Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	03 October 2022
Team ID	PNT2022TMID02410
Project Name	Project - Signs with Smart Connectivity For Better Road Safety
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Visibility	Guidelines are addressed to policy makers and private companies that are willing to use innovative solutions to decrease road related fatalities and injuries amidst populations
FR-2	User Reception	The potential users of connected technologies, individual drivers, commercial drivers, pedestrians, cyclists and motorcyclists
FR-3	User Understanding	The task force decided to study first the potential of connected technologies in high and middle income countries
FR-4	User Action	The user takes the actions like high income countries are leaders in development of connected vehicles
FR-5	Testing	Testing through components ,Testing through API and UI
FR-6	End Result	End result through product features, By using the technology

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	In present system the road sign and speed limits are static. But in case of heavy traffic, road accidents and diversions then we cannot change road signs accordingly based on immediate needs for this we can use Signs with Smart Connectivity for Better Road Safety
NFR-2	**Security**	If we use sign with smart connectivity for better road safety we can avoid the traffic and many road accidents
NFR-3	**Reliability**	We need to explore more cost-effective ways to strengthen the infrastructure. Building roads is expensive. While there is no substitution for new and upgraded roads, smart roadway indicators can be added to increase efficiency.
NFR-4	**Performance**	We need to explore more cost-effective ways to strengthen the infrastructure. Building roads is expensive. While there is no substitution for new and upgraded roads, smart roadway indicators can be added to increase efficiency
NFR-5	**Availability**	If the road signs are made digitalized or can be changed dynamically, in case of heavy traffic, road accidents and diversions then we can change road signs accordingly
NFR-6	**Scalability**	The value of implementing this technology should not be underestimated. Smart roadway indicators have the potential to increase cost efficiency, which eases the burden on governments and taxpayers. They facilitate a smoother driving process for both human drivers and autonomous vehicles.