Vehicle Network Application based on BeiDou/GPS

International Committee on Global Navigation Satellite Systems

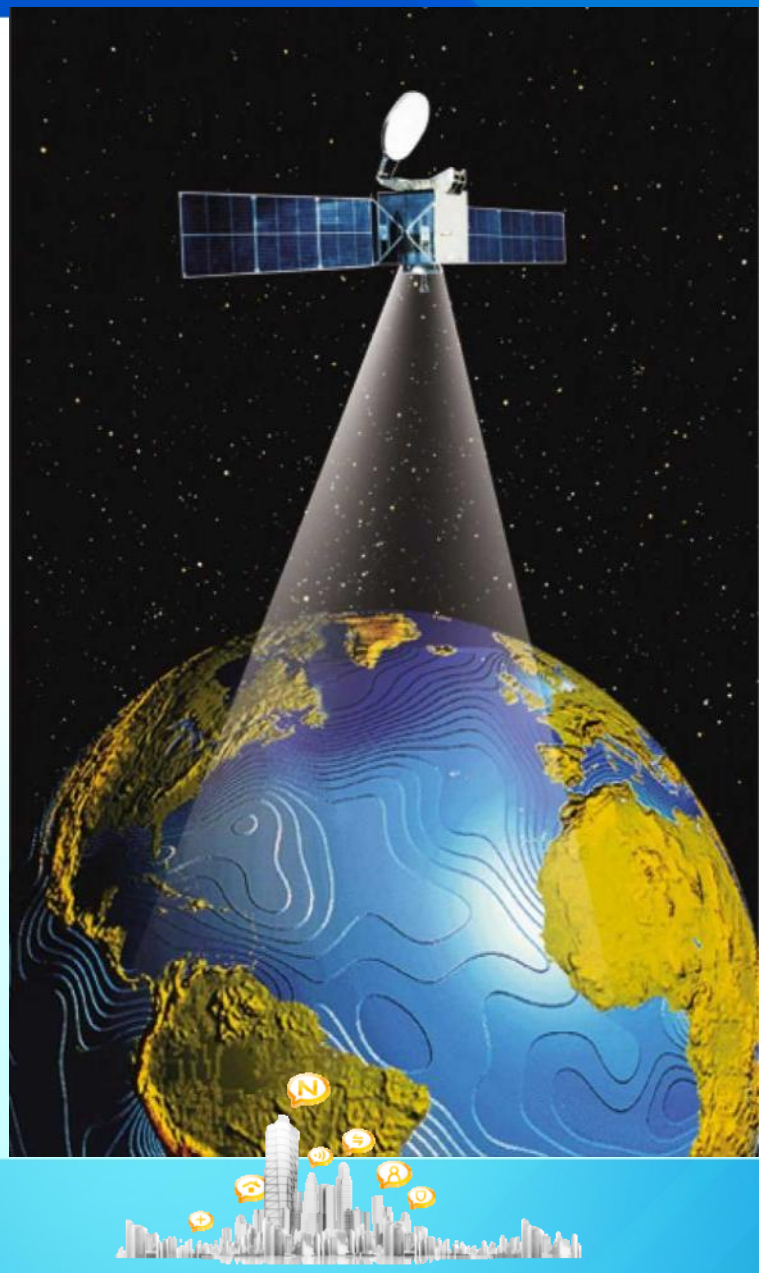
NavInfo Co., Ltd.

President Dr. Sun Yuguo

Nov. 2012

Content

- The current statues of vehicle network industry
- Cloud platform of vehicle network service
- Conclusion



Vehicle Network Applications

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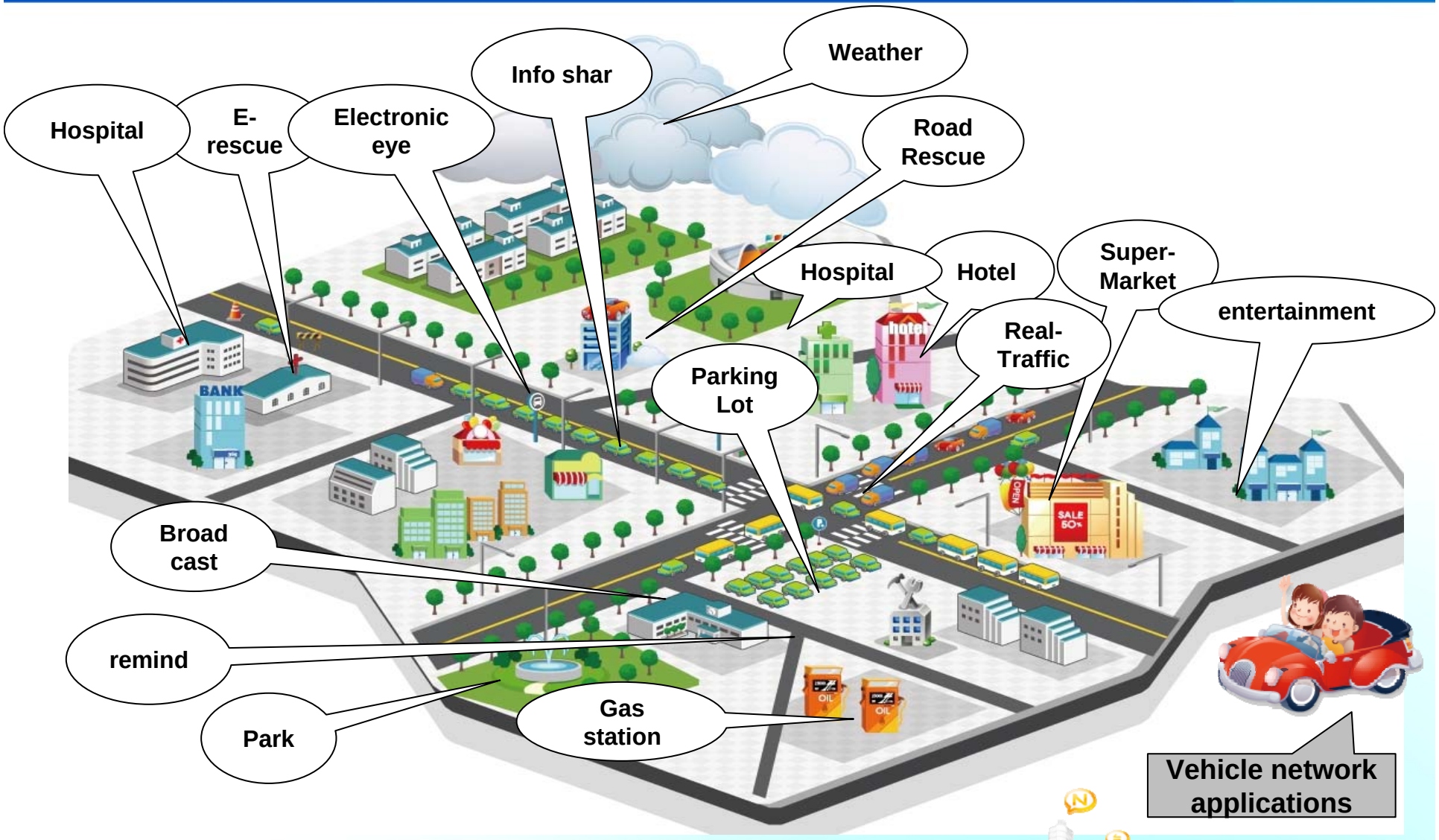

Global Market Situation of Vehicle Network

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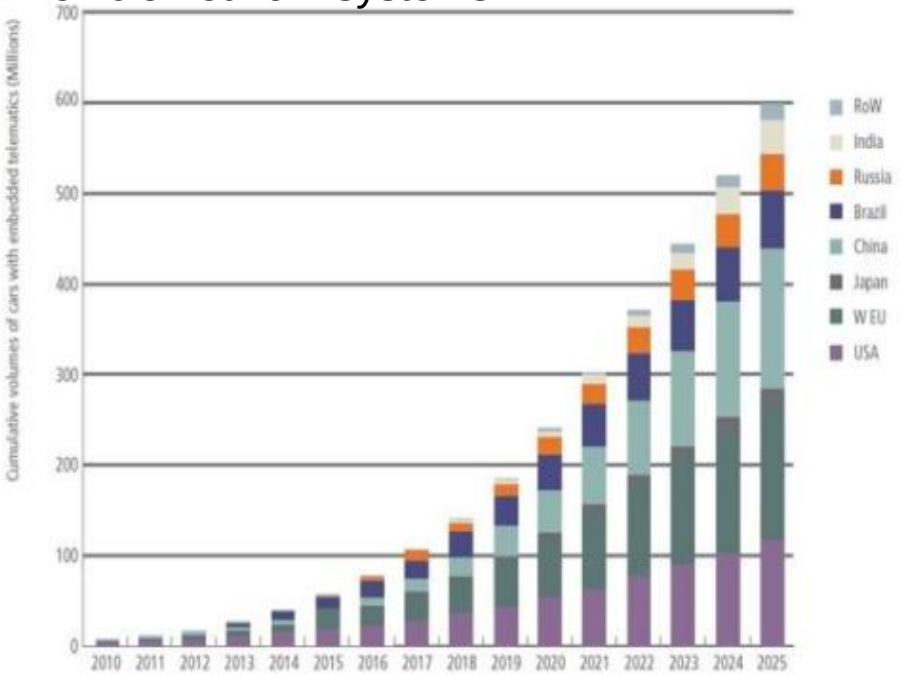
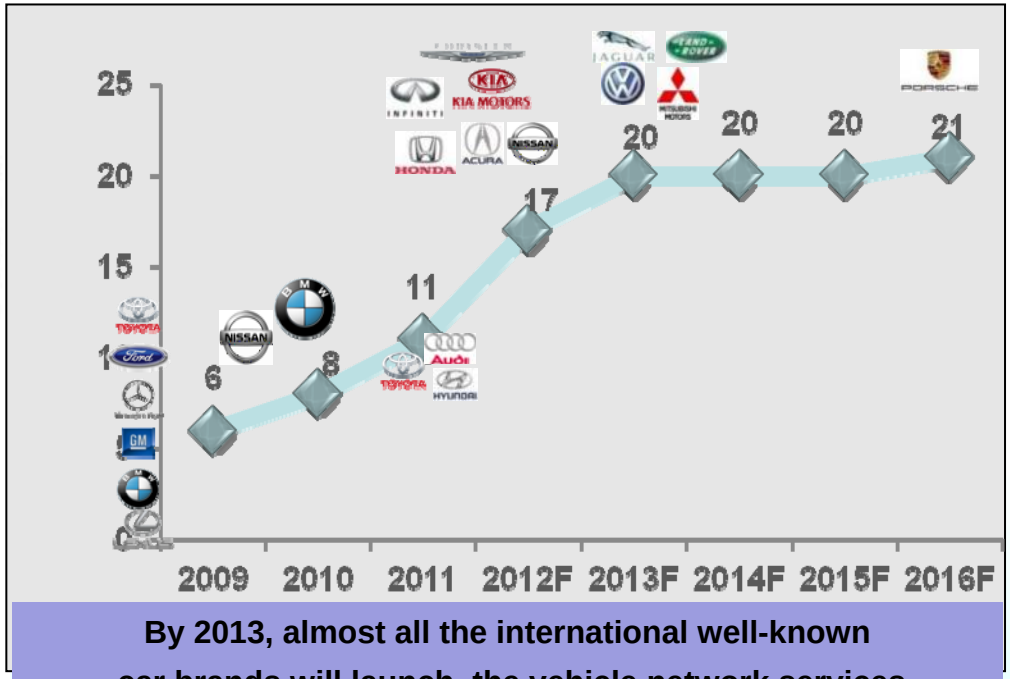
Cumulative increase in the number of the car with vehicle network systems



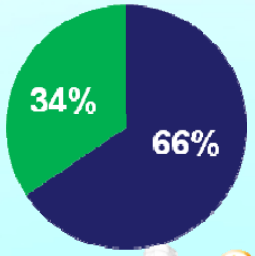
The rapid growth of the global vehicle network solutions



By 2013, almost all the international well-known car brands will launch the vehicle network services

- Till 2011 the applications market scale of vehicle network reached **423.13 Billion**
- 2012,The loading rate of vehicle network system in the developed countries is more than **25%**
- Till 2025, there is expected to have more than **100 Million** vehicles equipped vehicle network system

Source: MIIT Car Information Alliance



2/3 of the car in North America in 2012 to provide vehicle network services

Source: Internal Analysis

The market of China vehicle network grows rapidly

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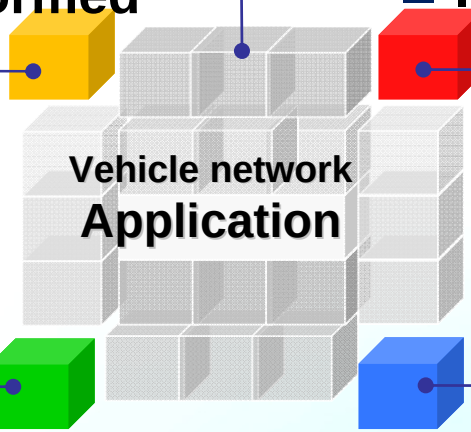
GM Ford VOLVO CHERY 长城汽车 Great Wall …

More and more car makers and system venders begin the development or application of vehicle network services

- **Industry scale Initially formed**
- **Industrial Alliances are formed**

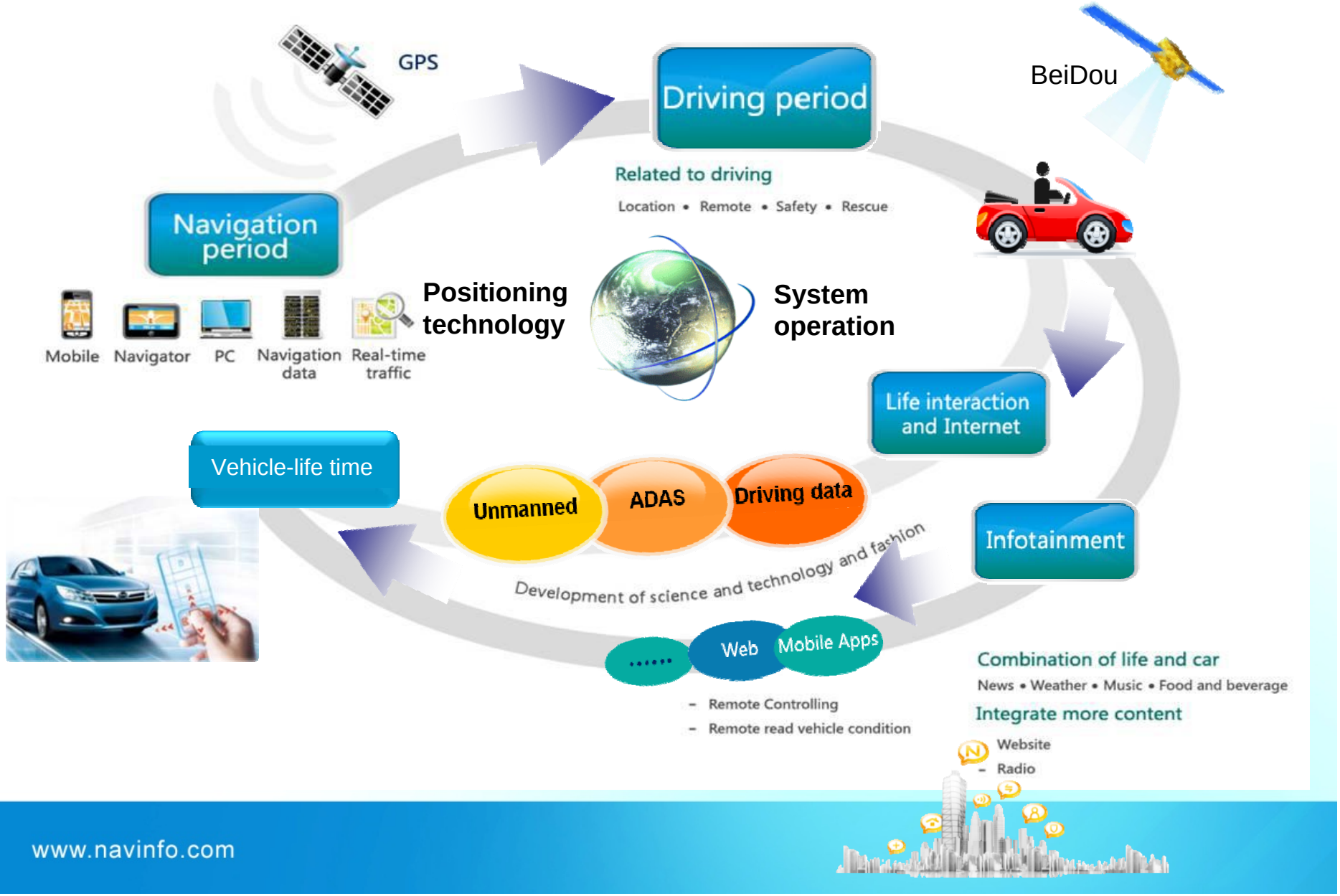


- **Widely market demand**
- **Industry standard and business model are in investigation**

- In 2011, China vehicle network market scale reached **6.02 Billion** RMB, the year-on-year growth rate is **31.7%**, and took the **1.4%** share of the international market
- In 2012, it is expected that about **3%** equipped with vehicle network service
- Expected in 2015, nearly **10%** of the cars will be installed with vehicle network services

Source: MIIT Car Information Alliance

Higher requests on positioning technology



BeiDou industrialization drives the development

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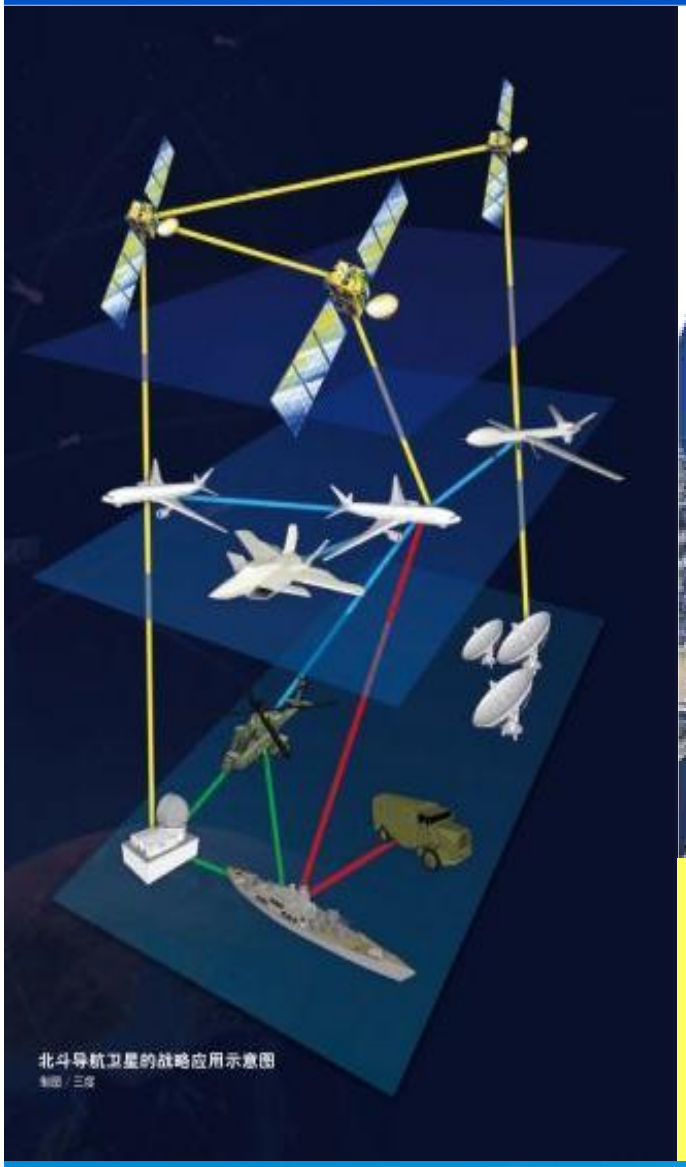

BeiDou and GPS, the dual system will make the positioning more accurate, the system running more stable; will promote the development and wider use of vehicle network industry.

Content

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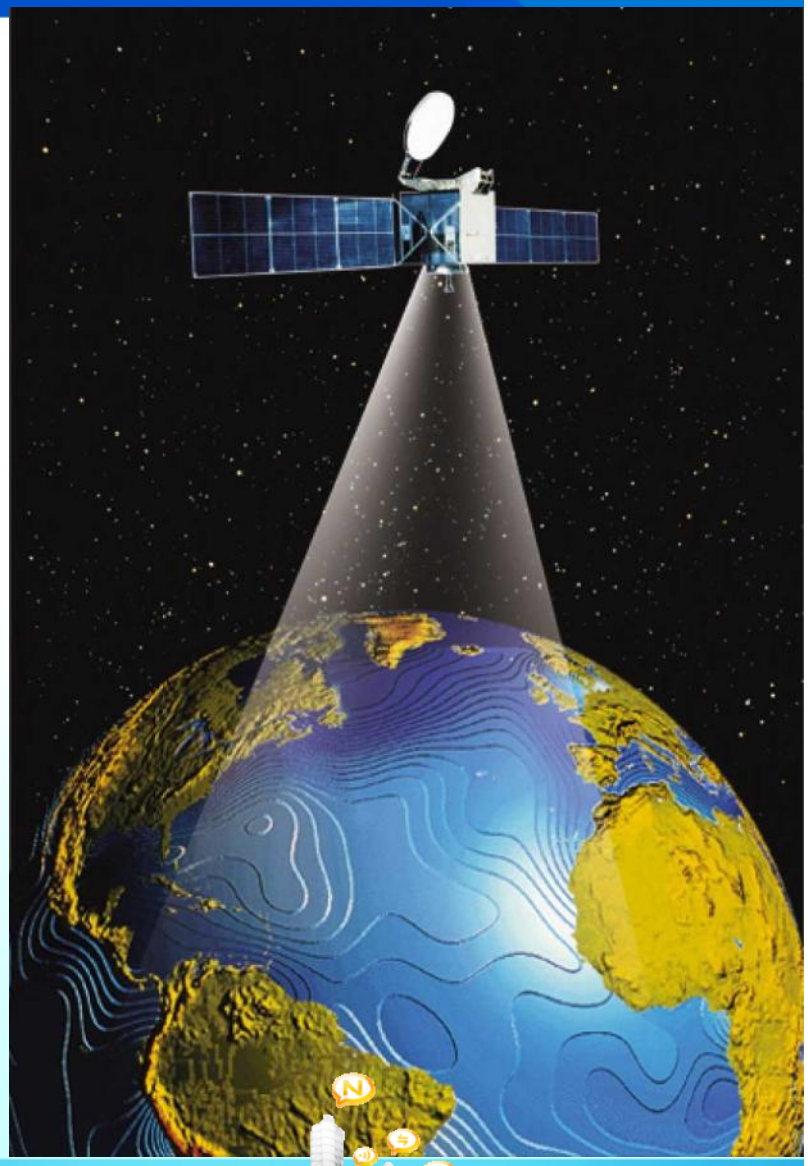
- The current statues of vehicle network industry
- **Cloud platform of vehicle network service**
- Conclusion



Cloud platform of vehicle network service

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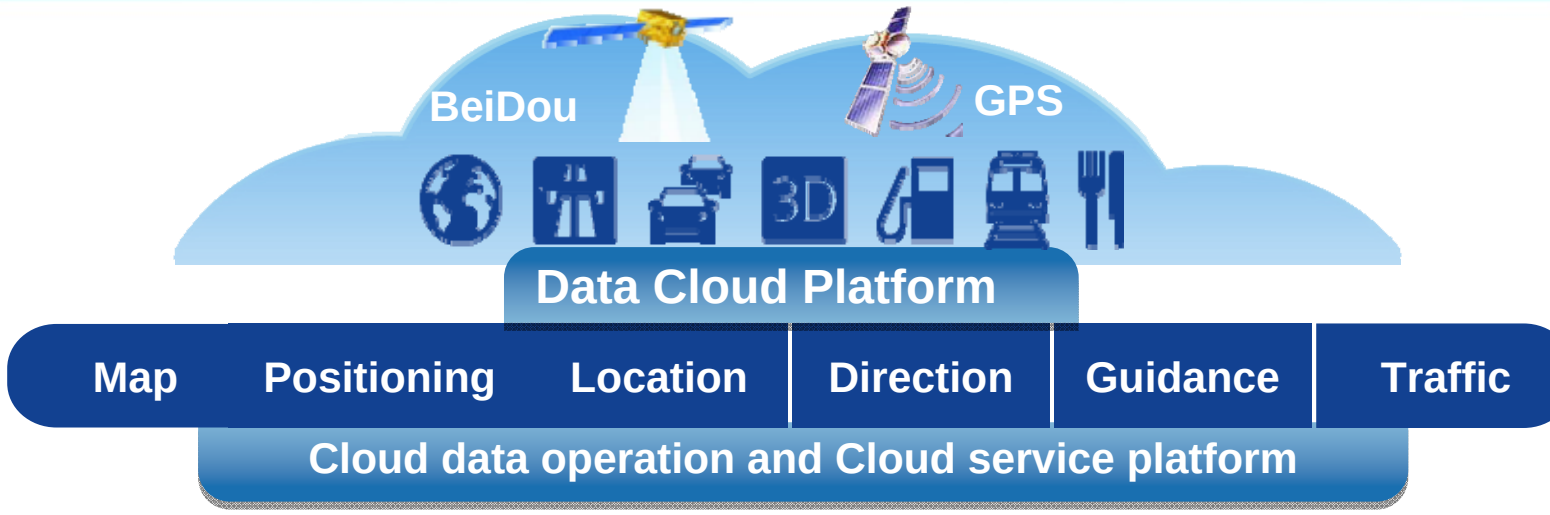

The open and modular Cloud platform of vehicle network service

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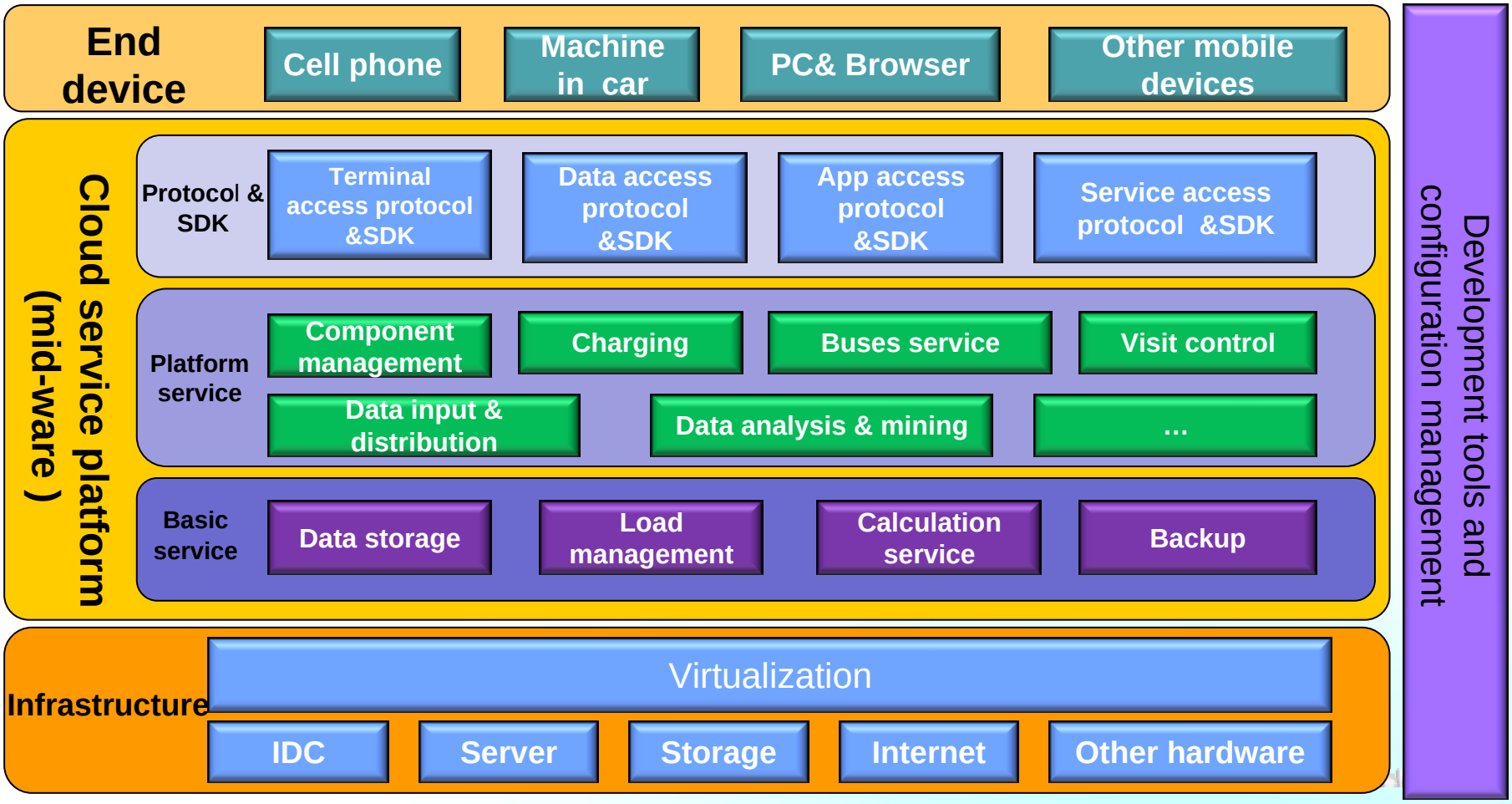
(SSE stock code : 002405)

Cloud structure of vehicle network service



- Infrastructure will be constructed in unit form
- Infrastructure unit will be constructed in accordance with the regions (Beijing, Shanghai, Guangzhou, Chengdu) gradually.

Key technology of the Cloud platform

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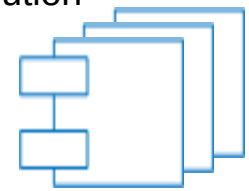
The open three-layer service protocol standard

- Data access and distribution based on location
- Content, such as news, access and distribution
- Service access and distribution
- APP access and distribution



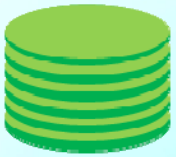
Open and modular service Cloud platform

Cloud mid-ware

- Cloud services middleware achieves high-quality Cloud service system with high concurrency, high access and distribution

Open data access and distribution

- Multi-source data access and
- technology integration system
- Evaluation system of data credibility
- Evaluation system of service Quality



Open public component library

- Basic services component library
- Business services component library
- Third-party distribution components library

Global cooperation

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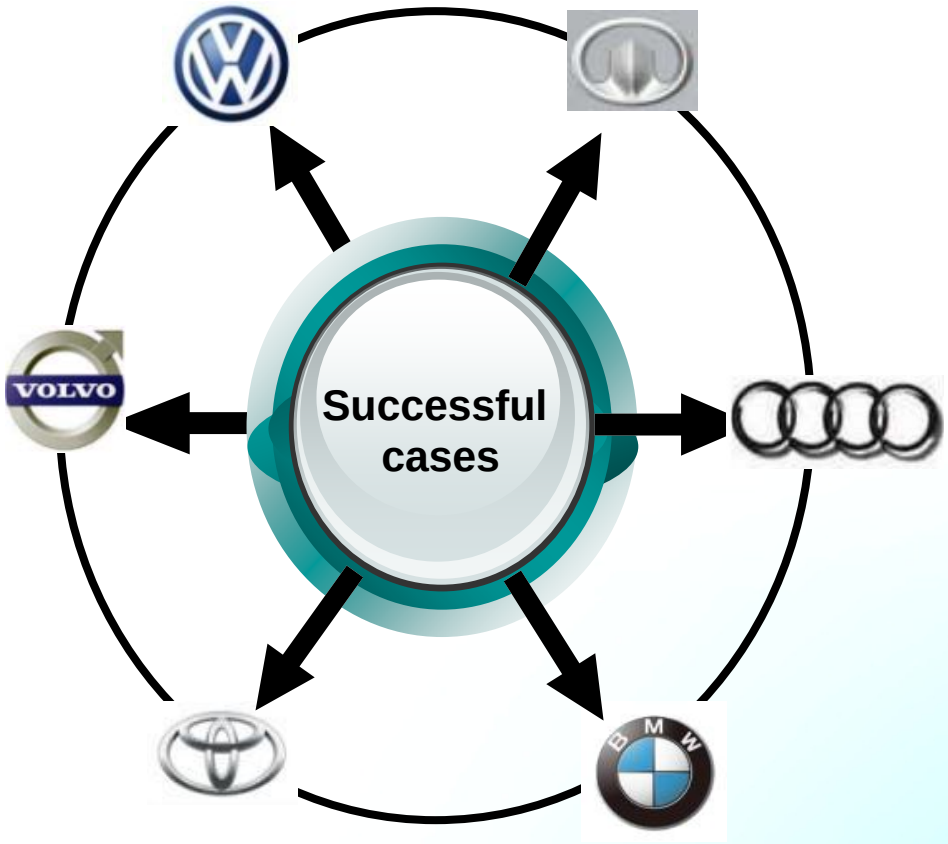
Key cases



Tier1 role:：

1)Development of full set of T service
- Backend, Mobile App, Web Portal
- Content integration and service delivery
- Call Center Client Website

2) System integration, operation and maintenance

3) Co-operation

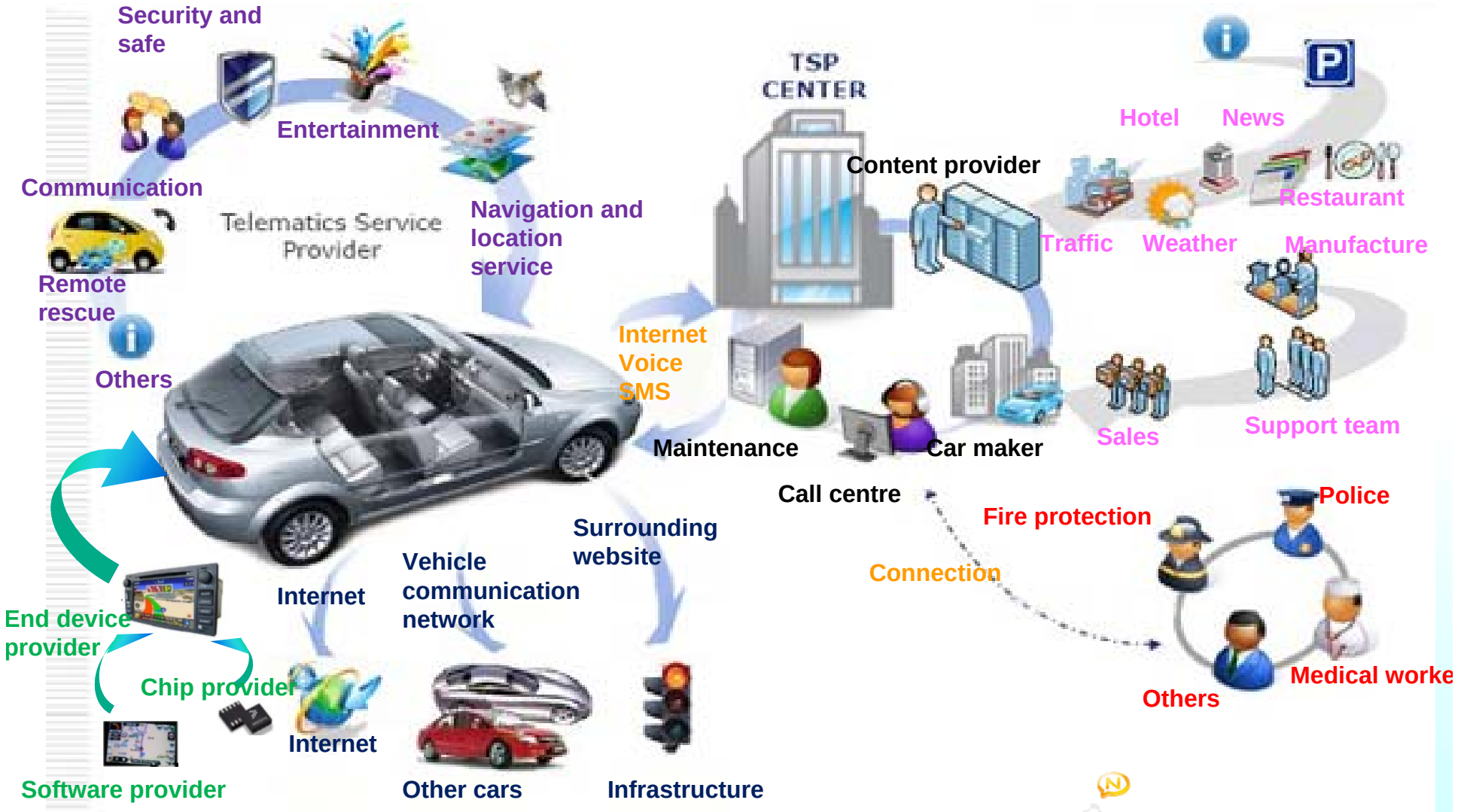
Tier2 role:：

Provide GIS service and some content service

- •POI online searching
- •Online map service
- •Geocoding and reserve geocoding service
- •SendToCar service

...

Close cooperation among different parties



Conclusion…

1. Vehicle network market is growing rapidly in China and has huge potential;

2. BeiDou and GPS, the dual system will make positioning more accurate and system more stable; and will promote the development and wider use of vehicle network industry;

3. Hope to strengthen international cooperation and industrial chain based on the Cloud platform of vehicle network and to jointly develop the China market

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Thank you!