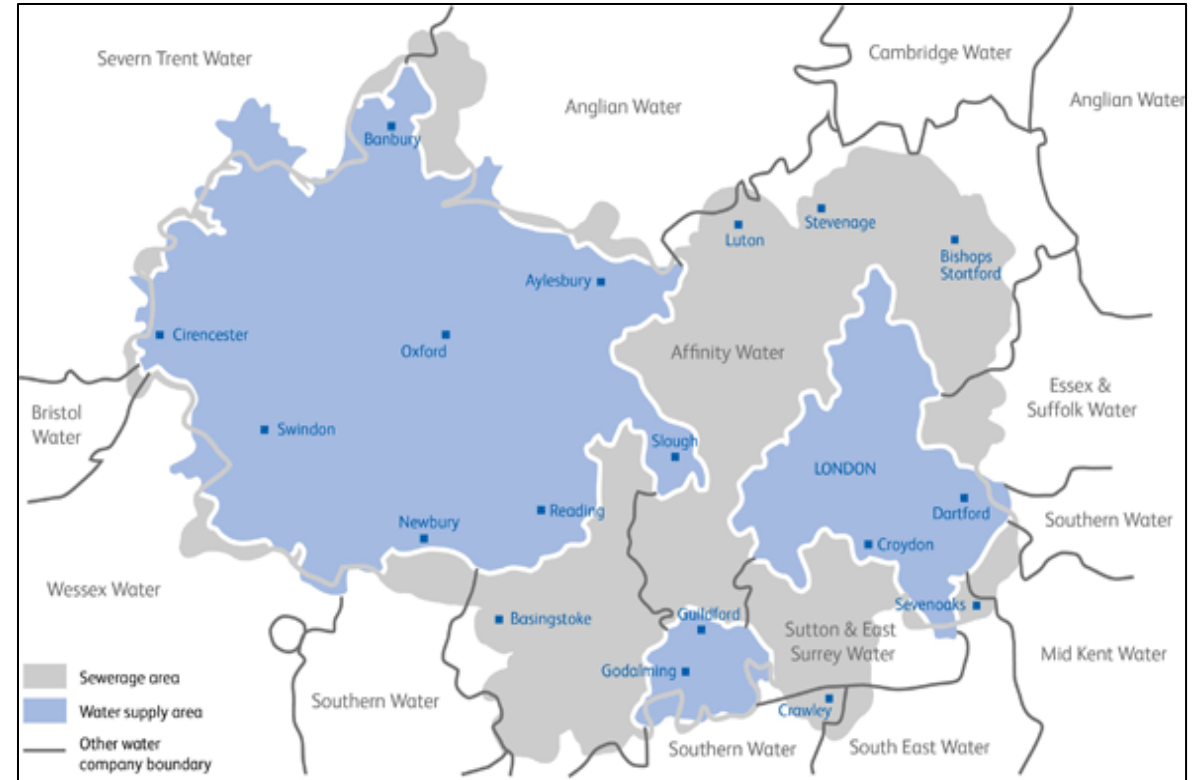


*An exhilarating story of bulwarking “the
Beast from East”, the cold Siberian blast
(TCS helps UK utility major mitigate the loss of water supply)*

About the customer

Customer is the monopoly private utility company responsible for the public water supply and waste-water treatment in large parts of Greater London, Luton, the Thames Valley, Surrey, Gloucestershire, Wiltshire, Kent, and some other areas of the United Kingdom.

- **UK's largest water and wastewater service provider, with annual revenue of ~ £2.1 Billion**
- **Supplies 2.6 billion liters of drinking water per day and treats 4.4 billion litres of waste-water per day.**
- **Serves 27% of the UK population.**



Customer's Operating Region

Business Challenge



The cold Siberian blast caused chaos for millions of people in the in the UK. For the Water utility companies, this heavy snow and thaw caused a series of water main bursts leading to several "No Water", "Flooding" and "Low Pressures" issues in the network.

In water industry an event is typically defined as a situation of major service failure such as No-Water, Water Pipe Burst, Flooding, Low pressure etc.

What we did

In the middle of this event TCS developed ESRI (GIS) based visualisation tool "**Event Viewer**" on ArcGIS online platform within matters of hours. Tool pulled together operational map, customer contacts, operational work data and tweets. This correlation of information **quickly provided actionable insight to:**

- **Quickly identify network hot spots**
- **Guide network service technicians towards right places**
- **Direct consumers to nearest bottled water locations**

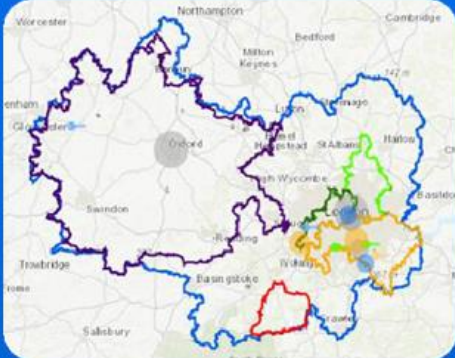


TCS Team Presenting Event Viewer in Operations Contact Centre



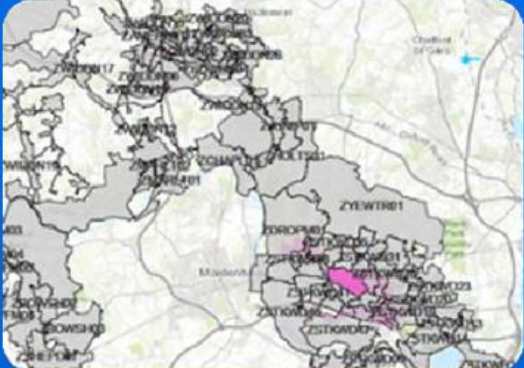
Operations Contact Centre Managers Using the Tool

Event Viewer Applications



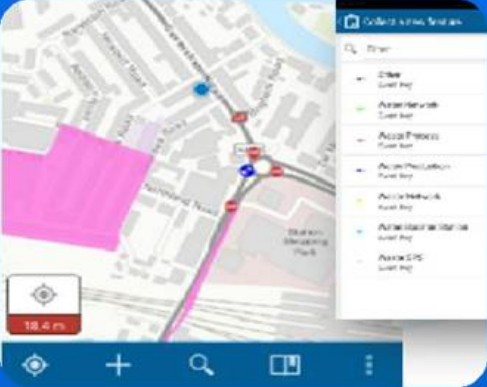
Event Viewer Dashboard

A browser based situational awareness tool used by event management stakeholders



Event Viewer Editor

A browser based map editor used by managers to edit event data



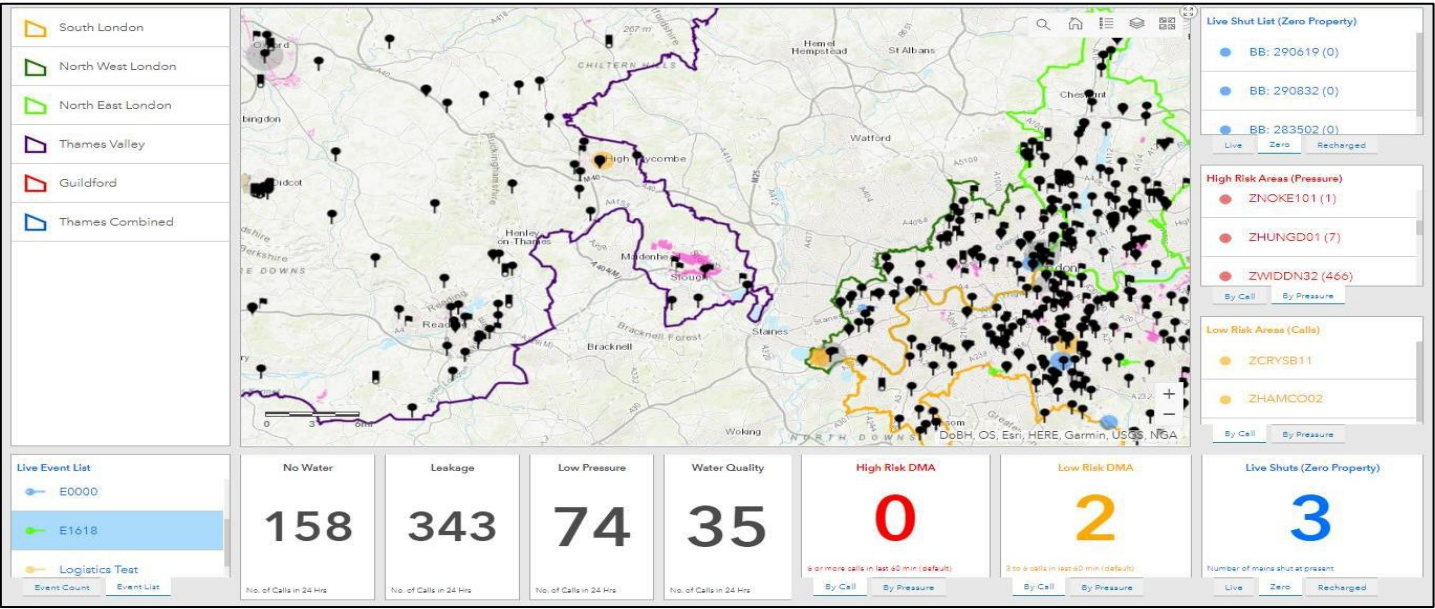
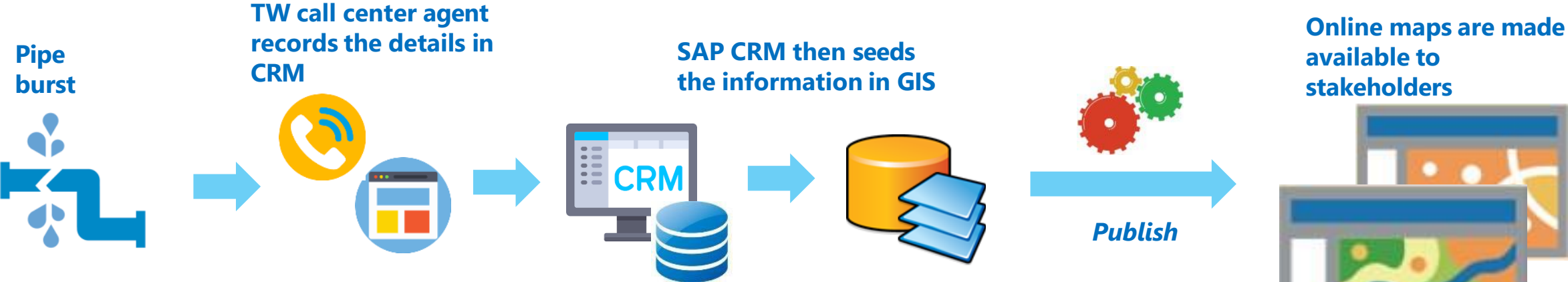
Event Viewer Field App

A smartphone based COTS mapping tool to analyse and report event related information from the field



Event Viewer Applications

Scenario 1: Pipe Burst

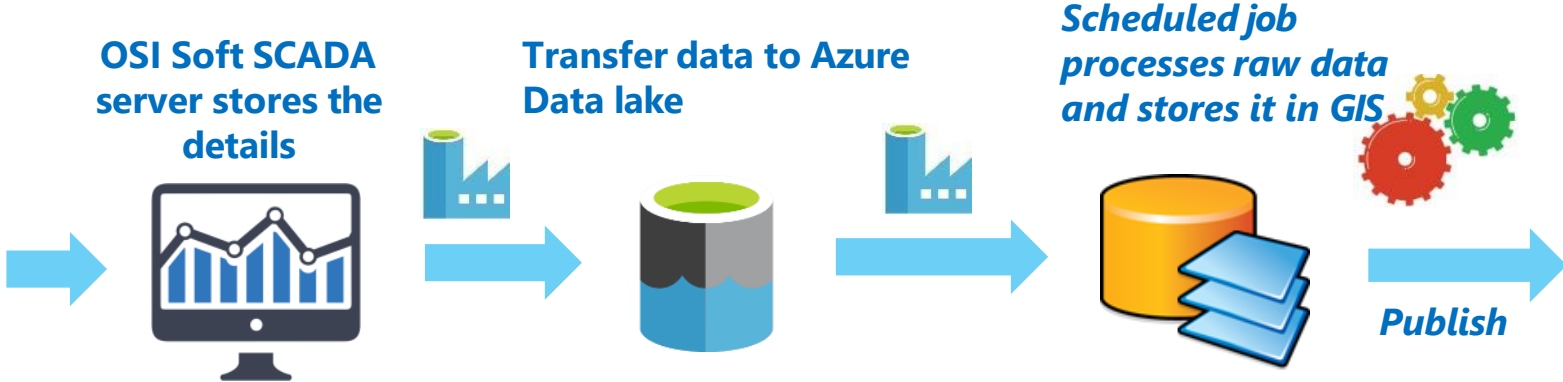


- *Point map of Calls*
- *Number of calls per DMA*

Scenario 2: Pressure Fluctuations in Network



Pressure Gauge



Online maps are made available to stakeholders



Affected customer locations are identified on map

High Risk DMA by Pressure: CPP0030

- CPPHeight: 102.60
- CPPID: CPP0030
- Current Pressure: 32.60
- PressureRecordedAt: 6/8/2019, 10:15
- MaxPropertyHeight: 131.20
- ImpactedPropertyCount: 7
- RiskStatus: No Water
- AreaCode: ZHUNGD01
- CPPName: 0030 - O/S 34 HARBLIN MEADOW UPPER EDDINGTON
- NoWaterThreshold: 33.60

Live Events: 5

No Water: 158

Leakage: 343

Low Pressure: 74

Water Quality: 35

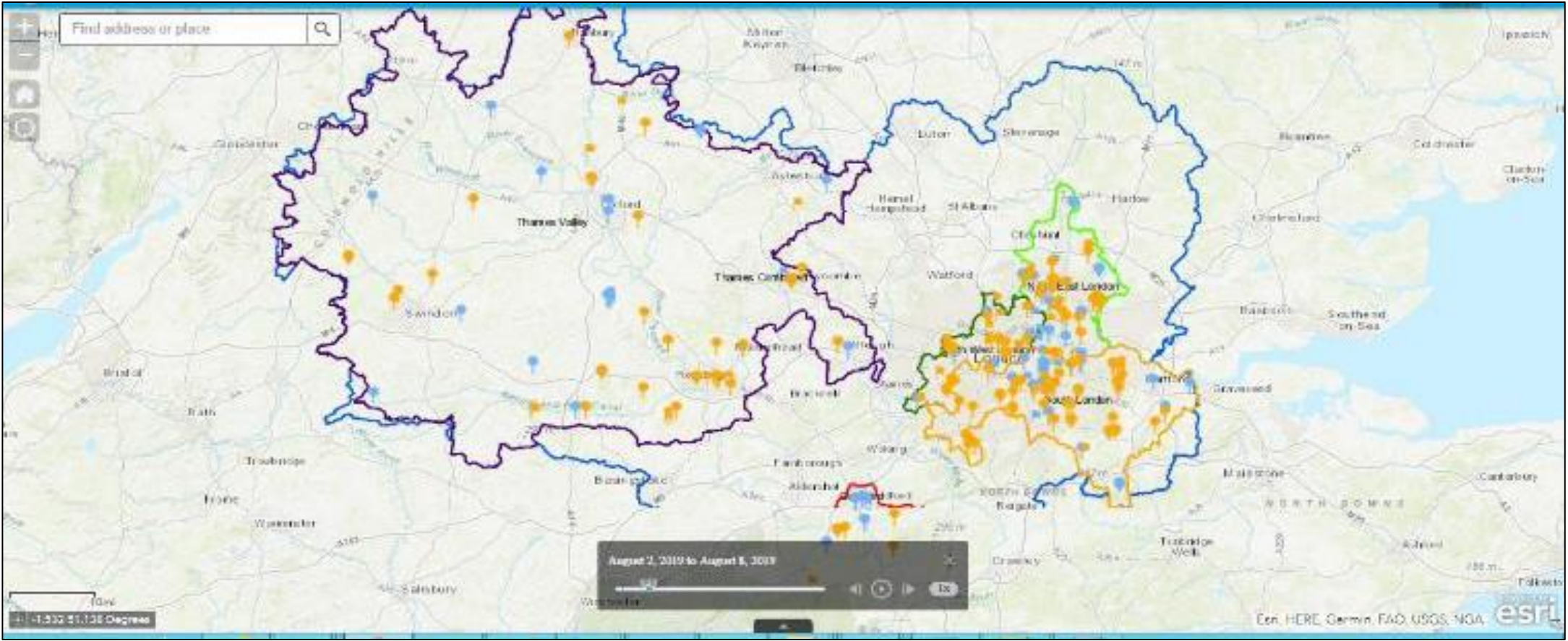
High Risk DMA: 0

Low Risk DMA: 2

Live Shuts (Zero Property): 3

Event Viewer App Features

Retrospective analysis of historical events with time aware tool



Voice of the Customer



“The solution shows a clear visualization of what type of calls we are getting and where we are getting them from is hugely beneficial, not only does it give specific information regarding location, it enables quick decision making in the deployment of resources, whether that be to deploy NSTs to the area where we have had multiple NW calls with no leak reported, or to understand how and when to deploy alternative supplies.

Obviously, the tool does much more than this but the time it saves is enormous, from being able to see in almost real time calls coming into the old system of getting someone to pin in GIS the calls as they arrive is like racing a formula 1 car against a Lada. No offence to Lada intended”

Operations Customer Manager - Water Control