Notes on the 12th Session of the Informal Group on “ITS”

GENEVA, 10th March 2006

(Transmitted by the representative from Japan*)

The meeting was chaired by Mr K. Wani (Japan).

**Agenda item 1**: Adoption of the Agenda

The Agenda in ITS-12-1 was adopted unchanged.

**Agenda item 2**: Adoption of the Notes for the 11th Meeting

The notes in ITS-12-2 were adopted unchanged

**Agenda item 3**: Information and discussion

M. IHRA: “The Idea of “Driver in the Loop” in Advanced Driver Assistance Systemed”

Dr Kaneo Hiramatsu of JARI gave the slide presentation in ITS-12-3.

He described “Driver in the Loop” in advanced driver assistance systems. The idea of “Driver in the Loop” means a driver must be involved in car driving, and be taken the responsibility of driving car.

**Q&A:**

**Question:** Is it possible for the driver to take an appropriate reaction in a short period of time just after the warning? Can the crash actually be avoided only by warning?

**Answer** – It has not been clarified how a human driver react when mitigation braking system activated. This implies in one hand that the reaction of human driver would fall into negative behaviour. However, there would be very few data on it. Even though it happens, the result according to the mitigation braking system would be expected to bring safer consequence because of reduction of impact speed.

*/The note was originally taken by Japan*
**Question:** I understood that the driver will be involved in the "driver in the loop", how does it inform the driver the transition from the system to a driver? Driver may not notice the transition when they are absent-minded.

**Answer** – When a driver is careless or below certain mental attention, he or she may not notice the transition of controllability from the system to a driver. Therefore, it will need to let a driver noticeable prior to the transition by using sound etc. How and when the transition should realize become points to be addressed.

**Question:** The development of the advanced technologies is remarkable but it thinks that it is difficult that a complete-automation is realized for now about the driving. The reasons are that one is a problem of reliability in system, another is based on the basic view that driver must be involved the responsibility. I do understand the importance of the "driver in the loop". Do you have a concrete view on how and in what way this will be achieved.

**Answer** – The important point in the idea of driver in the loop is how to realize the state of driver involvement in car driving. However, at the moment, it is not distinct of what is the proper form of driver in the loop. In Japan, we have been studying driver overly dependence to the advanced systems. This can be said in one sense that system realization of driver in the loop will not appropriate when the system cause driver overly dependence. Therefore, for example, as I mentioned in the previous slide, it is needed in Lane Keep Assist System that a driver must have continuous involvement with car driving,

If we try to develop quantitative procedure and to derive performance criteria to evaluate driver in the loop, further study will be required.

**Agenda item 4: Future Schedule**

The Chairman reminded delegates that the group is always open to suggestions for additional subject presentations.

Mr. Yarnold suggested that activity of “e-Safety” should be the appropriate as from Europa. He will contact representative to e-Safety who is DG Information and society, to invite them to make presentation at next session.

The Chairman indicated that works of the ITS group will be reported to WP29 after its session of November 2006. For the purpose, draft report will be submitted to in June Session and be discussed in November Session.

**Agenda item 5: Others**

M. Hyatt- OICA- reminded the group that the next ITS World Congress will be held in the United Kingdom from 8 to 12 October 2006, at ExCel conference center London.

The annual conference is managed by ITS America, ITS Japan and ERTICO for Europe. The United Kingdom conference is organized for ERTICO by the Dept for Transport, Dept trade and industry, ITS United Kingdom, Transport for London and Industry via SMMT.

The web site for the conference is: [http://www.itsworldcongress.com](http://www.itsworldcongress.com)