

Annexure A.

Project Title	Green, Efficient EV Shuttles & Smart Water ways with 30 no's Floating Bath Ghats for Devotees for their Holy Dip during Simhastha 2028
Team ID	TH11733

1. Overview:

Our proposed Project aims to Enable efficient & speedy **alternate mode of movement towards Smart Mobility** of 54,000 Devotees daily from nearby cities through waterways from four Jetties / Water Metro Terminals located at either side of 196 KM long bank of Shipra River to various decentralized floating ghats in the middle of river where large number of Devotees shall be taking holy dip for Devine experience during Simhastha 2028. These Devotees (Approx. 32.94 Lakhs i.e. 2.35 % of total 1400 lakhs anticipated during 61 days of Simhastha) shall not be entering into Ujjain city resulting into a better crowd management and less burden on roads & local administration. The total estimated infra cost also shall be much lower as compared to augmenting Roadways i.e. 7.91% only in terms of per capita budgeted for devotees. Saving in Diesel through Road Journey, time, Carbon emission and Accidental Loss as compared to Road & IWT make it even more attractive and Best in Class. The Project can be well completed within remaining period of **900 days from now Including EV Passenger Shuttle – the most critical item.**

2. Problem & Solution

Problem Statement	Congested roads, long traffic jam even up to 10 - 12 hours (based on recent Prayag Kumbh) or longer road distances leading to delays and stress to Devotees taking Holy Dip in Shipra River	
Solution & Infra	World's first ever High Speed fully EV Water Buse or Shuttles - Make In India	240 Nos
	Number of Jetties on either side of river bank away from City limits	4 Nos
	Number of Total Floating Bathing Ghats in middle of river	30 Nos

3. Logic & Workflow (Eg.) • Data Collection: • Processing: • Output: • User Side: • Admin Side:

EV Fleet operation from each Terminal proposed @ 8 Round trips per day by 8 EV **Shuttles** (8 each for to & fro movement) for each ghat with 15 minutes frequency with 30 passenger seating for 54,000 Devotees per day.

4. Tech Stack Eg. React.js (Frontend), Node.js + Express (Backend), MongoDB (Database), Python (AI), Google Maps API, and Firebase.

Presently vessels (from Candella Technology AB, Sweden) use an advanced control system that adjusts the hydrofoils' angle of attack 100 times per second in order to provide a smooth ride in waves and in windy conditions. To be further improved during manufacturing as we have 900 days for Simhastha 2028.

5. Future Scope Eg. The prototype can be scaled with advanced AI features, mobile app integration, and multi-user support for wider adoption

Growth in inland waterway operations & promoting cruise tourism shall lead to the creation of jobs in logistics, shipping, Ship & Vessel building and related industries employment prospects, contributing to economic growth and skill development in the sector. MP tourism Department may promote or tie- up such intercity travel through Narmada / Shipra water ways and associated required infrastructure like Floating Jetty, Floating Solar Power & Bathing Ghats soonest to match GOI mission and manufacturing of EV shuttle under make in India attracting FDI too and position waterways as a key pillar of sustainable transport and trade.

- Can be used for Water ambulance & courier services
- VIP river movement to reduce road traffic disturbance
- Intercity River Travel, River crossings, Various Cruise Operations may be other areas to expand.
- Saving of time & comfort to Devotees and also Substantial Saving of fuel by eliminating Road Journey. Earning in Carbon Foot Print be a new avenue.
- Saving in Accidental Loss as compared to Road & IWT shall result in big saving to State and country and therefore a big driver for future escalation.
- Earning in Carbon Foot Print be a new avenue for water ways passenger travel – which is a green initiative