

This is with kind reference to the Consultation Paper on the Regulatory Framework for Vehicle-to-Everything (V2X) Communication, please find below ASSOCHAM Members suggestions.

ASSOCHAM suggestions

Regulatory Framework for V2X Communication

The consultation paper released by TRAI focuses on key aspects concerning the service authorisation structure, spectrum allocation mechanisms, and associated financial conditions governing Vehicle-to-Everything (V2X) communications in India.

Service Authorisation Framework

India's ongoing expansion in road networks, digital infrastructure, and Intelligent Transport Systems has established a conducive environment for the adoption of V2X technologies. These solutions hold significant potential to improve road safety, reduce traffic congestion, and enhance the efficiency of transport systems. However, these benefits can only be fully achieved through a comprehensive and integrated deployment model covering Vehicle-to-Network (V2N), Vehicle-to-Infrastructure (V2I), Vehicle-to-Vehicle (V2V), and Vehicle-to-Pedestrian (V2P) communication modes, rather than through isolated or partial rollouts.

The availability of extensive nationwide telecom networks provides a strong foundation for deploying V2X services efficiently. Accordingly, introducing a separate authorisation regime exclusively for C-V2X is unnecessary. Instead, expanding the scope of the existing Access Service license framework to include V2X services would enable a more streamlined, scalable, and structured rollout, leveraging current telecom infrastructure.

Further, V2N connectivity must be treated as a core and indispensable element of all V2X deployments in India. By overcoming the range limitations associated with direct communication technologies, V2N enables broader coverage, cloud-enabled intelligence, and enhanced reliability. These capabilities are critical for ensuring safety, security, and effective functioning of V2X solutions. Incorporating V2X services within the Access Service authorisation will also support nationwide interoperability and ensure secure operations through licensed telecom networks.

Technology Standards

From a technological standpoint, LTE-CV2X represents the most established and mature ecosystem at present, supported by commercially proven chipsets, strong integration with automotive manufacturers, and successful deployments globally. To ensure seamless interoperability between onboard units, roadside infrastructure, and

telecom networks, it is important to adopt well-defined and standardized technology frameworks.

Adopting a technology-neutral stance at the initial stage could lead to fragmentation within the device ecosystem and hinder interoperability across different manufacturers. This, in turn, may delay the delivery of safety benefits that V2X technologies are expected to provide. Therefore, LTE-CV2X should be designated as the foundational technology in the initial phase.

Simultaneously, the regulatory framework should outline a clear and time-bound pathway for migration towards NR-V2X. This transition should be aligned with developments in the automotive sector and spectrum availability, enabling advanced applications such as vehicle platooning, remote driving, and cooperative autonomous mobility.

To maintain operational safety and prevent interference, all Roadside Units (RSUs) deployed within the country must undergo mandatory MTCTE certification. These certification standards should be aligned with globally recognized benchmarks such as 3GPP specifications and relevant Intelligent Transport System norms, including ETSI coexistence requirements. This will ensure consistent performance, interoperability, and protection of safety-critical communications.

Security Management

The Access service license/authorisation frameworks are already aligned with the security requirements for C-V2X as recommended in the final report of the Task Force on ITS in the recommendations for Automotive Industry Standards and regulations related to ITS, and rollout of V2X.

The division of this band into separate safety and non-safety segments should not be undertaken, as such segmentation could reduce spectrum efficiency, limit flexibility in technology deployment and restrict the potential for future high-capacity use cases.

Instead, interference issues should be addressed through standards based technical specifications issued by relevant bodies such as TEC and WPC .

Thanking you with best regards

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