



Working Group Communications (WG-C)

DG INFSO Workshop on V2X Communication
Spectrum Requirements
Brussels, 28 February 2006





Introduction

- WG-C was established in fall 2005
- Terms of Reference confirmed by the eSafety Forum Steering Group on 20-Sep-05
- Focus on:
 - standardisation
 - spectrum requirements
 - international cooperation
- members from industry, public sector, road and infrastructure operators



- WG-C works in close co-operation with COMeSafety and other EU projects (CVIS, COOPERS, GST, Safespot) [see following pres.]
- two task forces address spectrum issues and standardisation
- international aspects will be covered by active participation in the International Workshop on Communication (ITS World congress, London) and contacts to VII, ASV [see pres. C2C-CC]



Why V2X communications?

- most severe accidents occur because
 - drivers misjudge the speed of oncoming traffic leading to left turn accidents (UK: right turn)
 - drivers misjudge situations at intersections or don't yield right of way, leading to side crashes
 - crossing traffic can only be noticed late due to buildings/obstacles
- and could be avoided by vehicle to vehicle communication or infrastructure based systems





Why V2X communication? (2)

co-operative traffic using V2X communication
(including free to air traffic information broadcasts)

- increases road capacity
 - saves fuel
 - saves time
 - reduces emissions
 - increases revenue of road operators
- reduces the likelihood of congestions and accidents
 - thereby reducing maintenance costs of road infrastructure





Why V2X communication in the EU?

- European based electronics and car industries, telco and service companies could take lead in a new worldwide market
- but
- European Industry will have severe disadvantages if no home market exists
 - US and Japan already are more advanced with standards and have protected spectrum allocated



- **Standardisation**
 - all components must have an exactly defined behavior to guarantee safety functions
- **Spectrum Requirements**
 - maximum delay times, QoS needed, free of charge
- **Business Case**
 - Threshold problem, dissemination
- **International Harmonisation**
 - economies of scale, international trade

To strengthen the European position in a worldwide competitive market we need:

- a common set of standards
- dedicated spectrum (ideally with a worldwide, protected slot for safety applications)
- a common European market with one deployment strategy to overcome the threshold problem