

ARTS22 Breakout Session Title:

354-Understanding the Human Factors of Teleoperation

Session Contact/Organizers:

Natasha Merat, University of Leeds

Bobbie Seppelt, Ford

Stacy Balk, NHTSA

TRB Sponsor/Partner Committees (if any):

ACH30, TRB Standing Committee on Human Factors of Vehicles

Session Description

A number of OEMs and start ups have started to consider the use of remote and tele-operations for higher level automated vehicles (AV) that do not have a user in charge, or where a user may be incapacitated. Following a series of meetings the UNECE HF-IRADS group has summarized a number of human factors issues that may arise from such operations, including, but not limited to training of personnel, appropriate design, performance and positioning of communication channels and displays, and the communication and other needs of the passengers inside an AV. The aim of this half day session is to bring together a number of experts who are currently studying this topic from a human factors perspective, to share insights and research outcomes.

Goals/Objectives/Outputs

- Provide an overview of the human factors challenges of remote operation
- Outline of research conducted in this area in current international projects
- Provide a forum for researchers conducting work in this area to share knowledge at the meeting and beyond
- Create new Research Needs Statements to further the state of the art

Agenda

We begin with a short introduction to the session, including an overview of the HF-IRADS paper and setting the scene.

The following colleagues have offered to provide an overview of their work in the area

- Natasha Merat, University of Leeds, UK (Confirmed)
- Bobbie Seppelt, Ford, US (Invited)
- Stacy Balk, NHTSA, US (Invited)
- Michael Oehl DLR, Germany (Confirmed)
- Josh Domeyer, CSRC, US (Confirmed)
- Joanne Harbluk, Transport Canada (Invited)
- Satoshi Katazaki, AIST, Japan (Invited)
- Azra Habibovich, Scania, Sweden (Invited)

We hope to follow the talks with breakout sessions to discuss the sub-topics which will be identified by the talks.

Related Sessions:

253-Remote Assistance and Teleoperation for Automated Vehicle Operations
(Tuesday 19 July)