The Business needs for Adaptive Curies Control (V2V)

ACC stands for "Adaptive Cruise Control." It is an advanced driver assistance system (ADAS) technology commonly found in modern vehicles That enhances the traditional cruise control feature by automatically adjusting a vehicle's speed to maintain a safe following distance from the vehicle ahead. This is achieved through using various sensors, which continuously monitor the distance and relative speed between the driver's vehicle and the vehicle in front.

The primary benefits of ACC:

1- improved convenience.

2- reduced driver fatigue.

3- enhanced safety, especially on highway and heavy traffic conditions.

It is considered a fundamental feature of autonomous driving technology and is often a key component of more advanced driver assistance systems and self-driving vehicles.

Traditional ACC relies on sensors to monitor the distance to the vehicle ahead, but it may not have complete information about other vehicles further up in the traffic flow.

------------------------------------------ V2V communication can bridge this gap ------------------------------------------

In our project Vehicle-to-Vehicle (V2V) communication plays a pivotal role in enhancing Adaptive Cruise Control (ACC) by enabling vehicles to share real-time information with each other.  
Moreover, V2V communication extends ACC's situational awareness beyond the driver's line of sight.

It can provide information about potential hazards or road conditions further up the road, allowing ACC systems to anticipate and respond to issues that might not be immediately visible.

Overall, V2V communication adds an extra layer of intelligence and coordination to ACC, making it more adaptive, responsive, and capable of enhancing safety efficiency on the road.

