



COMPUTER ASSISTED EXERCISE



CAX
FORUM

2017

FIRENZE
26-29 SEPTEMBER



WAMS

FLORENCE2017

OFFICIAL
PROGRAM

Grand Hotel Mediterraneo, Convention Centre, Florence, Italy
September 26-29, MMXVII

DAY 0 Monday 25th SEP, 2016

WHAT	MSG-150 (Modelling & Simulation Supporting (NATO) Concept Development & Experimentation)	
WHERE	America Nord Conference Room	Conference Room
10:30 12:30	Chair: Lt.Col. Biagini <u>INVITED ONLY</u>	<u>INVITED ONLY</u>
WHERE	GHM Restaurant Area	
12:30 13:30	Lunch Break	
WHAT	MSG-150 (Modelling & Simulation Supporting (NATO) Concept Development & Experimentation)	MSG-147 (M&S Support for Crisis and Disaster Management processes, and Climate Change implications)
WHERE	America Nord Conference Room	America Sud Conference Room
13:30 15:30	Chair: Lt.Col. Biagini <u>INVITED ONLY</u>	Chair: Col. Nikolov <u>INVITED ONLY</u>
WHERE	GHM Restaurant Area	
15:30 16:00	Networking Coffee Break	
WHAT	MSG-150 (Modelling & Simulation Supporting (NATO) Concept Development & Experimentation)	MSG-147 (M&S Support for Crisis and Disaster Management processes, and Climate Change implications)
WHERE	America Nord Conference Room	America Sud Conference Room
16:00 18:30	Chair: Lt.Col. Biagini <u>INVITED ONLY</u>	Chair: Col. Nikolov <u>INVITED ONLY</u>
WHERE	GHM Reception Desk	
09:00 13:00 15:00 20:00	NATO CAX Forum 2017 attendees registration	

DAY 1 Tuesday 26th SEP, 2017

WHERE	Reception	
09:00 13:00	NATO CAX Forum 2017 attendees registration	
WHAT	NATO CAX FORUM & WAMS 2017 OPENING SESSION – Plenary Speeches	MSG-150 (Modelling & Simulation Supporting (NATO) Concept Development & Experimentation)
WHERE	CONTINENTI Conference Room	America Nord Conference Room
10:00 10:15	<p><i>Chair: LTC Jason JONES, NATO M&S COE</i></p> <p>CAX Forum Welcome Cpt (ITA N) Vincenzo MILANO, NATO M&S COE Director</p>	<i>Chair: Lt.Col. Biagini</i>
10:15 11:30	<p>KEYNOTE Speakers:</p> <ol style="list-style-type: none"> 1. Lieutenant General Miroslav ŽIŽKA, (CZE): Modelling & Simulation in support of Decision Making 2. Dr. Thomas KILLION (USA), STO, Chief Scientist: The value of simulation for NATO Forces Training 3. Mr. Thomas C. IRWIN, (USA) Executive Director, Joint Training, US JS J7:Global Integration - Developing a Global Joint Force 4. Col. Gerhard ZEH, (DEU): Model & Simulation in Training – Changes & Challenges from a NATO JFTC perspective 	
11.30 11.40	COFFEE BREAK	
11.40 11.50	<p>Welcome to Workshop NATO MSG 153, Dr. Wim Huiskamp, TNO, NL</p> <p>Welcome to WAMS: Prof. Agostino G.BRUZZONE, Simulation Team President, WAMS General Chair</p>	
11.50 12.30	<p><i>Chair: LTC Jason JONES, NATO M&S COE</i></p> <p>ROUND TABLE DISCUSSION Keynotes plus Mr. Wim Huiskamp (NLD), Mr. Agatino Mursia (ITA), Prof. Agostino Bruzzone (ITA), Prof. Erdal Cayirci (TUR) Chair: LTC Jason JONES, NATO M&S COE (USA)</p>	
12.30 12.45	CAX FORUM ADMIN INSTRUCTIONS	
12:40 13:00	Photo Opportunity for WAMS & CAX Forum Attendees	
WHERE	Grand Hotel Mediterraneo (GHM) Restaurant Area	
13:00 14:30	Networking Lunch Break	

WHAT	CAX Forum Session	CAX Forum Session	CAX Forum & WAMS	MSG-150
WHERE	Europa Conference Room	Africa Conference Room	America Sud Conference Room	America Nord Room
ITEM	Command and Control to Simulation (C2SIM) Interoperability	M&S for Exercises and Planning	Interoperable Simulation	Modelling & Simulation Supporting NATO CD&E
	<i>Chair: Dr. Mark Pullen</i>	<i>Chair: Lt.Col. Paolo Di Bella</i>	<i>Chair: Dott.ssa Marina Massei, DIME, Genoa University</i>	<i>Chair: Lt.Col. Biagini</i>
14:30 16:30	<ol style="list-style-type: none"> Benefits of C2SIM, Mark Pullen SISO C2SIM Standard, Mark Pullen C2SIM in Simple Environments, Brian Wardman C2SIM Infrastructure and Implementation, Mark Pullen 	<ol style="list-style-type: none"> Tutorial on Joint CAX Procedures and Architectures, Prof. Erdal Cayirci MILSIM and EDMSIM: CAX simulations for Today's Challenges, Harry Thompson 	<ol style="list-style-type: none"> Transition of a Monolithic Legacy M&S tool to a full SOA and practical Use Cases, Manlio Oddone, Agostino Bruzzone, C.Strode, NATO STO CMRE & University of Genoa, Italy Simulation of the Construction of a Lunar Habitat, Felipe Boni, André Carneiro, F.T.Leite, D.Rodrigues, Lucas Soares, G.Todesco, FACENS, Sorocaba Engineering College, Brazil Digital Cultural Heritage: How to use them? Applications on Florentine Architecture, G. Tucci, V. Bonora, A. Conti, L. Fiorini, F. Panighini, E. I. Parisi, GeCo & DICEA University of Florence 	
WHERE	GHM Restaurant Area			
16:30 17:00	Networking Coffee Break			
WHAT	CAX Forum Session	CAX Forum Session	CAX Forum & WAMS	MSG-150
WHERE	Europa Conference Room	Africa Conference Room	America Sud Conference Room	America Nord Room
ITEM	Command and Control to Simulation (C2SIM) Interoperability	M&S-Based Computer Assisted eXercise and Experimentation (CAX ²)	Crisis Management	Modelling & Simulation Supporting NATO CD &E
	<i>Chair: Dr. Mark Pullen</i>	<i>Chair: Lt.Col. Jan MAZAL</i>	<i>Chair: Prof.Grazia TUCCI, University of Florence</i>	<i>Chair: Lt.Col. Biagini</i>
17:00 18:30	<ol style="list-style-type: none"> C2SIM Sandbox Demonstration, Dr.Mark Pullen and Brian Wardman MSG-145 Task Group Plans and Progress, Brian Wardman <p>Discussion</p>	<ol style="list-style-type: none"> Joint approach to Hybrid Warfare from Multiple Players, Prof.Bruzzone et al. Using Web Technologies to Streamline Preparation for Simulation-Driven Training Exercises, Mr. Peter Swan, VT MAK A Discussion of Hybrid Replication, Mr. Kenneth R. Abramowski, Deputy Director I&S Training Support, Joint Multinational Simulation Center (JMSC) Computer Assisted Wargaming Challenges, Lt.Col. Jan Hodicky 	<ol style="list-style-type: none"> Population Modelling and Simulation in Disasters & Emergency impacting on Critical Infrastructures, A.Bruzzone, G.Maglione, M.Agresta, R.Di Matteo, O.Nikolov, H.Pietzschmann, W.David, Simulation Team, NATO M&S COE, NATO CMDR COE & Bundeswehr Human Behavior and Social Influence: an application for Green Product Consumption Diffusion, M. Agresta, J.Hsien Hsu, DIME & De Montfort Universities, Italy & UK ECOSHE Simulator to Assess Human Error Probability During Industrial Emergency Conditions, F.De Felice, A.Petrillo, F. Zomparelli, Universities of Cassino & Parthenope 	
WHAT	NATO CAX FORUM 2017 SOCIAL EVENT			
WHERE	GHM Hall			
19:00 21:00	Networking Ice-Breaker			

DAY 2 Wednesday 27th SEP, 2017

WHAT	CAX Forum Workshop	CAX Forum Session	WAMS
WHERE	Europa Conference Room	Africa Conference Room	America Sud Conference Room
ITEM	CAX M&S Services	NATO Training/ Simulation Centres	Simulation Techniques & Methodoloiges
09:00 10:30	<p><i>Chair: Dr. Robert SIEGFRIED, ADITERNA/ MSG-136</i></p> <ol style="list-style-type: none"> A Layered MSaaS Architecture and Testbed for Military Training and Exercise Clouds, Prof. Erdal Caiyrçi Man in the Loop Virtual Asset, Massari, Bellini, Oliveira, Vampo-Leonardo A use case of virtual immersive training over a MSaaS approach in the OCEAN Project, Picollo, Mursia-Leonardo 	<p><i>Chair: LTC Jason JONES, NATO M&S COE</i></p> <ol style="list-style-type: none"> Simulation Partnership Community Initiative, Col. Rob YOUNG, Director, Joint Multinational Simulation Center (JMISC) JFTC update, LTC Wolfhard SCHMIDT, NATO JFTC M&S COE update & Intro to M&S Enclave Initiative Continuum, Lt.Col. Jones/Biagini Presentation of M&S COE- JMISC Cooperation Initiative, C.V.Milano, Col. Young 	<p><i>Chair: Dr. Giovanni Luca MAGLIONE, Simulation Team</i></p> <ol style="list-style-type: none"> Use of Simulation for Studying Ecosystem Tipping Points, T.Bossomaier, J.Brown, C.Johnson, Charles Sturt Univ. & Univ. of Tasmania, Australia CFD & Numerical Models Validation: from Predictive to Effective Design Tools, E.Cattaneo, G.Minestrini, A.Mola, A. Spoladore, Stara Glass & DIME Verification and Validation applied to an Interoperable Simulation including Human Factors respect Strategic Decision Making, A.Bruzzone, M.Massei, G.L.Maglione, P. Di Bella, V. Milano, DIME & SIM4Future & NATO M&S COE
WHERE	GHM Restaurant Area		
10:30 11:00	Networking Coffee Break		
WHAT	PLENARY MSAAS DEMO		
WHERE	Continenti Conference Room (Europa + Africa + Asia)		
ITEM	M&S as a Service		
11:00 13:00	<p><i>Chair: Dr. Robert SIEGFRIED, ADITERNA/ MSG-136 Chairperson/ LTC Marco BIAGINI, NATO M&S COE</i></p> <p>MSaaS Experimentation & Evaluation and involvement of NATO and Nation</p>		
WHERE	GHM Restaurant Area		
13:00 14:30	Networking Lunch Break		
WHAT	CAX FORUM 2017 – SOCIAL EVENT		
WHERE	Florence Downtown		
15:00 19:00	Visit to Uffizi Gallery Museum		

DAY 3 – Thursday 28th SEP, 2017

WHAT	CAX Forum Session	CAX Forum Workshop MSG-153	CAX Forum
WHERE	Europa Conference Room	Africa Conference Room	America Sud Room
ITEM	National Simulation & Training Centers Best practices	Commercial Technologies & Games for Use in NATO and Nations Session 1: Game based Application	
09:00 10:30	<p><i>Chair: Lt.Col. Marco Biagini</i></p> <ol style="list-style-type: none"> A Discussion of Interoperability, Mr. Thomas LASCH, Models & Simulations Division Chief, Joint Multinational Simulation Center M&S Enclave Initiative Workshop, Lt.Col. Biagini, M&S CoE 	<p>Introduction - Chairs: Wim Huiskamp (TNO, NLD), Niels Krarup-Hansen (DALO, DNK), LTC W.Schmidt (JFTC, DEU)</p> <p>Keynote: Game based Training for Adult Learners, CDR. USN Rtd. Kimberley Himmer, Articulated Python, Inc. USA</p> <p>Chair: Mr. Niels Krarup- Hansen</p> <ol style="list-style-type: none"> The Naval Mine Warfare Gaming System, OF3 BEL Navy P. Clauwaert 	

WHERE	GHM Restaurant Area
10:30 11:00	Networking Coffee Break

WHAT	CAX Forum Session	CAX Forum Workshop MSG-153	CAX Forum Session
WHERE	Europa Conference Room	Africa Conference Room	America Sud Room
ITEM	Complex environments: Creating Crisis from the Ground Up	COTS based Gaming & Assessment Platform for Scenario-based Training Session 2: Mission Planning and Decision Support Training	<i>Multinational Capability Development Campaign (MCDC) & M&S Support to NATO CD&E</i>
11:00 13:00	<p><i>Chair: LTC Walter DAVID, NATO M&S COE</i></p> <ol style="list-style-type: none"> From the GIS to the operations simulation, LTC Walter DAVID, NATO M&S COE – (PRJ I-MOMA co-presented) The interplay between resilient cities and resilient responding organisations in crises, Prof Scira MENONI, POLIMI Disaster models and military simulation challenges, Col. Orlin NIKOLOV, CMDR COE Italian Military Geographic Institute Presentation 	<p><i>Introduction, Mr. Robert Pratten, CEO Transmedia Storyteller Ltd, UK</i></p> <p><i>Chair: LT.Col. Wolfhard Schmidt</i></p> <ol style="list-style-type: none"> NATO Virtual Operation Center, Mr. Cem Kumsal, ACT Enhanced Luna Warrior – An example of how to connect commercial tools and scientific methods into a solution for training in the German Armed Forces, Maj. Sandra Matuszewski, 2nd Lt. Leonie Johannsmann, GE Army Enhanced Luna Warrior -Hands on and Discussion 	<p><i>Chair: Lt.Col.Jan Hodicky</i></p> <ol style="list-style-type: none"> MCDC Capabilities, Mr. Carder US J7 M&S Supporting CD&E, H.Pietzschmann M&S COE NATO CD&E Approach, Lt.Col. Marco Biagini M&S for Decision Making Support, Lt.Col. Jan Mazal

WHERE	GHM Restaurant Area
13:00 14:30	Networking Lunch Break

NATO CAX FORUM 2017			
WHAT	CAX Forum Session	CAX Forum Workshop	NATO JCATS User Group
WHERE	Europa Conference Room	Africa Conference Room	America Sud Room
ITEM	CAX & Interoperability	Commercial Technologies and Games for Use in NATO & Nations Session 3: Modular Game Architectures & Standards	M&S Best Practices
14:30 16:30	<p><i>Chair: Lt.Col. Paolo Di Bella</i></p> <ol style="list-style-type: none"> NORCAX brief, LT.Col. NOR A Bjarne Korsgard Simulation & war games in the Hellenic armed forces, Lt.Col. HE MAVRATZOTIS CAX in the information Age- Cyber Warfare and Beyond, M. Pegelow-CAE NATO Education and Training Network - Federation Architecture and FOM Design, Mr.B.Lofstrand, PITCH 	<p><i>Chair: Mr. Wim Huiskamp</i></p> <ol style="list-style-type: none"> Outbrief from MSG ET-044 Modular Game Architectures. How should standards for COTS and Serious Games be developed and supported by Industry, Mr. Wim Huiskamp, TNO NLD Standards for Augmented Reality and Virtual Reality, by Webex; Mr. Adrian Webb, Virtual World Manager MoD, AUS Future proofing the Virtual Battlespace, Mr. Peter Morrison, CEO Bohemia, AUS Missile Defense Training Gamification, Mike Viland, USSTRATCOM/JFCC IMD 	<ol style="list-style-type: none"> French Army Training Tools, Col. Claude CHARY Using JTLS-GO For Globally Integrated Exercises, Mrs. Roland Constructive Simulation with a Higher Automation Level for Training and Decision Support , Thomas Stegemann Generating JTLS Scenario with GIS, Aknai, Segalin, Fabaris Inc
NATO CAX Forum Closing Session			
WHERE	Continenti Conference Room		
17:00 17:30	<p><i>Chair: Cpt (ITA N) Vincenzo MILANO, NATO M&S COE Director</i></p> <p>Final Remarks and declaration of NATO CAX Forum 2018 Event</p>		

DAY 4 – Friday 29th SEP, 2017

WHAT	MSG-150 (Modelling & Simulation Supporting (NATO) Concept Development & Experimentation)	
WHERE	Australia Conference Room	America Sud Conference Room
09:00 10:30	CAX FORUM HOT WASH UP	<i>Chair: Lt.Col. Biagini</i>
WHERE	GHM Restaurant Area	
10:30 11:00	Networking Coffee Break	
11:00 13:00	WAY AHEAD: CAX FORUM 2018	