

# ELROB 2016

20 - 24 June 2016

Eggendorf, Austria

## Team Information

Picture of vehicle:



Name of vehicle:

Telepresence@tEODor

Picture of team leader:



Name of team leader:

Ing. E.P.H. (Eduard) Winckers

Team Name:

TNO – NLD EODD

Team E-mail:

eduard.winckers@tno.nl

Logo:



Website:

www.tno.nl

Location:

Soesterberg, The Netherlands

Institution/Company:

TNO

Address:

PO Box 23, 3769 ZG Soesterberg, The Netherlands

Telephone:

+31 8886 65918

Fax:

-

**Return form to: [elrob@elrob.org](mailto:elrob@elrob.org)**

# ELROB 2016

20 - 24 June 2016

Eggendorf, Austria

## Team Information

Team Description:

The “TNO – NLD EODD” team will participate with a telepresence system developed for use on Explosive Ordnance Disposal robots. This telepresence system was developed by TNO, in collaboration with the companies ARVOO, Embedded Acoustics, and Egripment and funded by the Dutch MoD. It has been designed and optimized for use on Explosive Ordnance Disposal robots. It consists of two main components, one positioned at the vehicle, with a Pan-Tilt-Roll servosystem (PTR) with 3D audio sensors and (stereo) cameras, and the other at the operator control station with a headtracker, stereo audio and video head mounted displays. Information between these components is exchanged by wireless communication with minimal delay. The viewing direction of the operator, recorded by the headtracker, is ‘copied’ to the PTR viewing direction, and the audio and video recorded is presented on the HMD. This provides the operator with the feeling of actually looking and hearing around at the remote location where the robot is while actually being at a (safe) remote location. The operator can be further supported with video overlays on, for example, vehicle manoeuvring options and restrictions.

Sponsors:

sponsored by the Dutch Ministry of Defence / Directorate for R&D

Selection of scenario:

- Reconnoitring of structures (focus on radiological and nuclear measuring and mapping) **REMARK: radiological and nuclear measuring not applicable**
- Mule (shuttle between two locations)
- Movements / Convoying (transport with two vehicles)
- Search & Rescue (SAR) / MedEvac (find and drag a dummy body)
- Reconnaissance and disposal of bombs and explosive devices (EOD/IED; **for professionals only!**)

Proof of citizenship::

A copy of team leader passport will do (will not be published)!

**Return form to: [elrob@elrob.org](mailto:elrob@elrob.org)**