

CANSO ASIA PACIFIC CONFERENCE 2022

Goa, India

1 – 3 November 2022

Host:



REGIONAL COLLABORATION FOR FUTURE ANS

Organiser: **CANSO**

Host:  AIRPORTS AUTHORITY OF INDIA

UPDATE ON CATS GLOBAL COUNCIL



Ravikant Muddu

Strategy and Alliances Manager
ANRA Technologies

CATS Global council - Shared vision for 2045

Canso Asia-Pacific
Conference 2022
2nd November, Goa

Ravikant Muddu
ANRA Technologies



ANRA Technologies

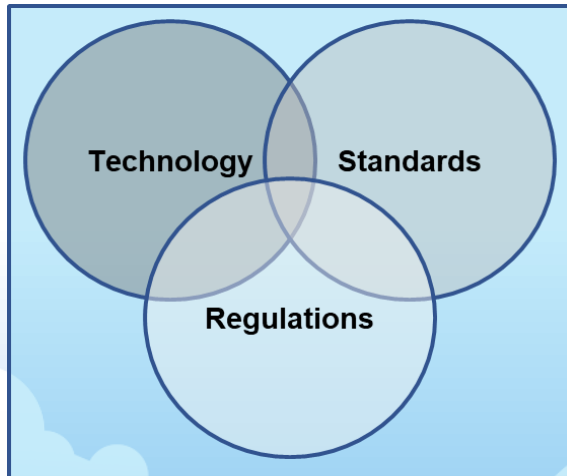
Global Footprint



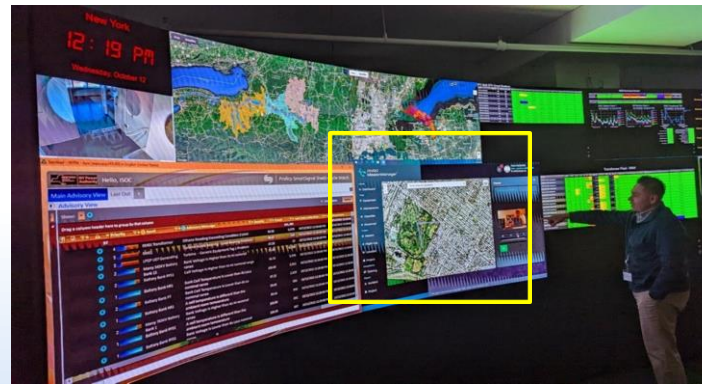
Our Affiliations

- Co-chair for [ASTM Committee F38\(UAS\)](#) for UTM, Remote ID, and UAM
- ISO Technical [Committee20/SC16](#) for UAS Standards
- Global UTM Association (GUTMA) [board member](#) and [Technical Standards Lead](#)
- FAA Aviation [Rulemaking Committee](#) for BVLOS Operations
- ICAO Aviation Trust Framework [Study Group](#)

Value Proposition



Latest Success Story



The Complete Air Traffic System (CATS) Global Council



The time for change is now

The interconnected aviation skyscape we are aspiring to is just over two decades away. That's not very long.

As a sector, we need to collectively and immediately act in order to step closer towards this goal.





2045 Vision Statement

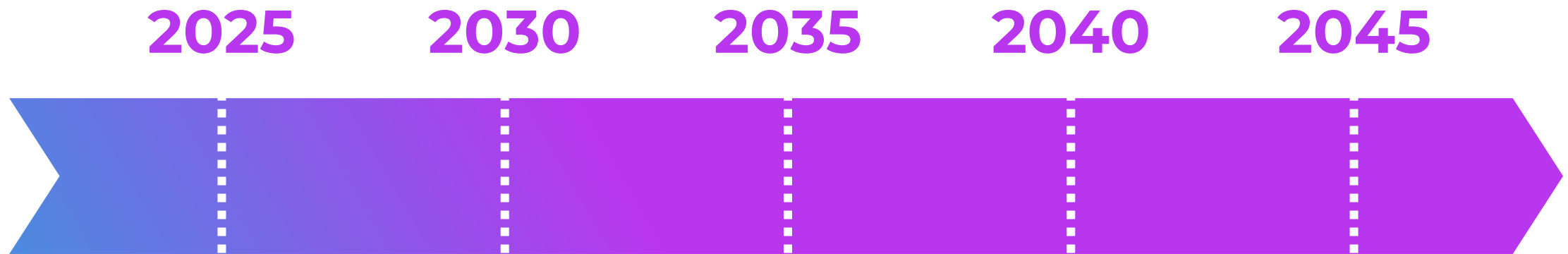
To create global airspace that is safe, fair, intelligent and interoperable, leveraging revolutionised design, technology and services to power global mobility and prosperity

The Complete Air Traffic System (CATS) Global Council

CATS GC Vision



Start in the future and work backwards



**Identify intermediate
Goals / Success factors**

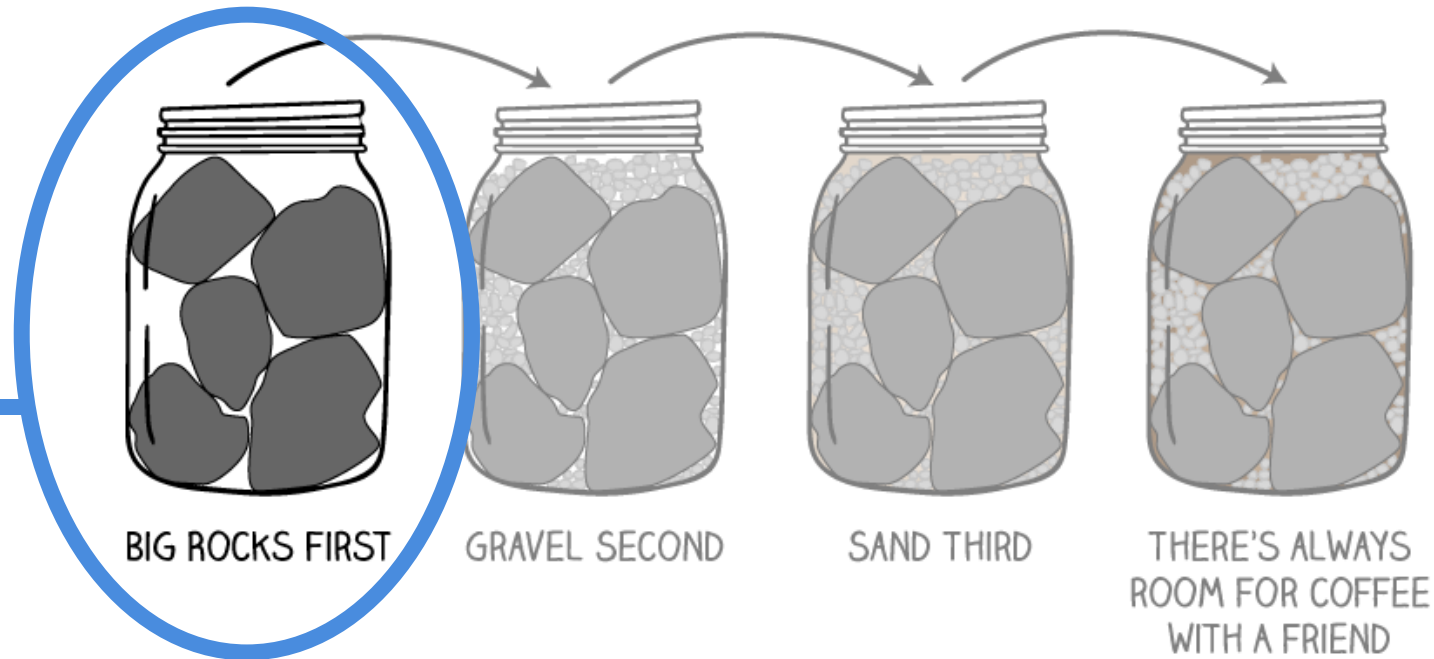


**2045 Goals / Success
factors identified in the
CATS Vision**

Scope of the CATS Roadmap

It is a high-level roadmap – focused on goals and key actions.
We scoped the Roadmap so it is manageable and it effectively steers the ATM industry towards the CATS GC vision

**Goals and
key actions**



2045 Vision Building Blocks



Services and Service Delivery



Technology and Digitisation



Safety and Regulation



Environmental Sustainability and Social Impact



Airspace Design and Classification



Data and Security



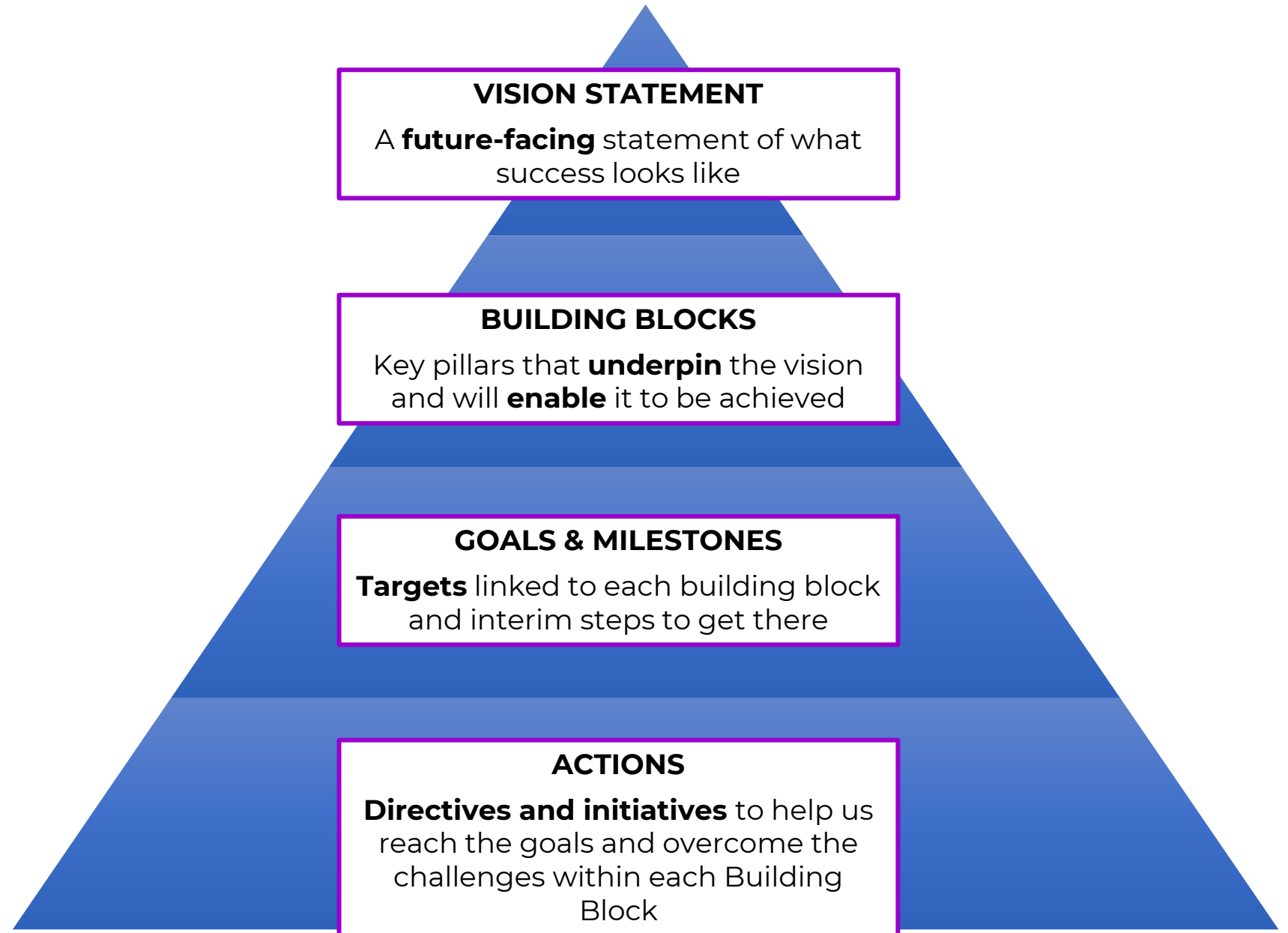
People, Organisation and Talent



GOAL 1 Improved performance through automation	GOAL 2 Harmonised service delivery	GOAL 3 Integrated airspace	GOAL 4 Harmonised, efficient and flexible systems
GOAL 5 Digital Collaboration	GOAL 6 Safety and Security by design	GOAL 7 Predictive approach to risk management	GOAL 8 Strong safety and quality culture
GOAL 9 Towards reduced climate impact	GOAL 10 Environmental sustainability and social impact management are broadly integrated into the air transport system	GOAL 11 Integrated and connected multimodal transportation network and infrastructures	GOAL 12 Data-powered ecosystem
GOAL 13 Thriving airspace management community	GOAL 14 High performing teams		

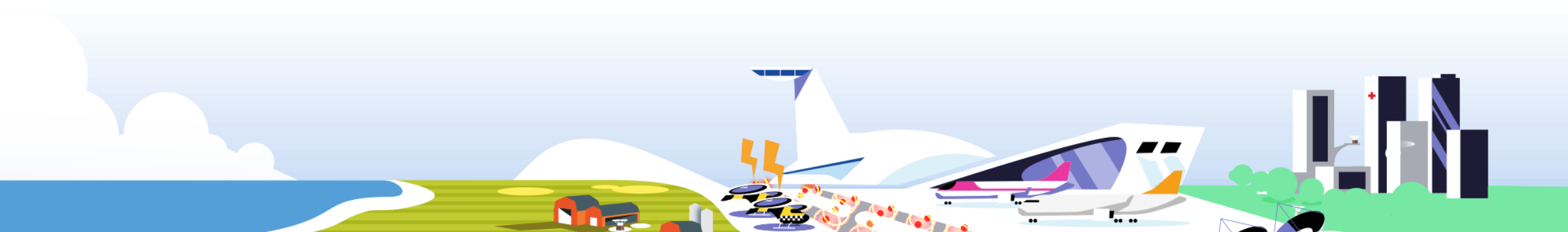
LONG TERM GOALS (2045)

CATS GC Vision Roadmap Structure



Next activities of the CATS Global Council

- Alignment issues with existing global and regional plans
- Start working on the implementation of the vision roadmap:
 - Define a 3-year work programme facilitated by CANSO
 - Find champions / sponsors for each key milestone





THANK YOU

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PANELLIST



Dr. Pham Dung Viet

Chairman

VATM

PANELLIST



Sirikes Niemloy

Executive Vice President

AEROTHAI

PANELLIST



Coleen Hawrysko

Director, FAA ATO International
FAA

PANELLIST



Blair Cowles

Regional Director - Safety and Flight Operations

IATA

PANELLIST



Conor Mullan

Managing Director
Think Research Limited

PANELLIST



Vineet Jolly

Director of Business Development, Space & Airborne Segment

L3Harris

REGIONAL COLLABORATION FOR FUTURE ANS

Facilitator: Poh Theen Soh, Director Asia Pacific Affairs, CANSO

Panellists:

- **Sirikes Niemloy**, Executive Vice President, AEROTHAI
- **Dr. Pham Dung Viet**, Chairman, VATM
- **Conor Mullan**, Managing Director, Think Research Limited
- **Coleen Hawrysko**, Director, FAA ATO International, FAA
- **Blair Cowles**, Regional Director, Safety and Flight Operations, IATA
- **Vineet Jolly**, Director of Business Development, Space & Airborne Segment, L3Harris

PANELLIST



Dr. Pham Dung Viet

Chairman

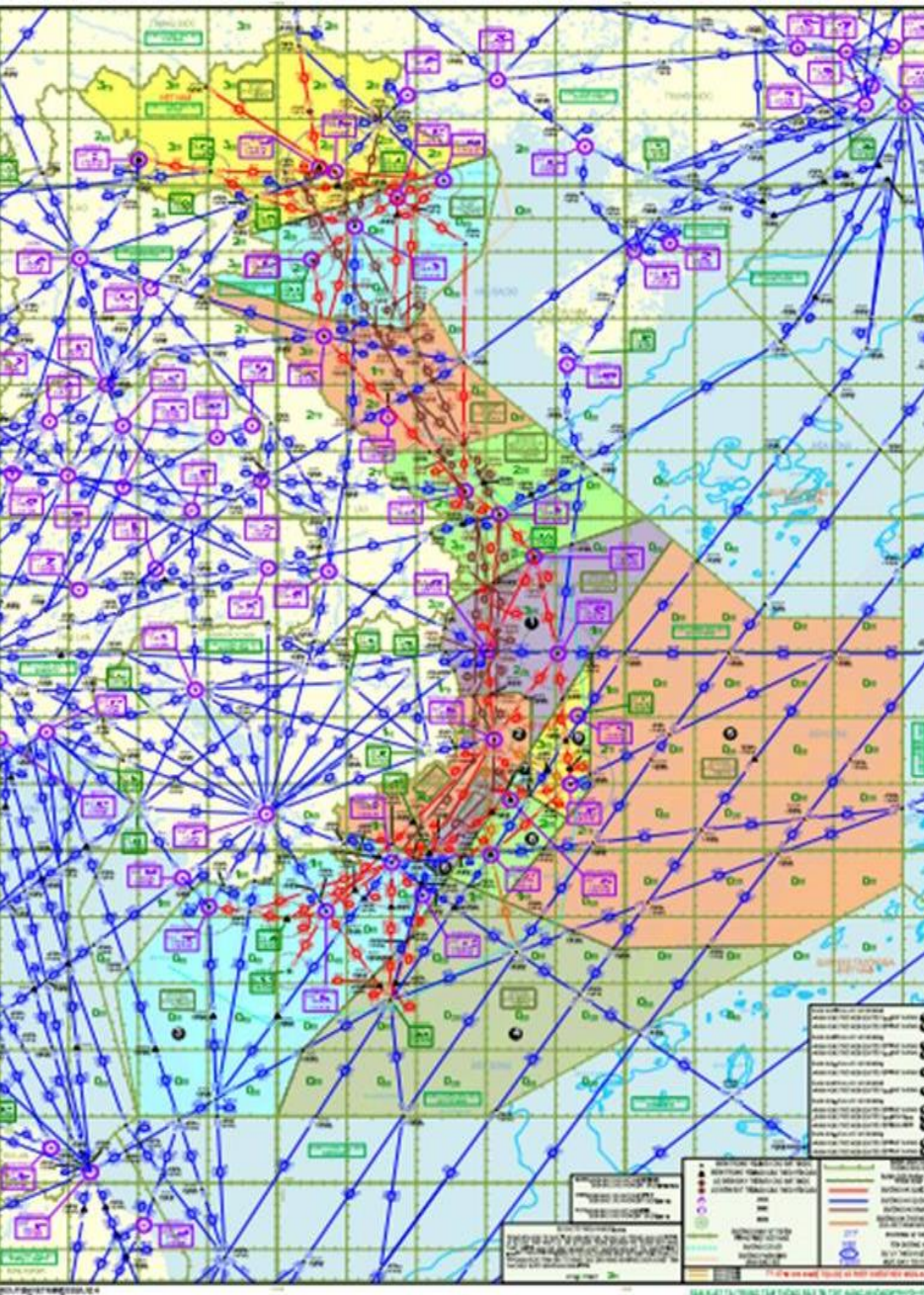
VATM

VATM's ATC FACILITIES

- 2 ACC Centers: Ha Noi, Ho Chi Minh City
- 4 APP Centers: Ha Noi, Da Nang, Cam Ranh, HCMC
- 22 ATC Towers

2 FIRs: Ha Noi FIR, Ho Chi Minh FIR





ATS ROUTE NETWORK

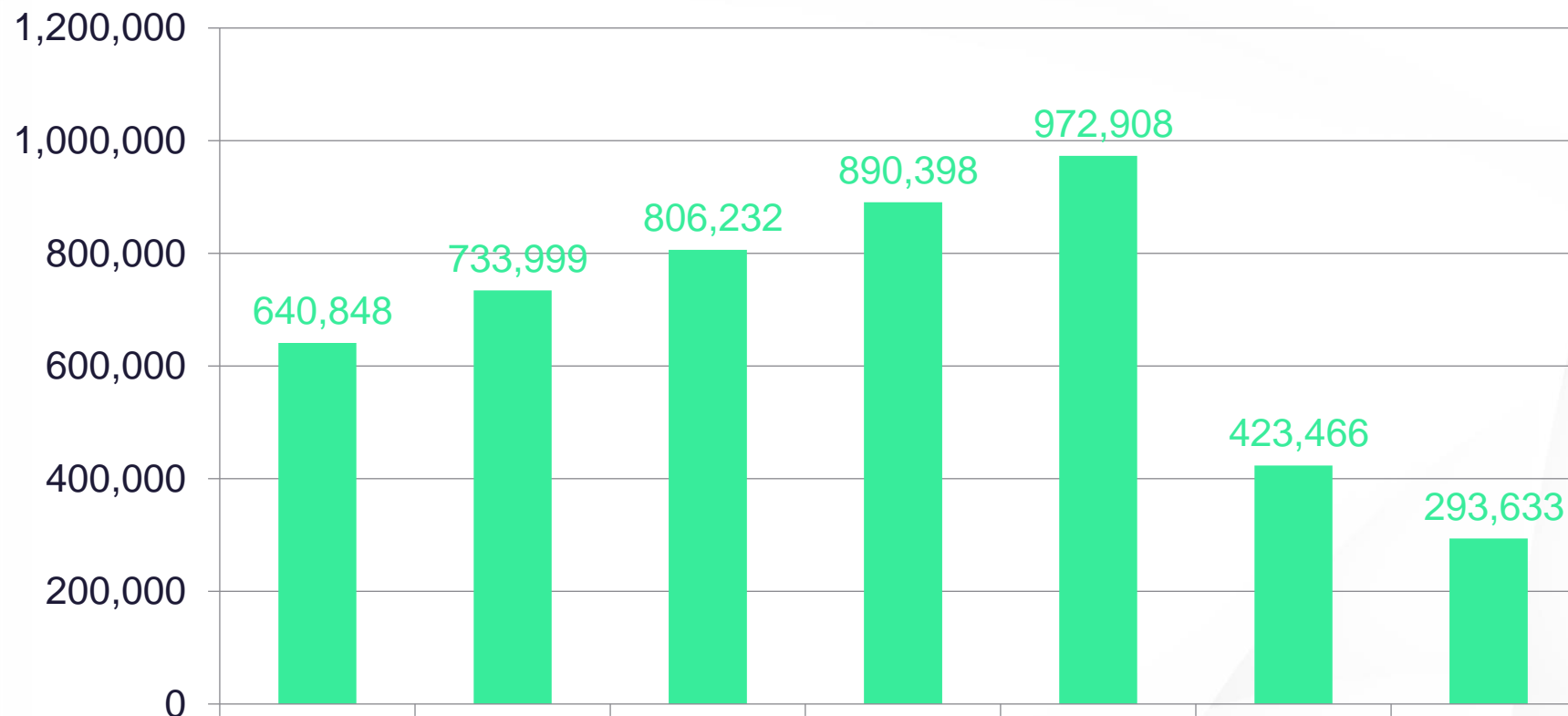


- 36 international routes
- 35 domestic routes

HAN-HCM route: Top 10 busiest domestic route
(Number 4)

A1 route: of Top busiest international routes

FLIGHT MOVEMENTS



Expectation

2022: **440.000**
flights

2023: **600.000**
flights

72% domestic
flights

28% over flights

RESOLUTIONS



- Assurance of operational performance
- Investment in ATM infrastructure
- Investment in Human resources
- Safety culture
- International networking and collaboration

ASSURANCE OF OPERATIONAL PERFORMANCE



- Taking good care of existing facilities: updating and following maintenance procedure strictly
- Ready for back up solutions
- Upgrading facilities
- Airspace organization and flight procedure designing optimization

INVESTMENT IN ATM INFRASTRUCTURE



- Major Projects: LTIA, HCM ATCC, radar stations, ADS-B stations...
 - LTIA phase 1: completed in **2025; 25 million** turns of passengers/year; **1.2 million tons** of cargo per year.
- Good financial management: availability of fund, cost optimization...



INVESTMENT IN HUMAN RESOURCES



- Proper recruitment, proper training, proper remuneration
- Investment in Human resources in line with Investment in ATM infrastructure



SAFETY CULTURE

- Safety – Regularity – Efficiency
- Raise awareness of safety in the whole organization



INTERNATIONAL NETWORKING AND COLLABORATION

- International networking and collaboration underlying all other resolutions
- For harmonious development





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