

Format

Contribution for updating National Frequency Allocation Table-2022 (upto1 GHz band)		
1	Name of Individual/Organization etc	ZERO-SUM ITS SOLUTIONS INDIA PRIVATE LIMITED
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3	Mail ID	MALLESH@ZERO-SUM.CO.IN
4	Phone/Mobile no.	+91 99109 93197
5(a)*	Nature of business	INTELLIGENT TRANSPORTATION SYSTEMS
5 (b)	Type of Organisation (Pvt industry, Association, academia, PSU, government departments etc.)	PVT INDUSTRY
6	Frequency band (kHz/MHz)	598-608 MHZ
7*	Applications of service	V2X technologies/Intelligent Transport Systems
8	Minimum & Maximum power with unit	Max: 10mW
9	Purpose	<p>V2X Use case applications that are focused around</p> <ul style="list-style-type: none"> - integration of V2X with road traffic signals for emergency vehicle priority & public transport vehicles - Signal status information to motorists - Road works warning to motorists - Road incident & accident detection warning to motorists - Lane merging warning to motorists - Unsignalized intersection vehicle collision avoidance system warning - Collision avoidance - Driving assistance based on road scenarios - Traffic flow optimization - Automated Driving
10 (a)	Countries in which similar applications are used along with web link (if known)	Japan
10 (b)	Provisions in frequency allocation table along with footnote of the country along with web link (if known)	<p>Frequency Allocation Table-2(27.5MHz-10000MHz) in Japan</p> <p>Note: Japan has currently allocated the 700 MHz band for ITS, however due to unavailability of such band in India, we are proposing for allocation in the 598-608 MHz band</p>

11	Radio Regulations provisions (if known)	
12*	Type of Radiocommunication service	Land Mobile Service
13	Combatable Wireless Standard for the device likely to work in the proposed band (ETSI, 3GPP, IEEE, EC, FCC ,TEC etc or any proprietary standard)	ITU-R M.2084 ARIB STD-T109
14	Benefit for public	<ol style="list-style-type: none"> 1. Social Impact that will save lives through Enhanced Road Safety & Accident Prevention 2. Automated Priority for Emergency Vehicles and Public transport services 3. Incident detection and warning 4. Disaster warning 5. Reduction of traffic congestion that can occur due to road accidents 6. Improved driving behavior and comfort
15	If modification in NFAP-2022 footnote then quote relevant footnote no. of NFAP-22	<p>Section 3D IND 29 reads as “Subject to not constraining the use of the frequency band 5875 to 5 925 MHz by the services to which it has been allocated in the RR, the band may also be considered for V2X technologies/Intelligent Transport Systems”.</p> <p>We request for 598-698 MHz band to also be considered for V2X technologies/Intelligent Transport Systems</p>
16	Remarks	<p>TEC 31218:2023 page 32 (provides reference to our experiments conducted in the 598-608 MHz band)</p> <p>Newslinks:</p> <p>Bus-priority system demo in India</p> <p>V2X demo prioritizes buses in Indian city</p> <p>V2X System Demonstrates 40% Reduction In Travel Time For BRTS</p> <p>Amdavad Municipal Corporation</p> <p>Encouraging results Emergency Vehicle Priority System</p> <p>Videolinks:</p> <p>Ahmedabad to get 'Green Corridor' for quickest passage of ambulances on roadways</p> <p>Special Traffic Signal For Ambulance In Ahmedabad</p>

Note.

5* . Construction service / Manufacturing service/ Shipping Service/Aeronautical Service etc

7*. Specify the operation of service (e.g. Handheld radio/ Vehicle mobile radio/ point to point links/FM/Community Radio/Aeromobile/Short Rang Device etc.

12* Amateur/Fixed/Land mobile/Aeronautical mobile/Maritime Mobile/Aeronautical radio navigation/FM broadcast/Community Radio Service etc

Date and Signature