

ICAO Aerodromes Operations and Planning Sub-Group

AIRPORT AUTONOMOUS TRANSPORT SYSTEM AT HONG KONG INTERNATIONAL AIRPORT

Presented by
Airport Authority Hong Kong

Airport Autonomous Transport System (AATS) Roadmap



2018

Development of Autonomous Electric Tractor (AET) for baggage conveyance



2021

Development of AET for cargo conveyance



2021

Development of Autonomous Bus for Staff Shuttle Services



Autonomous Electric Tractor (AET)



➤ Increase operational efficiency & reduce manpower required

KEY FEATURES



LiDARs



HD Cameras



dGPS



Remote Monitoring Unit

AET for Baggage Conveyance



2018

Technical feasibility studies for developing AETs for baggage conveyance



Jun 2019

Operational trial of AETs at non-apron road section of SkyPier – T1 baggage conveyance route



Dec 2019

Commencement of live operations of AETs at non-apron road section



Sep 2020

Commencement of live operations of AETs for end-to-end SkyPier – T1 baggage conveyance route



FIRST IN THE WORLD

Apron Road Section

Gatehouse

Non-apron Road Section

**T1
Baggage Hall**

**SkyPier
Baggage Hall**

AET for Cargo Conveyance – 3RS Operations

Timeline:

- Commenced feasibility studies & ramp community engagement
- Trial expected to commence in mid-2021

PRELIMINARY TEST AT HKIA



➤ Increase operations' cost effectiveness & align with AA's pledge of GSE electrification

Autonomous Bus for Staff Shuttle Services

Shuttle bus services are currently being provided to HKIA staff along the apron roads



Use of autonomous bus will allow more convenient services with greater flexibility in operating hours & bus frequency



Trial:

To be conducted at segregated apron areas by Q1 2022

Expansion of AATS Roadmap

2018

Development of Autonomous Electric Tractor (AET) for baggage conveyance



2021

Development of AET for cargo conveyance



2021

Development of Autonomous Bus for Staff Shuttle Service

2024

Expansion of AATS for passenger conveyance in the landside area of HKIA or even neighboring town



THANK
YOU