Report of the Ad-hoc meeting on Lane Keeping Assist System (LKAS) in Paris, 19-20 November 2014

At the GRRF-75 meeting delegates discussed the necessity to have requirements for approving Lane keeping Assist Systems (LKAS) due to a proposal from Japan/Sweden. Industry was of the opinion that it is too early to regulate and that UN Regulation No. 79 concerning steering is sufficient to ensure a functional safety level of the systems. The GRRF chair proposed to continue discussions in a separate Ad-hoc meeting. Japan agreed to arrange meeting invitations and OICA offered the meeting place at their office in Paris.

Sweden was asked to chair the meeting and 28 delegates participated at the two-day meeting. OICA and CLEPA represented industry. Contracting parties were represented by Germany, Korea, the Netherlands, Japan, the European Commission, Spain and Sweden. 10 documents are uploaded to the UNECE web page. Japan and Sweden each had a presentation to the background of their involvement in the issue. There is currently no clear regulation dedicated to LKAS, rather some Japanese guidelines, ITS guidelines, LDWS regulation, ISO standards and some requirements of UN Regulation No. 79 could be applied. Some guidelines and standards contain similar provisions but unfortunately are diverging in some areas. This is shown in the Japanese document LKAS-01-05. The areas with diverging opinions are: operation speed, functionality on a straight road or also a curvy road, possibility to turn systems off or not, etc.

Some delegates are not keen to allow on the market systems that are coming close to automated driving or that facilitate introduction of autonomous systems whilst others have no problem with that.

After discussions whether UN Regulation No. 79 is covering or not the main technical aspects of LKAS, the chairman proposed, to get some clarity, a three step approach:

- 1. going through the document LKAS-01-05 to see which issues are covered by UN R79 and which aren't.
- 2. Assessing whether items not covered by UN Regulation No. 79 are important and agreeing on the criteria that could be relevant for testing by a technical service.
- 3. Agreeing on how these criteria best can be introduced in the approval process, i.e. new regulation, guidelines or amendment to already existing regulations, e.g. UN Regulation No. 79.

This approach was accepted and the rest of the meeting time was devoted to that task. The document LKAS-01-05 was expanded with a new column and each area was examined to see whether UN R79 covers it or not (see document LKAS-01-05-Rev.1 on the UNECE website). The Conclusion is that UN Regulation No. 79 is covering some areas but not all of them and not always with specific or quantified requirements for the assessment by technical services.

The group proposes to continue with step two and three in a second Ad-hoc meeting after GRRF in February and report the outcome to GRRF in September if delegates at the GRRF meeting in February consider this to be appropriate.