

The First Day – 20th JUNE, 2016		
08.30-09.00	Registration and distribution of conference materials	
09.00-09.10	Opening ceremony of the conference Rector - Commandant kmdr prof. dr hab. Tomasz Szubrycht (Polish Naval Academy)/President of the Board- Managing Director dr inż. Andrzej Kilian (OBR CTM S.A.)/President of the Board Andrzej Kasprzak (MTG S.A.)	
09.10-10.00	Plenary session I (Ordered papers) Chairman: Rector - Commandant kmdr prof. dr hab. Tomasz Szubrycht (Polish Naval Academy)	
09.10-09.20	Ordered papers (Ministry of National Defence Republic of Poland)	
09.20-09.30	Strategic approach to functioning and the development of the naval forces in Poland in the context of the state security (National Security Bureau)	
09.30-09.40	Ordered papers (Inspectorate for the Navy, General Command of Branches of Armed Forces)	
09.40-09.50	Capabilities and needs of the Navy-Shipbuilding - a window to the world (Polish Armament Group)	
09.50-10.00	Ordered papers (OBR CTM S.A.)	
10.00-10.10	Coffee break	
10.10-11.55	Session I Naval Combat Systems Naval, air, coastal platforms (Manned)/Armaments systems Chairman: dr inż. Jerzy Uczciwek (OBR CTM S.A.)	
10.10-10.25	K. Przeźniak	Polish Combat Management System in the operational program of "Threat Deterrence at Sea". (OBR CTM S.A.)
10:25-10:40	C. Urheim	KONGSBERG - the Combat System Partner (Kongsberg)
10.40-10.55	J.T. Dobkowski, A. Stefaniak	Electronic Warfare Systems in sea action. Analysis of needs and requirements. Proposals of systems for the PLN ships (OBR CTM S.A.)
10.55-11:10	A. Wojtkiewicz	Remontowa Shipbuilding as partner of Polish Ministry of National Defence in surface platform construction under Polish Navy Modernization Program – operational program "Countering threats at sea" (Remontowa Shipbuilding S.A.)
11.10-11.25	C. Rubelek	The potential and opportunities of the vessels designs for Polish Navy offered by MMC (MMC Ship Design&Marine Consulting)
11.25-11.40	P. Darche	PSIM – Panoramic Sensors and Intelligence Module aboard the Gowind 2500 (DCNS Group)
11.40-11.55	J.Ballé	Realising MIECZNIK and CZAPLA based on MEKO® technology in partnership with Polish industry (ThyssenKrupp Marine Systems)
11.55-12.30	Free time to visit BALT MILITARY EXPO Exhibition	
12.30-13.10	Lunch	
13:10-14.25	Session II Naval Combat Systems Naval, air, coastal platforms (Unmanned) Chairman: Prof. dr hab. L. Rowiński (Gdansk University of Technology)	
13:10-13:25	J. T. Dobkowski, A. Stefaniak	Unmanned platforms in MCM operations MCM mission modules (OBR CTM S.A.)
13.25-13.40	R. Miętkiewicz	Possible applications of USVs in Polish Navy (Polish Naval Academy)
13.40-13.55	W. Abramowicz, D. Filipiak, J. Małyszko, M. Stróżyna, K. Węcel	Maritime domain awareness system supplied with external information-use-case of the SIMMO system (Poznań Univeristy of Economics)
13.55-14.10	J. T. Dobkowski, P. Polański, F. Szarkowski	New technologies for detection and countering buried mines (OBR CTM S.A.)
14.10-14.25	P. Karcz, M. Chmieliński, J. Zalewski, S. Draga	Comparative analysis of selected unmanned aircraft systems air to the tasks implemented by the Navy (Research Laboratory ZENIT, Polish Naval Academy, Maritime Operations Centre Polish Navy-Maritime Component Command)

14.25-14.35	Coffee break	
14.35-15.35	Session III Naval Combat Systems, Armament systems (Sensors, effectors)	
Chairman: dr hab. inż. Jerzy Garus prof. AMW (Polish Naval Academy)		
14.35-14.50	<i>P. Selling</i>	<i>The littoral environment and product development (BAE Systems Bofors)</i>
14.50-15.05	<i>P. Dobrzyński, M. Gerigk, S. Lipski, B. Machowski</i>	<i>The concept of miniature supercavity rocket-propelled torpedoes for manned and unmanned systems of naval combat (Military University of Technology/Gdansk University)</i>
15.05-15.20	<i>J. Stępień</i>	<i>Antenna systems dedicated to mobile naval platforms (OBR CTM S.A.)</i>
15.20-15.35	<i>M. Delorme</i>	<i>Key Attributes of Submarine Sonar for High Performance in Challenging Environment (Thales Underwater Systems)</i>
15.35-15.45	Coffee break	
15.45-17.00	Session IV Naval Combat Systems Naval, air, coastal platforms (Manned)/Armaments systems	
Chairman: dr inż. Józef Jakubczyk (OBR CTM S.A.)		
15.45-16.00	<i>T. Witkiewicz</i>	<i>The possible capabilities of prospective midget submarines (3rd Ships Flotilla)</i>
16.00-16.15	<i>X. Mesnet</i>	<i>Technological transfer between submarines - The Scorpène's improvement coming from Barrucada (DCNS)</i>
16.15-16.30	<i>H. Söderstedt</i>	<i>State of the Art Underwater Capability – A National Asset (FMW)</i>
16.30-16.45	<i>D. Angelopoulos</i>	<i>Thyssenkrupp Marine Systems Submarine Designs – the modern deterrent for the Baltic Sea and beyond (ThyssenKrupp Marine Systems)</i>
16.45-17.00	<i>K. Brännström</i>	<i>Submarine Stealth Capability – an holistic approach to increased survivability and mission effectiveness (Saab Kockums AB)</i>
17.00-18.00	Transport to the anti-terrorist and rescue at sea demonstration at the port of Gdynia	
18.00-19.00	Anti-terrorist and rescue at sea demonstration at the port of Gdynia	
19.00-20.00	Transport to the European Solidarity Center in Gdansk	
20.00-02.00	Integration meeting for BALT MILITARY EXPO exhibitors and NATCON conference participants in the European Solidarity Center in Gdansk	

Session II A		
Maritime Security Systems. Cooperation in ensuring safety at sea		
Chairman Prof. dr hab. inż. R. Katulski (Gdansk University of Technology)		
13.10-14.25		
13:10-13:25	J. Teska	Współdziałanie podmiotów Państwa w zakresie bezpieczeństwa morskiego (Polish Naval Academy)
13.25-13.40	B. Czaplewski, M. Blok, S. Kaczmarek, M. Młynarczuk, M. Narloch, M. Sac	Multimedia distributed system for visualization of ongoing and archival events for BG (Gdansk University of Technology)
13.40-13.55	J. Stefaniak J. Hajduczenia, R.J. Katulski, M. Narloch	Integration of Radio Communication Systems in Distributed System for Data Exchange of Border Guard (Gdansk University of Technology)
13.55-14.10	K.Cwalina, B. Czaplewski, M. Blok, S. Kaczmarek, M. Miszewski, M. Młynarczuk, M. Sac	A system of visualization of operational situation on digital maps for mobile units of the BG (Gdansk University of Technology)
14.10-14.25	W. Wosek	Cooperation of special forces in terms of counteracting anti-terrorist threats in coastal areas (University of Business and Administration)
14.25-14.35	Coffee break	
14.35-15.35	Session III A	
Naval Technology Exploitation. Logistic support		
Chairman: dr inż. L. Mroziński (Akademia Marynarki Wojennej)		
14.35-14.50	K. Łaba A. Grześkowiak	Rola NCBR w zarządzaniu programami i projektami na rzecz bezpieczeństwa i obronności państwa (The National Centre for Research&Development)
14.50-15.05	M. Malawski	Polish Space Agency – important role in the technical modernization of the Polish Armed Forces (Polish Space Academy)
15.05-15.20	R. Łukawski	Nowoczesne technologie - nowoczesny przemysł - nowoczesna armia – reminiscencja z działalności I3TO (Inspectorate for Implementation of Innovative Defence Technologies)
15.20-15.35	K. Pałucha, M. Chmieliński	Determinants safety loading military equipment for maritime transport (Pol-Mare Sp. z o. o./AMW Gdynia)
15.35-15.50	D. Nalepa, T. Cieślik	Hydraulic systems for universal sea cannons – selected applications of PONAR Group (Ponar Silesia S.A.)
15.50-16.00	Coffee break	

The Second Day – 21st JUNE, 2016		
09.00-10.00	Plenary Session II	
Chairman: dr inż. Andrzej Kilian (President of the Board-Managing Director of OBR CTM S.A.)		
09.00-09.10	Sektor obronny w systemie promocji gospodarki (Ministry of Economic Development)	
09.10-09.20	Contemporary Hybrid Threats influence on the development of maritime surveillance and recognition technologies (Maritime Operations Centre Polish Navy-Maritime Component Command)	
09.20-09.30	Ordered papers (3rd Ship Flotilla)	
09.30-09.40	Ordered papers (United Kingdom Hydrographic Office)	
09.40-09.50	Ordered Papers (Polish Naval Academy)	
09.50-10.00	Ordered Papers (Gdansk University of Technology)	
10.00-10.10	Coffee break	
10.10-11.40	Session V Maritime Security System. Safety and protection of Navigation	
Chairman: Kadm rez. K. Wisniowski (OBR CTM S.A.)		
10.10-10.25	J. Stawowczyk	Security Operations Center – wyższa kultura bezpieczeństwa (Sygnity S.A.)
10.25-10.40	A. Makowski	Does Poland need a national maritime security strategy (Polish Naval Academy)
10.40-10.55	C. Dyrz	Arctic – the area of navigation and military interests (Polish Naval Academy)
10.55-11.10	B. Kosk, Ł. Świdorski	Project C-Bord, effective inspection of containers at border checkpoints. The role of the Customs Service in Gdynia (Customs Service/National Centre for Nuclear Research)
11.10-11.25	A. Ogonowski, M. Wołoszyn	Aktualne prace na rzecz Marynarki Wojennej i perspektywy rozwoju zespołu obrony biernej okrętu (Gdansk University of Technology)
11.25-11.40	H. Chodkiewicz, J. Ostap, D. Pielecki, S. Marecik	Resistance of vessel to dynamic load influence caused by non-contact underwater explosion (OBR CTM S.A.)
11.40-11.50	Coffee break	
11.50-12.50	Session VI Naval Technology Exploitation. Testing and product certification for Defence and Security	
Chairman: dr inż. L. Mroziński (Polish Naval Academy)		
11.50-12.05	J. Uczciwek, K. Dymarkowski	Military standards application in the process of naval ships development and construction. Support or trouble? (OBR CTM S.A.)
12.05-12.20	R. Namiotko, P. Pozański	The process of conformity assessment system in the OBR CTM S.A. Research Laboratories in the aspect of the military equipment modernization (OBR CTM S.A.)
12.20-12.35	P. Łuka, D. Bukowiecka, J. Horoszkiewicz A. Marszałe, K. Łężak	Field tests as a part of the validation of customised secret wearing ballistic vests dedicated for Police (Police Academy in Szczytno)
12.35-12.50	M. Chmieliński, L. Mroziński, M. Gołyga,	Compliance with product safety standards as a defense in the centre for product and certification (Polish Naval Academy)
12.50-13.30	Lunch	

13.30-14.45	Session VII Naval Combat Systems. C4ISR Systems. Command & Communications	
Session: Prof. dr hab. inż. R. Katulski (Politechnika Gdańska)		
13.30-13.45	P. Pennings	The smallest and the biggest (Thales Nederland)
13.45-14.00	A. Marczak	The implementation of the OFDM air interface for military application in Software Defined Radio technology (Gdansk University of Technology)
14.00-14.15	M. Gajewska, S. Gajewski, R.J. Katulski	Radio Communication System for High-Rate Data Transmission in the Sea A1 Zone (Gdansk University of Technology)
14.15-14.30	J. Garus R. Studański	Determination of impulse responds of teletransmission channel in chosen propagation environments (Polish Naval Academy)
14.30-14.45	M. Gajewska, S. Gajewski	Radio communications V2X technology as a method for improving the sea safety (Gdansk University of Technology)
14.45-14.55	Coffee break	
14.55-16.25	Session VIII Naval Technology Exploitation. Testing and product certification for Defence and Security	
Chairman: dr inż. P.Pozański (OBR CTM S.A.)		
14.55-15.10	D. Regliński, P. Pozański	Conception and modelling of undernoise data transmission in hydroacoustic channel (OBR CTM S.A.)
15.10-15.25	E. Ciba, T. Sauer	Assessment of hydrodynamic loads acting on an outboard boom (Gdansk University of Technology)
15.25-15.40	M. Michalak, M. Szafrńska, K. Spalt	Screening effectiveness testing Wroclaw National institute of Telecommunications PIB)
15.40-15.55	A. Kaczmarek, P. Pozański	The concept of automation test stands for the procedure PRS-02 standards NO-06-A500:2012 (OBR CTM S.A.)
15.55-16.10	M. Dras, M. Kałuski, M. Hamberg, M. Bawaj, M. Szafrńska	HPM pulses - source of disturbances (Radiotechnika Marketing sp. z o.o./Wroclaw National institute of Telecommunications PIB)
16.10-16.25	R. Namiotko, A. Kaczmarek, M. Makowski, K. Biernacki	Low-frequency strong magnetic fields impact test of critical infrastructure devices (OBR CTM S.A.)
16.30-17.00	Prize Awarding Ceremony	
17.00-18.00	Transport to the "Stary Maneż" restaurant in Gdansk	
18.00-23.00	Integration meeting for NATCON conference participants and invited guests in the restaurant "Stary Maneż". The organisers provide possibility to watch the match between Poland and Ukraine)	

10.00-10.10	Coffee break	
10.10-11.40	Session V A Maritime Security System. Navigational and hydrographic support	
Chairman: Kmdr A. Kowalski (Hydrographic Office of the Polish Navy)		
10.10-10.25	A. Grzędziel	Hydrographic Service as a support element of Naval Forces activities and ensuring maritime safety (3rd Ship Flotilla)
10.25-10.40	M. Banaszak	Essence of maintenance and development Hydrographic Service potential for support the Polish Navy and maritime economy (Hydrographic Office of the Polish Navy)
10.40-10.55	J. Janik	The implementation of e-navigation strategy for marine technology platforms, as a result of the navigation and hydrographic support of shipping (Hydrographic Office of the Polish Navy)
10.55-11.10	A. Drapella, W. Morgaś	Zastosowanie metody modelowania statystycznego (Monte Carlo) do oceny losowego błędu ustalania pozycji okrętu (Polish Naval Academy)
11.10-11.25	J. Narkiewicz, S. Topczewski, M. Sochacki	Nanosatellite formation flying for Maritime Applications (Warsaw University of Technology)
11.25-11.40	M. Malawski, M. Gałuszkiewski	Galileo - resource for innovation and progress in positioning and navigation (Polish Space Agency)
11.40-11.50	Coffee break	
11.50-12.50	Session VI A Naval Technology Exploitation. Simulation systems and simulators	
Chairman: G. Trzeciak		
11.50-12.05	K. Bielawski, A. Banacki, M. Chmieliński	Some aspects of collection and use experience with the use of training trainer 23mm marine set missile and artillery in the PNA (AREX Sp. z o. o./Polish Naval Academy)
12.05-12.20	S. Stępniaś, R. Haberek, M. Chmieliński	Version of the possibility of marine training system "ŚNIEŻNIK" (Autocomp Management Sp z o. o.)
12.20-12.35	M. Chmieliński, M. Gołyga, J. Otremba	Concept training of E-Learning. The use system simulators Navy weapons system in the PNA (Polish Naval Academy)
12.35-12.50	M. Stopniak, J. Masiejczyk, M. Chmieliński	Virtual environment simulation VBS3 as a support system training for Navy (Bohemia Interactive Simulations Sp. z o. o)
12.50-13.30	Lunch	
13.30-14.45	Session VII A Naval Combat Systems. Armament systems (Sensors, Effectors)	
Chairman: Kmdr dr hab. inż. J. Teska, prof. AMW (Polish Naval Academy)		
13.30-13.45	D. Krefft, P. Chojnacki	Naval Missile Unit - modern costal defence system (3rd Ship Flotilla)
13.45-14.00	T. Rutkowski, M. Sankowski, J. Miłoś	From navigation to ship self-defence radar (PIT Radwar S.A./PGZ S.A.)
14.00-14.15	J. Marszał	Wyniki modernizacji 30 sonarów Marynarki Wojennej RP przeprowadzonych na Politechnice Gdańskiej z zastosowaniem najnowszych technologii i metod cyfrowego przetwarzania sygnałów (CMTM Gdansk University of Technology)
14.15-14.30	M. Chmieliński, J. Kosiński	35 mm naval artillery system with integrated ZSG 158m tracking system optoelectronic sensor (Polish Naval Academy)
14.30-14.45	K. Nowakowski, L. Strączek M. Chmieliński,	Brief historical development of naval artillery from antiquity to the end of XIX century (Polish Naval Academy)
14.45-14.55	Coffee break	

The Third Day – 22nd JUNE, 2016		
09.00-10.15	Session IX Maritime Security System. Safety and protection of shipping	
Chairman: Kadm rez. dr inż. C. Dyrz (Polish Naval Academy)		
09.00-09.15	B. Rutkiewicz	<i>Integrated Maritime surveillance approach and modern integrated maritime surveillance systems supporting the decision making process – Polish Border Guard national experience (Maritime Regional Unit of Boarder Guard)</i>
09.15-09.30	L. Collot	<i>Challenges and Solutions for Unmanned Mine Warfare Systems (Thales Underwater Systems)</i>
09.30-09.45	R. Namiotko, M. Narożny, L. Zajczkowski	<i>Electric field signature and its' minimization for OPM vessels (OBR CTM S.A.)</i>
09.45-10.00	P. Polański, F. Szarkowski	<i>Modern ship degaussing system for newly built vessels (OBR CTM S.A.)</i>
10.00-10.15	J. Magiera, R.J. Katulski	<i>System for detection and mitigation of GPS spoofing (Gdansk University of Technology)</i>
10.15-10.25	Coffee break	
10.25-11.25	Session X Maritime Security System. Harbour and maritime infrastructure protection	
Chairman: Kadm P. Stocki (Maritime Regional Unit of Border Guard)		
10.25-10.40	G. Krasnodębski, K. Karwacka	<i>The maritime matters of energy security (Polish Naval Academy)</i>
10.40-10.55	P. Dobrzyński, M. Krawczak S. Lipski, B. Machowski, M. Malawski	<i>Stratospheric platform as a component of the system to recognize and guard ships Navy and coastal infrastructure (Military University of Technology/PCO S.A./Polish Space Agency/ High Altitude Platforms)</i>
10.55-11.10	J. Dobkowski, P. Maciakowski, A. Zielenkiewicz	<i>Development of harbour and critical infrastructure protection systems against armed divers (OBR CTM S.A.)</i>
11.10-11.25	R. Kłos	<i>Deep diving with the use of a crabe rebreather (Polish Naval Academy)</i>
11.25-11.35	Coffee break	
11.35-12.35	Session XI Maritime Security System. Harbour and maritime infrastructure protection	
Chairman: Kadm P. Stocki (Maritime Regional Unit of Border Guard)		
11.35-11.50	P. Dobrzyński, R. Głębocki, dr S. Lipski, B. Machowski, J. Rosiak	<i>Optoelectronic system to alert and identify objects that pose a threat to infrastructure and the environment (Military University of Technology)</i>
11.50-12.05	W. Kustra	<i>Infrastruktura bezpieczeństwa państwa (National Defence University)</i>
12.05-12.20	A. Dobrucki, R. Bolejko, J. Greblicki, A. Grobelny, P. Pruchniak, J. Witkowski, B. Żółtogórski	<i>System for detection of the border violation on the Vistula Spit (Wrocław University of Technology)</i>
12.20-12.35	E. Kozaczka, G. Grelowska, W. Szymczak, K. Kozaczka	<i>System monitorowania granicy państwowej na Zalewie Wiślanym (Polish Naval Academy)</i>
12.35-12.50	Summary and closing of the Conference	
12.50-13.30	Lunch	