

ITS Standardization

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Chairman: ISO TC204

TRANSCORE INC.



ITS is getting POPULAR

- ▶ Clear now that it's coming
- ▶ Clearly a customer demand
- ▶ Clearly a business opportunity
- ▶ So....everybody wants in

ITS Standardization is 'Mature'

- ▶ ITS has been 'coming soon' for ~20 years
 - ITS standards work >>20 years
- ▶ New standards
 - To fill the gaps and support new thinking
- ▶ Updates/Revisions/Replacements
 - To keep earlier work current
- ▶ More activity now than ever
 - More organizations, more people

ITS Standards Developing Organizations



TC204: ITS
TC22: Road
Vehicles



ITS Standards
Collaboration



TC ITS



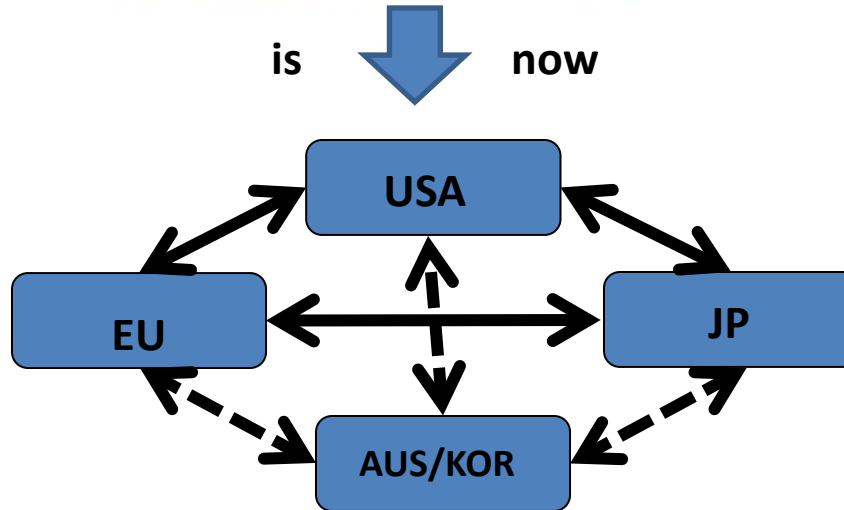
Around the World.....

- ▶ SDOs (Standards Development Organizations)
 - International
 - Regional
 - National
- ▶ Local Regulation
- ▶ Harmonization Challenge

Harmonization Task Group



is now



ISO – The ‘I’ Means International

- Technical Committee (TC)204: ITS
 - One of largest & most active TCs
 - 26 ‘P’ and 27 ‘O’ members
 - 530 registered experts
 - Hundreds of ITS standards complete
 - 77 active WIs and 51 PWIs
 - Many active liaisons and SDO alliances
- Responsible for ‘the overall system & infrastructure aspects of ITS’

TC204 General Info

- Deals with both “technologies and applications”. They are inseparable in the ITS world. Each must be understood to effectively address the other.
- Developing a complete ITS program. As standards evolve, it is quite common for elements of one standard to force changes into other standards. This coordination is critical to creation of a successful ITS standards package.
- TC204 has been doing this for >20 years!

ISO TC204 Structure

► 12 Active Working Groups:

- **WG1: Architecture**
 - **WG3: ITS Database Technology**
 - **WG4: AVI/AEI (Automated Vehicle/Equipment ID)**
 - **WG5: EFC/ETC (Electronic Fee & Toll Collection)**
 - **WG7: Fleet, Commercial & Freight Management**
 - **WG8: Public Transport & Emergency Services**
 - **WG9: Integrated Transport Info, Mgmt & Control**
 - **WG10: Traveler Information Systems**
 - **WG14: Veh/Roadway Warning & Control Systems**
 - **WG16: Wide Area Communication Systems**
 - **WG17: Nomadic Devices in ITS Systems**
 - **WG18: Cooperative ITS**
- + Ad-hoc groups: Spectrum, iMobility, Big Data**

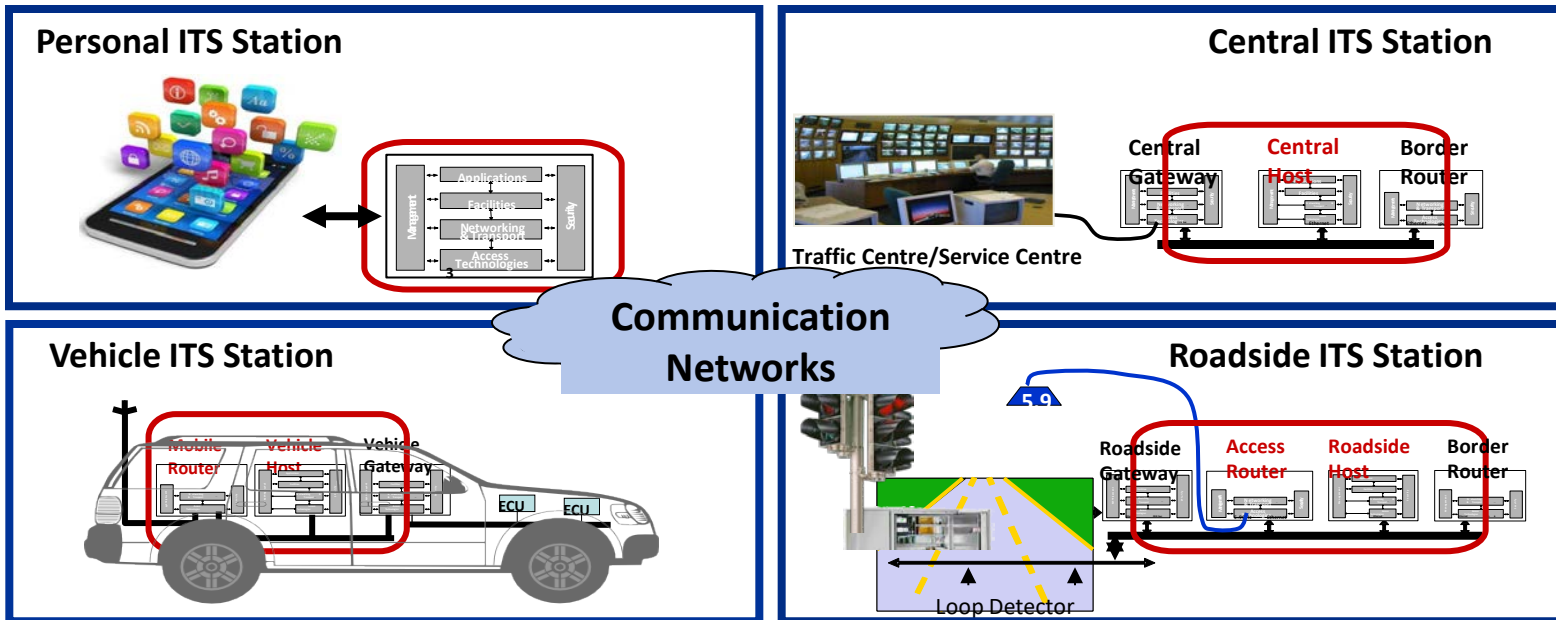
Current TC204 Activities

- ▶ In addition to progressing current WIs....
 - 77 Active + 51 PWIs
- ▶ Building collaboration with TC22 as well as vehicle OEMs individually, Tier 1s, and assorted suppliers/supporters
 - Active safety initiatives
 - Vehicle gateway
 - ExVe initiative
- ▶ Planning for the future
 - Highly automated & autonomous vehicles

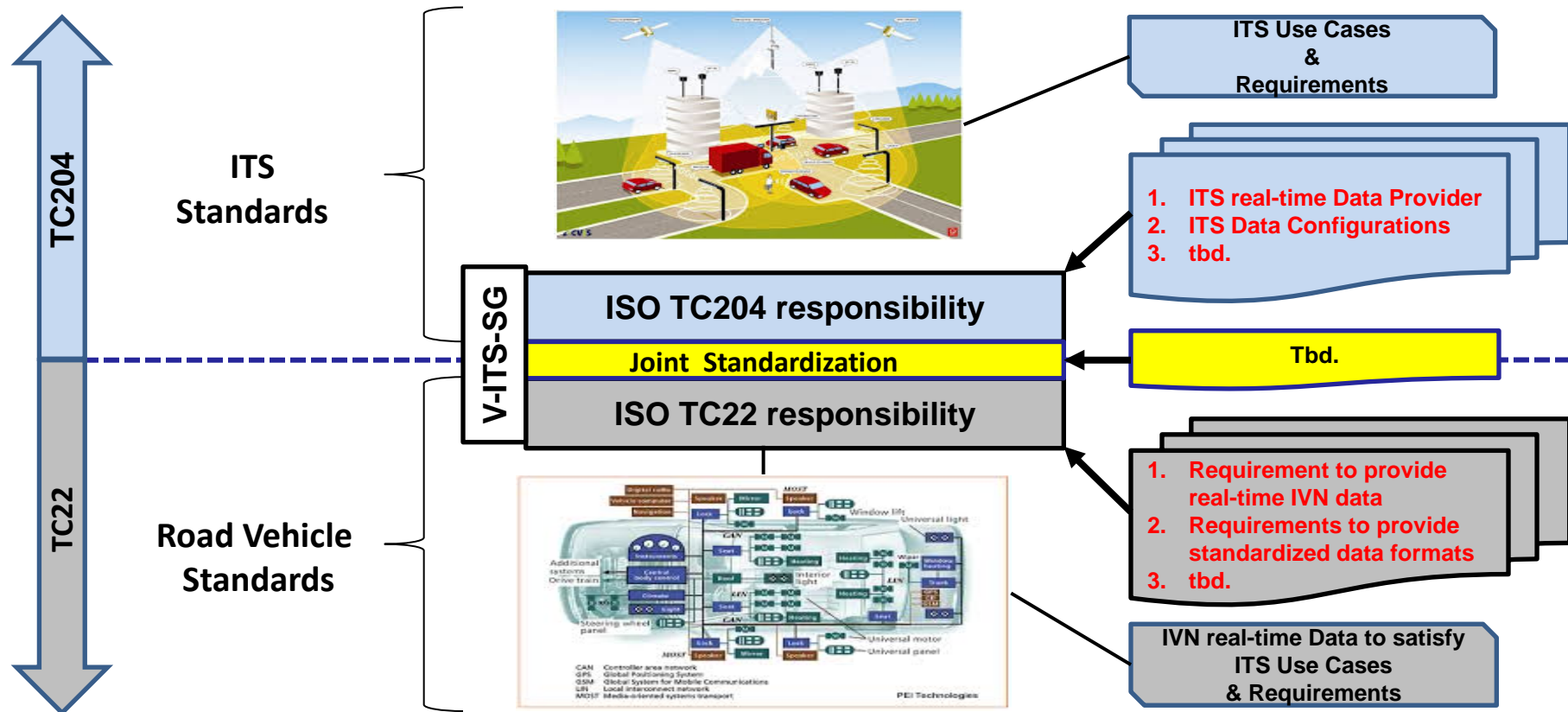
ITS Stakeholders

- Vehicle manufacturers / auto OEMs
- Tier 1 suppliers
- Aftermarket suppliers
- Roadside equipment manufacturers
- Industrial and multi-stakeholder organizations active in the ITS domain (Car2Car, TISA, eSafety forum, ERTICO, ...)
- Regulatory authorities / DoTs
- Application developers
- Etc.

Cooperative-ITS – Communication Nodes

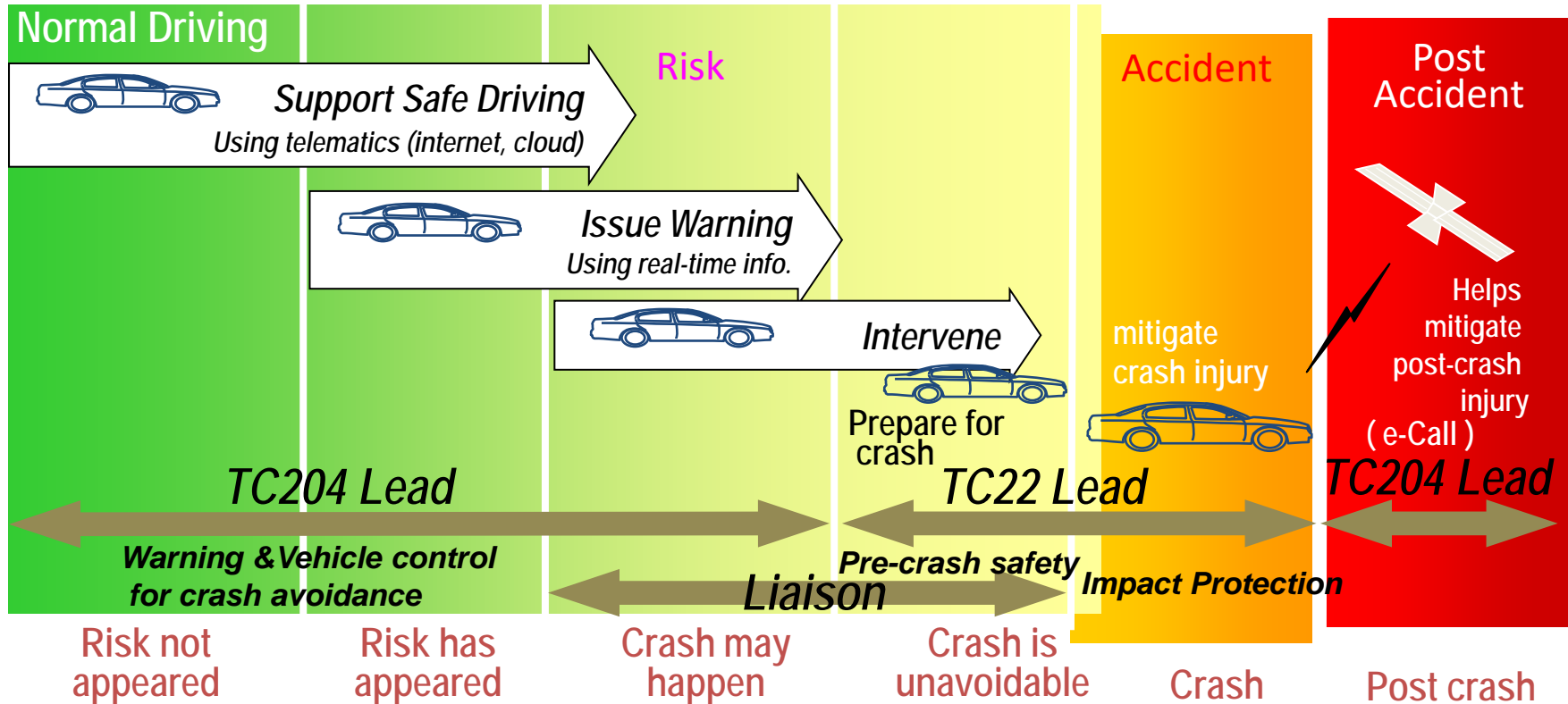


Vehicle ITS Gateway – Standardization



Potential Collaboration on ADAS

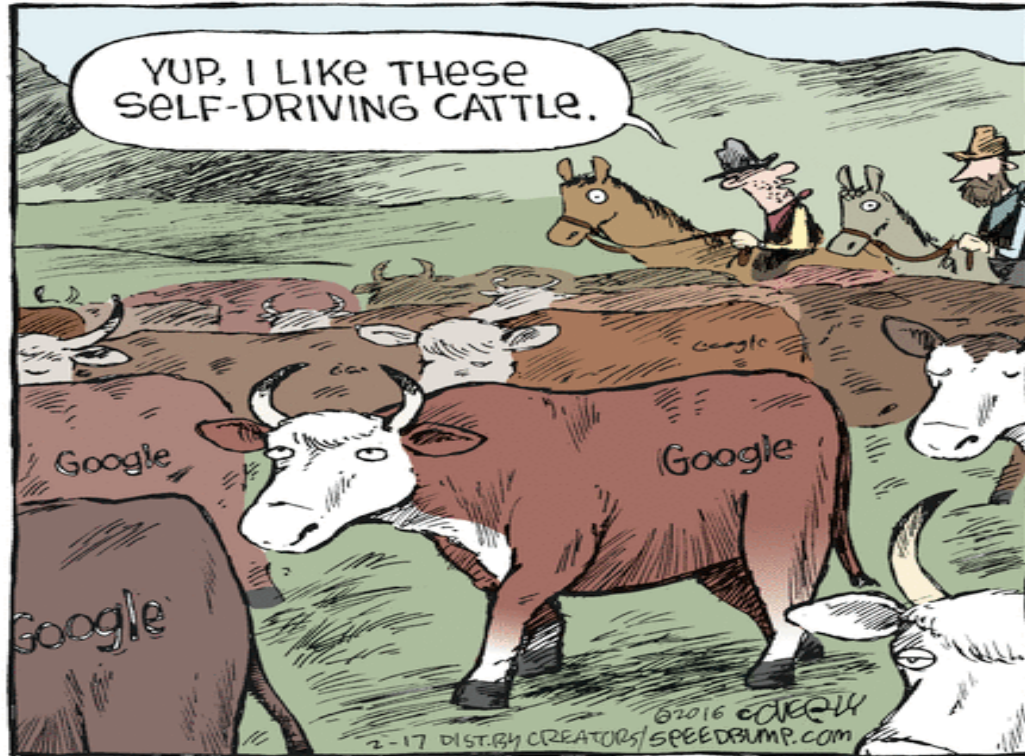
Time Chart



TC22 – TC204 MoU Summary

- ▶ We will:
- ▶ Use existing standards where applicable
- ▶ Not duplicate work – applies to both existing and new standards
- ▶ Inform each other of planned new work – before it gets rigidly set into the ISO system
- ▶ Place new work where the most relevant competence resides
- ▶ Handle disagreements at the lowest possible level
 - But elevate if required

Texas ITS



Contact Information

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