



URBAN AIR MOBILITY (UAM) FEASIBILITY STUDY FOR INDIA

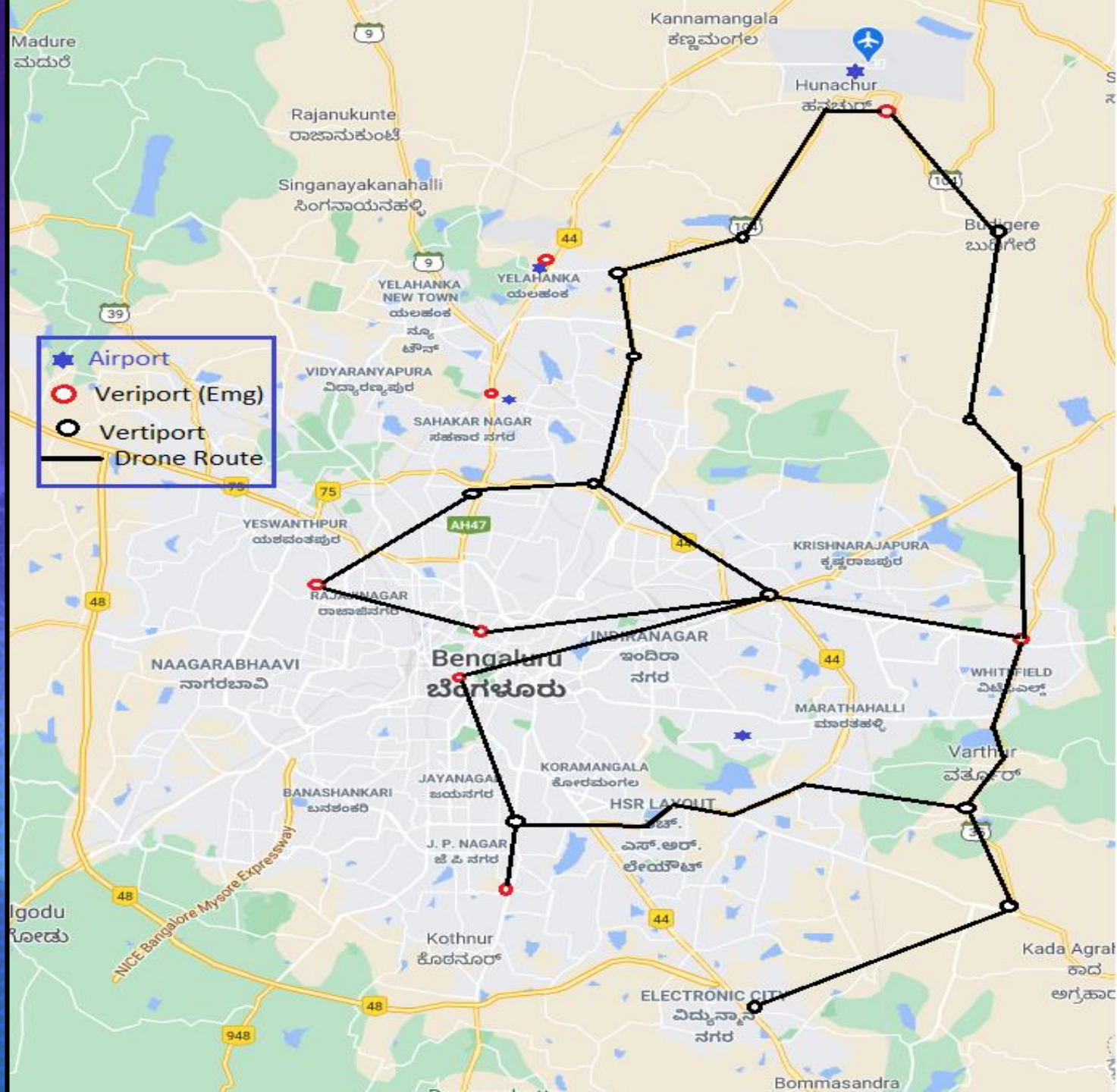
Enabling the Indian ecosystem for future urban operations

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Leverage Global Engagement

Project	Partners	Objectives
Galicia SkyWays Program (Spain - Ph I Completed)	Spanish Regional Government	Development of sUAS standards and procedures to enable Beyond Visual Line of Sight BVLOS) Flight. Use of Simulation and Flight tests to address UAS BVLOS Contingency Management issues (Loss of Power, Communications, etc.)
UAS Communication, Navigation, Surveillance (CNS) Airspace Assessment (US- Completed)	NASA	Assessment for universal, reliable, always available, cyber secure and affordable Communication, Navigation, Surveillance (CNS) Options for all altitudes of UAS operations
Vertiport Automation System (US- Completed)	NASA, FAA, NU-Air,	Technology and CONOPs Assessment of a Vertiport Automation System for Urban Air Mobility Operations.
NASA Advanced Air Mobility (AAM) National Campaign (US- Ongoing)	NASA, FAA,	CONOPs Development for Advanced Air Mobility (UML-4) Operations. Boeing AAM platforms, Partner air vehicle and USSP platform, Airspace operational concepts employed.
FAA Texas Lone Star UAS Program (US – Ongoing)	FAA, Texas Lone Star UAS Test Site, Embry Riddle	Provision of UAS platforms to support FAA's UAS airworthiness rule-making processes and standards for all UAS test-sites.
AAM Operations CONOPs Validation (NZ - Ongoing)	Wisk, CAA NZ, MOT NZ	Air and Ground CNS Technology Assessment to validate AAM airspace integration and CONOPs and advance Regulatory support for Cross Regional AAM operations.
AMU-LED (Air Mobility Urban – Large Experimental Demos (Europe -Ongoing)	SESAR JU Euro-control, EASA	CONOPS Development for UAM operations. Definition of relevant Use Cases to demonstrate key capabilities. Data management in support of live demonstrations. Mission planning

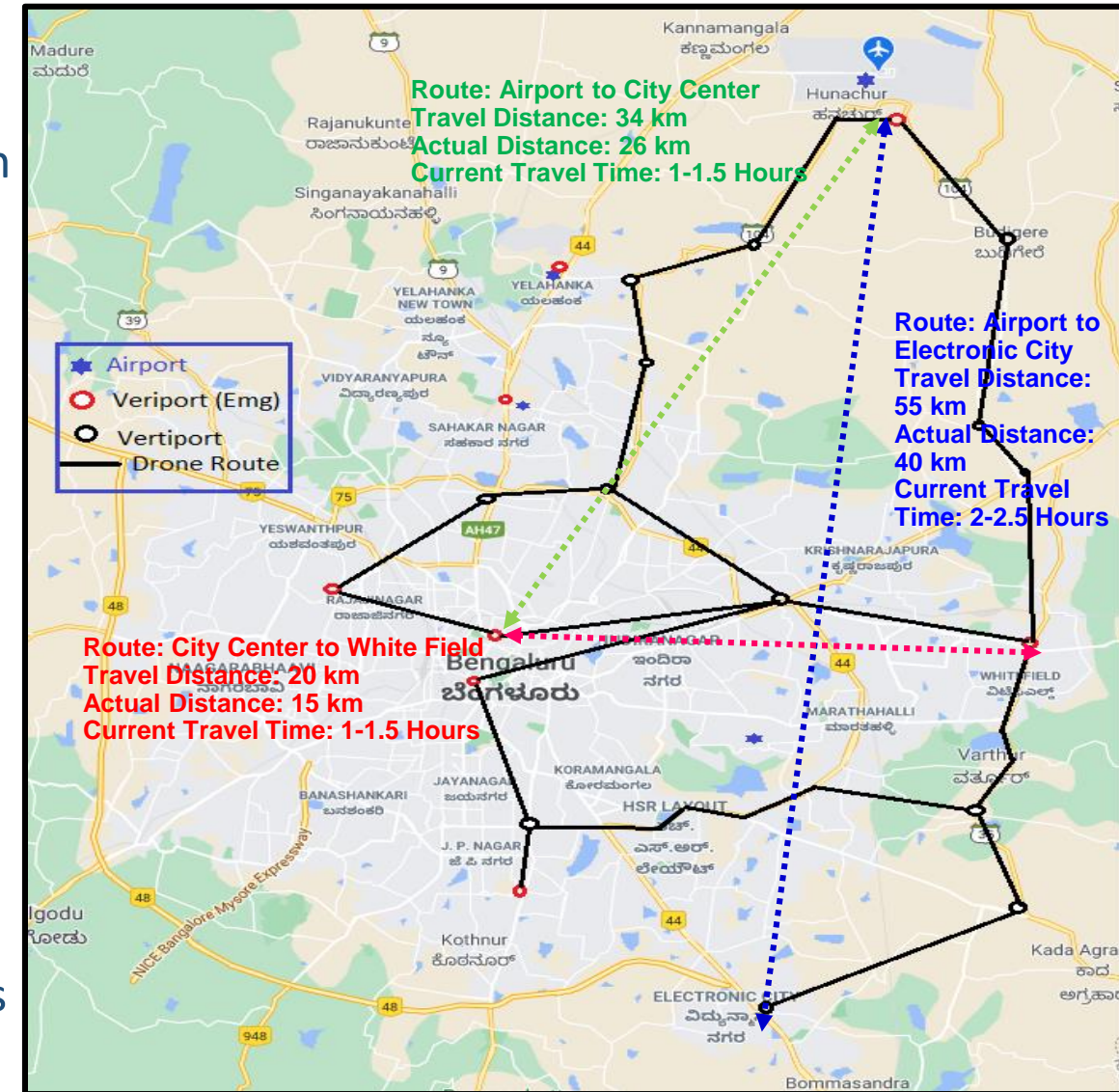
Proposed India UAM Feasibility Study

Objective :

To assess technical feasibility and commercial viability of a Fully Functional, Scalable Urban Air Mobility System that supports multiple use cases in one urban city environment in India. Provide guidelines to scale up to NAS wide application

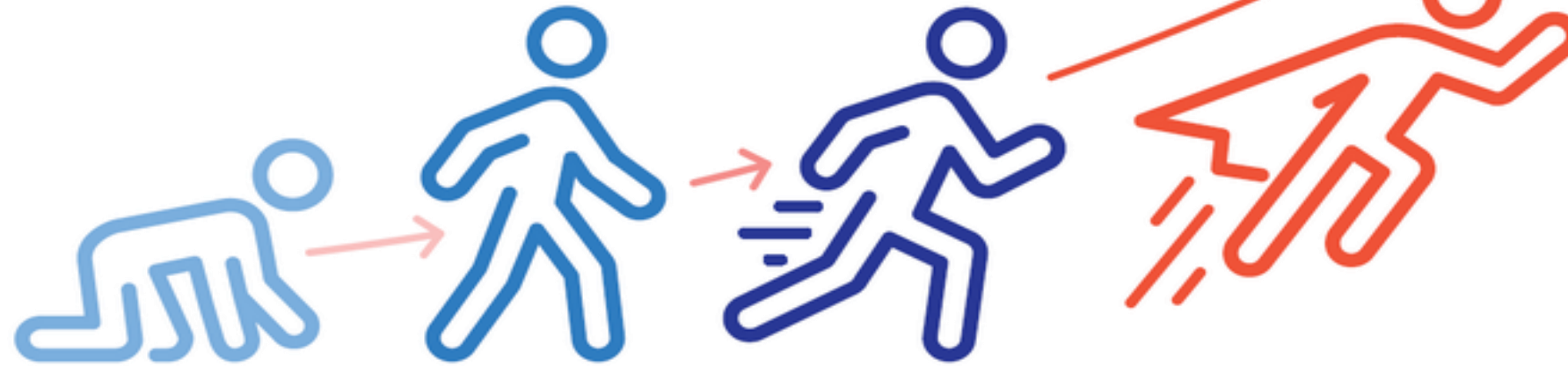
Key Deliverables:

- Airspace Plan with suggested Routes, Vertiports for the chosen city
- Regulatory input on Airspace Segregation, Routes, Procedures etc. for alignment with global standards and initiatives
- Air and Ground Technology Roadmaps, with requisite equipage and infrastructure, to ensure interoperability
- Roadmap to a fully functional UAM system in chosen city
- Identify lessons scalable for replication in other urban areas and for national deployment



Action Expresses Priorities

Employ a Systematic Methodology



CRAWL

- Technology Gap Analysis
- Technology Roadmap
- Regulation
- ConOps
- Missions
- Simulation

WALK

- Initial deployment
- Vertiport Location
- Certification
- Ground-based infrastructure
- Airspace structure

RUN

- Advanced Deployment
- ATM coordination
- Strategic de-confliction
- Dynamic Geo-fencing

FLY

- Full deployment
- ATM integration
- Dynamic Capacity Management

Working Together to Build India's Future of Flight

