



## **Host National Government Keynote Address**

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Mister Chairman,

Ladies and Gentlemen,

It is a pleasure for me to welcome you on behalf of the President of the German Federal Office for Defence Technology and Procurement to the Modelling and Simulation Conference linked to the 14<sup>th</sup> business meeting of the NATO Modelling and Simulation Group in the city of Koblenz.

I hope you are able to enjoy the wonderful area of Koblenz, where the river Mosella joints the river Rhine. Beside of the conference I presume that you will have some time for sightseeing and you should not forget to taste the most famous and well known wine of our region during the evening hours.

Talking about the connection of the two rivers, it comes into my mind that your business deals also with connecting, not rivers but many different nations in the area of modelling and simulation.

Modelling and simulation has been used by the German Armed Forces and in German defence programs for more than 30 years. Main application areas so far have been training and exercise in conducting military operations and analyses in context with operations research. The German defence industry have used modelling and simulation extensively for the development of armament material.

Today, however we encounter new challenges. Changing threats require changing missions. Therefore different types of military scenarios and doctrines have to be applied. Joint and combined operations are more important than ever before.

Fortunately rapidly developing technologies may help to support the Armed Forces to fulfil the new requirements. But the process to field these technologies must be accelerated. In this context a new assessment of military modelling and simulation is helpful and necessary within the changing world, which requires also changes in the military environment known as transformation process.

In Germany we are convinced, that modelling and simulation still includes an enormous useful potential to support and enhance defence related activities.

Application of modelling and simulation for the provision of the capabilities of our forces can be seen under different points of view:

Modelling and simulation are key technologies, especially in the consideration of "network centric warfare" and "concept development and experimentation areas".

Paper presented at the RTO NMSG Symposium on "Modelling and Simulation to Address NATO's New and Existing Military Requirements", held in Koblenz, Germany, 7-8 October 2004, and published in RTO-MP-MSG-028.

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In this sense modeling and simulation help to discover military and technological capability gaps.

Modelling and simulation support all types of missions - Article 5 as well as Non Article 5 - in all areas of modelling and simulation, such as:

- Operations research,
- Acquisition,
- Mission Decision Support and
- Training and Exercises

for all levels of command.

In all this areas particular attention has to be given to the application of networks of simulations.

Multinational Rapid Response Forces require flexible collaborative environments for training and support across the complete spectrum of their activities. Thus, the potential for interoperability of simulations and their utilization within national and international networks is becoming mandatory for the entire application space of simulation for the support of military commanders and staffs.

Furthermore, the utilization and leverage of common programs across the nations and NATO will be useful for financial and technical reasons.

This will also enable the expansion of capabilities of individual national simulation systems by the establishment of networks of existing national and NATO systems.

One of the key aspects of transformation of our forces is a more efficient utilization of information in the military command process to allow faster decisions with less risk. In this context Course of Action development and assessment supported by modelling and simulation will play a major role in future operations.

We are aware, that an exploitation of the potential of modelling and simulation as outlined before embraces technical and organizational challenges and will require new priorities for investments.

Germany has started to establish suitable organizational and technical changes to deal with these challenges.

Our existing centers for live, virtual and constructive Simulation of the Armed Forces and our technical expertise at the proving grounds might be a solid foundation to build on. These facilities are getting more and more prepared for joined and combined applications. Several national research and development efforts have been made to improve the use of modelling and simulation and develop simulation networks. This result must and will be shared with international partners.

Germany's active involvement in the NATO Modeling and Simulation Group has to be seen in this context. Germany is contributing to most of the Technical Activity Programs. Especially these programs might contribute to combined solutions for the future use of modelling and simulation for the NATO.

Ladies and Gentlemen.

the headline of the NMSG conference this year is "Modeling and Simulation to Address NATO's New and Existing Military Requirements".

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I am convinced that future approaches for dealing with an increasing complexity of military requirements and new challenges have to imply an extensive application of Modelling and Simulation support. I hope that the papers and discussions of this conference will trigger many new ideas for future Modelling and Simulation application in fulfilling new and existing military requirements.

I wish you all a successful conference and do not forget the taste of wine during your spare time.

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