



Location

Carl-Cranz-Gesellschaft
Argelsrieder Feld 22, bldg. TE 03,
D-82234 Wessling-Oberpfaffenhofen

Participants will receive details to the seminar location as well as a list of nearby accommodations with the confirmation of registration. Please note that the accommodation is not included, and participants are asked to make their own hotel accommodation.

Fee

EUR 1.490,-
CCG is a non-profit organisation, exempt from value-added tax in Germany. For foreign seminar locations the local tax regulations are applicable. Members of CCG receive a discount of 10 %. Student discounts are available on request. Discounts cannot be combined.

Invoice is to be paid within 14 days of invoice issue date by direct deposit only.

Registration

Please register up to 2 weeks before the seminar via E-Mail anmelden@ccg-ev.de or online at www.ccg-ev.de
You will receive a confirmation E-Mail with further information.

Further Information

For more information about our organization please contact:
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For more information on the content of the seminar please contact

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Substitutions and Cancellations

Substitutions of participants may be made at any time. Cancellation of an accepted registration later than 14 days prior to the start of the seminar is subject to a 25% cancelation fee. No shows will be billed for the entire seminar fee.

CCG reserves the right to cancel a course up to 14 days before the course's beginning in case of low number of participants or for other significant reasons. Furthermore, CCG reserves the right, against the announcement in the programme, to possibly replace at short notice a

lecturer and also the lecturer's topic. Any claims for damages shall be excluded.

Focus

The seminar deals with communication technologies for the disaster case (satellite, 4G/5G, TETRA etc.) with main focus on alerting. The OASIS standard suite Emergency Data Exchange Language (EDXL) will be introduced and the therein included standard used world-wide for alerting: the common alerting protocol (CAP). The usage of different medias (cell broadcast, apps etc.) will be discussed together with their characteristics as well as the latest advances in research towards alerting via the Galileo system. Link between the topics is CAP which as a platform independent enabler provides the means for public warning and communication between authorities. Additionally, the guidelines and progress of the ETSI Emergency Communication (EMTEL) working group will be presented including the Next Generation (NG)-112, along with some notes about the work done in 3GPP around mission critical services. Finally, an outlook about 6G-NTN systems for the support of PPDR scenarios will be given as well.

Who Should Attend

Target audience are interested people (e.g. public authorities and vendors) which work in the field of warning and emergency communication, people which are new to the field, people that always wanted to become familiar with the protocols and transmission systems used, and people wanting an overview of the latest advances of research and standardization on these regards.

Lecturer

Tomaso de Cola	DLR, German Aerospace Center,
Benjamin Barth	Oberpfaffenhofen
	Institute of Communications and Navigation

Seminar DK 2.40

Communication Technologies for Effective Public Safety and Emergency Services

October 9 – 10, 2024
Oberpfaffenhofen near Munich

Scientific Coordination

Tomaso de Cola
Benjamin Barth
DLR, German Aerospace Center
Oberpfaffenhofen



Seminar Outline

Wednesday, October 9, 2024 10.15 – 16.30

- 10.15 – 10.30 Welcome and Introduction
- 10.30 – 11.00 **Introduction to PPDR Communication**
B. Barth
Typical public protection and disaster relief (PPDR) use cases and scenarios will be introduced including alerting.
- 11.00 – 12.00 **Alerting Channels and Systems in Use**
B. Barth
A variety of different alerting channels (e.g. cell-broadcast, sirens) and their characteristics will be described. This section will also include an overview of the current systems in place for alerting and disaster management communication.
- 13.00 – 14.00 **EDXL Overview**
B. Barth
An overview of the OASIS Emergency Data Exchange Language (EDXL) and the Common Alerting Protocol (CAP) will be introduced. They are XML-based standard for communication in disaster management and alerting messages.
- 14.15 – 15.15 **CAP Design Details**
B. Barth
The Common Alerting Protocol (CAP) will be discussed in detail including some practical examples.
- 15.30 – 16.30 **Alerting via Satellite**
T. de Cola
An outlook and the latest advances in alerting via satellite (communication and navigation systems) will be presented, including some of the standardized protocols (e.g., MAMES)

Thursday, October 10, 2024 09.30 – 16.30

- 09.30 – 10.30 **The ETSI EMTEL Perspective**
10.45 – 12.15
T. de Cola
Overview of the standardization work carried out within the ETSI EMTEL (Emergency Telecommunications) WG, with special focus on the converged network architecture and notably the definition of the NG112 and EU-ALERT service
- 13.00 – 14.30 **The Support of Mission Critical Services in 5G**
B. Barth
This slot will introduce how mobile communication systems enable mission critical (MC) services on the basis of the standardization activities carried out in 3GPP. A special emphasis will be given to the support of MC through 5G+ systems.
- 15.00 – 16.30 **PPDR Evolution in the Context of NTN-6G Systems**
T. de Cola
This slot introduces the latest advances in the convergence of terrestrial- and non-terrestrial networks (NTN) towards the definition of 6G, with special focus on the PPDR scenarios and related services.

Material

Each attendant will be provided with detailed course material in English.

Language

English