



General Authority of Civil Aviation (GACA) Keynote - Drone Enable 2023

December 2023



The global UAS market is expected to skyrocket in the next decade

KEY DRIVERS



Public acceptance and interest on UAS solutions

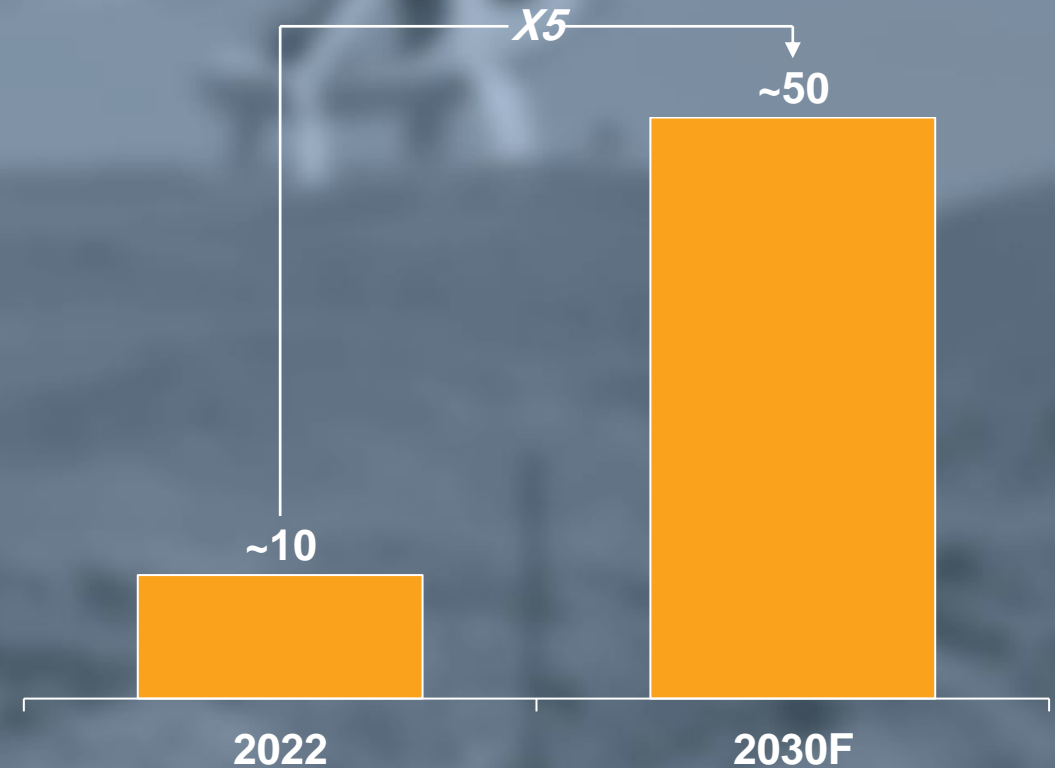


Growing need for sustainable air transportation



Technological developments in propulsion and other adjacent fields

GLOBAL UAS MARKET VALUE (USD Bn)



Saudi Arabia is especially positioned to benefit from a wide range of UAS applications

Not exhaustive

Specific use case potential for KSA



INDUSTRIAL APPLICATIONS

Large oil and gas sector, requiring **inspection and maintenance** of facilities, e.g., offshore sites, and power infrastructure



CARGO

HRH Crown Prince **approved** in August the **Master Plan** for Logistics Centers to make KSA a **Global Logistical Hub**¹, a great case for cargo UAS



PILGRIM TRANSPORT

+30 million Muslims targeted in 2030 on pilgrimage, while Makkah has the **highest congestion**, especially **during Hajj**



REGIONAL AIR MOBILITY

KSA has a considerable number of relevant **cities within 250 miles** and relatively poor ground connectivity, making it a suitable market for RAM



3 1. Across 59 centers with 100M sqm
Source: The Pilgrim Experience Program, GACA

Hence, KSA has made considerable progress in the UAS space seeking for collaboration with national and international players

Past and ongoing initiatives in KSA on UAS



Saudi Health and Saudi Post SPL successfully carried out trials in July to transport blood units using UASs during the Hajj Season. These trips have shortened the transportation time for blood units from 2.5 hours to 2.0 minutes.



First public flight of an air taxi eVTOL in the NEOM experience center in MAY 2023



Aerial inspection of flares & tanks, aerial mapping & security surveillance



Matternet (M2) Type Certificate has been accepted by GACA



Several Saudi universities are testing UAS systems, driving local knowledge and enabling industry localization



Under the AAM Roadmap project, the **National AAM Roadmap for the Kingdom has been developed** to enable a thriving national AAM ecosystem



The mega project drives the development of the AAM ecosystem in KSA supporting trial flight is collaboration with international OEMs

Recent UAS progress in NEOM



Parcel delivery small drones pilot project

NEOM Community 1, Dec 2022



First flight of an air taxi eVTOL in Saudi Arabia

NEOM Experience Center, May 2023



- NEOM Advanced Air Mobility team is targeting to **begin testing the VoloDrone prototype heavy lift Unmanned Aerial Systems (UAS) by Q4 2023**
- The AAM team **is responsible for obtaining and coordinating all necessary approvals, permits, and permissions required to authorize the flights** with the national civil aviation authority and any other relevant authority
- Full **payload** and range capabilities of the aircraft **will be explored during the flight test campaigns**

GACA has regulations governing drone operations to enable several use cases in the Kingdom

KSA UAS operations overview

Available regulations



48

Registration and Marking Requirements for Model Aircraft and Small Unmanned Aircraft

101
SP-F

Unmanned Aircraft Systems

>25
KGs

107

Non-Recreational Civil Small Unmanned Aircraft Systems

<25
KGs

Coming regulations



New UAS regulations
(to be published in Q4 2023)

102

Advanced Operations with Unmanned Aircraft

037

Unmanned Aircraft Systems

062

Remote Pilot Certification (including ICAO Annex 1 RPL)

Adopt ICAO standards for RPAS into national regulations

Annex
6 Part 4

RPAS Operations

Annex
8

Airworthiness of RPAS

Annex
10

RPAS C2 Link & Detect and Avoid

Annex
2 & 11

Air Traffic Management (ATM) for RPAS

Annex
19

Safety management RPAS operators

شكراً لكم
Thank You