



CASE STUDY

Public Administration

A photograph of a river or canal with a metal walkway in the foreground. In the background, there is an industrial facility with several buildings and tall chimneys under a cloudy sky. The entire image has a green tint.

EMR supports Dublin City Council's flood management system for capital's citizens and businesses

COMPANY OVERVIEW

DUBLIN CITY COUNCIL

Dublin City Council is the largest Local Authority in Ireland, employing approx. 5,600 staff. The 2020 Revenue Budget amounts to €1.03 billion, while the three year Capital Programme 2020 to 2022 amounts to €2.65 billion. The Council provides a wide and diverse range of services to the citizens of Dublin City (population in excess of 500,000), to businesses and to visitors to the city.

Activities are carried out in both the physical works area (e.g. provision and maintenance of housing, roads) and in the areas of arts, sports, recreation and social services.

The City Council also provides emergency services through Dublin Fire Brigade. Council facilities are spread geographically throughout the city and are also located outside the Dublin City Council area. The Council headquarters are located at Wood Quay, Dublin 8.

Dublin City Council is responsible for the social, economic, infrastructural and cultural development of the city.

Dublin City council expects to oversee the expenditure of €6 - €10M in flood alleviation schemes over the next 12 months



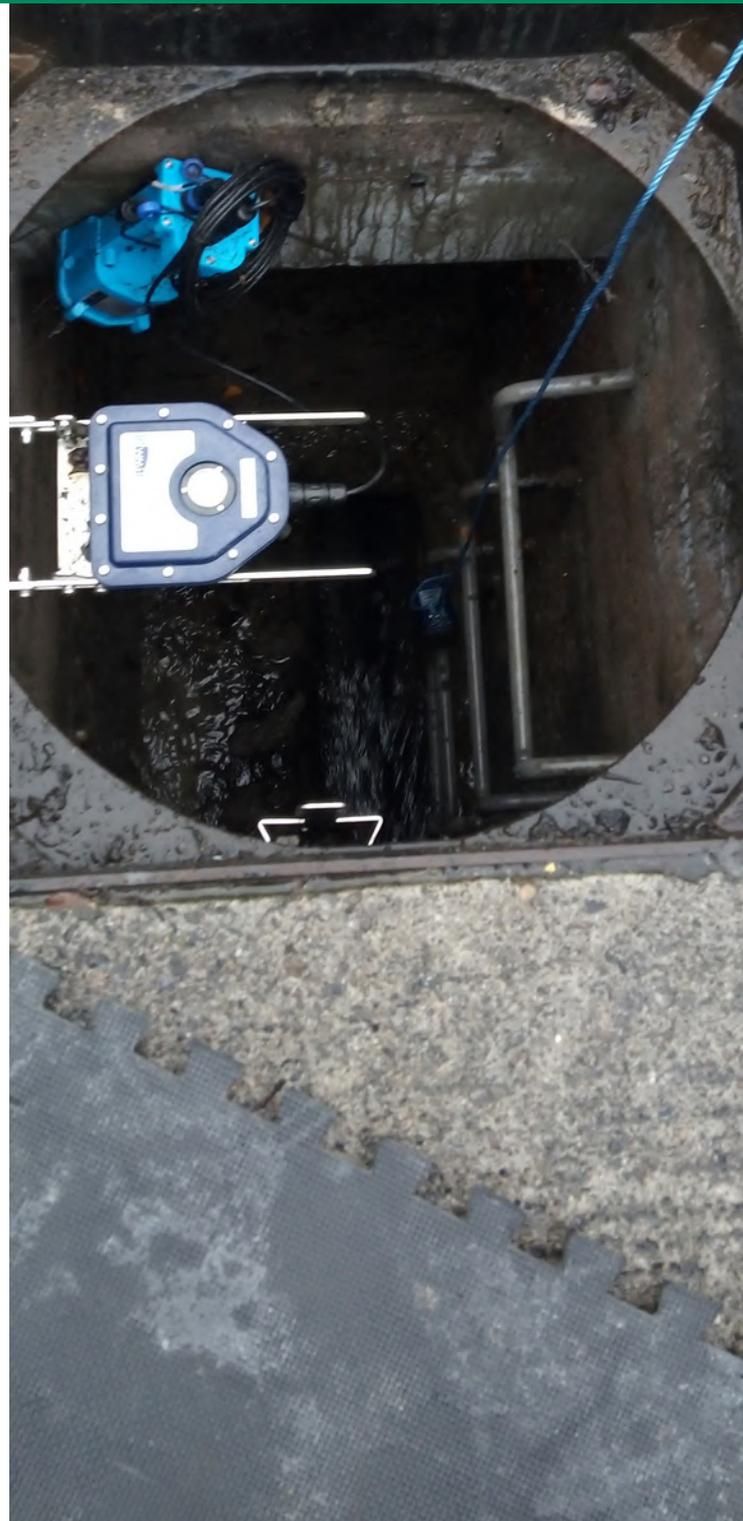
THE REQUIREMENT

Like any local authority, flood management is an important part of DCC's remit. And while we regularly talk about the effects of climate change, Alan Vickers, Chief Technician with the Flood Projects and Water Framework Directive Division in the council is acutely aware of the impact intense weather events, which make flood monitoring critical for the citizens and businesses of the capital city.

The council has 69 outstations, dotted throughout the city and surrounding counties. These outstations consist of rain gauges, sewer loggers, river level monitors, tide monitors, weather stations and river trash screen monitoring cameras, which are connected to a centralised SCADA system, via a telemetry network.

These devices are the 'eyes and ears' of the council for flood risk and alert them in advance to the threat of flooding in the nation's capital.

The council went out to tender for a single party framework agreement for the maintenance of its regional SCADA and telemetry system. EMR was deemed the successful bidder for the contract, which will run for three years, with an option for up to three annual extensions thereafter.



THE SOLUTION

SOLUTION COMPONENTS

- Professional on-site engineering skills to manage and maintain a variety of rainfall instrumentation and underlying telemetry network.
- Deployment and configuration of Ignition SCADA platform with development of customised reporting dashboard, specific to the council's requirements.
- Configuration of Ignition's mobile app to give staff real-time critical data while on the move.
- Hosting of council's mission-critical SCADA system with automatic failover to a resilient cloud-hosted server farm in the event of outage or disruption.
- Managed service through EMR's Network Operations Centre, with categorisation of priority incidents.
- Spares management and storage.



At each of the council's outstations, individual alarms are set for rain gauges, sewer loggers, river level monitors and tide monitors. These alarms are fed back via a telemetry network and alert council staff on the 'Ignition' SCADA dashboard to the threat of flooding.

For example, staff know that if consecutive rainfall amounts exceed 2.4mm in a 15-minute period at certain locations, there is a risk of localised flooding. Any pre-set level or rainfall threshold that is breached, is captured in the Ignition System and forwarded in the form of an "Information Alarm" to DCC engineering and technical crews, on a 24/7/365 basis. DCC engineers or on-call engineers can then take appropriate action if needed.

The data loggers installed at each outstation are based on technology from Halma Water Management and the EMR team is directly responsible for troubleshooting these critical devices and replacing them in the field where necessary.

"While DCC look after the monitoring of the system, setting of alarm thresholds and the response to events, EMR is responsible for ensuring that accurate information is always available in a timely manner."

Brian Martin, Sales Director,
EMR

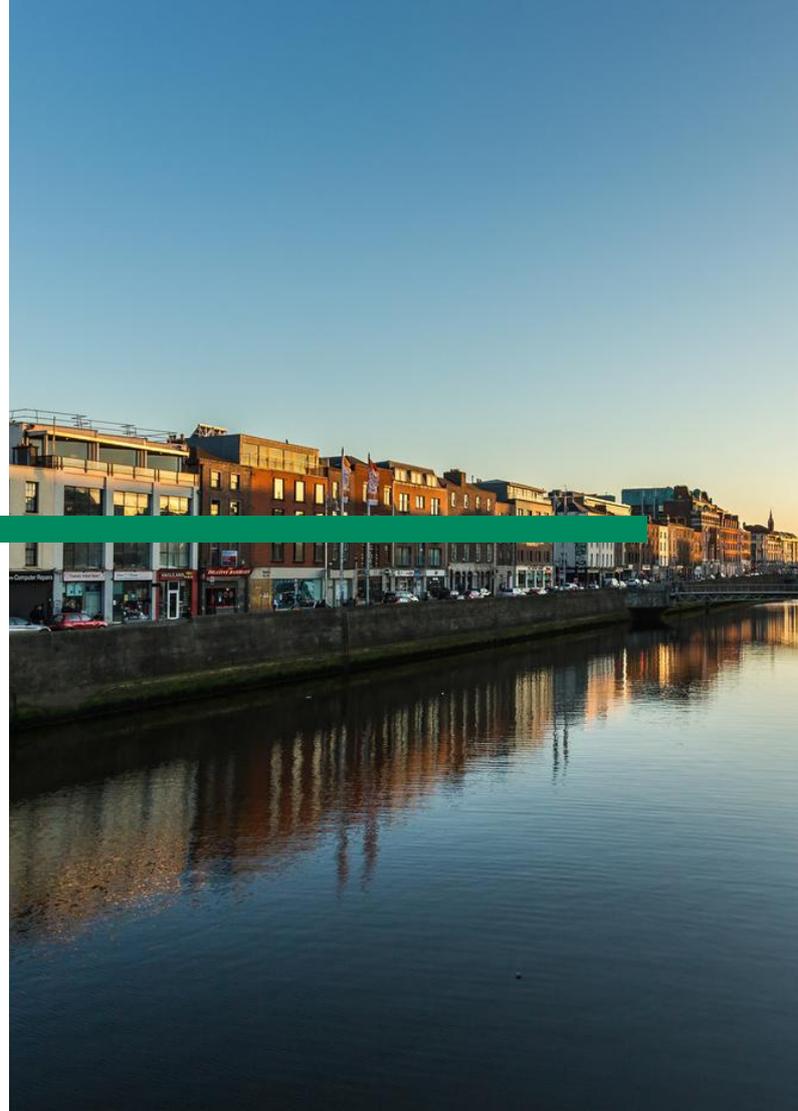
THE BENEFITS

EMR provides a full managed service to the council. This provides uninterrupted access to real-time data and alarm notifications, which provide valuable advanced warning, allowing council staff to take remedial action and prevent local flooding.

The SCADA and telemetry system is hosted in EMR's data centre with automatic failover to a secondary cloud-hosted server farm for business continuity so council staff can concentrate on remedial activities. Using the 'Ignition' platform from Inductive Automation, DCC have access to a user-friendly and intuitive reporting dashboard that drills right down to site level.

Real-time data 'on the go' is available through any smartphone device for mobile engineering, technical and maintenance crews.

The framework contract not only covers the system implementation but provides DCC with on-demand access to EMR's SCADA and telemetry engineering teams. This supports the development of the system's capabilities and the adoption of emerging technologies throughout the lifetime of the agreement.



BENEFITS AT A GLANCE

- Swift escalation and resolution of any issues on the telemetry network including swap out and replacement of faulty instrumentation.
- Immediate availability and accessibility to expert field engineering and SCADA specialists.
- Peace of mind with defined service level agreements and guaranteed uptime of SCADA software.
- User-friendly and intuitive reporting dashboard that drills right down to site level.
- Access to real-time data 'on the go' through any mobile device.

WHY EMR?

“EMR met all the detailed and specific criteria that were demanded as part of the tender process, including, the availability of field and SCADA engineers and the expertise to carry out installation work, repairs and calibrations.”

Alan Vickers, Chief Technician, Flood Projects and Water Framework Directive, Dublin City Council



ABOUT EMR

EMR Integrated Solutions is a leading provider of communications, SCADA and instrumentation solutions. With a track record stretching back to the early 1980s and a management team with a wealth of industry experience, the company has established a strong, successful foothold in markets as diverse as retail, hospitality, utility, transport, telecoms and public safety.

The organisation has customers across Ireland, the UK and Europe and has the expertise, engineering know-how and project management capability to delivery large, complex, integrated solutions on time and within budget.



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