile-friendly UI
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15. Terms & Conditions

- Social Telecoms terms apply
 - G-Cloud 15 call-off terms apply
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16. Glossary

- **IoT:** Internet of Things
- **HMS:** Housing Management System
- **LoRaWAN:** Long Range Wide Area Network
- **Telemetry:** Automated sensor data