

The SURE process, to improve safety on existing roads in France

Timetable

Since the beginning of 2004

Testing the SURE process on 15 pilot routes, monitored by Sétra.

7 July 2004

Formalising of the SURE process and confirmation of its use over the national road network by the Comité interministériel de la sécurité routière – CISR (interministerial road safety commission).

1st September 2004

Ministerial circular stating the launch of the SURE process over the entire toll-free national road network.

11 October 2004

Presentation of the SURE process to all department heads (DDE*, DRE*, MGR*, CETE*, CIPP*...) by the roads director and the safety and road traffic director.

December 2004

First SURE training courses given to the DDE and DRE.

2005

Implementation of the process on 15 pilot routes and generalisation of SURE over the entire national road network.



Safety is one of the most important priorities of the national road administration

Currently, user behaviour is probably the most important source of improvement in terms of road safety. But this does not necessarily mean

“ Safety is one of the most important priorities of the national road administration ”

that measures taken to improve the roadway infrastructure are unnecessary. Drivers, even when respecting the rules, unfortunately continue to make mistakes.

Our task is to create conditions to ensure that these are less frequent and cause as little harm as possible.

Where new investments are concerned, the respect of technical rules and the safety checks carried out on road projects have, over the last few years, ensured a high level of infrastructure safety.

The SURE process (safety of users on existing roads), currently being finalised and which has already been experimented with on 15 routes, is a tool specially adapted to improving the safety of the existing network. The plan is to rapidly introduce it on a large number of our roads. ■

Patrice Parisé, *Roads Director*

Road safety, a government priority: proof provided by infrastructures



SURE can be adapted to all types of roads, including mountain roads.

Everyone knows that road safety is one of the government's priorities. This priority is translated by

GLOSSARY

APS: avant-projet sommaire (outline proposals).

CERTU: centre d'études sur les réseaux, les transports, l'urbanisme et les constructions publiques (Centre for the Study of Urban Planning, Transport, and Public Facilities).

CETE: centre d'études techniques de l'équipement (Public Works Regional Engineering Centre).

CIFP: centres interrégionaux de formation professionnelle (Interregional Professional Training Centres).

CISR: comité interministériel de sécurité routière (interministerial road safety commission).

CSI: contrôle de sécurité des infrastructures (infrastructure safety inspectorate).

DDE: direction départementale de l'équipement (County Public Works Directorate).

DPSM: direction du personnel, des services et de la modernisation (personnel, services and modernisation directorate).

DR: direction des routes (Highways Department).

DRE: direction régionale de l'équipement (Regional Public Works Directorate).

DSCR: direction de la sécurité et de la circulation routières (Road Safety and Traffic Directorate).

MIGT: missions d'inspection générale territoriale (general national inspection missions).

SCAN: schéma de cohérence des actions nationales de formation (national training plan coherence framework).

SURE: sécurité des usagers sur les routes existantes (user safety on existing roads).

concrete decisions and measures covering several areas: better respect of rules, risk prevention, etc.

Systemic analyses of road accidents have revealed that the "infrastructures" factor was present in 40% of fatal accidents.

Consequently, it was only logical within this context that the State, as the national road network administrator, made a concrete contribution to improving the infrastructures aspect of road safety. This has been done through the formalisation of the SURE process at the last interministerial road safety committee and the decision taken to apply this process to the entire national network as from early 2005.

To begin with, the highways department provided an additional €6 million for the 15 pilot routes on the national network to translate the conclusions of the SURE works. This provides proof, should it be required, that the aim of the process is to successfully transform infrastructures to improve safety levels.

By taking a scientific look at the entire national road network and then treating the areas causing

“ The generalisation of SURE, a new step towards greater safety on French roads ”

problems, I am sure that the SURE process will result in a great many lives being saved. ■

Based on an interview with Jean Panhaleux,
Deputy safety and road traffic director

The principles and basis of the process



Integration of the SURE process into the maintenance programme: case of the RN 138 pilot site in the Eure region between Bernay and Saint-Denis-Des-Monts.

The "user safety on existing roads" process is initiated by the Highways Department (DR) and the Road Safety and Traffic Directorate (DSCR). Its aim is to reduce the number of road accidents and victims on the existing network by making changes to the infrastructures. SURE is a global process that results in concrete measures but which does not omit minor, immediate and even temporary solutions.

These measures are highly varied: layout, renovation, maintenance, operation, etc.

Five fundamental principles guided the S etra works which were carried out with the assistance of the Centre for the Study of Urban Planning, Transport, and Public Facilities (Certu) and the support of the Public Works Regional Engineering Centres (CETE):

■ Identification of those parts of the network where we could expect the greatest increase in safety by taking measures concerning the infrastructure.

■ Basing the method on an understanding of the roadway's problems. Unlike a normative approach, this makes it possible to meet the wide range of situations encountered.

■ Complete this device by detecting configurations where the risk is known (especially the treatment of lateral obstacles).

■ Privilege a route approach to give priority to providing the driver with a coherent overall perception of the road.

■ Accompany the technical method by a real managerial project, being the only way in which to truly guarantee the success of the process. ■

Thierry Dallard, *Assistant network management director in the Highways Department.*

For further information
Consult the S etra Internet site:
www.setra.equipement.gouv.fr

The four stages of the SURE process

<p>The four main phases in the process</p> <p>Ranking the routes</p> <p>Diagnostic and action guidelines</p> <p>Choice, study and implementation of the measures</p> <p>Evaluation</p>	<p>"Diagnostic and action guidelines" stage framework</p> <p>Uses and functions</p> <p>Accident factors</p> <p>Configurations recognised as causing accidents</p> <p>Global layout principles. Safety objectives</p> <p>List of action guidelines</p> <p>The SURE process is broken down into four phases.</p> <p>The first consists in ranking the route according to their "safety potential". This involves, for each route, calculating the cost of "avoidable" accidents (theoretical value) and expressing this in a linear manner.</p> <p>The following phase, "diagnostic and action guidelines", focuses on the route or routes with the</p>	<p>accident factors so that these are better understood prior to taking any measures. Efficient solutions adapted to the diversity of the situations are then developed.</p> <p>The third phase, being the choice of actions to be taken, is based on their potential efficiency and their cost. Programming dossiers are prepared (maintenance, renovation, operation, development, etc.) and standard complementary studies (APS*, project, etc.) are carried out prior to the solution being implemented on site.</p> <p>Finally, in the last phase, the evaluation concerns monitoring the method and checking the efficiency of the actions taken. A report is always prepared on completion of these phases and this means that indicators need to be measured throughout the process. ■</p> <p>Sylvie Blanc, <i>Assistant to the S�etra travel safety studies manager.</i></p>
	<p>greatest safety potential.</p> <p>A "global layout principle" and safety objectives are defined. These are based on the levels of use and the functions of the roadway, configurations recognised as causing accidents (i.e. obstacles, bends, etc.) and accident factors.</p> <p>The heart of the diagnostic phase, established on the basis of a detailed analysis of accident police reports, lies in establishing the</p>	

SURE training



Making department heads more aware of SURE training courses, 11 October 2004.

Identified as a precondition for the success of the process, the training of agents is seen as an important factor accompanying the deployment of SURE.

As such, the training organiser is part of the SURE technical committee.

National mobilisation of training resources

Assuming, within the remit of

road safety, the priority aspect of this approach, the clients (DR and DSCR) obtained from the personnel, services and modernisation department (DPSM) the inclusion in the national training plan coherence framework (SCAN) of the SURE training system and the mobilisation of the interregional professional training centres (CIFP) for its design and implementation.

A training system geared up to the implementation of SURE

The training system has been designed as a way developing the collective competence needed for the implementation of SURE in the decentralised departments.

Training for SURE management is first proposed to the 2nd level executives responsible for the process in each department to assist them in setting up an adequate organisation, create their teams and

make the process a reality.

The "issues study" and "diagnostic and action guidelines" training courses are then proposed to the team agents respectively responsible for these two stages of the process.

A flexible and operational introduction of the device

Each of the actions comprises acquisition sessions, inter-session works to apply the acquired knowledge and sessions for submitting the work carried out. The training courses take place at the same time as the adaptation of the training - action principle.

The training offer is spread over

time. The agents partake in training courses when the necessary conditions are brought together. Consequently, inter-session work is possible.

It is programmed that agents will be trained in all decentralised departments between the end of 2004 and mid-2006. This represents around 120 DDE* and DRE* management project leaders, 150 employees responsible for issue studies within DDE and DRE and 220 responsible for diagnostics within DDE and CETE*. ■

Robert Allemand,
"Road infrastructures and road safety"
project leader, Rouen CIFP.

For further information

Consult the following Internet sites:

<http://www.setra.equipement.gouv.fr/SURE>

<http://intra.setra.i2/SURE>

Promising first experiments

Experiments using the SURE process have begun in three departments: Calvados, Indre and Jura. They are being carried out by the DDE* with the assistance of their CETE* and in coordination with the regional facilities directorate (DRE).

The Indre department contains one of the first sites that, in 2005, could be subject to works being carried out within the SURE framework.

"In 2003, the Indre DDE submitted its candidature to apply the SURE process. We introduced it over the 98 km of toll-free motorway and 197 km national highways crossing our department", explains Yves Decreuse.

The first phase, being the issues studies phase, is particularly important as it establishes the sites requiring priority treatment.

On the chosen site – the RN 151 from Châteauroux up to the limit of the Cher department – each accident, thanks to a detailed reading of the concerned reports, is subject to detailed analysis. It permits the typologies of the studied accidents to be clearly expressed: was roadside equipment to blame? Were they frontal or shearing collisions? Were pedestrians involved? Were other vehicles involved? This led to a classification of the types of accidents being repeated at a given location or all along a route. A site visit makes it possible to imagine how modifications to the road or its equipment could improve safety.



Pilot route on the RN 151 between Châteauroux and the Indre and Cher limits.

"The application of the SURE process provides an excellent opportunity to share our know-how and increase the availability of our knowledge and experience" explains Stéphane Le Moing. ■

Yves Decreuse, *Head of the Indre DDE departmental operations and safety unit (CDES)*

Stéphane Le Moing, *Head of the CETE Normandie-Centre road operations and safety office.*

Franco-German cooperation



Franco-German meeting held in Montargis, 25 and 26 April 2004.

In 2003, the European Commission set itself the goal of halving the number of road deaths by 2010.

The SURE process was presented to the European Union and will form a basis for the development of good practices, currently in the design phase, that will subsequently be transmitted to

member States.

Cooperation between member countries to improve road safety is encouraged within the Union. This resulted in France and Germany setting up a technical cooperation structure some years ago and, in particular, the two countries have worked together

to finalise a joint method that will establish the "safety potentials" to be used to rank the routes in the "issues study" of the SURE process.

This first SURE stage is fundamental as it permits the identification of areas where actions can have a real influence on the number of accidents and their severity. As a result of this cooperation structure, the calculation for determining what areas require priority treatment was inspired by the works carried out by our German colleagues.

Primarily based on observing accidents, SURE is not a standardising process, unlike "EuroRAP" developed by the European automobile clubs and which is limited to comparing existing road characteristics with "standards". SURE draws its efficiency from its capacity to adapt solutions to the

specific nature of each encountered road and context. It represents a realistic and efficient alternative to the abandoned "infrastructure

“ The indicator permitting the identification of sites requiring priority treatment was developed with our German colleagues ”

safety inspectorate" (CSI) project whose main fault was that it did not result in the definition of an intelligent grading of the sites to be treated. ■

Pascal Chambon, *head of S etra's Safety, Transport and Road Techniques Centre (CSTR).*

For further information

Consult the S etra Internet site:
www.setra.equipement.gouv.fr

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