

TUESDAY, DECEMBER 07th, 2021

08:30	REGISTRATION & WELCOME
	PLENARY ROOM
09:00	OPENING PLENARY SESSION - Conference Co-Chairs Louis LE PORTZ, 3AF President - Emmanuel DELORME, MBDA, Conference Co-Chairs - Yannick DEVOUASSOUX, ArianeGroup, Conference Co-Chairs - Luc DINI, Thales Group, Conference Co-Chairs
	PLENARY ROUND TABLES Moderator:
09:30	<u>GOVERNMENTS VIEWS 1: POLICY</u>
11:00	COFFEE BREAK
11:30	<u>GOVERNMENTS VIEWS 2 : PROGRAMS</u>
13:00	NETWORKING LUNCH
14:30	<u>INDUSTRIALS VIEWS 1</u>
16:00	COFFEE BREAK
16:30	<u>INDUSTRIALS VIEWS 2</u> (continued)
18:30	End of Sessions
19:30	GALA DINNER

WEDNESDAY, DECEMBER 08th, 2021

PLENARY ROUND TABLE: " Political and military aspects of IAMD" - Moderator: Emmanuel DELORME, MBDA
 Perry JAGO, Director of Pear Tree Ltd and participant of the Nimble Titan experimentation
 Stefanova RADOSLAVA, Chairwoman of the DPPC MD

		ROOM 1	ROOM 2	ROOM 3	ROOM 4
		SESSION 1 Chairperson:	SESSION 2	SESSION 3	SESSION 4
		International & European Policy and Cooperation (including NATO, BMD, NATO IAMD, EU and others)	Interceptors & Weapons Systems and Technologies - 1	Sensor systems & Sensor networks incl. Space - 1	Modelling & Simulation - 1
09:30	1	45 The NATO BMD Programme progress Laurent SMITH, NATO COMMUNICATION AND INFORMATION AGENCY	115 Standard Missile Cross-Platform Integration -- Challenges, Benefits and Progress Dean GEHR, IERUS	110 A Comparison of Sensor Orbit Regions for Space-Based Detection and Tracking of Hypersonic Vehicles Sebastian STABROTH, Airbus Defence and Space GmbH	112 Examination of Fundamental Kill-Chain Relationships in Multi-Tiered Kill Web Architectures Joseph UZDZINSKI, Lockheed Martin
09:50	2	46 NATO BMD Tranche 21: the road to operations Joe MAGGS, NATO COMMUNICATION AND INFORMATION AGENCY	121 Pathway for a modernized M-IAMD capability Pierre ROTY, MBDA	116 Polarization Diverse Radar Benefits Over Fixed Polarization Radars Koubiadis FOTIS, Lockheed Martin	114 Design of air defence missile evaluation model by using hybrid fuzzy dematel and fuzzy vikor approach Özüm öyküm KATLI, ROKETSAN A.Ş.
10:10	3	50 The TWISTER project, with a focus on the interceptor part Grégoire FARON, MBDA	48 Command Shaping Optimal Guidance for High-altitude Interceptor with Acceleration Limit Hyungho NA, Agency for Defense Development	31 Very Long Range Radar (TLP): Overview and Experimentation for Early Warning Ronan MOULINET, THALES LAS FRANCE	43 Integrated Modeling and Simulation (M&S) to Support the Digital Mission Engineering Environment Stephen THOMAS, Parsons
10:30	COFFEE BREAK				
		SESSION 5	SESSION 6	SESSION 7	SESSION 8
		International & National Programs	Interceptors & Weapons Systems and Technologies - 2	Sensor systems & Sensor networks incl. Space - 2	Modelling & Simulation - 2
10:50	1	94 The European Defence Fund Frans KLEYHEEG, TNO Defence & Security	49 Adaptive Attitude Control for a High-altitude Interceptor with Divert and Attitude Thrusters under Input Constraint Yongwoo LEE, Agency for Defense Development	25 Naval 3-Dimensional Air and Surface Radar Can See Beyond Horizon Özlem TURGUT, ASELSAN	28 Contribution to the Simulation and to the analysis of the French Initial Early Warning Capability For NATO BMD benefit Michel CUGINI, Thales LAS France
11:10	2	87 SAMP/T NG, going forward: Programme View Philippe CHOPIN, EUROSAM	57 Innovative ArianeGroup Controllable Solid Propulsion Technologies Pascal CAUBET, ArianeGroup	32 Dynamic engagement against air and missiles threat Luc DINI, THALES LAS FRANCE	44 Multi-Objective, Multi-Variate Optimization for Mission Level Digital Engineering Stephen THOMAS, Parsons
11:30	3	90 SAMP/T Transformation to address new challenges Alain DEUDON, Thales	58 Towards an Evolved Sea Viper M-IAMD/ASBMD Capability Stew KILBY, MBDA	37 Thales Groundmater 200 MM/C Matthijs GEUTJES, Thales Netherlands	34 Optimal hypersonic threats and interceptors: Matlab dynamic optimisation tool GIANT Wouter HALSWIJK, TNO Defence, Safety & Security
11:50	4	59 MBDA Experience in European Business Claudio PONZI, MBDA Italia SpA	92 Eurosam contribution in naval systems Jean-Noël BRUGNAUX, EUROSAM	42 Development and Integration of Novel IAMD Discrimination Sensor and C2 System Tod SCHUCK, Lockheed Martin	56 Track Generation of Hypersonic Glide Vehicles for Defended Area Analysis Daniel PAUKNER, IABG
12:10	NETWORKING LUNCH				

WEDNESDAY, DECEMBER 08th, 2021

13:30		PLENARY SESSION - KEYNOTE SPEECH Lt. Gen. Henry "Trey" OBERING			
		ROOM 1	ROOM 2	ROOM 3	ROOM 4
		SESSION 9	SESSION 10	SESSION 11	SESSION 12
		Defence Architectures & Integration of Air and Missile Defence - 1	Ballistic & Hypersonic Missile threat - Dual threat (ABT & TBM)	Sensor systems & Sensor networks incl. Space - 3	Modelling & Simulation - 3
14:30	1	69 The SkyCeptor interceptor as a significant key player in the Multi-Layered ADS concept Ronen LEIBOVICH, RAFAEL	36 Hypersonic Aerodynamics of Glide Vehicles (HGV) for Interdisciplinary Analysis Jannis BONIN, IABG	51 Scalable IAMD sensor technologies and related developments within BAE Systems Martin WIDGERY, BAE Systems	67 System process analysis in missile defense systems Aviel BARNETT, IAI
14:50	2	53 Changing the Scope of Aegis Ashore Roy BALACONIS, MITRE	38 A Study of Aerothermodynamic Loads on Hypersonic Glide Vehicles Dominik HAUGER, University of the Federal Armed Forces in Munich (Germany)	62 New approach in Tactical Radars design to support CRAM, Counter UAV, GBAD & NBAD missions Oren COREN, RADA	84 Interception debris is a major side effect of missile defense interceptions, posing challenges to all system elements. Ofri BECKER, WALES, Ltd.
15:10	3	71 A Proposed Placement Option for Missile Defense Assets Azriel LORBER, RTG	78 Measurement of liquid ablation in hypersonic shock tunnel Flavien DENIS, ISL	63 SMART-L Multi Mission - Status update Marco STRIJKER, Thales Hengelo	95 MBSE for Optimization of Air Defense Tim GAYDOS, Parsons
15:30 COFFEE BREAK					
16:00		PLENARY SESSION - KEYNOTE SPEECH Missile Defense and Defeat: An Outlook for Policy, Programs, and Posture Tom KARAKO, Center of Strategic and International Studies, US			
		SESSION 13	SESSION 14	SESSION 15	
		Defence Architectures & Integration of Air and Missile Defence - 2	Ballistic & Hypersonic Missile threat / Identification and discrimination - 1	Sensor systems & Sensor networks incl. Space - 4	
17:00	1	100 Hypersonic capabilities and their impact on military operations Andreas SCHMIDT, JAPCC	82 Hypersonic Glider Vehicle (HGV) Flight Optimization Dror COHEN, WALES, Ltd.	64 Sea Fire / Ground Fire, a flexible new Multifunction Radar family Nico DE BRUIJN, Thales	
17:20	2	108 Hypersonic Weapons – A non-technical view of threat perception and general options to counter them Joerg TREIBER, Competence Center Surface Based Air and Missile Defence	88 Concepts for Fusion of Sensor and Intelligence Data for Exploitation within Naval Air Defence Gareth REES, MBDA	77 Neural network adapted Kalman filter Sami JOUABER, Thales LAS	
17:50	3	76 The Hypersonic Glide Vehicle Threat - How Does It Challenge the Defense System? Omer ROTENBERG, Elisra	29 Advances in discrimination of air breathing targets and ballistic missiles using Deep Learning Massimo LOFFREDA, Leonardo SpA	91 Determine the impact point of hypersonic missile using "The Funnel Model" Haim Yuval AVIRAM, IAI- ELTA	
18:10 END OF DAY 2					

THURSDAY, DECEMBER 09th, 2021

08:30		PLENARY ROUND TABLE : "Disruptive factors of IAMD" - Moderator: Luc DINI, Thales Group, FR			
		ROOM 1	ROOM 2	ROOM 3	ROOM 4
		SESSION 16	SESSION 17	SESSION 18	SESSION 19
		Defence Architectures & Integration of Air and Missile Defence - 3	Ballistic & Hypersonic Missile threat / Identification and discrimination - 2	Sensor systems & Sensor networks incl. Space - 5	Directed Energy Weapons
09:30	1	65 The Benefits of centralized Multi-Tier Missile Defense Alon KAHANA, IAI	73 EO/IR Spectroradiometry Supporting Missile defense Pk improvement Eliahu LEVY, Linkcom	79 Comparative Coverage of Hypersonic Threats from High-Altitude Air Platforms Bob CHILD, Optima Systems Consultancy	75 High Energy Laser - Is It a Game Changer? Omer ROTENBERG, Elisra
09:50	2	52 A Service-Oriented Architecture for Ground-Based Air Defence Systems Alberto MACRI PELLIZZERI, MBDA Italia SpA	47 Infrared synthetic image dataset preparation for automatic target detection algorithm development Inyong KIM, Agency for Defense Development	80 Satellite array as a sensor for missile defense mission Eran GURFINKEL, IAI	81 Aerostat Laser Substations for Extension of Ground Based Laser Range Daniel WEIHS, Technion Israel Inst of Technology
10:10	3	70 Open Architecture Concept in the Evolving Air Defense Arena Shachar SHOHAT, RAFAEL	41 RCS-based ballistic threat classification using Machine Learning Bernadetta DEVECCHI, TNO	86 The Potential of MIMO Over the Horizon Radar for Missile Detection Paul CANNON, University of Birmingham	96 Vulnerability to high-energy lasers Eric DUCLOUX, MBDA
10:30 COFFEE BREAK					
		SESSION 20	SESSION 21	SESSION 22	SESSION 23
		Command and Control - C2	CRAM, Counter UAV, GBAD & NBAD	Testing, Targets & Demonstration Programs	Space and disruptive technologies
10:50	1	117 NATO ACCS Road to Systems Federation Philippe KRAIT, Thales Raytheon Systems	120 Dual-Layer VL MICA / MISTRAL GBAD weapon system : the efficiency of a structured GBAD Product Line Pascal VINCENT, MBDA	20 A Presentation of NATO Missile Firing Installation Operation & Capabilities Stylianios RODOUSAKIS, NATO Missile Firing Installation	66 Advanced Grid Structure for Missiles with Embedded Fiber Optic Sensing Capability Ilan WEISSBERG, IAI
11:10	2	118 Aegis Ashore 2.0 Jeff SMITH, Lockheed Martin	54 Detecting UAS, air breathing threats and RAM using FMCW Doppler technology. José NAVARRO, Weibel Scientific	30 ASD/FS-21 A Dutch perspective Rogier NOORLAND, Thales Netherlands	109 Disruptive & Low-cost cruise missile engines - An inevitable part of future missile programs Radim JANSKA, PBS Group, a.s.
11:30	3	27 Mastering complexity of the Ballistic Missiles Defense Command and Control through an augmented multi-domain Indications and Warnings (I&W) process. Gilles LTGEN (R) DESCLAUX, THALES RAYTHEON SYSTEMS AMDC2	83 A Reference Model for UAV Swarm Attack Alik HERMETZ, WALES, Ltd.	35 Unmanned Aerial Target Platform - Air Defence Training and beyond Reto SCHNIEDERMEIER, Airbus Defence and Space	74 Difference in damage caused by low-velocity and hyper-velocity impacts Eliahu LEVY, Linkcom
11:50	4	68 Data visualization for complex and multi-layered analysis Yoav COHEN, IAI	93 C-UAS : Incremental answer to an unexpected threat Alain BANDINI, MBDA	72 Targets Converted from Combat Missiles, to Simulate Threats for Flight Tests. Ephraim BASHAN, EZB	125 Extension of missile defence simulation to hypersonic defence: going to space Fatima LERVOLINO, ArianeGroup
12:10 NETWORKING LUNCH					

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SESSION 24

PLENARY SESSION : "Evolution of the threat"

Moderator: Uzi RUBIN, Begin Sadat Center for Strategic Studies, IL

13:30	1	39 Ballistic and Hypersonic missile threat Julie CENDRIER, MBDA
13:50	2	33 Beyond the 2000 km range limit, Iranian IRBMs Ralph SAVELBERG, Netherlands Defence Academy
14:10	3	61 The New Challenge: From Ballistic Threats to Aeorballistic Threats Uzi RUBIN, Begin Sadat Center for Strategic Studies
14:30	4	126 Russian A2/AD : Capacity, experience, perspectives. Pierre GRASSER, FR Air Force, IRSEM
14:50		CLOSING ADDRESS - Conference Co-Chairs Emmanuel DELORME, MBDA - Yannick DEVOUASSOUX, ArianeGroup - Luc DINI, Thales Group
15:30		<i>End of IAMD 2021</i>