

7. Master (Managing Speeds in Traffic on European Roads)

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7.1 INTRODUCTION TO THE BASIC PROBLEM

Very much is known about problems connected to inadequate speeds - much of which is about "excessive speeds". However, adequate speed has not been defined in a more general sense, yet, and I doubt if it will be defined (in a strict sense) in the future. What should adequate speed imply? How can a traffic process be described that is characterized by adequate speed? I want to develop my contribution to the reduced MASTER-project by the following arguments (I, II, ...)

7.2 SOME ADDITIONAL ARGUMENTS

I) In spite of the difficulties mentioned above, let us assume that we can come near a definition of adequate speeds. It will not be possible to achieve such a definition only by referring to physical parameters (radiusses of curves, lane widths, friction coefficients, vision conditions, etc. ==> safe operational speed). Rather, it will be necessary to consider interactive aspects;

more "objective" ones, like capacity aspects that depend on interaction, like waiting times from side roads, difficulties to join main roads, etc. ("Interaction 1");

and more "subjective" ones, like route choice aspects for pedestrians and cyclists because of difficulties to cross the road, noise, etc.; disturbance of residents - an interaction aspect in the widest sense - ,anxiety of parents for their children, anxiety of elderly as VRUs, anxiety of elderly and of beginners in fast going traffic flows, etc. ("Interaction 2")

II) If we knew everything about adequate speeds from the physical perspective, it would be rather easy to develop technical solutions that allow or provide for what we define as adequate speeds in different situations. What we still would not know is if road users would feel the same way and if they would accept recommended or set speeds. ("Acceptance 1")

III) But things are more complicated than that: Even if we only concentrated on the drivers (and not on other, especially vulnerable road users who are effected by the speeds chosen by "the drivers"), we would have to consider interactive aspects. And there, the probability that they (=drivers) would not agree with what we find out would be even higher than in II ("Acceptance 2").

IV) Pedestrians', cyclists', residents', elderly's, etc. perception of speeds is not (or at least not mainly) dependent on "objective" criteria, but on many context aspects, part of which are emotional, aesthetical, etc.. Without communicating with them it would be impossible to come nearer to a type of recommended or automatically set speed that is accepted by these groups ("Acceptance 3").

V) If drivers do not accept recommended or set speeds, or speed recommendations in general, they react in a way that is often difficult to predict: by political obstruction in case of powerful groups, by ignoring speed limits, by reducing their vigilance, by choosing other routes [than wanted], by reducing their mobility, by reacting with frustration or anxiety "privately" (*reactance* " and "behaviour adaptation")

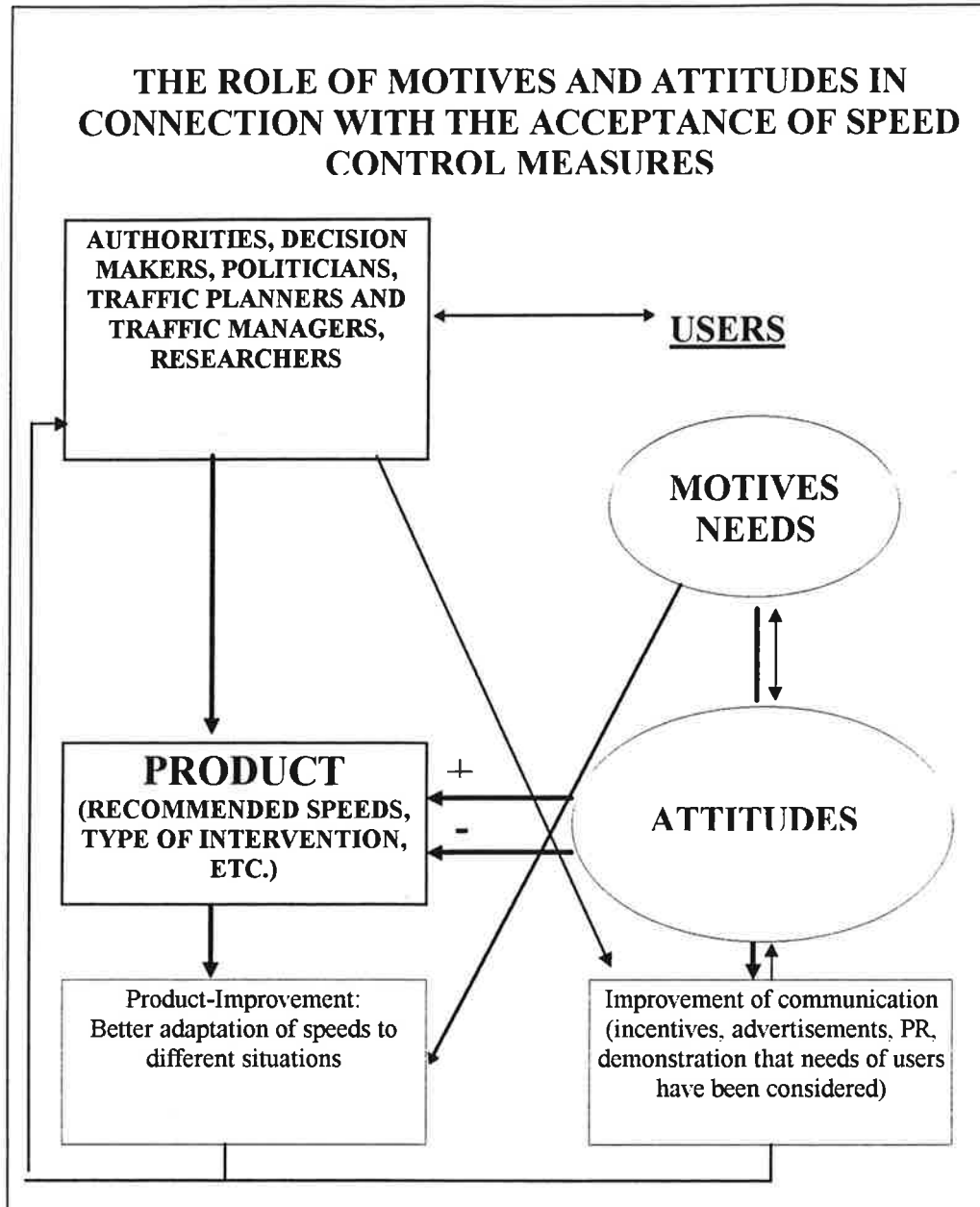
VI) As far as acceptance by drivers is concerned, the type of intervention will play a decisive role (e.g., to which degree does it influence the drivers' *freedom of decision*)

7.3 A SHORT CUT TO CONCLUSIONS

1. The definition of "adequate speeds" depends on technical parameters **and** on interactional aspects
2. "Adequate" depends to a large degree on road users' view. Different groups will have very different views on comparable situations ("Acceptance 1", "Acceptance 2" and "Acceptance 3").
3. Different definitions of "adequate" speed by different road user groups result in the necessity for authorities to find **compromises** between clashing interests
4. What authorities want to sell as "adequate speed" has to be based on technical parameters **and** it will have to refer to the road users' view ("Interaction 1" and "Interaction 2", and "Acceptance 1", "Acceptance 2" and "Acceptance 3")

7.4 A STATEMENT IN MARKETING TERMS

Both **the "products"** (established types of situations and interactions, ways of displaying recommended speeds, etc.) and the **communication policy** (advertising, public relations work including arguments for certain solutions when communicating with pressure groups, etc.) **have to be based on technical aspects and on the users' view.**



7.5 CONCLUSION WITH RESPECT TO SOCIAL-SCIENTIFIC WORK

Communication with the road users plays an important role in this project (interaction and its perception, acceptance, interest clashes, reactance, behaviour adaptation). I.e., studies dealing properly with this aspect have to be done. Wps 1.2 and 2.3 are such studies. The time for these studies was calculated at an absolute minimum already in the beginning: 10.5 (+2) mms for (international) attitude studies that fulfill quality requirements is a minimum.