





# Making an active contribution to sustainable development is a key issue for France. In particular, this issue relates to urban areas.

However, combining the demands of traffic, road safety, local life and environmental protection in a single location can be a complex process.

In April 2006, the government followed the example of other European countries such as Belgium by launching a consultation process involving representatives from institutions and associations involved in the *code de la rue* project. This process was designed to help road managers improve the way in which public space is shared between all types of users, to improve user journey safety, particularly for the most vulnerable, and to encourage sustainable solutions as an alternative to car journeys.

This desire was reaffirmed in autumn 2007 by Jean-Louis Borloo, minister of state and minister of Ecology, Energy, Sustainable Development and Spatial Planning for the Grenelle de l'Environnment (the French government's environmental round table). The consultation process involved a participative element and focused on lessons learned from both foreign and French experiences. It opened the way to changes in the *Code de la route (Highway Code)* with decree 2008–754, which was passed on 30th July 2008. This decree introduced the "principle of prudence", governing the relationship between drivers and the most vulnerable, as well as new urban road planning rules.



# The *code de la rue* programme

Taking its inspiration from the Belgian example, the code de la rue programme is designed to raise awareness of the code de la route as applied to urban areas and, where necessary, to modify regulations by adapting them to the practices of those using public space.

The programme is managed by the DSCR (Road Traffic and Safety Directorate), with the support of Certu (Centre for the Study of Urban Planning, Transport and Public Facilities). It brings together national associations representing policy-makers, professionals, users and institutions concerned. The principle of participation underlying the programme implies commitment on two levels: the commitment of the government to push forward the proposals made by the steering committee and the commitment of other actors participating in the consultation process to disseminate the results.

# A ROAD NETWORK FOR ALL WITH CALMER TRAFFIC

The Code de la route (highway code) consists primarily of behavioural rules for car drivers and its aim is to improve traffic flow. The roles of the pedestrian or cyclist were, until now, defined only within the context of their relationship with motorised vehicle traffic.

The 1980s and 1990s saw a turning point in France with the introduction of a partnership programme between central government and local authorities entitled "Ville plus sûre, quartiers sans accidents" (safer, accident-free cities). A new scheme, focused on road safety and the needs of local residents, saw the speed limit reduced from 60 to 50 kmph in urban areas and the introduction of the "30 kmph zone" into the Code de la route. Since then, road and street user practices have changed further. Society is now concerned with sustainable development, and particularly with the use of green modes of transport for urban journeys. It is also concerned with improving the way in which conflict between users is managed. In order to help road managers improve the way in which public space is planned and shared between citizens, and to provide greater consistency between different traffic zones in towns and villages of all

sizes, the French legal framework needed to evolve and a formal set of road network planning rules was required. This is the central motivation behind the work of the government, politicians, transport professionals and user associations and their involvement in the *code de la rue* project in 2006.

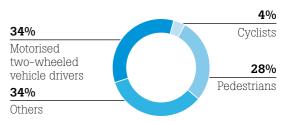
### > THE CODE DE LA ROUTE HAS CHANGED FOLLOWING DECREE NO. 2008-754 OF 30<sup>TH</sup> JULY 2008

Firstly, the principle of prudence towards vulnerable users was accepted and introduced. Article R412-6 of the *Code de la route* now states that the drivers "must, at all times, behave in a prudent and respectful manner towards other road users. In particular, they must show increased prudence towards the most vulnerable users." The changes also included a legal redefinition of specific traffic zones in urban environments, to include pedestrian areas and 30 kmph zones. The concept of the pedestrian priority zone was created and defined. Finally, two-way cycle traffic in 30 kmph zones and pedestrian priority zones is generalized (except in specific cases).

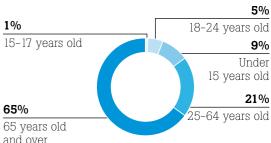
### VULNERABLE USERS PAY A HEAVY PRICE FOR POOR ROAD SAFETY

Although significant progress has been made in terms of road safety (4,620 deaths in 2007 compared with 7,742 in 2002, a fall of 40%) through a voluntarist policy, this progress relates primarily to inter-urban road networks rather than the urban environment itself. In 2007, 1,359 people were killed in urban areas, compared with 2,079 in 2002 (-35%). The most vulnerable users are twowheeled vehicle drivers (34% of all deaths) and pedestrians (28% of all deaths). An analysis of the age of pedestrians killed in urban areas shows that 2 out of 3 casualties are over 65 years old.

# BREAKDOWN OF THE 1,359 PEOPLE KILLED IN HRBAN AREAS BY USER CATEGORY:



# BREAKDOWN OF THE 379 PEDESTRIANS KILLED IN URBAN AREAS BY AGE:



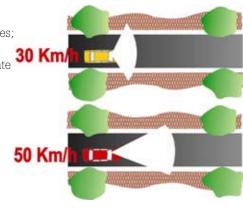
#### > THE SPEED OF THE VEHICLES INVOLVED

#### Field of vision

Peripheral vision widens as speed decreases; by moderating their speed, drivers are in a better position to identify and anticipate the movements of pedestrians, for whom seeing and being seen is a key gauge of safety.

In urban areas, peripheral vision is essential. The higher the speed, the narrower the field of vision.

Source: DSCR, France



#### Stopping distances

In situations where drivers are forced to perform emergency braking, lower speed results in shorter stopping distances; collisions can therefore be avoided or, at worst, their severity reduced.

Stopping distance is defined as the total distance travelled both during reaction time and during braking (on the diagram: in dry conditions).

Source: DSCR, France

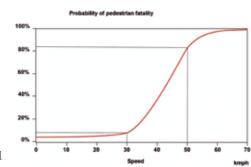
# Pleasition time 8 m 5 m Total : 13 m 30 kmph Reaction time Evaling Chancion time 14 m Total : 28 m (Reaction time 14 - Bushing in dry conditions)

# The probability of pedestrian fatality during a collision with a car

In cases where a collision cannot be avoided, speed has a direct influence on the likelihood of the pedestrian being killed, which increases from 10% at 30 kmph to over 50% at 50 kmph. The chances of survival are zero for a collision at 70 kmph.

The energy of the collision is proportional to vehicle mass and speed squared. It is 60% lower for a collision at 30 kmph compared with one at 50 kmph.

Source: Waltz and al, 1983, Sweden



# Urban planning in Chambéry: a quarter of a century ahead of its time

The city of Chambéry is noted for its perseverance in fighting road safety issues and its ability to maintain a calm urban environment. In 1979, there were 453 road accidents in Chambéry. In 2006, there were just 36 accidents. The city has focused its energies on "calming" traffic and redressing the balance in how public space is used. Firstly, the city increased safety around school exits and introduced restrictive planning measures for motorised vehicles in areas where mixed use was considered dangerous for pedestrians and cyclists. Next, the focus turned to combining traffic and road safety on the main routes through the city. At the same time, the city encouraged measures designed to improve mixed use between different modes of transport, in particular by reducing speed and taking active planning decisions: pedestrian priority zones at intersections, "30 kmph zones", suitable street furniture, etc.

The speed of motorised vehicles is a key factor in accidents and in the severity of collisions, especially when pedestrians are involved. The challenge is therefore to reduce vehicle speed. Clarification of regulations and the introduction of new, additional measures will help planners to improve road safety.

# WHAT, IN PRACTICE, CAN ROAD MANAGERS DO?

Every conurbation has a road network designed for vehicle traffic. However, this network is also the place where local life is expressed and developed: businesses, education, culture, social activities, etc. Depending on the importance that policy-makers place on each of the network's roles - traffic or local life - there are several possible planning schemes, each of which is consistent with the principle of prudence and the protection of the most vulnerable users: the 70 kmph section, the 50 kmph route, the "30 kmph zone", the pedestrian priority zone and pedestrian areas. Each of these designs has its own set of rules as defined in the Code de la route, some of which were introduced by the decree of 30th July 2008. Thanks to the changes in the law and the actions taken to disseminate knowledge and encourage discussion between parties, urban planning policy-makers and



professionals are finding new legal and technical planning and signalling solutions for traffic zones.

### THE THREE SPECIFIC TRAFFIC ZONES



# THE PEDESTRIAN AREA

The pedestrian area is a zone dedicated to pedestrians. They have priority over all vehicles except trams. Authorised vehicles, including cycles, move at walking speed. Motorised vehicles only use these zones on exceptional occasions and according to specific traffic regulations as set out by the mayor. Authorisation is only granted if the vehicle is serving the pedestrian area itself. Parking is not permitted in this zone.



# THE PEDESTRIAN PRIORITY ZONE

This is a new feature. The pedestrian priority zone is open to all forms of transport.

However, pedestrians have priority over all other forms of transport except trams. Pedestrians can move with total freedom across the entire width of the road. To make this possible, motorised vehicles are limited to 20 kmph. Motorised vehicles may only stop and park in designated areas.



### THE "30 KMPH ZONE"

Vehicles are limited to a speed of 30 kmph. This new regulation requires specific planning that is consistent with the speed limit and generalisation of two-way cycle traffic (except in specific cases). This type of planning has a traffic calming effect. In this area, cyclists and pedestrians benefit from improved safety. Pedestrians are able to cross at any point as long as they do so with care.

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# > BALANCE BETWEEN LOCAL LIFE AND MOTORISED TRAFFIC.

In urban areas, the roads often combine the demands of local life and motorised vehicle traffic in a single location. Depending on the importance that policy–makers place on each of the network's roles – traffic or local life

- there are several possible planning schemes.

# Status of the area or route | Pedestrian area | Pedestrian priority zone | So kmph road | So km

THE GENERALISA-TION OF TWO-WAY CYCLE TRAFFIC IN PEDESTRIAN PRIO-RITY ZONES AND "30 KMPH ZONES"

In order to encourage cycle use in these zones and to dissuade cyclists from using the pavements on one-way streets open to vehicles, road managers must (unless otherwise specified), make provisions for two-way cycle traffic with suitable signage on each section of road. If necessary, specific materials may need to be used for this purpose.

Local authorities have until 2010 to ensure that existing "30 kmph zones" enable two-way cycle traffic.



# ... WHAT ABOUT USERS?

by the best-protected user towards the most vulnerable user will prevail. There is a hierarchy from the "strongest" to the "weakest": HGV drivers, utility vehicle and public transport vehicle drivers, car drivers, motorcyclists, cyclists, pedestrians, people with reduced mobility.

From now on, the principle of prudence

This principle will become an integral part of user behaviour under the condition that there is improved visibility in each zone that a pedestrian, cyclist, motorcyclist or car driver may use. Henceforth, each specific urban zone will be identified with clear signage and will be subject to specific parking and traffic regulations. As each zone is identified in the same way across France, it is easier for users to adapt their behaviour: for motorised vehicle drivers: change of speed, parking authorisation; for cyclists: two-way cycle traffic in the majority of "pedestrian"



priority zones" and "30 kmph zones"; for pedestrians: safer crossing provisions; for people with reduced mobility: dedicated routes, etc.

### > A number of sanctions have been specified for those who infringe the regulations

| Type of infringement   | Offence class         |          | Fine        |           |
|--|-----------------------|----------|-------------|-----------|
|  |                       | Reduced  | Normal rate | Increased |
| Unauthorised use of a motorised vehicle in a pedestrian area   | 4 <sup>th</sup> class | 90 euros | 135 euros   | 380 euros |
| Parking a motorised vehicle in a pedestrian area   | 2 <sup>nd</sup> class | 22 euros | 35 euros    | 75 euros  |
| Parking a motorised vehicle in a pedestrian priority zone outside areas specifically designated for this purpose | 2 <sup>nd</sup> class | 22 euros | 35 euros    | 75 euros  |

BETTER
PROVISIONS FOR
PEOPLE WITH
REDUCED MOBILITY
THROUGH THE NEW
URBAN PLANNING
DESIGNS

The government made a concerted effort to consider the needs of vulnerable people and people with reduced mobility in the consultation process. Within the definition of each traffic zone, a continuous and obstacle-free route

is provided for people with reduced mobility, including the blind. Furthermore, where possible, pedestrian priority zones also include dedicated, clearly-indicated, pedestrianonly zones.

The effectiveness of urban planning provisions to improve public space use depends on all users respecting regulations.

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### For more information...

- Decree 2008-754 of 30th July 2008, pertaining to modifications to the Code de la route.
  - The Code de la route, particularly articles R. 110, R. 411 to R. 417.
    - Guidelines on specific traffic zones in urban areas (CERTU).
  - Report on the "Illkirch Graffenstaden" case study, September 2008 (CERTU).

## www.securite-routiere.gouv.fr www.certu.fr

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