**ONE Record –
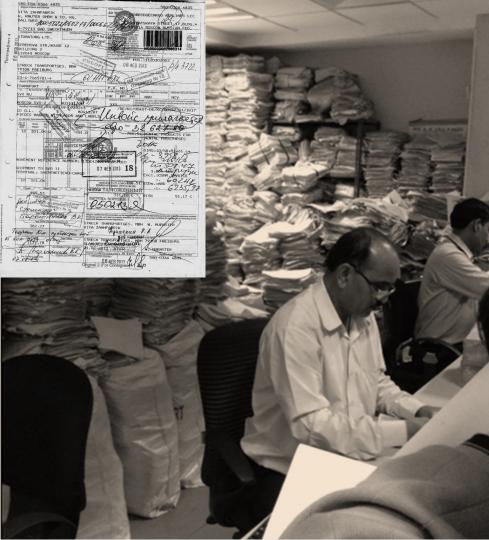a look back and the way forward ...**

Dr. Jan-Wilhelm Breithaupt
Vice President Global Fulfillment Management

Lufthansa Cargo

Airfreight needed a lot of documents
and Cargo guys love(d) paper and stamps

In 2012 we started out eAWB journey – with our first customers

go**digital**

Lufthansa Cargo's target is a digital fulfillment with paperless processes

The future of Lufthansa Cargo:

- The documental acceptance is fully digitized

- The transport of accompanying documents is unneeded

- The information processing is accelerated by automation, robotics and AI

In close cooperation with customers, hubs and regions eAWB grew up to more than 85% share until March 2022

eAWB became mandatory for LH cargo shipments as of SFP 2022

100%

eAWB penetration in 08/2022
based on IATA CASS figures

Simply deliver ...paperless

Visible results achieved, but still an
uphill battle

Eliminate further paper volumes

eCSD eHM eDGD

Paperless push
Use already existing digital foundation

MDH PaperX

100% paperless potential
Digitize remaining documents faster

PreCheck Center

PreCheck continuous improvement
Generate more traffic, include more functions and automate more transactional tasks

What leads to the assumption that data exchange in the air cargo industry is outdated? | Some arguments to consider

Currently dominating messaging standards are outdated

- dominating messaging standard in the industry (CIMP) is more than 50 years old and has not evolved to meet modern requirements

- Community systems are needed to make information exchange between stakeholders possible

"store & forward"-based exchange leads to Chinese whispers syndrome

- incomplete data due to max. number of characters and corrupted data due to technical limitations

- no single source of truth, but discrepancies in the level of information due to data copies

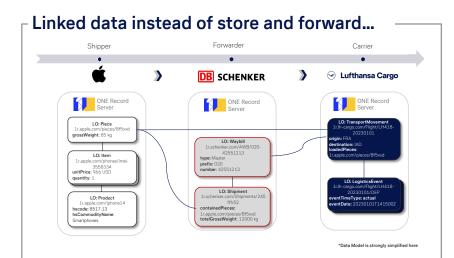- no real time availability of data whenever a change is made

Current standards only allow textual data to be interchanged

- messaging is solely focusing on the interchange of textual data

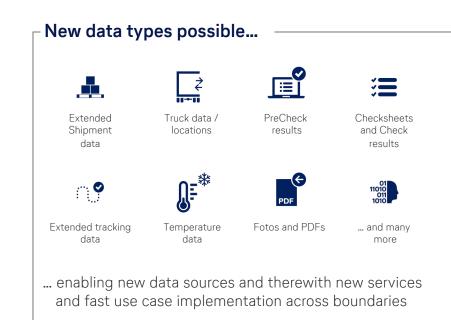- Requirements for the exchange of IoT-data, documents, photos, etc. are not met

from blocked roads, congestions and detours, we need to get to expanded highways for data exchange...

Why can ONE Record be seen as the adequate response to overcome the current pain points in data exchange? | There are two basic answers

Linked data instead of store and forward…

Shipper · Forwarder · Carrier

ONE Record Server

LO: Piece
1r.apple.com/pieces/8f5xxd
grossWeight: 85 kg

LO: Item
1r.apple.com/phones/imei-3558334
unitPrice: 966 USD
quantity: 1

LO: Product
1r.apple.com/iphone14
hscode: 8517.13
hsCommodityName: Smartphones

ONE Record Server

LO: Waybill
1r.schenker.com/AWB/020-42551213
type: Master
prefix: 020
number: 42551213

LO: Shipment
1r.schenker.com/Shipments/245fffr52
containedPieces: 1r.apple.com/pieces/8f5xxd
totalGrossWeight: 12000 kg

ONE Record Server

LO: TransportMovement
1r.lh-cargo.com/Flight/LH418-20230101
origin: FRA
destination: IAD
loadedPieces: 1r.apple.com/pieces/8f5xxd

LO: LogisticsEvent
1r.lh-cargo.com/Flight/LH418-20230101/DEP
eventTimeType: actual
eventDate: 20230101T141500Z

*Data Model is strongly simplified here

… as the basis for one single source of truth and therewith high data quality by design

… enabling efficient operational synchronization between stakeholders

New data types possible…

Extended Shipment data

Truck data / locations

PreCheck results

Checksheets and Check results

Extended tracking data

Temperature data

Fotos and PDFs

… and many more

… enabling new data sources and therewith new services and fast use case implementation across boundaries

… serving as a basis for new possibilities to automize processes

A de-central platform offers significant advantages compared to other types of platforms | ... and has the potential to scale up

Open digital production platform
Based on ONE Record

VS

„Classical" data platform
Based on customized integration or legacy standards

logistics.cloud
project44
SITA

Data is integrated de-centrally via URLs
„1r.schenker.com/AWB/020-2234"*

Data is transmitted to the platform
Using legacy or customized interfaces

Master data remains in owner's system
No central repository with copies exists

Master data is on the platform
Data copies on platform are in the lead

Open and de-central organization
Participation is free and no lock-in effects

Commercial provider in central position
Commerical provider is in control incl. pricing model

ONE Record compatibility = integration
No additional efforts required

Customized and individual integration required
No compatibility to other platforms

Lufthansa Cargo | Dr. Jan-Wilhelm Breithaupt | ONE Record – a look back and the way forward ...

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* = URI structure is simplified

Platform enables mutual benefit for all parties providing and consuming data | some exemplary use cases to underline

What´s in for ...	... LH Cargo?	... and partners?

Shipment Record sharing
- Cost efficient **direct** data sharing
- Higher **data quality**, earlier data
- More sophisticated data model

- Lowered **data exchange costs**
- Increased **transparency**, add. data
- **Single API** for all data

Digital Accompanying Docs
- More **100% paper free** shipments
- More shipments preCheck OK
- Enables **earlier, centralized** doc checks

- **Fewer rejections** due to missing docs
- Separation of physical and doc flow
- Enables fully **paper free warehouse**

Fully automated TruckPreAdvice
- Improved **ramp capacity** steering
- Better **precheck prio** using ETAs
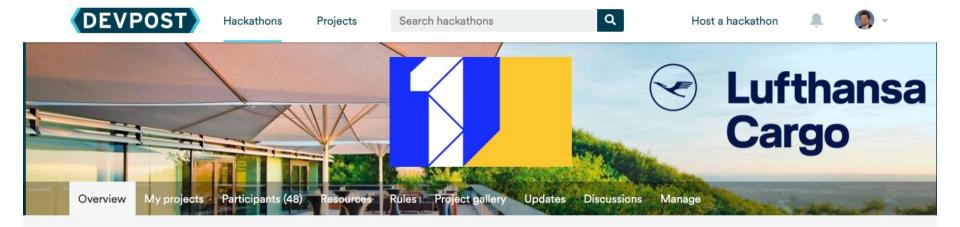- Acceptance based on **truck AWB lists**, not single AWBs

- Total **elimination of data capture** in ePortal
- **Faster turnaround** for trucks
- Fully **automated** preAdvice process

We believe in ONE Record as the future of data exchange in the aircargo industry | we have set ourselves ambitious goals to let it become reality

Achieve **desired outcome** "Establish ONE Record for LCAG messaging in fulfillment processes in 2025"

Become **implementation leader** in the IATA ONE Record joint piloting initiative by 2023

Build the foundation to **enable advanced business cases** with ONE Record

Be ready for **abandonment of CargoIMP and CargoXML** by 2026

Lufthansa Cargo

IATA ONE Record Hackathon – hosted by Lufthansa Cargo

Leverage ONE Record and Aviation APIs for the logistics supply chain 23-25 June 2023

Find teammates

Who can participate

- Above legal age of majority in country of residence
- Team required: 2 to 6 members

- All countries/territories, excluding standard exceptions ⓘ

View full rules

• Submissions open soon   View schedule

Jun 23 – 25, 2023   📅

📍 Lufthansa Seeheim   🏛 Public

$15,000 in prizes   **48** participants

🚩 (iata)

🏷 (E-commerce/Retail)   (IoT)

(Machine Learning/AI)

Let us make history again!

go**digital**

Dr. Jan-Wilhelm Breithaupt
Vice President Global Fulfillment Management

Lufthansa Cargo
Networking the world.