Stirling Council – IoT Connected Home

About Aico

Aico, an Ei Company, are the European market leader in home life safety, pioneering new technologies and offering high quality alarms, developed and manufactured in Ireland. All Aico alarms meet UK standards and offer a variety of sensor types to guarantee protection for every home, the cornerstone of which is delivering education, quality, service and innovation.

In 2020, Aico expanded their Connected Home offering with the acquisition of leading Internet of Things (IoT) solutions provider, HomeLINK. HomeLINK are a multi-award-winning high-tech software team within Aico that leverage cutting edge home integration and analytic technologies to address the needs of social landlords and their residents.

Executive Summary

Following Stirling Council's IoT working trial with Aico, a wider rollout which includes environmental sensors to collect information from tenants' homes was implemented. Collected data will include temperature, humidity and carbon dioxide (CO_2) gas levels, along with smoke detection sensors and will dramatically improve the health, safety and wellbeing of residents. Tenants will be able to take actionable measures from insights via a mobile app.

This is the first full rollout of a multi technology and sensors connected home solution across an entire housing portfolio and currently the largest UK social housing sector rollout, with 50,000 IoT devices being installed over the next 8-10 years in homes managed by Stirling Council Housing Service.

The Connected Home Solution

Solution Overview

SmartLINK Gateway

The Gateway

↗ Mains powered – wire from non-switched fused spur

↗ Rechargeable back-up

↗ Built-in SIM

↗ Wall mounted

aico®

Environmental Sensors

Ei1020

Temperature + Humidity

Ei1025

Temperature + Humidity + CO_2

HomeLINK®

Environmental Sensors

↗ 10 Year Lithium Battery
↗ Discreet design – no buttons or LEDs
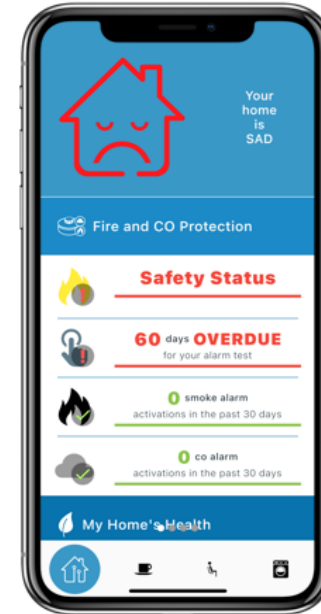↗ Wall or ceiling mounted

SmartLINK Installer App & HomeLINK Resident App

Sign in with log-in details →

User can now access the App and view data from their property

Technology

The SmartLINK Gateway and Environmental sensors will be installed in various rooms around the properties which will deliver real-time risks insights.

- ❑ **Mould**
- ❑ **Thermal Efficiency**
- ❑ **Extreme Heat**
- ❑ **Extreme Cold**
- ❑ **Void Risk**
- ❑ **Dust Allergen Risk**
- ❑ **Air Quality**

In a time of fuel poverty, connected devices more often seen in private dwellings are emerging as a powerful tool ensuring social homes are healthy to live in and used in an energy efficient manner.

Strategic Outcomes

Having the ability to identify the least thermally efficient homes means that Stirling Council as a landlord can take intelligence led decisions to target capital investment programmes at those properties.

The Fuel Poverty Act (Scotland), also seeks to protect residents of all households but particularly those in rural, highland and island communities from facing fuel poverty. Stirling council have around 20% of its housing portfolio in rural areas.
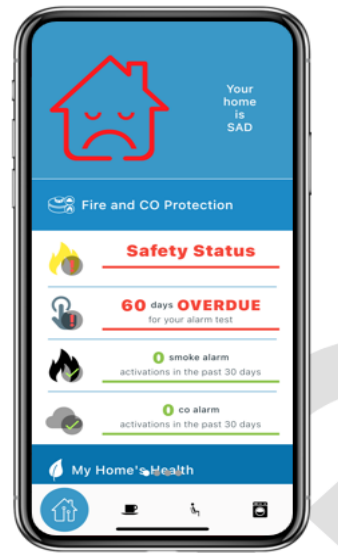
Strategic Outcomes Cont'd

The long-term rollout intended follows a successful pilot project and sees Stirling Council at the forefront to providing tenants with a comprehensive view of the internal air quality environment in their homes.

The initial pilot was part of a Scottish Government funded programme called CivTech, which aimed to drive innovation in collaborative and cost-effective technology across the public sector.

Aico and HomeLINK state that across the UK more than 150,000 IoT devices are connected in tenants' homes and in use by social landlords. Based on current demand this number is expected to hit 1 million devices by the end of 2024 bringing about a paradigm shift in landlords' efforts to comply both with regulations but also in offering tenants a better understanding of their home's environment.

Resident

Residents using the free app gain a view of the safety and health of their indoor environment. The app also provides advice and guidance on how to improve living conditions and live a healthier and safer life whilst reducing carbon footprint and saving money on energy bills.

Stirling Council Quotes

• "This technology helps us manage our housing stock through reliable data driven intelligence, take prioritised investment decisions and improve customer satisfaction."

• "When considering our sustainability goals, the data generated will help us identify the least energy-efficient homes and take action. It will also provide insight into the performance of properties that have been recently retrofitted to ensure they remain healthy environments to live in."

• "Living conditions can have a dramatic impact on our health. By providing insight via the app, there is potential to dramatically improve the health and wellbeing to everyday living conditions."

• "We've seen some interesting insights on these trial properties with several high-risk indications of condensation caused damp and mould; this has really got us thinking how we help the resident manage their environment better and discern if it is actually something inherent with the building performance."

Thank you for your time.

If you would like a further information the please email me at david.richmond@aico.co.uk