Provisional Agenda

8th Meeting of the Quiet Road Transport Vehicle Work Group 18 thru 20 October 2011 Baltimore, Maryland, USA

18 October- 10:00 a.m. to 5:30 p.m.

- 1. Welcome and Opening remarks
 - QRTV Chairman
 - Host Organization: (TBD) National Federation of the Blind
- 2. Introduction of Participants and Logistic Information
- 3. Agenda
 - a) Modifications / Additions
 - b) Adoption
- 4. Minuets from 7th Meeting in Osaka, Japan
 - a) Modifications / Additions
 - b) Adoption
- 5. Report of Activities
 - a) Report by GRB Chairman Christian Theis of relevant information from September 2011 meeting
 - b) Status report U.S. NHTSA regarding regulation development and the 12 July 2011, NHTSA Notice of Intent to Prepare an Environmental Assessment for Pedestrian Safety Enhancement Act of 2010 Rulemaking
 - c) Status report on U.K. study of quiet car related accidents
 - d) Status report on activities in Japan
 - e) Status report on activities in Germany
 - f) Status of U.S. proposal to sponsor the GTR

- g) Report by QRTV Chairman of special meeting at Inter Noise 2011 to hear presentations by the following conference presenters regarding quiet cars:
 - Mr. Norio Kubo, President, Yokohama Institute of Acoustics, Inc., discussing development of various audible sound designs,
 - Dr. Klaus Genuit, President, Head Acoustics GmbH, discussing audible signal characteristics in low signal to environmental noise conditions,
 - Dr. Koji Nagahata, Associate Professor, Fukushima University, discussing the quiet vehicle impact on the soundscape
 - Mr. Toshiyuki Tabata, Advanced Vehicle Performance Group, Nissan Motor Company, Ltd, discussing basis for selecting two primary frequency bands for audible signal detection in various environments
 - Dr. Katsuya Yamauchi, Professor, Nagasaki University, discussing cultural differences with regard to various audible signals

7. Presentations:

- a) Further discussion by the U.S. Department of Transportation, National Highway Traffic Safety Administration (NHTSA), Volpe Laboratories, of their Phase 2 report and the application of results to regulation development.
- b) To be determined
- c) Recap of Osaka meeting by QRTV Chairman

6:30 p.m. Group Dinner at waterfront restaurant (optional)

19 October - 9:30 a.m. to 5:30 p.m.

8. Development of a Draft Global Technical Regulation (GTR). (Attachment A - GTR template to be provided prior to Baltimore meeting)

(Receive inputs from experts as assigned at the Osaka meeting)

- a) Revise Scope and Introduction language per Osaka discussions
- b) Applicability Need to resolve applicability wording issue
- c) <u>Definitions</u> Need to provide clear definitions of vehicles subject to this GTR, environmental terms, vehicle operation, other terms used in GTR

- d) General Requirements Need to define alerting system requirements with regard to pedestrian safety and environmental masking
- e) <u>Alerting Signal Characteristics</u> Need to specify acoustic signal form, time related functions and other key acoustic parameters
- f) <u>Performance Requirements</u> Need to specify acoustic performance in terms of sound pressure level, directionality, locatibility, operation on-time, and other key performance requirements of alerting system
- g) <u>Test Conditions</u> Need to specify environmental test environment that are not defined in the ISO quiet vehicle test procedure such as use of test subjects, vehicle selection, etc.
- h) <u>Test Procedures</u> Need to incorporate by reference the ISO quiet vehicle test procedure to establish baseline vehicle sound levels (with regard to vehicle operation, alerting system operation, environmental conditions, acoustic influences, other)
- i) <u>Conformance Test Procedure</u> Need to define test procedure that will be used by government authorities to determine compliance with GTR
- j) <u>Alignment of Technical Terms</u> Need to review definitions, performance requirements, testing protocols and other key technical requirements with those established by signatories to the 1958 and 1998 Agreements
- k) Other considerations (See Attachment B)

6:00 p.m. NFB reception and President hosted dinner for participants

20 October - 9:30 a.m. to 5:30 p.m.

- 9. Continuation of GTR development
- Collaboration / Harmonization of U.S. Pedestrian Safety Regulation with UN/ECE/GTR for Quiet Road Transport Vehicles (QRTV). (see Attachment C)
- 11. Discussion and assignment of key GTR requirements
 - a) Economic / cost analysis
 - b) Public benefit analysis
 - c) Environmental impact analysis
 - d) Other considerations

- 12. Date and place of 9th and 10th(?) QRTV meetings.
- 13. Required February 2012 report/recommendations to the GRB
- 14. Review and discussion of recent publications, both pro and con, regarding the need for alerting devices on quiet vehicles
- 15. Other business
- 16. Adjourn

Attachment A

Draft GTR Template

Global Technical Regulation Regarding Audible Alerting Systems for Quiet Road Transport Vehicles

Attachment B

Development of UN/ECE/Global Technical Regulation (GTR)

(The following explanation is provided for those parties not familiar with the GTR requirements set forth in the UN/ECE/1998 Agreement)

Article 6, of the Agreement Concerning the Establishing of Global Technical Regulations for Wheeled Vehicles, Equipment and Parts Which Can Be Fitted and/or Be Used on Wheeled Vehicles (1998 Agreement), requires the following major elements for the development of a GTR for QRTV alerting systems:

- a) A proposal to the Executive Committee of the 1998 Agreement (AC.3) from a contracting party(s) to develop a harmonized
 - i) an explanation of the objective of a GTR
 - ii) a narrative description or draft text of the proposed GTR
 - iii) identification of documentation that will facilitate the analysis of issues to be addressed in the report [to the AC.3] that supports the recommended GTR and those issues that may be in opposition to the GTR
 - iv) recommendation of Working Party(s) that are appropriate to the development of the proposed GTR
- b) Obtain a consensus vote of the AC.3 in favor of developing a GTR, establish the country sponsorship(s) of the GTR (Japan? USA? Germany? EU? others?), assign the regulation development to a Working Party(s) with recommended time schedule

- c) In accordance with Article 6 of the 1998 Agreement the Working Party(s) shall develop a work plan, time lines and assign responsibilities to:
 - i) consider technical feasibility
 - ii) consider economic feasibility
 - iii) examine benefits, including those of any alternative regulatory requirements and approaches considered
 - iv) compare potential cost effectiveness of the recommended regulation to that of alternative regulatory requirements and approaches considered
 - v) verify whether the new GTR satisfies the stated objective and the criteria of Article 4 and
 - vi) give due consideration to the possibility of the technical regulation being established under the 1958 Agreement
- d) The Executive Committee determines if the recommended regulation and its supporting materials meet the requirements for establishment as a GTR under the UN 1998 Agreement.
- e) The Executive Committee of the 1958 Agreement (AC.1) will determine if the regulation meets requirements for establishment under the UN 1958 Agreement

Attachment C

National Highway Traffic Safety Administration

Notice of Intent to Prepare an Environmental Assessment fo Pedestrian Safety
Enhancement Act of 2010 Rulemaking