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
- DHL
- CPSL
- SinoTrans
- Hong Kong International Airport
- Concord Express (H K) Co., Ltd.

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

### 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
CX OneRecord Pilot workflow

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

Pilot Set Up / Architecture

**CX OneRecord Sandbox Pub/Sub flow**

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