European Safety and Reliability Conference

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PANEL

# Autonomous system safety, risk, and security

## **Description**

This special session will be organized in the format of a panel for discussing autonomous systems safety, risk, and security (SRS). The session will discuss the results of the First International Workshop on Autonomous Systems Safety (IWASS), as well as early findings of the 2<sup>nd</sup> IWASS. Key experts will be invited to discuss autonomous systems SRS from an interdisciplinary and cross-industrial perspective.

The panel is expected to present the results from IWASS discussions and make them more accessible to a wider audience. Participants may present additional thoughts on the discussions and workshop outcomes.

#### **Motivation**

The First IWASS was organized by the Department of Marine Technology at the Norwegian University of Science and Technology (NTNU) and the B. John Garrick Institute for the Risk Sciences at the University of California, Los Angeles (UCLA). IWASS took place in Trondheim, Norway, from March 11<sup>th</sup> to 13<sup>th</sup>, 2019. The 47 participants were selected and individually invited to the workshop only and included 47. The subject matter experts came from Europe, Asia, Australia, and the U.S.A., working in both academia and industry. The 2<sup>nd</sup> IWASS is planned as a virtual event to be held in April 2021.

Autonomous systems on land, in the air and on the sea are being widely applied. The safety issues concerning these systems are the focus of many research projects and publications, yet each industry and academic field attempts to solve arising safety issues on their own. Given the identifiable similarities, could common solutions be envisioned and developed? Answering these and related questions motivates this panel as an

opportunity for an interdisciplinary discussion on risks, challenges, and foremost potential solutions concerning safe autonomous systems and operations.

## **Objective**

This session aims at using the results of the First IWASS, early findings of the 2<sup>nd</sup> IWASS, and participants expertise to discuss autonomous systems SRS, identifying key challenges, and possible solutions for those.

### Organizer

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The validation of the special sessions will be done under the responsibility of the technical and scientific committee. Organizers are invited to provide a list of reviewers that may be supplemented by TC members to ensure consistency in the evaluation process.