



# Multi-Domain Operations II

## Technology, Philosophy & Methods

Maritim Hotel Bonn | May 07-08, 2024

Courtesy copy  
in English



## Program

including terms & conditions and  
registration link

As of: April 18, 2024

### Conference ratio:

*"Multi-Domain Operations represents a pivotal shift in NATO's approach. This transformative concept empowers the Alliance to strategically influence events, synchronize efforts with external stakeholders, and present formidable challenges to adversaries. [...] Within NATO's structure there are five areas of operations: Maritime, Land, Air, Space and Cyberspace. Historically, operations in these domains have either not existed (i.e. Space and Cyber) or have functioned as largely independent entities within national militaries. Many Allied nations' militaries still function in this capacity today; however, given the speed of information, data flows and adversarial capabilities, the necessity of orchestrating military activities across all domains as a single force is crucial for long-term defence and deterrence initiatives within NATO."*

Multi-Domain Operations in NATO – Explained (As of October 05, 2023)

URL: <https://www.act.nato.int/article/mdo-in-nato-explained/> (seen on October 31, 2023)

The Multi-Domain Operations (MDO) conference aims to promote a common understanding between MoD, armed forces, research and industry on the subject of multi-domain operations and to support them on the path towards realisation: Through mutual understanding of goals, limits and possibilities. We invite you all, stakeholders from politics, the military (MoD, Bundeswehr, friendly armed forces), research and industry within NATO, EU and selected partner nations.

You are welcome to join us and participate in the dialogue aiming towards a common orientation and understanding.

In this second edition of the conference series, we will focus on the following aspects:

- ◆ What is NATO doing?
- ◆ What are our partners doing?
- ◆ Positioning of the Bundeswehr: How will / could the German MDO design look like?
- ◆ Approaches and demands of the armed forces branches
- ◆ Ideas / considerations from industry and research: How can rapid and coordinated action succeed with the technologies available today and tomorrow?
- ◆ End2End: Turning findings into effects - compatible design from sensor to shooter

As usual, we are organising the conference interactively:

- ◇ Keynotes with Q&A,
- ◇ Presentations of short impulses, followed by panel discussions,
- ◇ The most communicative of all formats for large groups of participants, the "poster sessions" are back, and
- ◇ we offer extensive times for individual communication, including a communication evening with walking dinner

All of this will enable you to get actively involved. Seize the opportunity!



### The Programme on May 07, 2024

08:00 **Check-In opens**

[Exhibition opens](#) | [Welcome coffee](#)

09:00 **Welcome to the conference**

**Retired Colonel Bernd Kögel**, Managing Director of SGW mbH

09:10 **Keynote Politics**

**Roderich Kiesewetter**, Member of the German Bundestag, Deputy Chairman Parliamentary Control Panel, Member of the Committee on Foreign Affairs

09:30 **Keynote NATO**

**Colonel (GS) Stephan Pillmeier**, Supreme Allied Command Transformation

10:00 **MDO - A situational assessment**

**Major General Wolfgang Gäbelein**, Head of Planning Office of the German Armed Forces and **Major General Dr Michael Heinz Färber**, Head of Planning and Digitalisation Department in the Bundeswehr Cyber and Information Command

10:30 [Coffee break / Exhibition](#)

11:15 **Intended way ahead & demands of the the armed forces branches**

Impulses from the Army, **BrigGen Jared Stefan Sembritzki**, KdoH, AL Einsatz the Air Force, **BrigGen Holger Neumann**, KdoLw, AL Weiterentw./ Planung the Navy, **RearAdm Ulrich Reineke**, MarKdo AL Planung the CIR, **BrigGen Michael Volkmer**, Commander ZDigBw the ZSanDst **Col MD Dr Uwe Unkelbach**, Kdo ZSanDst, RefLtr I-1

12:15 **Panel discussion: Above mentioned representatives in exchange with**

**General (ret.) Jörg Vollmer** and **Professor Dr. Wolfgang Koch**, Fraunhofer FKIE

13:15 [Lunch break / Exhibition](#)

14:30 **MDO - Challenges for the technical realisation**

**Holger Bonnen**, BWI

14:50 **Panel I: MDO - empowerment by design**

Keynote speeches followed by a panel discussion

Moderation: **Holger Bonnen**, BWI

Impulses: **OpArch FÜFä Bw - the basis of a command and MDO-capable Bundeswehr**

**Colonel (GS) Thomas Zimmermann**, Head of Division EBU II 2, BMVg

**Capability development in the MDO network - a systemic E2E approach**

**Colonel (GS) Christian Sendner**, PlgABw, RL II 2 (1)

**Management of the cyber/IT sub-portfolio**

**Brigadier General Michael Volkmer**, Commander ZDigBw

**Private Cloud for the Bundeswehr (pCloudBw)**

**TRDir Stefan Rechmeier**, BAAlNBW I 3.4

**The complexity of military cloud computing**

**TRDir Carsten Hatzig**, WTD 81

16:20 Elevator pitches of the poster sessions in plenary

16:35 [Coffee break / find your poster](#)

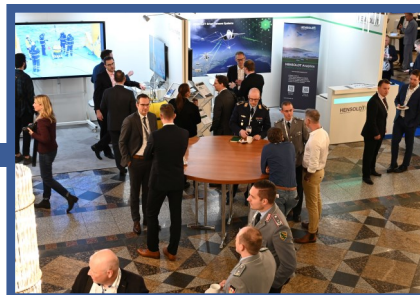
17:00 **Parallel poster sessions (see next page for details)**

18:15 [Beercall in the exhibition area](#)

18:45 [Walking Buffet / Communication Evening in the exhibition area](#)

21:15 Last Order

21:45 End of day one / recharge batteries for the second day



### Poster Sessions on May 07

Each of the 11 parallel "Speaker Corners" (posters) lasts 15 minutes (presentation / dialogue), followed by a 5-minute changeover time. The poster presentations will be held four times, so that each participant can visit his or her individual "TOP 4". Start-times are: 17:00 - 17:20 - 17:40 - 18:00

Poster 1

**Emergent self-organisation in multi-domain operations: Securing maritime critical infrastructure through ambient communication and mobile ad-hoc networks**  
Konstantin Brandl, ATLAS ELEKTRONIK

Poster 2

**Multi-domain operations - the role of simulation for education, training, operational planning and execution**  
Michael Sauer and Andreas Krupp, CAE

Poster 3

**Shared Information Space - optimised data management to support MDO**  
Michael Pegelow, Dynamite Nobel Defence

Poster 4

**The transformative impact of AI and resilient data-enabled Multi-Domain Operations (MDO)**  
Brigadier General (ret.) Robbie Boyd, Gartner Germany

Poster 5

**Smartphones & Tablets: The Secure Ultra-Mobile Workplace for Armed Forces and Defence Industry - todays state of the art and aotentials for the Future**  
Frigate Captain (ret.) Marco Schrader, Materna Virtual Solution

Poster 6

**The potential of venture capital for defence technology innovations**  
Dr Martin Heipertz, Paralos Partners

Poster 7

**Software Defined Defence: Implications for signal intelligence in MDOs**  
Sven Lüttich, Plath GmbH

Poster 8

**MDO in the context of the European Defence Fund (EDF)**  
Ulf Schröter, Rheinmetall Electronics

Poster 9

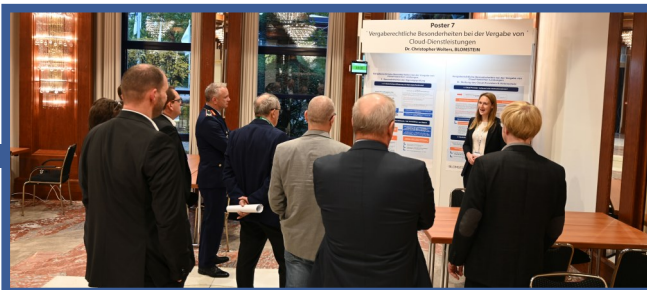
**Multi-Domain Operations in the Civil & Combined Environment - Challenges and Solutions**  
Thomas Mundstein, Systematic

Poster 10

**Blockchain technology: A key technology for multi-domain operations of the future**  
Dr Dirk Stauder, University of the Federal Armed Forces Munich

Poster 11

**Because we can!? - When technology overtakes the process.**  
Martin Becker, Bundeswehr Digitalisation and Capability Development Centre CIR



### The Programme on May 08, 2024

08:00 **Check-In opens**

[Exhibition opens](#) | [Welcome coffee](#)

08:30 Opening of the second day

08:40 **Looking over the Fence (1): United States MDO perspective**

*Colonel Matthew Cannon*, USARMY 2nd Multi-Domain Task Force

**Looking over the Fence (2): French MDO perspective**

*Général de Division Aérienne Vincent Breton*, Directeur du Centre Interarmées de Concepts, de Doctrines et d'Expérimentations

**Looking over the Fence (3): British MDO perspective**

*Air Vice-Marshal Fin Monahan*, Director Defence Capability Development Centre

**Looking over the Fence (4): Italian MOD perspective**

*Major General Giuseppe Bertoncello*, Chief of Defence Innovation Office

10:00 [Coffee break / Visit to the exhibition](#)

10:30 **MDO = Fast & coordinated leadership and action**

Short speeches followed by a panel discussion

Moderation: In coordination

Impulses: **Digital twins for MDO for decision support, simulation and artificial intelligence artificial intelligence**

*Daniel Kalfass*, Airbus Defence and Space

**Interoperability of communication for joint and combined missions missions - a prerequisite for MDO capability**

*Peter Sevenich*, Fraunhofer FKIE

**Revolutionising military strategy and communication through generative AI**

*Udo Würtz*, Fujitsu Technology Solutions

**MDO - Success factors beyond buzzwords**

*Benjamin Fuchs*, IABG

**Focal points and challenges in the realisation of**

**"Multi-/ Joint-All-Domain-Operations (MDO)"**

*Frank Dürrbeck*, PricewaterhouseCoopers

12:15 [Lunch break / visit to the exhibition](#)

13:25 **MDO: Sensors and effectors in (autonomous) dialogue**

Keynote speeches followed by a panel discussion

Moderation: In coordination

Impulses: **Cloud-based effect management in multi-domain-based operations**

*Michael Söllner*, MBDA Germany

**Multi-domain effects in the network of branches and nations**

*Oliver Dellschau*, Dellschau Consulting / Kongsberg Defence & Aerospace

**Light Remote Carrier - Modular effects in a multi-domain environment**

*Jakob Hammes*, Diehl Defence

**Multi-Domain Operations End2End - From the sensor via the shooter to**

**the ammunition**

*Andreas Schiel*, ESG Elektroniksystem- und Logistik-GmbH

14:50 **Follow-up:**

*General (ret.) Vollmer*, *Major General Gäbelein* and *Brigadier General Volkmer* talk.

15:15 Farewell

15:20 The End





### Pricing for Visitors

The conference is aimed at members of the armed forces, civil services, parliaments and ministries, embassies, academia and industry.

<b>Category A:</b>	<b>€ 85.00 (incl. catering)</b> German armed forces, police, BKA, LKA, BND, THW, DRK, other German "blue light Organisations" (BOS), German ministries, offices subordinate to the ministries,
<b>Category B:</b>	<b>€ 310.00 (incl. catering)</b> Research organisations, universities, BWI, BwBM, HIL, BwFPS and BwConsulting, "non-German" authorities and participants from friendly / allied organisations in the sense of category A as well as persons who cannot be assigned to categories A, C or D.
<b>Category C:</b>	<b>€ 1190.00 (incl. catering)</b> Industry
<b>Category D:</b>	<b>€ 0.00 (incl. catering)</b> Press

Discounts for early registration (Cat B, C: 10% Early Bird reduction until 07.03.2024), 50% for speakers from industry and research, 100% for speakers from MoD and armed forces will be considered in the online booking process. Discount for exhibitors: See below. Prices for participation on individual days will be displayed / taken into account in the booking process on our homepage.

Please sign up online:

<https://veranstaltungen.dwt-sgw.de/?v=131>

The conference is aimed at members of the armed forces, civil services, parliaments and ministries, academia and business.

[Participants from non-NATO or non-EU countries only with the prior consent of the organiser!](#)

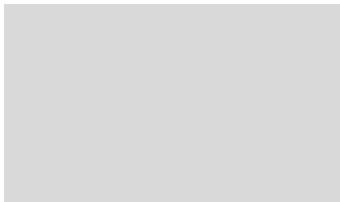
Catering / drinks are included in the conference fees. The prices do not include VAT.

With your registration you agree:

1. The electronic storage of the data you provide.
2. That photos and/or film recordings may be taken during the event, e.g. for reporting purposes or for publication in invitations to future DWT/SGW events.
3. The distribution of a list of participants (name / function / company or office) and the photos taken during the event to the participants.
4. With your registration / signature, you accept the conditions of participation of this invitation, the General Terms and Conditions and the Data Protection Agreement of the DWT Study Association, which can be viewed at [www.dwt-sgw.de](http://www.dwt-sgw.de).
5. If necessary, please exercise your right of objection in accordance with the GDPR by sending an e-mail to [bernd.koegel@dwt-sgw.de](mailto:bernd.koegel@dwt-sgw.de).
6. Cancellation conditions: Cancellations are free of charge for participants up to 5 working days prior to the conference; a substitute participant can be named at any time. Exhibitors have the option to cancel free of charge up to five weeks before the event.
7. If an event has to be cancelled for unforeseeable reasons, registered participants and exhibitors will be notified immediately and any participation and exhibition fees will be refunded. The liability of Studiengesellschaft der DWT mbH is limited to the participation and exhibitor fees.

### Pricing for Exhibitors

**Option A | 330,- Euro / m<sup>2</sup>**  
Exhibition Space



**Services Option A**

- Stand space in the desired size
- Row / corner / island stand
- 1 full admission ticket per 6 m<sup>2</sup> stand area included.
- 20% discount on additional full tickets
- 50-70% discount on additional tickets without participation in the presentations ("stand service")
- Security at night

**Option B | 420,- Euro / m<sup>2</sup>**  
System-Stand



**Services Option B**

- Services Option A
- Stand construction in Octanorm system
- Carpet Expo Rips grey
- Stand cleaning at night
- Supplements to the conference folders

**Option C | 510,- Euro / m<sup>2</sup>**  
System-Stand All Inclusive



**Services Option C**

- Services Option B
- Illumination of the stand
- Front banner 200 x 50 cm
- Furnishings of your choice
- Sideboards, counters, brochure stands
- Lockable cabin (if required)
- Choice of 20 carpet colours

**Option D | 610,- Euro / m<sup>2</sup>**  
Individual Booth Building



**Services Option D**

- Services Option C
- Premium exhibition stand construction, e.g. with:
  - Smooth wall wood system
  - Printed stenter frames
  - Truss construction
  - Presentation technology (TV, projector, ...)
  - Graphics / border printing
  - Choice of laminate / parquet / carpet

**Option E (Outdoor Exhibition)**  
On request