



MESAS 2020 Scientific Conference Program

MESAS20 - 21 OCT 2020			
Timezone CEST: Central European Summer Time Zone (UTC+2, GMT+2)			
Start time	Duration	Plenary Session - moderator Jan MAZAL	Presenter/Author(s)
10:00	0:05	Welcoming speech	Director NATO MS COE
10:05	0:05	Welcoming speech	Dean, Faculty of Military Technology, University of Defence
10:10	0:10	MESAS20 Chairman's message	Adriano FAGOLINI
10:20	0:10	MESAS20 Chairman's message	Agostino Bruzzone
10:30	0:10	MESAS20 Chairman's message	Stefan Pickl
Session 1A - Chair: Jan Nohel			
10:40	0:20	Multi-UAV Mission Efficiency: First Results in an Agent-based Simulation	Julian Seethaler, Michael Strohal, Peter Stütz
11:00	0:20	Combat UGVs support of company task force operations	Jan Nohel, Petr Stodola, Zdeněk Flasar
11:20	0:20	Doctrine Analysis and Courses of Action Simulation for Robotics and Autonomous Systems in Biological Defence Scenarios	Walter David, Federico Baldassi, Silvia Elena Piovan, Antony Hubervic, Erwan Le Corre
11:40	0:20	Model of Surveillance in Complex Environment using a Swarm of Unmanned	Petr Stodola, Jan Drozd, Jan Nohel
12:00	0:20	Artificial Intelligence in the Defence Sector	Antonio Carlo
Session 1B - Chair: Petr Vasik			
10:40	0:20	Initial Solution Constructors for Capacitated Green Vehicle Routing Problem	Viktor Kozák, David Woller, Miroslav Kulich, Václav Vávra
11:00	0:20	The GRASP Metaheuristic for the Electric Vehicle Routing Problem	David Woller, Viktor Kozák, Miroslav Kulich
11:20	0:20	Experimental Leg Inverse Dynamics Learning of Multi-Legged Walking Robot	Jiří Kubík, Petr Cizek, Rudolf Szadkowski, Jan Faigl
11:40	0:20	Evaluation of the vision-based localization system Intel RealSense T265 mounted on a multi-rotor aerial vehicle deployed in outdoor scenarios	Jan Bayer, Jan Faigl
12:00	0:20	On Building Communication Maps in Subterranean Environments	Martin Zoula, Miloš Prágr, Jan Faigl
Lunch Break			
Session 2A - Chair: Walter David			
13:45	0:20	Replacement Possibilities of the Medium-Size Truck Transport Capabilities by UAVs in the Disturbed Logistics Infrastructure	Pavel Foltin, Petr Tulach, Martin Gesvret, Daniel Zlatnik
14:05	0:20	UAV based Vehicle Detection with Synthetic Training: Identification of Performance Factors using Image Descriptors and Machine Learning	Michael Krump, Peter Stütz
14:25	0:20	M&S based test bed to support V&V of Autonomous Resources Task Coordinator	Giovanni Luca Maglione, Luca Berretta, Sasha Blue Godfrey, Athanasios Kapoutsis, Savvas Apostolidis, Alberto Tremori
14:45	0:20	M&S driven experimentation for concept development on combined manned and unmanned vehicles in urban environment: simulation design	Jan Hodicky, Pilar Caamano, Giovanni Luca Maglione, Alberto Tremori
15:05	0:20	Artificial Intelligence and Robotics addressing COVID-19 Pandemic's Challenges	Walter David, Michelle King-Okoye, Laura Musgrave
Session 2B - Chair: Vaclav Krivanek			
13:45	0:20	Stereo Camera Simulation in Blender	Tomáš Pivoňka, Libor Přeučil
14:05	0:20	Hyperbolic quantum computing based on quantum bit algebra QBA	Radek Tichy, Jaroslav Hrdina
14:25	0:20	Numerical experiment on optimal control for simple car model	Marek Stodola, Matej Rajchl, Stanislav Frolík
14:45	0:20	Geometry Algebra for Conics based Support Vector Machine for Handwritten Digit Recognition	Petr Velan
15:05	0:20	ORB-SLAM2 Based Teach-and-Repeat System	Tomáš Pivoňka, Libor Přeučil
15:25	0:15	Closing remarks, Discussion and MESAS20 way ahead considerations - End of the Conference	