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<u>Working Party on Road Traffic Safety</u>
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REVISION OF THE CONSOLIDATED RESOLUTION ON ROAD TRAFFIC (R.E.1)

**<u>Report submitted to the Working Party on Transport Statistics (WP.6) by the
European Federation of Road Traffic Victims (FEVR)</u>**

<u>Reliability and harmonization of statistics on the the number of people killed and injured in road
traffic accidents</u>

The intent of the present initiative is to improve road safety measures and medical emergency services.

The knowledge of a reliable and a reasonably precise number of persons killed and injured in road accidents is a necessary feedback for the implementation and improvement of present and future road safety measures. This knowledge is also a necessary feedback for the development and improvement of emergency medical services.

It is a widespread opinion that the present data published by most national statistical offices as well as by Eurostat, UNECE and ECMT often do not provide reliable numbers. Furthermore, the lack of reliability and harmonisation of these numbers impedes fair international comparisons which would allow the identification of the most successful prevention practices.

Here are some examples:

1. Road Accidents in Great Britain: the Casualty Report (RAGB) 1998 [1] reports: "…there is evidence that an appreciable proportion of non-fatal injury accidents are not reported to the police and thus they are not included in this publication… In addition 20% of

casualties reported to the police were estimated to be unrecorded. Studies confirm the view that police are more likely to underestimate the severity of injury because of the difficulty of distinguishing severity at the scene of the accident…"

2. RAGB 1996 [2] and TRL (Transport Research Laboratory) report: "The number of casualties reported by the police was just over the half (54%) of that reported being treated by the hospitals."

3. TRL research estimated [3] "only 18% of the serious cycle casualties are officially reported."

4. The Bureau Suisse de prevention des accidents[4] reports: "In 1997 the number of road traffic injuries reported to the police was 27,286. The same year, the number of road traffic injuries reported to insurance companies was 100,000. Thus the police reported only 27% of the injuries."

5. The European Union [5] has published for the last few years a number of 1.7 million people injured yearly on the roads. Recently this number was adjusted by the European Transport Safety Council (ETSC) to be at least 2.5 million showing a previous underreporting of 68%.

Other examples could be given, but what appears is that official numbers, generally taken by the police, are systematically underestimated compared to those given by hospitals and insurance companies. This does not seem to be due to the definition of these quantities, which as shown, for example, in Annex I of TRANS/WP.6/2001/2 , are simple and clear.

The problem of underreporting or misreporting is rather linked to the system or the institution, which is collecting the data. For example a person injured in an urban area may quickly be brought to a hospital by a private ambulance or a private car (which may save his life) without registration by the police, later he may be transported to another department of the hospital, making it simple for the hospital but difficult for the police to retrace him. Other scenarios can easily be imagined where the victim escapes registration by the police, but is in the files of hospitals or in those of the insurance companies.

It thus seems quite natural to take the hospital data to measure the number of people killed and injured in road traffic accidents, as hospitals are deeply involved with the victims and therefore have more reliable data than the police.

In countries where civil liability for driving is compulsory, the claims for reimbursement by the victims may also provide reliable data on road traffic accidents.

However as police data have been historically used up to now in most countries, it would be unpractical to change abruptly to another system and such a change may be misunderstood by the public.

Therefore a coefficient system could be proposed according to the following definition:
Hospital data = coefficient x police data or mathematically:

$$N_{\text{killed hospital}} = H_k \text{ x } N_{\text{killed police}}$$
$$N_{\text{injured hospital}} = H_i \text{ x } N_{\text{injured police}}$$

where $N_{\text{killed hospital}}$ is the number of people killed according to hospital data, $N_{\text{killed police}}$ the number of people killed according to the police and H_k the coefficient linking these two numbers.

For the above example 2, the coefficient H_i which would transform the police data into the number of injured according to hospital data would be 1.85 (= 1/0.54). Similar coefficients are already used to calculate the number of deaths at 30 days from those provided by countries who count their deaths for example at 6 days.[6]

In the same way coefficients may also be defined linking insurance company data to police data.

Such a system of coefficients would allow the continued use of police data, while at the same time providing the authorities in charge of implementing and improving road safety measures and emergency service with valid feedback information.

References

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5. European Commission 2001 and ETSC 2001 reports.
6. Annex I of TRANS/WP.6/2001/2

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