ONE Record Insight: Pilot testing

Engaging with the cargo community

ONE Record is a standard for data sharing that defines a common model for data that is shared via a standardized and secured API. In order to put theory to practice, real world examples and testing is required. This is where the ONE Record Pilots come into their own.

Introduction

As the development with ONE Record advances, it comes a point in time to bring real-life testing of what has been developed and provide much needed feedback from our valued stakeholders. This is achieved through our Pilot community that helps us greatly.

Purpose of the pilot

So what do pilots really do? For that we must go back to basics; what is a pilot? A pilot test is a small-scale preliminary study conducted in order to evaluate feasibility, duration, cost, adverse events, and improve upon the study design prior to performance of a full-scale research project.

The first ONE Record Tech Insights on API (link) and the power of ontology (link) provided valuable groundwork for the ONE Record project. Basically ‘how’ data is exchanged. Following on from this came the ONE Record Data Model Insight (link), this is basically the ‘what’ in ONE Record. Now comes the merging of these two streams in real life and the pilots do just that; tie the two elements together and provide a continuous feedback loop. Without pilots the standard development would take a lot longer and wouldn’t be as effective as work would be done on a purely theoretical model.

How does it work?

Currently, pilots are split into small groups, roughly 5-6 different stakeholders in each. This allows the groups to be agile and work on different scenarios in order to create a complete data model to cover all kinds of operational scenarios such as special cargo, booking etc.

Pilots take the latest release of the data model (which can be found on GitHub) and API/Security specifications, implement it within their IT framework and exchange data with their stakeholders. As testing goes on, feedback and improvements are noted and shared in the working groups and at regular meetings that happen throughout the year. At the end of the year an overall review is made to make sure that the standards are robust and work in the air cargo environment for all parties. They also help create an implementation guide and new Standard Operating Procedures for using this new method of data sharing.

Real-world examples

Initially ONE Record started in 2019 with 6 pilots around the world and 26 companies. Currently there are 7 pilots, working on 9 use cases, and the number of companies involved is currently close to 50 and keeps on increasing as members join existing pilots. More information on this can be found on the dedicated microsite (link). In 2020 the aim of the pilots is primarily to start connecting all these pilots together to create a wider Internet of Logistics (IoL) in order to better connect all stakeholders and create a true global coverage.
FEDeRATED Living Labs

The FEDeRATED consortium is an EU project for digital co-operation (more information can be found here link). The aim of FEDeRATED is to deliver the foundations for a trustworthy and interoperable business and administrative data sharing infrastructure for freight transport and logistics. This means that it not only looks at air and road, but also ocean, rail and inland barge. This is truly multi-modal vision!

To this end, in order to support FEDeRATED, IATA has created the pilots, using the ONE Record data sharing standard, that provide a test bed for FEDeRATED architecture, this is done under the Living Lab brand. Each pilot can work on its own, but IATA has grouped these in order to test perhaps the most important aspect of FEDeRATED: a federated network of separated and independent logistics and transports systems.

Next Steps

Now we have a better understanding of the purpose of pilot testing in the air cargo industry especially with regards to ONE Record. Part two of this ONE Record Pilot Insight will look into how to actually join these pilots and where you can bring value!

More info at https://www.iata.org/one-record