Project Design Phase-I
Proposed Solution Template

Date	01 October 2022
Team ID	PNT2022TMID10970
Project Name	Project - Signs with Smart Connectivity for Better Road Safety
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	• To replace the static signboards, smart connected sign boards are used. • These smart connected sign boards get the speed limitations from a web app using weather API and update automatically. • Based on the weather changes the speed may increase or decrease. • Based on the traffic and fatal situations the diversion signs are displayed. • Guide(Schools), Warning and Service(Hospitals, Restaurant) signs are also displayed accordingly. • Different modes of operations can be selected with the help of buttons.

2.	Idea / Solution description	• Road safety is crucial and the Government intends to leverage technology for augmenting the safety of citizens. The technology enables you to control traffic, catch the lawbreakers, and provide road safety. • IOT based rain sensor • I0T based humidity sensor • IOT based wind sensor • IOT device • Weather sensor by IOT • Accelerometer sensor
3.	Novelty / Uniqueness	• Collabarotion work of IOT platform and sensors • Prior information about weather can be intimated • By using IOT based sensor and by following the road rules Road safety can be increased efficiently
4.	Social Impact / Customer Satisfaction	• It serves of value to road users as they are able to receive the latest updates on the road and traffic conditions, especially that of vehicle breakdowns and traffic congestion.
5.	Business Model (Revenue Model)	• A clearly publicized campaign that promises that the sole objective of the automated enforcement operation is road safety improvement, and that all revenue above the expenses incurred by private parties will be reinvested only in road safety related projects.
6.	Scalability of the Solution	• This work illustrates the viability of an economic road safety monitoring and assessment solution through exploiting advances in the Internet of Tings

		(IoT) within the context of smart cities. • The introduced architecture facilitates robust and dynamic road safety assessment that complements the Safe System approach motivated by the World which has been increasingly adopted worldwide. An application of the dynamic assessment framework for route planning is also demonstrated. • Future work involves exploring further applications, especially in the context of raising driver awareness of the road safety conditions during their trips.