



COORDINATION DAY FOR COOPERATIVE SYSTEMS FOTS

Session 1 – Interoperability of Cooperative
Systems and Feedback to Standards

EU – US Convergence – SCORE@F Approach

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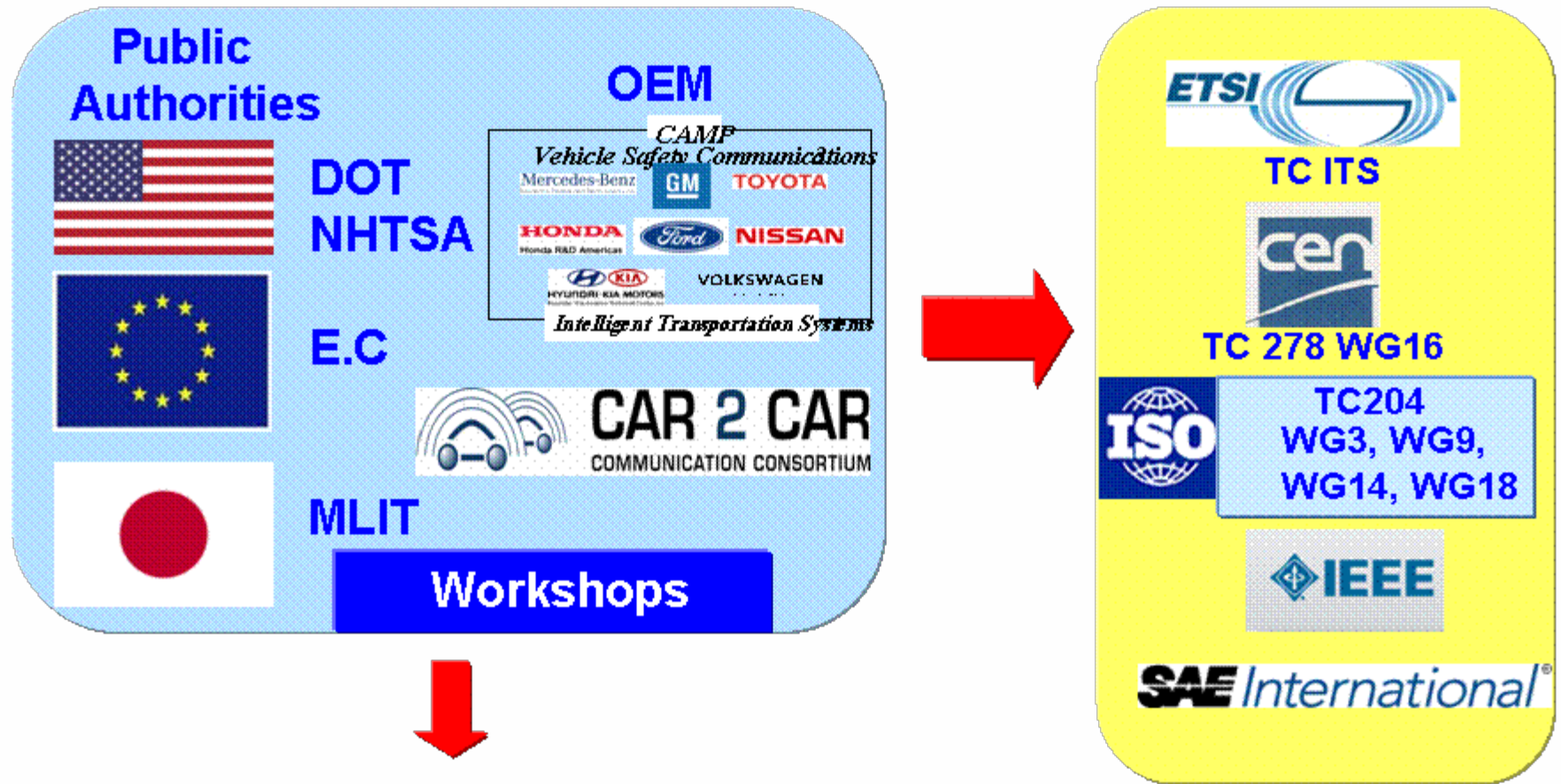
FOT-Net is a support action co-funded by the European Commission to network FOT activities at European, national and international level.

EU – US CONVERGENCE

NEED OF EU – US CONVERGENCE

- Cooperation Organization
- Hardware (chipset)
- Congestion control
- Applications
- Security
- Tests and Certification
- Summary

COOPERATION ORGANIZATION

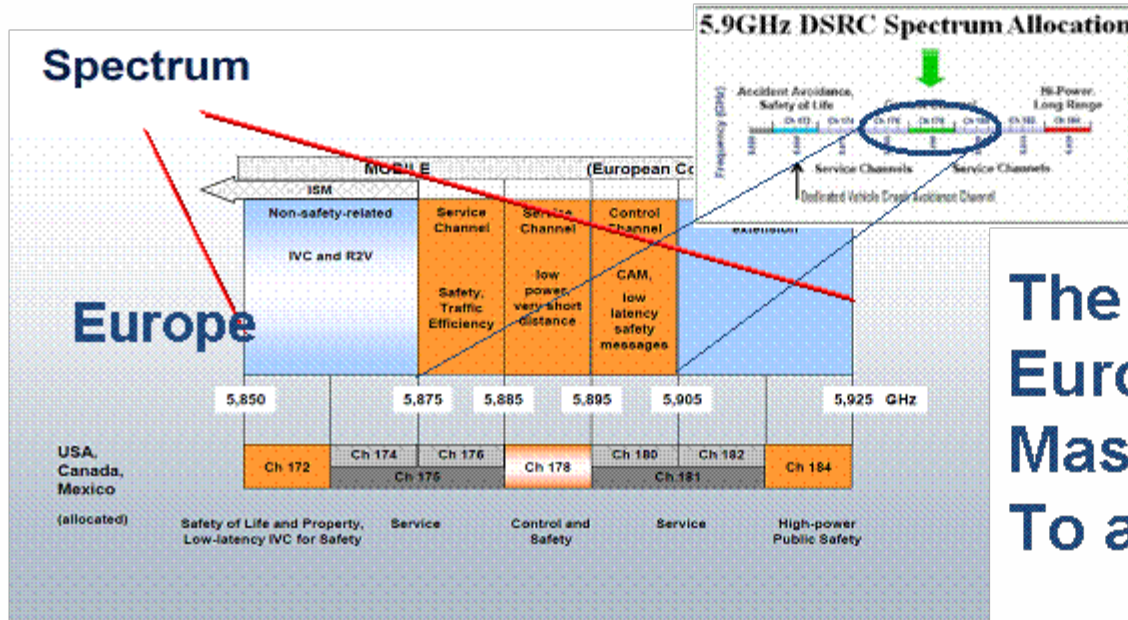


EU - US – Japan Task Force

HARDWARE CHIPSET

W.W Mass Market
Enabler

G5 / WAVE Modem



The constraining European Spectrum Mask does not allow us To align to USA.

Security chipset

Under discussion. Need to be consolidated.



CONGESTION CONTROL

■ AGREEMENT

- ∅ Action on the TPC

- ∅ Action on the message time interval

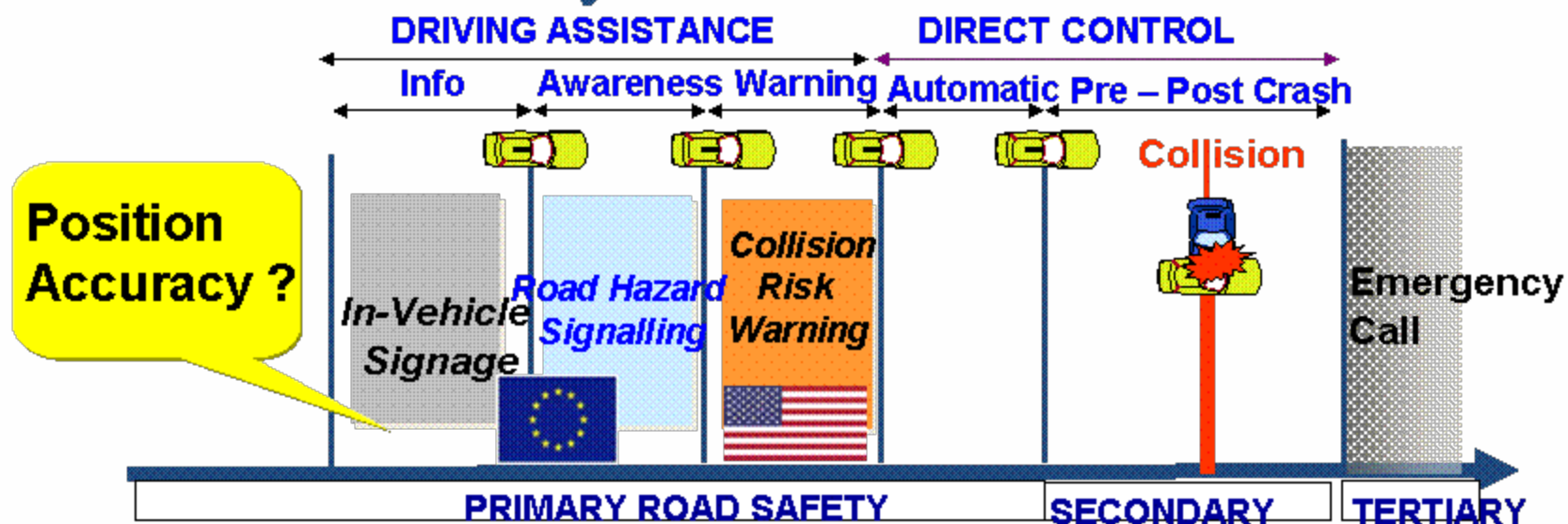
■ Europe: DCC APPROACH

- ∅ Cross layer issue

- ∅ Must take into account critical safety application requirements.

APPLICATIONS

Road Safety



Basic Safety Messages

Harmonization between CAM and BSM for highly critical data elements.

SECURITY

■ Based on IEEE 1609-2

- ∅ Same communication protocol for certificate updating
- ∅ Same signature / authentication algorithm
- ∅ But security « on demand » in USA (being studied in Europe).

■ Security hardware chipset



- ∅ Needed when receiving thousands safety messages
- ∅ Respect of maximum latency time (a few tens ms) in case of critical road safety situations.
- ∅ But may be solved with the « on demand » approach?

TESTS AND CERTIFICATION

■ Product Conformance Testing

∅ See the development of common conformance testing procedures and accredited tools.

■ Interoperability Verification

∅ See the development of common interoperability procedures.

■ Performance Testing

∅ See the development of common conformance testing procedures and accredited tools.

The ultimate goal would be to reduce the validation cost when producing world wide products.

SUMMARY

- Going on process (organization in place and initial results obtained)
- Required for hardware and application software mass production.
- Expected for certification cross recognition between world regions
- Shall be generalized between all regions of the world (particularly use of common exchange profiles for cross border travels).