



Skyparts

Infrastructure in UAM: The Crucial Component

Duncan Walker – Co-Founder & Manager Director

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is the first mover in vertiport infrastructure globally. We have live projects in Asia, the US and continental Europe and are building the world's first Vertiport in Singapore





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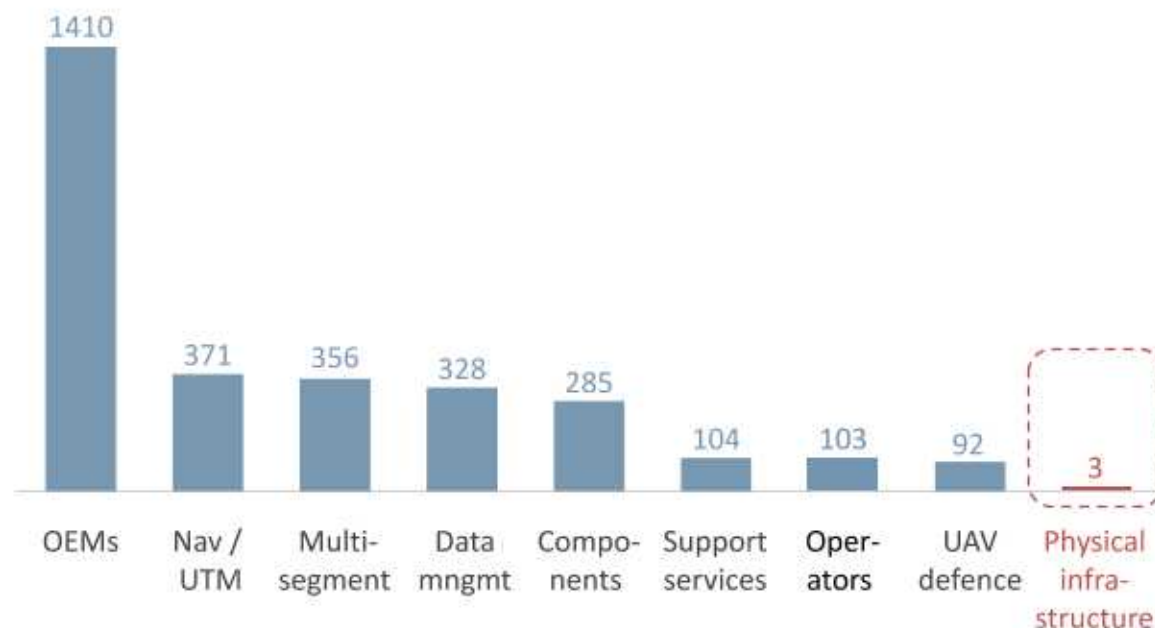
Roadmap to Vertiport Expansion

UAM INFRASTRUCTURE AND THE eVTOL ECOSYSTEM

There is significant investment in vehicles and enabling technology R&D by companies including Airbus, Boeing, Daimler, Amazon and Google. Large balance sheets, engineering expertise and regulatory pressure mean rapid progress towards scale operations. However, infrastructure is under-invested, despite being essential for the realisation of UAM as a mobility solution.

2017 Worldwide Drone Market Total Investment

Includes only companies receiving outside funding (\$USD, millions, 2017)



Source:
McKinsey, Morgan Stanley

Morgan Stanley

2040 URBAN AERIAL MOBILITY MARKET
FORECAST

\$1.5trn

Total addressable
global market

\$851bn

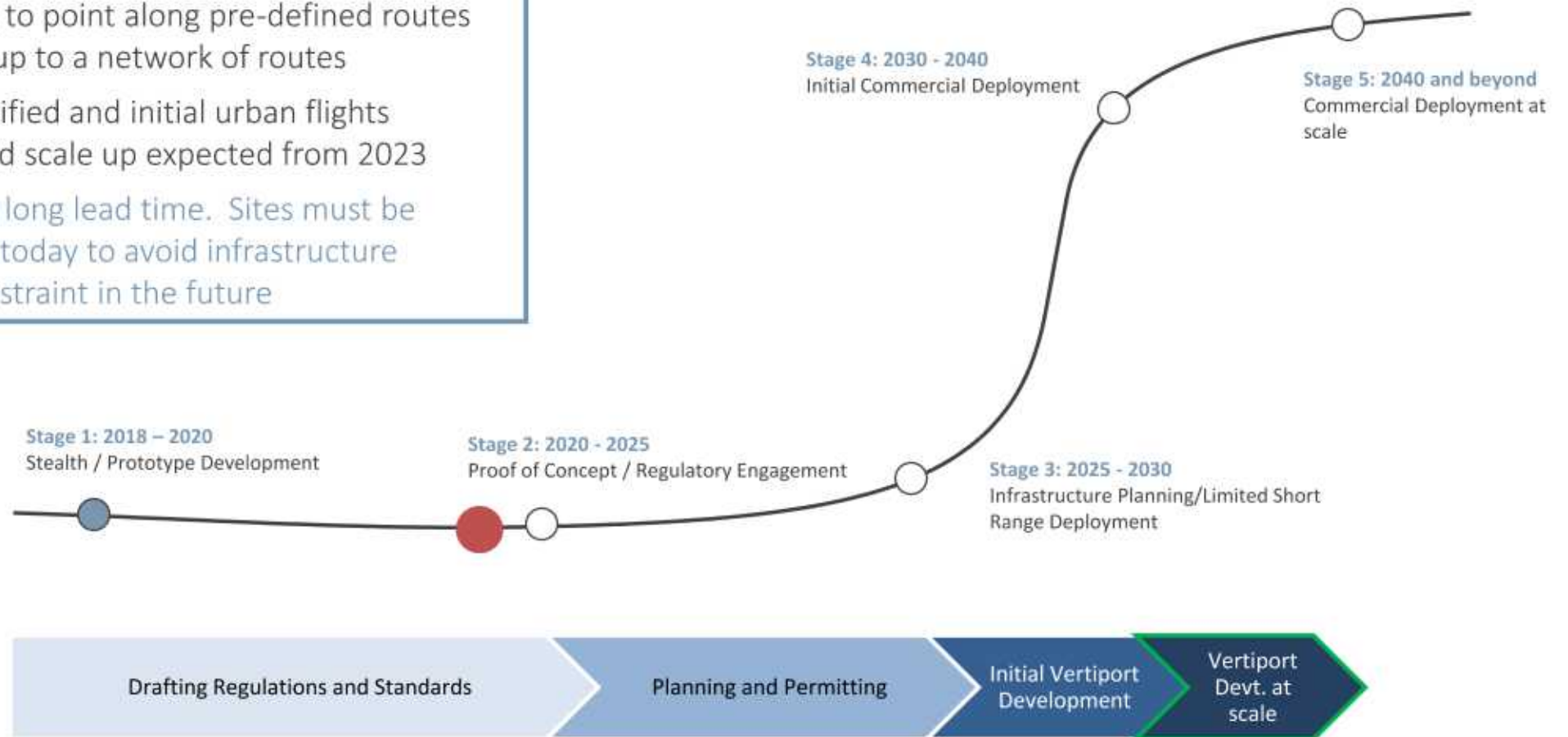
Shared mobility market:
Transporting humans

\$413bn

Freight movement: Transporting goods

UAM ADOPTION AND VERTIPORT LEAD TIMES

- First urban flights point to point along pre-defined routes with subsequent scale up to a network of routes
- First vehicles being certified and initial urban flights expected in 2021. Rapid scale up expected from 2023
- Vertiport delivery has a long lead time. Sites must be secured and permitted today to avoid infrastructure becoming a market constraint in the future



SKYPORTS MISSION

Skyports is connecting the world through our skies by owning and operating infrastructure for urban aviation.

We Own & Operate Vertiports

- Skyports locate, secure, design, build and operate passenger and cargo vertiports at strategic locations within urban environments
- Geographic focus on London, Singapore and Los Angeles with further strategic expansion into major global cities based on market analysis, OEM partnerships and regulatory environment





VERTIPORT INFRASTRUCTURE

Vertiports are complex infrastructure assets with multiple operational requirements to meet the demands of vehicles operators and passenger customers.



VERTIPORT
BUILD

- Vertiport design & development
- Vertiport certification
- Vehicle agnostic infrastructure



LANDSIDE
OPERATIONS

- Passenger and baggage security management
- Passenger handling facilities
- Maintenance and repair facilities
- Multi-modal integration



AIRSIDE
OPERATIONS

- Landing and take-off procedures
- Charging
- Parking and hangarage
- Air Traffic Control integration
- Interface with vehicle operators

REGULATORY LANDSCAPE

Many bodies – too many – around the world are involved in the regulation, certification and planning approval of vertiport infrastructure. Despite the need to progress vertiport delivery, there are no regulations or standards in place yet.



VERTIPORT APPROVAL & DEVELOPMENT TIMESCALES

The first vertiports will need to precede finalization of regulations and standards in order to meet timetables for early UAM deployment

- EASA in consultation with Skyports are developing regulatory guidance for vertiports
- Vehicles are unlikely to have permission to operate without definition of infrastructure standards
- Vertiport and vehicles certification and standards must be developed concurrently and initial vertiports will need to precede finalisation of regulations and standards
- OEMs must share performance data with regulators to inform vertiport specification.





OEM & OPERATOR PARTNERSHIPS

We develop partnerships with vehicle manufacturers early on to ensure our vertiports are designed and located according to manufacturers' and operators' needs and requirements.

VEHICLE
SPECIFICATIONS

CHARGING/FUEL
REQUIREMENTS

SPECIAL
CONDITIONS

PASSENGER
EXPERIENCE

TARGET MARKETS

ROUTING



AIR TAXIS IN SINGAPORE BY 2022

Singapore's ambition is to be the first market in the world to adopt air taxi services. Skyports, in collaboration with Volocopter, are helping them to realise this ambition and use it as a launchpad for expansion into other Asian markets.



OEM / INFRA
PARTNERSHIP



GOV / REGULATOR
SUPPORT



PROTOTYPE
VOLO-PORT



PERMANENT
OPERATIONS

THE VOLO-PORT SHOWCASE

The world's first full-scale vertiport prototype will be showcased in Singapore during the ITS World Congress. It is the first major step towards installing permanent air taxi infrastructure in Singapore.

The vertiport prototype enables:

- Demonstration of pre-flight checks, boarding procedures and passenger lounges
- Demonstration of the end-to-end air taxi ecosystem
- Authorities and industry to interact with the infrastructure and provide feedback



Smart Mobility, Empowering Cities

ROADMAP TO VERTIPORT EXPANSION

Sites

- Sites must be identified early

Standards

- Global standards and national regulations are urgently needed
- OEMs must share performance data with regulators to inform vertiport specification

Planning

- Accelerate changes to planning laws and production of guidance following regulation production

Government and Policy

- Authorities to provide progressive and active support for UAM and vertiport introduction





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