The air cargo industry has been driving the adoption of the e-AWB for more than a decade and although a penetration of 60% on feasible trade lanes is not a whole-hearted victory, it is a fairly accurate measure of the state of digitisation of airlines and forwarders.

We can all agree that more is needed but let us not belittle this progress either. Since the end of 2017, IATA has now been working on the next generation of digital cargo: ONE Record, a standard for direct data sharing between air cargo stakeholders. This uses modern web standards for data exchange as well as a smart approach to data modeling.

Before we look at the ins and outs of ONE Record, let’s get one question out of the way: why should the industry pursue a new digital cargo standard when e-AWB has not reached 100% usage yet?

The answer lies in the way that technologies are developed. When e-freight was introduced as an industry objective at the start of 2006, there was the hope that the industry could achieve full e-freight capability within half a decade.

We now know that for e-AWB it will have taken about 15 years to be deployed. This is a trend that underpins every new technology: there is a significant lag between the emergence and the full usage of the new technology and this lag is measured in decades...

This means that if we want to ensure that air cargo continues to pursue digital innovation then we must have developed tomorrow’s standards today to ensure that the transport industry can use them fully at the latest by 2030!

This also means that whilst the e-laggards in e-AWB are still dithering on ditching paper processes, the digital leaders will be transacting their business using modern data sharing standards like ONE Record within a few years. Our industry will always run different generations of technologies in parallel.

ONE Record is a standard for exchanging data directly between air cargo stakeholders. In that sense it adds to the democratisation of information since there is no need for third-party service providers to act as information brokers.

In a way ONE Record takes a page out of the World Wide Web playbook where anyone can create a website and share information with anyone else. The result will be that instead of the EDI hub and spoke model, ONE Record creates networks where information flows directly between stakeholders.

Single API for every system

Another page from the web's playbook is the specification of a standard API. When you want to browse any of two billion websites in the world, you only need one browser. That is because every website uses exactly the same API known as the HTTP and HTML.

ONE Record also specifies a single API for every system that wants to connect to any other system and access data.

Which brings us to URLs. ONE Record uses URLs for accessing data anywhere. In fact, every relevant piece of information in air cargo has its own unique URL, whether that is an air waybill or a specific shipment or even the contents of the box we're shipping.

All data is accessible through a URL.

That’s really neat because it means that instead of communicating electronic documents to our transport partners, we just need to give them a URL and they can then pick up the data whenever they wish. Data stays where it is created.

To make sure that the data we wish to share is understandable, ONE Record uses smart data models that are based on an ontology.

Think of an ontology as “the language of cargo”. This means that data model will tell its own story. Even if you don’t know what a specific data element means or represents, the data itself includes all the context that will explain it to you.

This is crucial in a world where we are increasingly connecting many business domains that each “speak” their own and often different language.

Data security

Data security is critical to every system these days. ONE Record has a security model that allows you to identify with certainty who you are sharing data with and whether or not you want to provide that data or just part of it, or not.

It is worth underlining that ONE Record is not a global platform for data sharing. ONE Record is a specification for making any system, including your system, compatible with any other system.

It specifies universal connectivity and compatibility for an “Internet of logistics”.

As the old Nike ad said: Just do it...

The ONE Record data sharing standard is at the start of a very exciting journey and the 50 companies from across the supply chain that are developing this are highly engaged. In 2019, the air cargo industry will see some 20 companies implementing ONE Record on their systems and creating the start of a new data network, that will grow into a global Internet of Logistics that will spark an era of innovation in air cargo digitalisation.