

Leveraging Standardization for Vehicular Multimedia Services and Infotainment Applications

Jun Li
Deputy Secretary General of TIAA

Telematics Industry Application Alliance, China

TIAA Introduction

TIAA is an industrial and marketing organization with a global perspective, which has 600 members in areas of vehicle manufacturing, automotive electronics, vehicular software, communication, internet and information service from 12 countries and regions. TIAA has been undertaking over 40 national projects like Chinese proposals of WRC-19 ITU-R Agenda Item 1.12 (Global ITS Frequency Distribution), IoV Cyber security issues in WTO/TBT, Intelligent Vehicle and Intelligent Transportation Application Demonstration Based on Mobile Broadband Internet, Active (Passive) Safety Solutions of Commercial Vehicle, Field Trial of NGB-W/S (Next Generation Broadcasting-Wireless/ Satellite) in china. 54 TIAA standards have been released, or initiated or researching, which have been used in 62 auto brands in millions of vehicles. TIAA is one of pilot units of Chinese association standard.





Background

- With the development of intelligence and networking, the vehicle will change from a travel tool to a new generation of infotainment space and smart living platform. The vehicular multimedia system will become "the 4th screen" following TV, PCs and mobile phones. As ADAS (Advanced Driver Assistance System) and automatic driving technology is evolving, the vehicle will be "the 3rd living and infotainment space" besides family and office.
- The new four modernizations of vehicle industry



Electric power



Intelligentize



Connection



Sharing



Challenges

- Intelligentize Infotainment System
- I. Customer don't want pay money for vehicle data.
- II. The existing vehicle APP doesn't conform to the using habits of the scene in the vehicle.
- III. Infotainment system is not friendly.
- Connection
- I. The mobile communication network (4G) covers 50-70% of the land area.
- II. The vehicle's Scope of activity is 500-1000 kilometers per day.
- III. How does the Vehicle-Cloud Network work without mobile communication network



We Need

- low cost and wide coverage Infra-Structure Network for vehicular information data and stream convey
 - For example: the Satellite and Terrestrial Mobile Network converged infotainment Delivery Platform
- Infotainment system based on Smart Media & Intelligent Engine
- Infotainment Management system based on User ID
- Multi-Screen content relay and sharing between Multi-Networks
- Intelligent voice interaction and control
- Interconnection between vehicular terminal and smart phone
- High precision navigation

Leveraging Standardization for Vehicular Multimedia Services and Infotainment Applications



Standardization Suggestion

- Infra-Structure Network Standard
 It focus on Infra-Structure network architecture supporting vehicular multimedia and vehicular infotainment transmission.
- Infotainment Terminal Standard
 It is responsible for Infotainment Terminal Research, such as interface protocol between hardwares, convergence protocol, security mechanism and so on.
- Infotainment Application Standard
 It studies the upgraded process and method of Infotainment Application to make sure vehicle driving safety.
- Valued-added Services Standard
 It researches in valued-added services field, such as intelligent voice interaction, interconnection between vehicular terminal and smart phone, high precision navigation and so on.



Thank you for your attention

harry.li@gvmedia.com.cn +86 18811059966

