A comprehensive approach for road safety – The example of Germany

**Vehicle Related Measures**

- 1956 Introduction of three point seat belt
- 1963 Introduction of electrically adjustable steering column
- 1963 Speed limit for driving heavy motorcycles reduced to 35 km/h
- 1964 Introduction of anti-lock braking system
- 1969 Introduction of energy absorbing steering column
- 1973 Introduction of euro NAP testing procedures for vehicle passive safety devices
- 1985 Increasing use of windowbags (protecting passengers from head injuries)
- 1985 Introduction of fasten seatbelt in cars
- 1988 Introduction of 2+1 lane road design for high level roads
- 1996 Introduction of brake assist system (BAS)
- 2004 Commitment by European car manufacturing industry to equip all new cars with anti-lock braking system

**Infrastructure Related Measures**

- 1958 Introduction of extra crossings for pedestrians
- 1973 Introduction of standards for geometrical layout, gradients, cross sections and design speeds to be integrated into design guidelines
- 1977 Introduction of general principles of road network design, classification of roads according to road categories (e.g., arterial, secondary, local) and connection type (urban, rural, expected volume etc.)
- 1980 Introduction of zones with traffic calming (‘Spielstraßen’), designed to be oriented towards pedestrians
- 1991 Publication of German Road and Transportation Research Association (FVDG) recommendations on traffic calming in residential areas
- 1996 Introduction of guidelines on urban sections for roads (‘RD-U’) including the determination of the road’s components based on physical and volume characteristics
- 2004 First trials for cars with 36 mph (60 km/h) speed limit in residential areas

**Rescue Services**

- 1970 First permanent HEMS (Helicopter Emergency Medical Services) base established in Munich
- 2001 Introduction of design for infrastructure to provide accessible transportation facilities (HBVA)

**Further information and the infographics as pdf**

**Contact:** transport@giz.de

**Concept & Editing:** Dominik Schmid

**Sector Project ‘Transport Policy Advisory Services’**

**German Development Corporation (GIZ) GmbH**

Highway Research Institute (BASt), for the helpful suggestions. All errors and omissions remain with GIZ.