

The Comment on the Draft Document of the Role and Position of ITS Informal Group

Transmitted by the Representative of Japan

Item	Comment
Role & Position in general	<p>We think that the role of the ITS informal group should be to develop consensus on guidelines regarding in-vehicle ITS technologies which are installed either for the purpose of enhancing road safety or for the purpose of providing information to the driver that is unrelated to safety. Both aspects need to be discussed and addressed.</p> <p>In addition, the role of both governments and industry must be addressed. We believe that the current approach appears to put full responsibility on governments to assess the safety impacts of these technologies. We urge that this document show that industry shares this responsibility and that industry must conduct its own safety evaluations before it puts these technologies in vehicles. Governments should not be the only parties that spend time evaluating the safety impacts of ITS technologies. Industry should be encouraged to share its safety evaluations with governments.</p> <p>Further, clear test procedures may need to be developed in order to assess the safety impact of some ITS technologies. This will require human factors research and that research should be identified. Finally, before proceeding, the group needs to compile a list of ITS technologies that are currently in production or on the market, including those technologies that provide in-vehicle information and that may unintentionally degrade safety.</p>
1. Role in general	We agree with these two roles. However, we need to be as comprehensive as possible in defining ITS technologies and should focus our efforts on in-vehicle systems.
1. Role in general	We assume that the first item of the working plan to be developed might be development of definitions, terminology and scope of ITS studying
1. Role in general	We agreed with the two roles set out in the first section.
1. Role 1)	We think that for the middle term the organization subjected to ITS within WP.29 should be kept as the Informal Group, the same as at the present time.
1. Role 2)how to deal with IVS and ITS at WP29.
2. Definition in General	<p>The IVS and ITS shall be clearly differentiated, described and specified.</p> <p>The communication between IVS-s and ITS-s belongs to the responsibility of WP-29, too, the border, the dividing line shall be clearly specified. Doing so the compatibility of the different IVS-s and ITS-s can be standardised in the future.</p>
2. Definition in General	<p>There was some concern and discussion about the definitions of ITS provided in this section. We propose the following single definition rather than those used in the WP.29 statement:</p> <p><i>“In-vehicle Intelligent Transport Systems (ITS) are on-board systems that utilize information that is received from direct sensing (such as radar)and/or telecommunications via the road infrastructure or other source.”</i></p> <p>This definition should be accompanied with a comment on the importance of safety.</p> <p><i>“It is important to emphasize that certain ITS applications use advanced technologies to provide in-vehicle support for reducing the number of crashes and attendant injuries and deaths. Other ITS applications provide in-vehicle information for purposes other than improved safety. Whatever the primary function, both types of ITS applications can have important unintentional influences on safety (positive and negative) and need to be understood by governments when considering policy alternatives.”</i></p>

2.Definition 1)	<p>Informal Document No. 14 (15 November 2002) points out that ITS technologies can be employed to provide a wide variety of improvements to motor vehicle travel. This document also suggests that in-vehicle technologies that support safe driving should be the emphasis of the WP-29 ITS Informal Group. It would be helpful to have this emphasis stated more explicitly. For this reason, we recommend that the first definition be changed to:</p> <p><i>Safety Enhancing Intelligent Vehicle Systems (IVS-SE) are systems that use advanced technologies, and that provide in-vehicle support for reducing the number of crashes that occur and the injuries and deaths that result from crashes.</i></p> <p>We also recommend that a new definition be introduced for systems that can unintentionally degrade safety. This definition would be:</p> <p><i>Safety-Related Intelligent Vehicle Systems (IVS-SR) are systems that use advanced technologies, and that provide in-vehicle information for purposes other than improvement of safety.</i></p> <p>Use of these two definitions for the specific services that are the subject of the group will also help avoid confusion with the more general term, ITS.</p> <p>The current definitions 2) through 4) can be included as explanatory notes to the two basic definitions above.</p>
2.Definition 1)	<p>Definition of IVS and ITS to be</p> <p>(The IVS definition is given now in the draft, we need the ITS definition, too)</p> <p>Add to the definition “Electronic systems that advise..”</p>
2. Definition 1)	<p>“ITS are in-vehicle systems that provide a driver for the information and undertake fully or partly realizing driver's vehicle control functions”.</p>
2. Definition 2) & 3)	<p>Harmonize these two paragraphs.</p> <p>(The communication between IVS and ITS shall be the subject of WP29 responsibility. Now it is not clear, where and what is the dividing line between IVS and ITS, it shall be studied in the ITS Informal Group and WP29.)</p>
2. Definition 2) & 3)	<p>Our understanding is that “traffic side systems” are road system infrastructure ITS applications which may recognise a vehicle, but do not pass information to the vehicle. Such applications may gather information from the vehicle but do not require specific specialised equipment to be fitted to the vehicle to enable this to happen. Assuming that our understanding is correct we would agree that such systems should be outside the scope of WP.29’s consideration.</p> <p>“Vehicle side systems” we understand to be infrastructure ITS applications that allow information to be passed to the vehicle, to inform, or support, or to take control from the driver/rider. Also information-gathering applications that require the fitting of specific specialised equipment to the vehicle, would be recognised as “vehicle side systems”. We agree that such ”vehicle side systems” should be within the scope of WP.29’s consideration of ITS.</p> <p>However WP.29’s consideration of “vehicle side systems” should be limited to the in-vehicle equipment and operation of the ITS application. It should not extend to the application’s extra-vehicle or infrastructure aspects.</p> <p>The draft base document implies that “side systems” are or will be part of the road system’s infrastructure. This we would question. Already there are ITS applications that are dependent on receiving information from sources other than the road system’s infrastructure, for example from Global Positioning Systems (GPS). We believe that such ITS applications should be grouped with the “vehicle side systems”.</p> <p>In view of these points we would suggest that the “side systems” terminology is not appropriate. We believe that “external interface systems” would be more understandable and that the distinction between “traffic” and “vehicle” would be clearer by using “passive” and “active”. Therefore “traffic side systems” would be “passive external interface systems” and “vehicle side systems” would be “active external interface systems”.</p>
2. Definition 4) a)	<p>To emphasize the first definition, we also recommend that the first item under 4) be expanded to include warnings of impending crashes. Incorporation of this suggestion would result in it reading:</p> <p><i>4) a) Systems that provide drivers with information or imminent crash warnings.</i></p>

2. Definition 4) b)	We would suggest that the first word “Control” be deleted. Certain ITS applications that will support drivers/riders will not seek to control the vehicle in anyway. An example of such an application would be vision enhancement.
2. Definition 4)Addition)	We also recommend addition of a new entry in item 4) for systems that are intended to reduce the level of injury when crashes occur. This entry would be: [New] <i>Systems that help reduce the level of injury when crashes occur.</i>
3. Position in general	In all cases we should say “IVS and ITS” instead of ITS
3. Position in general	There were also several comments regarding this third section. The priority in the first statement should be put on the safety of ITS rather than market freedom.
3.Position 1)	it may be more appropriate to re-phrase it as follows <i>“The introduction of ITS shall only be hindered if it compromises safety.”</i>
3.Position 1)	Item 1) applies to systems that are not designed to enhance safety, i.e. IVS-SR. However, this description is insufficient to cover the role of governments in the development of safety enhancing systems, i.e. IVS-SE. For this reason, we recommend clarification of the current item 3. 1) and addition of a new position to address IVS_SE immediately after it. Incorporation of this recommendation would result in the first two entries being: <i>1) The introduction of IVS-SR into market shall not be hindered as far as there are no major problems on safety.</i> <i>2) [New] The introduction of effective IVS-SE into market shall be encouraged.</i>
3.Position 1)	Current entries 1) and 2) infer that there is a need to assess the level of safety for both IVS-SE and IVS-SR. This need should be explicitly included as a position. For this reason, we recommend addition of the following position: [New] <i>An important role of governments is to develop and apply methodologies for assessing the safety impact of IVS-SE and IVS-SR as a basis for determining appropriate government oversight and encouragement. This includes estimating the effectiveness, or safety impact, of IVS-SE and the potential safety degradation of IVS-SR.</i>
3.Position 1)	We support the principle that if it can be demonstrated that an ITS application will not cause road safety problems, its introduction should not be hindered. However we do not accept the qualification in the use of “major” and would propose its deletion. Recognising that it is being claimed that ITS has the potential for massive safety benefits, as evidenced by the European Union’s e-Safety programme, we believe that no additional road safety risks could be tolerated.
3.Position 1)	Regardless lack of major safety problems related to application of ITS,in case of ITS malfunction, a driver shall be assured that his capability in realizing vehicle control functions will not be deteriorated.
3. Position 1)	We would also propose the inclusion of the principle that the road safety impact of ITS applications must be independently and verifiably evaluated. We also believe that the road safety role and responsibilities of WP.1 within the United Nations structures should be acknowledged.
3. Position 2)	Concerning studying role of governments in promotion of IVS, we assume that WP.29 might only address its recommendations to the governments of the participating countries in regards to such promotion
3. Position 2)	We would recommend that the second statement also be revised. <i>“ An important role of governments is to develop and apply methodologies for assessing the safety impact of ITS as a basis for determining appropriate government oversight and encouragement. This includes estimating the effectiveness, or safety impact, and the potential safety degradation.”</i>

3. Position 4)	We accept that that some United Nations' Regulations contain principles that were established at a time when the potential and impact of ITS could never have been imagined, and that they may need to be re-evaluated. We could accept, in the light of such re-evaluation, that some Regulations and their principles would need to be qualified, refined or developed. We believe that the tone of draft clause 3.4 prejudices the prospect of an objective re-evaluation and would propose that a far more open and balanced form of wording should be used.
3. Position 6)	We would recommend to develop at the ITS Informal Group the working plan of its activity. Depending on such a plan, the participating Working Groups of experts might be determined with respect to particular subject, and a necessity of foundation of a new Working Group might become clear.
3. Position 7)	Further specification is needed for the final statement on the need to consider HMI. <i>“It is important that ITS is guided by human factors principles of HMI and that it is properly integrated within the driver-vehicle system.”</i>
3. Position (additional clause):	It is generally accepted that a number of ITS applications will not lend themselves to being applied to motorcycles. It is also inevitable that many ITS applications will not be able to be retrospectively fitted to older vehicles, particularly historic vehicles. To ensure that this does not result in these non-ITS compatible vehicles being excluded from public roads, we would propose that WP.29, through the ITS Informal Group, accepts the principle that all ITS applications that it is required to consider are tolerant of non-compatible vehicles.
3. Position (additional clause):	FEMA, in conjunction, with interested organisations representing the motorcycling community and the historic vehicle movement, is currently preparing an Informal Document for the consideration of WP.29 and the ITS Informal Group. It will address the principles of ITS applications being tolerant of non-compatible vehicles and non-ITS compatible vehicles not being excluded from public roads. As soon as our consultations have taken place and the Informal Document has been finalised, we will forward it to you and Mr. Gauvin, through the offices of Mr. Jerie.
3. Position (additional clause):	New paragraph: Every IVS has two basic features: a) technical function (to control the steering, or the braking, or the emission, or the lateral stability, etc.) b) communication function (to communicate with other IVS-s, or with the driver, or with third parameter, or with ITS centres, etc.) The function “a” shall be regulated (if necessary) in the different GRs, and function “b” could be covered by one general regulation (See para 3/6)