

Circular Economy Engineering Case Study

Traceability Through Tracking a.k.a. "T3"

Traceability Through Tracking – T3

Traceability project on web collection requests for one of our IT producer

Background and Challenge

The case study was conducted to analyze the reliability of a supply chain through the traceability of waste units, for a web collection requests service. Various types of IT devices were injected as waste in the assessment process, representing more than 200 units that covered 14 countries in Europe and 2 in North America.

High level of confidentiality was required. The customer strictly forbid any disclosure of the project to any internal or external stakeholder, aside from the need-to-know basis.

Customer Profile

A multinational technology company that specializes in information technology.

Objectives

Deliver a comprehensive assessment of the ability of the supply chain to deliver the required services through tracking devices injection and through tracking software monitoring, by:

- Organizing samples collection in the cities selected by the customer.
- Tracking the movement of the waste sample from collection to destruction.
- Providing routes mapping and assessment reports on final destination and waste status.
- Determine any leak of material.
- Detecting and solving deviations..

The Solution At a Glance...

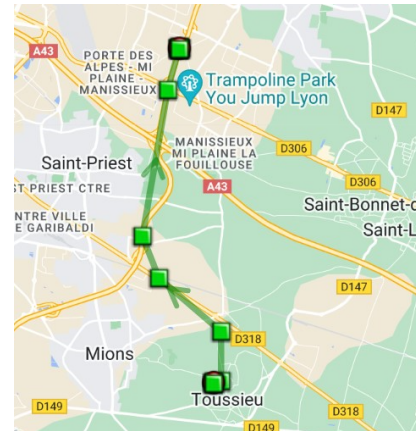
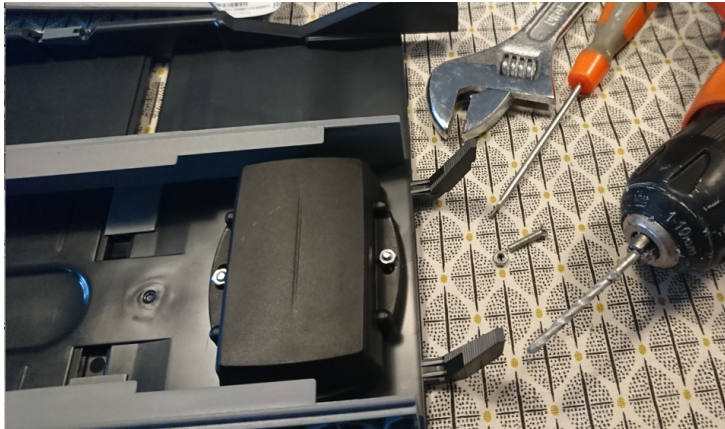
- Using the vast network of Landbell Group employees, as tracker injectors and collection points from their residences.
- The tracking software allows real time tracking, location and travel path reporting with high level precision and worldwide coverage.
- Trackers are equipped with movement detection.
- Tracker battery has one year+ life span.
- Waste, refurbished and brand-new IT units are used to carry the trackers.
- Service totally customized as per customer needs.
- Also provides other relevant knowledge: route, distance driven, transport duration, consolidation and transfer station location, storage time, destruction date.

For more information about the product please access our product sheet available at:

[Traceability Through Tracking T3](#)

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09/03/2022 Wed	
● 02:42	Parked
■ 11:02	Driving (stationary)
● 11:07	Parked
■ 12:14	Driving (stationary)
■ 12:17	Driving (stationary)
● 12:22	Parked
■ 14:08	Driving (stationary)
■ 14:11	Driving (stationary)

Key Facts	Results
<ul style="list-style-type: none"> The trackers can be easily fixed to IT units with simple tools or inserted in cavities. The software is linked with Google Maps providing most recent maps data and allowing street views. Destruction is assumed when contact is lost at treatment facility sites or at downstream vendors, after 2 days without signal. Alarm can be set up to detect movement from a specific zone. 	<p>01 200+ units collected and processed domestically at known and contracted approved facilities. No illegal export occurred.</p> <p>02 Less than 5% of the trackers shown signal deficiencies on route. 95% of the injected trackers were successfully followed and tracked until final destination.</p> <p>03 The punctual deviations found were quickly addressed and mitigation measures put in place to avoid repetition.</p>