

CASE STUDY · NOVEGEN & DUBLIN CITY COUNCIL · DUBLIN

Creating a connected future for Dublin City.

Novegen is building the next generation of multi-conduit infrastructure beneath Dublin's highest-value corridors. With LOC, every conduit and vault carries a verifiable record, and every route can be traced end to end, from a phone, in seconds.

CLIENT

Novegen

ASSET OWNER

Dublin City Council

LOCATION

Dublin, Ireland

SECTOR

Multi-conduit telecoms

LIVE SINCE

March 2025

— AT A GLANCE

Dublin's highest-value connectivity real estate.

City Centre

CORE COMMERCIAL DISTRICT

IFSC

INTERNATIONAL FINANCIAL SERVICES CENTRE

Silicon Docks

IRELAND'S GLOBAL TECH CLUSTER

LOC Routes

FULL CONDUIT ROUTES, ORIGIN TO DESTINATION

ArcGIS

FIELD UPDATES ALIGNED TO GIS

35%

increase in on-site efficiency, as engineers verify the correct vault instantly using photo-linked records.

CUSTOMER-REPORTED ESTIMATE

25%

improvement in audit accuracy, with photo evidence ensuring records match real-world conditions.

CUSTOMER-REPORTED ESTIMATE

20 yr

rated service life for the IP-rated NFC tags carrying each asset's identity.

TAG SPECIFICATION

— INTRODUCTION

Underground assets you cannot see still have to be **proven**.

The challenge

In the heart of Dublin, Novegen and their client, Dublin City Council, are delivering the next generation of multi-conduit infrastructure, supporting one of Europe's fastest-growing digital economies. With networks running through the city's most important commercial and technology districts, accurate documentation and traceability of underground assets has become essential.

The solution

Novegen partnered with KelTech IoE to deploy Label on a Cable on Dublin City Council telecoms infrastructure, replacing fading, missing or damaged labels with NFC-enabled digital tags linked to cloud-based asset records. Each tag gives immediate access to data, photos and route information, so engineers and auditors can verify assets with confidence.

The result

By combining field-first usability with ArcGIS compatibility, LOC delivers a unified record of Dublin City Council conduits and vaults. Live conditions are captured in the field and the GIS environment stays perfectly aligned: **network documentation as resilient as the infrastructure it represents.**



THE CHALLENGE: UNDERGROUND, UNDOCUMENTED, UNVERIFIABLE



SCANNING A LOC TAG ON A STREET VAULT

From static plans to a **living record** of the network's topology.

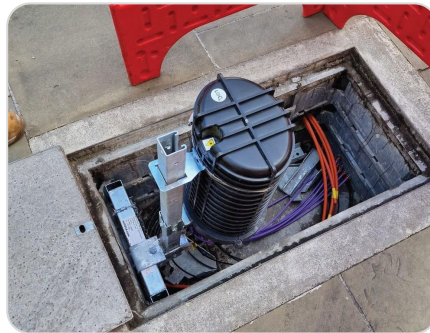
The rollout began in **March 2025**, focusing on Dublin's most critical fiber corridors: the City Centre, the International Financial Services Centre (IFSC), and the Silicon Docks, home to Ireland's global tech companies. These areas represent some of the highest-value connectivity real estate in the country, where accuracy, reliability and speed are non-negotiable.

Novegen's challenge was not just to label assets, but to create a connected digital record of its underground routes for Dublin City Council. With LOC's **LOC Routes** feature, engineers capture each conduit's journey from entry to exit, with every vault and chamber linked as a stop along the way. That turns once-static plans into a living record of the network's topology.

The result is a system where GIS planning and field documentation are no longer separate silos. LOC's **ArcGIS compatibility** means every update made on the ground reinforces the integrity of the GIS database, letting planners, auditors and engineers work from the same source of truth.



ATTACHING LOC TAGS TO CONDUITS



EVERY VAULT RECORDS WHAT IS ACTUALLY INSIDE IT



NOVEGEN SERVES DUBLIN'S DIGITAL DISTRICTS

What the deployment had to achieve.

01

Long-term asset identification

- Traditional conduit and vault labels were prone to wear, fading and detachment, leading to lost or unreadable identifiers.
- LOC introduced IP-rated, NFC-enabled tags capable of lasting up to 20 years, keeping data accessible long-term.
- Each tag is securely linked to a cloud-based asset record, eliminating data loss from manual or outdated spreadsheets.
- Engineers can identify and verify any conduit or vault instantly, so every asset remains accounted for.

02

Improve operational efficiency

- Engineers locate and identify assets instantly, cutting time wasted searching for, or opening, the wrong vaults.
- The mobile app allows quick scanning of tags to access real-time data and photos, giving visual confirmation of the correct location.
- Reduced on-site confusion and rework have led to measurable improvements in field productivity and deployment consistency.
- A single, intuitive workflow simplifies documentation for all field personnel, regardless of experience level.

03

Enhance network traceability and auditability

- LOC Routes gives Novegen complete visibility of conduit routes from origin to destination, including all intermediate stops.
- Every LOC record includes photo-based evidence, creating a verifiable, auditable chain of asset information.
- That level of traceability simplifies inspections, supports compliance, and ensures as-built records match what exists in the field.
- Auditors and engineers alike can confirm conduit continuity and route accuracy within seconds using the mobile app.

04

Ensure data integrity, security and sustainability

- All asset data is securely stored in the cloud and accessible only by authorized Novegen users, giving full control over network information.
- LOC's encrypted NFC technology prevents unauthorized access, maintaining data privacy and integrity throughout the network's lifecycle.
- Consistent GIS naming conventions reduce ambiguity, ensuring all field data aligns with central records.
- Durable, re-usable LOC tags reduce material waste and replacement costs, while fewer site revisits and truck rolls contribute to a lower carbon footprint.

RESULTS

What the deployment delivered.

Outcomes reported across the current deployment of LOC on Novegen-managed, Dublin City Council-owned infrastructure.

✓ **All deployed conduits and vaults tagged**, securing the longevity and accuracy of asset identification information across Dublin City.

✓ **Operational efficiency increased by an estimated 35%**, as engineers identify and verify the correct vault instantly using photo-linked LOC records.

- ✓ **Improved traceability and auditability through LOC Routes**, allowing full route visibility from origin to destination and simplifying inspections.
- ✓ **Re-usable, IP-rated NFC tags** reduce both material waste and the carbon footprint associated with re-labeling or site revisits.
- ✓ **Encrypted, access-controlled records**: all deployed infrastructure securely tagged, readable only by authorized Novegen personnel.
- ✓ **Real-time visibility of labeling progress** via the LOC web dashboard, giving clear oversight of field activity and deployment accuracy.

— IN THEIR WORDS

From the people running the build.

“

LOC has modernized how we document and verify our network builds. LOC Routes gives us full visibility of conduit routes end-to-end, which was previously difficult to achieve.

EMMANUEL KENNEDY
DIRECTOR, NOVEGEN

“

Integrating LOC with our ArcGIS data means our field and GIS teams now work from the same source of truth. It's streamlined and reliable.

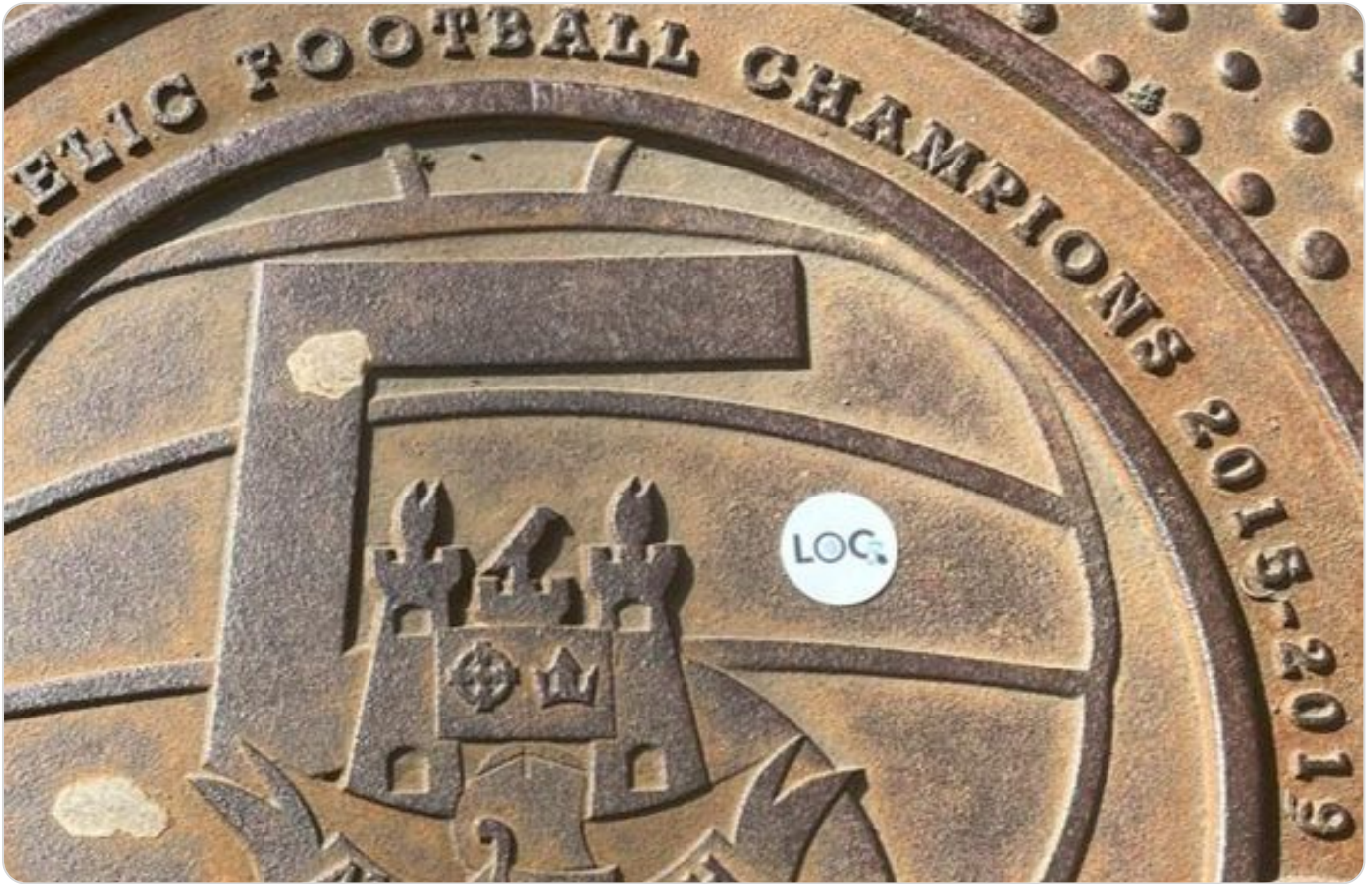
JACK MASTERSON
PROJECT MANAGER & GIS ENGINEER

“

Being able to scan a tag, see a photo, and confirm the exact vault location saves us time every day. We no longer waste effort opening the wrong lids.

FILIBE CARVALHO
PROJECT MANAGER & TELECOM ENGINEER

A blueprint for modern asset documentation in Ireland.



LOC ADHESIVE DISC TAG ON A DUBLIN CHAMBER LID

The deployment of Label on a Cable by Novegen on Dublin City Council telecoms infrastructure marks a new standard for how telecom networks in Ireland can be documented and managed. By introducing digital labeling and LOC Routes conduit-route mapping across Dublin's City Centre, IFSC and Silicon Docks, the city's most high-value network corridors are not only accurately recorded today but remain verifiable for years to come.

What this project demonstrates

- Static network plans become dynamic, living records.
- Field teams and GIS staff share a single, trusted view of infrastructure.
- Operators gain the confidence needed to expand and maintain critical city networks at scale.

Label on a Cable (LOC) · a KelTech IoE platform · useloc.com

A Novegen and Dublin City Council Case Study. Efficiency figures are customer-reported estimates. Testimonials reproduced verbatim as supplied by Novegen.

— THE ACCOUNTABILITY LAYER

As networks expand and oversight tightens, proof of installation becomes the standard. The operators holding field-verified records hold the advantage.



Label on a Cable · a KelTech IoE platform

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