ONE Record HKG Pilot

Pilot Description

• To create awareness and help the HKG air cargo community to get ready for IATA ONE Record. The pilot includes exchange of shipment status among HK Airport / Airline / Cargo Terminal / Forwarder.
• This project is jointly owned by HKIA, CX and GLSHK.

Pilot Participants

CATHAY PACIFIC CARGO
GLS
accenture

Pilot Project Tag Line

“ONE Record – Hong Kong is getting ready”
**ONE Record HKG Pilot**

### Data Model
- Airline Core Ontology
- Shipper's Letter of Instruction
- Cargo Distribution
- CO2 Emission
- e-CMR
- ULD Tracking
- Interactive Cargo (IoT)
- Dangerous Goods
- Pharmaceutical
- Customs (PLACI, ICS2)
- Ground Handling
- Live Animals

### API / Security
- PUB/SUB
- LO update
- Access delegation
- Security
- Status update
- Audit trail

### Implementation Roadmap

**High Level Timeline**
- Requirement/Design: 2 Nov – 20 Dec 2020
- Development: 4 Jan – 19 Feb 2021
- Testing: 22 Feb – 12 Mar 2021
- Pilot Test: 22 Mar – 26 Mar 2021

- Access restriction
- Cascading status update - Pub/sub in multi-chain
- Data integrity / non repudiation with RDF
- SHACL shapes
- IoT updates
- Rich data
ONE Record HKG Pilot

Pilot Set Up / Architecture

CX OneRecord Pilot workflow

<table>
<thead>
<tr>
<th>Forwarder</th>
<th>CPSL</th>
<th>CX</th>
<th>EzyOneRecord (GLSHK)</th>
<th>HKIA Cargo Data Platform (ONE Record Server)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FWB</td>
<td>1a. Submit via Agent Channel</td>
<td>1b. Submit FOH Via API</td>
<td></td>
<td>2. Publish LO to API endpoint</td>
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<tr>
<td>FOH</td>
<td></td>
<td></td>
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<td>3. Accept Shipment</td>
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<td>RCS</td>
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<td>4. Publish LO to API endpoint</td>
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<td>DEP</td>
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<td>5. Update Security status</td>
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Pilot Set Up / Architecture

CX OneRecord Sandbox Pub/Sub flow

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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1. Make Subscription Request</td>
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<tr>
<td></td>
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<td>2. Grant Access Right</td>
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<td></td>
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<td>3. Get Subscription Key</td>
</tr>
<tr>
<td>4. Agent Submit FWB</td>
<td></td>
<td></td>
<td>6a. Publish to Endpoint If exists</td>
</tr>
<tr>
<td>4. CPSL Submit FOH</td>
<td></td>
<td>5. Stored LO(s)</td>
<td>6b. View LO(s) By Subscription key</td>
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<td></td>
<td></td>
<td></td>
<td>GET LO</td>
</tr>
</tbody>
</table>

Accept HKIA Subscription

Request Subscription

Subscribe Request

Get Subscription status

API Endpoint