

Ladies and gentlemen,

Thank you for coming. I am pleased to speak to you about our proposal for capabilities for the management of crises, conflicts and catastrophes.

I am not addressing you as a specialist in the management of crises, conflicts and catastrophes.

I am here as an engineer,

an engineer who can, would like to assist you in getting your capabilities on the road, effectively and efficiently.

During the course of my preparations, I stumbled upon an aphorism I would like to share with you

Slide 2 - Luck

Luck is what happens, when preparation meets opportunity

It is our good luck that we have been granted the opportunity to meet you today here with our preparations.

I will briefly present you

- our spirit,
- our motivation,
- our intention

with which we are able to contribute to the preparation of your capabilities.

Trailer: EDS, an HP company

Slide 3 - EDS, an HP company

Slide 4 - Luck

Luck

is what happens when

Preparation

meets

Opportunity

That is nothing from me. The saying is attributed to Seneca the Younger.

But that is not enough to make this saying remarkable for today's presentation.

More interesting is the fact that General Petraeus, Commander of US Central Command and previously Commander US Iraq Mission, quotes this saying from Seneca in his Field Manual and recommends it as a guiding principle for the mission.

The opportunity will arise or is the daily challenge. Every opportunity is to be grasped with the means and resources available. We have to take opportunity as it comes. It cannot be influenced ex ante. The opportunity is to be dealt with the means available when the case arises and not with the ones we dream about having.

But preparation is something that

- we have to make,
- is up to us,
- we are responsible for, and
- we have to initiate – no ifs, ands or buts.

Preparation includes the selection and provision of the proper capabilities on the ground.

What capabilities on the ground are feasible now, must be made available to manage conflicts, crises and catastrophes?

Today, the core capabilities of leading, steering and acting are handled by

- Network Enabling Capabilities (NEC) in EU and NATO,
- Network Centric Operation (NCO) in the US Forces and
- vernetzter Operationsführung (NetOpFü) in the German Bundeswehr.

NEC, NCO or NetOpFü is used as the organizational paradigm for the daily challenge – the handling of our conflicts, crises or catastrophes under known asynchronous threats and challenges.

Slide 5 - Preparation NEC

Preparation requires network enabling capabilities to generate, secure and support interoperable operation and action.

The NEC processes have been described a number of times. For our purposes we will focus on the EU definition of capability development areas for NEC.

The focus is on capability development areas

- INFORM
- COMMAND
- DEPLOY
- SUSTAIN

These capability development areas are to be secured with the goals with which you are familiar.

Slide 6 - Preparation using NEC-ICT

Processes are supported by or are only possible with information and communication technology (ICT). In the case of Network Enabling Capabilities (NEC), the desired interoperability only becomes realistic, economically and effectively, with ICT.

ICT becomes a means for the preparation of the capabilities, the prerequisite for Network Enabling Capabilities (NEC). Let's take a look at the capabilities the Bundeswehr foresees and requires to be prepared in the framework of its transformation to networked control and operation.

- Information processing: the effective processing of data into information about the mission
- Information transfer: the targeted communication of information in the mission room
- Information management: the efficient management of data for suitable information for the mission
- Information security: the securing of information in processing, communication and management

All capability areas have equal rights. They depend on each other to provide Network Enabling Capabilities (NEC).

In consequence the question arises: Where are

- the essential,
- the actual problems,

that cause the frictions in daily operation?

In the framework of our approach we took the effort to investigate the problems, to seek them out in situ, quasi on-site.

From the perspective of the Japanese KAIZEN, the way (ZEN) to continuous improvement (KAI), problems are considered to be treasures.

Treasures,

to be lifted,

Problems,

to be solved.

Where are our treasures, our problems, our needs for preparation?

Let's take a look at the experiences, the lessons learned from crises, conflicts and catastrophes.

Here we should, however, find and name "requirements".

We ran into treasures!

Slide 7 - lesson learned "Elbe flood"

I will now quote from the "Report by the Independent Commission of the State of Saxony on the Floods of 2002" – by the way, a disaster which resulted in personal damages of 9.2 billion euros.

General von Kirchbach, a former General-Inspector of the Bundeswehr and Chairman of the Commission that compiled the report warned in no uncertain terms

about the lack of capability to act jointly, of Network Enabling Capabilities (NEC).

Specifically the need for improvement of capabilities in the 4 reoccurring main processes in Network Enabling Capabilities was addressed.

For the processes the main concern mentioned was in the capability-areas.

In ORIENT:

Stringent evaluation of the overall situation in one hand

In DECIDE:

Clear coordination of the cooperation of the parties involved

In ACT:

Clear control of the resources in one hand

In OBSERVE:

Predictive evaluation of the impact of measures on the overall situation

Well, those are the problems.

The capability-areas mentioned that are to be improved are not unique or typical for the disaster. Other lessons learned also point to such problems. Similar and even the same treasures can also be found in other lessons learned and final reports.

One treasure, one problem, one capability-area always rears its (ugly) head:

The stringent evaluation of the overall situation by a single function or the establishment of the situational awareness

under the premises of joined, combined and comprehensive

as a prerequisite for decide, act and observe

as the basis for interoperability for networked actions of the various participants, are they the armed forces, GOs and NGOs or independent participants.

Situational awareness assumes information. Information from all the participants. Information from the various sources available from the participants and third parties is to be

derived

forwarded

processed and

evaluated as to how it can be put into an understandable, standardized form for decision makers.

We need a turntable - for information!

Slide 8 - situational awareness information turntable

Like the locomotive turntable, which turns the locomotives in front of the roundhouse, aiming them at the right track, establishing their destination, we need an information turntable for the information and data.

The information turntable directs the logistical element information from the source, to the user to the decision maker.

The information turntable is our ICT means and measures. With these the relevant data and available information are compiled from the various systems and databases of the participants or third parties involved.

The only data and information that are read, are

relevant for the task, for the mission and

available.

Of course this takes place on the basis of agreed upon information exchange requirements.

The data and information are processed in such a manner that they are standardized for the specific user, are understandable and applicable for the various destinations and command levels.

The data and information are also to be adequately secured. The access, changes, processing of information and data must be secured with the necessary means and measures.

Are we in a position to provide such an information turntable with the possibilities

that we have and

not the ones we wish we had

in the short-term?

What quality and what degree of capability can we attain with the extensive use of state-of-the-art technology on the basis of commercial off-the-shelf (COTS) and/or military off-the-shelf (MOTS) systems?

What is necessary for a rapid improvement of the capability areas for situational awareness?

It is obvious that we first of all, though not exclusively, checked in our directly accessible EDS portfolio for ICT means and measures.

And we found something. From this we developed in an initial step our solution Agile Mission Oriented Networking (AMON) for the current needs.

AMON is significantly, but not exclusively, based on the COTS and MOTS means and measures used by and available in EDS.

We selected the AgileJOP Solution from the EDS portfolio to serve as the nucleus.

AgileJOP is a COTS-based framework with re-usable components for the control center for the various command levels in crises, conflicts and catastrophes.

AgileJOP provides re-usable components for processes, functions and/or vignettes such as functionality for the classical NEC processes

orient,

decide,

act and

observe.

Vignettes are available for the various capability areas. One vignette provides components for capabilities for situational awareness in crises scenarios.

AgileJOP is an integral part of a concept for Networking Enabling Capabilities.

AgileJOP is based on and is itself a component of a Service Oriented Architecture (SOA). The NEC SOA forms the technology baseline for AgileJOP.

Competence fields have been defined for the NEC SOA. The competence fields provide NEC SOA services for installing, ramping up and operations, amongst other things for AgileJOB under the premises

flexible to adapt

re-use of legacy (assets)

speedy deployment

secured communication

AgileJOP therefore offers a preparation for better decision making through situational awareness.

Agile Mission Oriented Network (AMON) is not a theory. AMON is what we have. AMON is what we offer – right here and now.

Slide 9 - AMON

AMON is right on the mark

We have developed a demonstrator of the AMON information turntable for the congress.

AMON demonstrates, on the basis of a generic ISAF Afghanistan scenario the information turntable for situational awareness.

AMON consolidates flexibly and task-based data and information from various systems of the participants for various command levels.

AMON processes rules-based data and information for scenarios in the assignment.

With AMON we are prepared for the opportunity.

Slide 10

We are looking for the opportunity.

We would like to enter into a dialogue with you.

We would like to support you in the preparation of the capabilities for NEC in the current orders for managing crises, conflicts and catastrophes.

We would like to make our contribution, so that you can act and impact successfully joined and combined in the framework of a comprehensive approach strategy.

AMON is our contribution to optimized, networked management and actions so that crises, conflicts and catastrophes – though not avoidable – can be successfully managed in a smoother manner while protecting resources in the long-term.

I am looking forward to a lively discussion about AMON.

I am happy to present you with an existing solution for EU & NATO capabilities and C4I.

Allow us to demonstrate it to you and discuss it with you at our stand here today.

As Erich Kästner, one of Germany's most famous poets put it:

'There is no good, but that which you do'