

Proposal No. 25
(Proposal details for the R&D scheme of USOF)

Subject: AI enabled use cases applications

Problem Statement	Immersive multimedia communication using XR
Problem Description	<p>The next generation Video Conferencing and e-Learning platforms would need an immersive user experience. In this regard, there is a requirement to enhance the current C-DOT secured unified communication solutions for providing an immersive experience.</p> <p>The requirement is to build a software stack that can be offered as a service over any cloud deployment and provides SDKs to other developers for invoking the services. These SDKs need to perform the tasks of immersive data capturing from various types of sensors (vision and audio), data encoding (generating multimedia streams with a MUX of Video, Audio), data decoding (decode multimedia content with a DEMUX of Video, Audio and Haptics) and immersive data rendering over different end user devices.</p>
Future Expectations	The system will be enhanced to include haptic sensors as input and corresponding output.

Format of Response

Companies / organizations / institutions / individuals developing enabling technologies / modules / components / subsystems / products are required to respond in the format provided in Annexure-A, on the DOT website ([link address provided- refer “format of response”](#))