2016-2022

# European Police Modernization & First Responders Markets



## **Europe's Terror & Migration Crisis Series**

## European Police Modernization & First Responders Markets

2016-2022

May 2016

Homeland Security Research Corp. (HSRC) is an international market and technology research firm specializing in the Homeland Security (HLS) & Public Safety (PS) Industry. HSRC provides premium market reports on present and emerging technologies and industry expertise, enabling global clients to gain time-critical insight into business opportunities. HSRC's clients include the EU, NATO U.S. Congress, DHS, U.S. Army, U.S. Navy, DOD, DOT, and US Congress GAO among others; as well as Counter Terror & PS government agencies in Japan, Korea, Taiwan, Israel, Canada, UK, Germany, Australia, Sweden, Finland, Singapore. With over 950 private sector clients (72% repeat customers), including major defense and security vendors, and Fortune 500 companies. HSRC earned the reputation as the industry's Gold Standard for Counter Terror & Public Safety market reports.

Washington D.C. 20004, 601 Pennsylvania Ave., NW Suite 900, Tel: 202-455-0966, info@hsrc.biz, www.homelandsecurityresearch.com

#### **Acknowledgements**

The authors of this report wish to convey their sincere thanks to all of the Counter Terror & Public Safety planners, engineers, scientists, security personnel, government officials, vendors, distributors and users, who granted us interviews, sent us their publications, provided us with non-published presentations, reviewed and commented on our drafts - giving us an invaluable insight into the working of technologies markets and trends. The list below contains the names of some of the people who have helped us directly or indirectly in the preparation of this report. We thank them and many others.

Jorge Domecq, Chief Executive of the European Defence Agency (EDA). Carl Bildt. Former Swedish Prime Minister and Minister of Foreign Affairs and Trustee of Friends of Europe. Ana Gomes, Member of the European Parliament, Committee on Civil Liberties, Justice and Home Affairs and on the Subcommittee on Security and Defence. Ian Bremmer, President and Founder of Eurasia Group. Elisabeth Guigou, President of the Foreign Affairs Commission of the French National Assembly, President of Anna Lindh Foundation and Trustee of Friends of Europe. Lock Pin Chew, Director of the Risk Assessment and Horizon Scanning Programme Office of Singapore's National Security Coordinating Secretariat. Peter Hultqvist, Swedish Minister of Defence. Luis De Almeida Sampaio, Portuguese Permanent Representative of Portugal to NATO. Wolfgang Ischinger, Chairman of the Munich Security Conference and former German Ambassador to the U.S. Jaap De Hoop Scheffer, Former NATO Secretary General and Trustee of Friends of Europe. Elizabeth Johnston, Executive Director of the European Forum for Urban Security. Marina Kaljurand, Estonian Minister of Foreign Affairs. Joanne Liu, International President of Medecins sans Frontieres (MSF). Mara E. Karlin, U.S. Deputy Assistant Secretary of Defense for Strategy and Force Development. Frederica Mogherini, High Representative of the Union for Foreign Affairs and Security Policy and Vice-President of the European Commission. Irene Khan, Director General of the International Development Law Organization and Former Secretary General of Amnesty International. Bert Koenders, Dutch Minister of Foreign Affairs. General Mikhail Kostarakos, Chairman of the European Union Military Committee (CEUMC). Baroness Pauline Neville-Jones, Member of the UK House of Lords and former Minister of State for Security and Counter-Terrorism. Thomas Gottschild, Director for EU & NATO Policies, Cassidian. Colonel Henry Neumann, Group Leader of CBRN Protection, Fire and Self Protection, German Armed Forces. Lieutenant Colonel Brian Clesham, HQ Land Command, Ministry of Defence, UK. Pentti Partanen, Director General, Finnish Department of Rescue Services. John Conaghan, Police Inspector, British Transport Police. Colonel Frank Kämper, Project Officer Protection, Capability Directorate, European Defence Agency. Gayle Gorman and Jamie Campbell, Eclipse Ventures. Lars Kjaer, World Shipping Council. John Avolio, Director, Security & Detection Systems, L3 Communications. Ted Strancyek, President, Aircraftsmen & Associates. Dore S. Perler, President & CEO, Sense Holding Inc. James T. Ryan, General Manager, Cantronic Ethnologies. M. Peretz, Executive Vice President, Integrated Detection Systems. Richard Doubrava, Managing Director of Security, Air Transport Association. Marian Terlecki, Manager, Cargo Security and ULD Industry Distribution & Financial Services, International Air Transport Association (IATA). Raphael Kahn, Director Secure, Marine. Tony Magnusson, Acting Head of Anti-Smuggling Division, National CSI coordinator, Swedish Customs, Nadège Grard, Assistant European Organisation for Security (EOS). Pavel Adam, Institute of Photonics and Electronics, Czech Republic. Ralph Hammer, Expert, National and European Security Research, Ministry of Transport, Innovation and Technology, Austria. Charles Elsen, Former Council of the European Union. Jean-Louis de Brouwer, European Commission. Audrey Baneyx, Sciences-Po Paris Médialab. Benoit Verjat, Sciences-Po Paris Médialab. Peter Jozsef Csonka, European Commission. Wenceslas de Lobkowicz. Former European Commission. Sciences Po Paris. Médéric Martin-Mazé, King's College, London. Tony Venables, Former European Citizen Action Service. Kees Groenendijk, University of Nijmegen. Beate Winkler, Author, former Director of the EU Agency in Vienna, now FRA. Fabrice Leggeri, Frontex. Elspeth Guild, University of Nijmegen, CEPS. Wouter Van De Rijt, Council of the European Union. Emilio de Capitani, Former European Parliament. Michael Kennedy, Eurojust. Petra Bard, Central European University. Willy Bruggeman, Europol. Monica den Boer, SeQure Research and Consultancy, Vrije Universiteit, Amsterdam. Johannes Vos, Former Council of the European Union. Peter Hustinx, Former European Data Protection Supervisor. Julien Jeandesboz, Université Libre de Bruxelles. Sandra Nunes, eu-LISA. Sharon Abbas, Business Development Manager Raytheon International, Europe. Nicolas D. Loannidis, Managing Director, Patras Port Authority, S.A. Anthony Comber, Sales and Marketing Manager, Thales Navigation Limited. Steven D. Botello - Director, Cargo Sales, Rapiscan Security Products. Jiří Homola, Institute of Photonics and Electronics, Czech Republic. Marek Piliarik, Institute of Photonics and Electronics, Czech Republic, Prague. Jianping Yao, Microwave Photonics Research Laboratory, Canada. Philip Anderson, Senior Fellow Homeland Security Initiatives, CSIS Center For Strategic & International Studies. Dale K. Kotter, Scientist, National Security -INEEL. Jerry Peck, Global Trade Management Solutions. Mike Bohlman, Horizon Lines and ISO TC 104. Charlie Piersall, ISO TC. Daniel Colonel Fred Hilpert, Director, Transformation Support, Joint CBRN Defence Centre of Excellence, Czech Republic. Bill DeWitt, SSA. Susan F. Hallowell, Ph.D., Director of Technology. Jerry W. McElwee, Vice President, Joint Programs, Boeing. Eric R. Schwartz, Director, Advanced Systems Technology Phantom Works, Boeing. Patrick OSZCZEDA, VP Counter Terror, Thales Group. Bruce Aitken, President, Homeland Security Industries Association (HSIA). R. Barry Ashby, President, Ashby & Associates. Rodney E. Thomas, CEO, Thomas & Herbert Consulting LTC. John C. Carrano, Ph.D., Program Manager Microsystems Technology Office, Defense Advanced Research Projects Agency. Mark J. Rosker, Ph.D., Program Manager, DARPA. John M. Libert, Physical Scientist, Display Metrology, Forensic Imaging, Department of Commerce National Institute of Standards and Technology Electronics and Electrical Engineering Laboratory of NIST. Tomáš Springer, Institute of Photonics and Electronics, Czech Republic. Milan Vala, Institute of Photonics and Electronics, Academy of Sciences of the Czech Republic, Prague. Benjamin R. Watts, Department of Engineering Physics, McMaster University. Tomasz Wolinski, Faculty of Physics, Warsaw University of Technology. Chang-Qing Xu, Department of Engineering Physics, McMaster University. Brig. Gen (Res.) Dani Arditi, Fmr. Director Israel National Security Council. Giorgio Abrate, Senior Vice President. Avio Olav Adami, Strategic Relations Luciad Col (GS). Thomas Ahammer, Deputy Military Representative Permanent Representation of Austria to the EU. Frank Amedick, Global Account Manager, NATO Siemens Belgium. Paul Ames, Freelance Journalist. Jacqueline Argence, Solution Portfolio Management Director, Cassidian. Aviel Atias, Consultant Mind-Alliance Systems, LLC. Fabio Bagnoli, Division Manager, D'appolonia. Paul Baker, Director/Associate Consultant Baker, R&C/Ecorys. Gary Bamford, Director, Arcadis Vectra. Alain Barbier, Deputy Special Representative to the European Union, International Criminal Police Organization (INTERPOL). Dan Baxter, Senior Vice-President and Director, Fleishman-Hillard. Jacquelyn Bednarz, Attaché, Department of Homeland Security Mission of the United States of America to the EU. Emanuela Bellan, Head of Unit, Crisis Management European Commission General Secretariat. Juliette Bird, First Secretary, Security and Terrorism Permanent Representation of

the United Kingdom to the EU. Ivan Bizjak, Director General for Justice and Home Affairs Council of the European Union. David Blackwell, Director for Cybersecurity DETICA (BAE Systems). Christian Blobner, Project Manager, Logistics and Factory Systems, Fraunhoffer Institute for Factory Operation and Automation IFF. Agnes Borg, Assistant, Weber. Shandwick Martin Borrett, Director, IBM Institute for Advanced Security. John Brading, Deputy BD Director, National Security, Raytheon, UK. Simon Busuttil, European Parliament. Geert Cami, Co-Founder & Director, Security & Defence Agenda (SDA). Genseric Cantournet, Vice President, Security Cross-Processes and Projects Telecom Italia. Patrice Cardot, Conseiller, Ministry of Defence, France, Direction Générale de l'Armement (DGA). Valentina Carletti, Advisor for EU, EDA and NATO affairs, Selex Sistemi Integrati. Albert Caruana, Information Assurance Officer, Council of the European Union. Claudio Catalano, Analyst, Studies Division, Finmeccanica, UK. Marc Cathelineau, Vice President, European Union & NATO Affairs, Thales. Inge Ceuppens, Project Officer, European Commission, DG for Information Society & Media. Jacques Cipriano, Vice President, European Affairs, Safran Group. Michael Clarke, Public Affairs Director, G4S. Robert Cox, Trustee, Friends of Europe. Eugenio Creso, Institutional Relations Director, Selex Sistemi Integrati S.p.A. Vincenzo Cuomo, Professor, Italian National Research Council (CNR). Charles de Couessin General Manager, ID Partners. Dennis Davis, Vice President, International Association of Fire and Rescue Services (CTIF). Jean-Louis de Brouwer, Director for Migration and Borders, European Commission, DG for Home Affairs. Gilles de Kerchove, European Counter-Terrorism Coordinator, Council of the European Union. Kirsten de Haan, Research Assistant, Fleishman-Hillard. Stanislas de Maupeou, Director for Cyber-Defence, Thales. Eva Diaz Perez, EADS Key Account NATO/EU, European Aeronautic Defence and Space Company (EADS). Anatoly Didenko, Counsellor, Mission of the Russian Federation to the EU. Claes Dorien, Office Manager, European Corporate Security Association (ECSA). Michael T. Dougherty, Director of Immigration Control, Raytheon. Jonathan Dowdall, Policy Analyst & Market Development, Security Europe. David Henry Doyle, Security & Defence Advisor, YPFP Brussels, Anna Katarzyna Dubowik, Secretary, Permanent Representation of Poland to the EU. H.E. Mr. Dumitru Sorin Ducaru, Ambassador, Delegation of Romania to NATO. Krzysztof Durczak, Key Account Manager, Defence & Security Sector, Thales. **Eeva Eek-Pajuste**, Counsellor, Political Affairs, Permanent Representation of Estonia to the EU. Sabine Ehmke-Gendron, Director for Civil Protection and Disaster Management, Council of the European Union. Ludwig Eickemeyer, Corporate Sales Executive, European Voice. Gamze Erdem, Advisor, Turkish Industry and Business Association, (TÜSIAD). Anu Eslas, Programmes Coordinator, Estonian Atlantic Treaty Association. Henning Faltin, Deputy Branch Head, European Union Military Staff (EUMS). David Fairnie, Director of Global Port Solution, G4S. Patsy Faynsztein, Manager, EU Business Development, Raytheon International. Europe. Maria Fialho, Special Advisor, Transatlantic Relations, European Parliament. Ulrich Fikar, Assistant to Zoltàn Martinusz, European Council Cabinet of President Herman Van Rompuy. Theodor Fokken, Director, Business Development EU-NATO, Rohde & Schwarz. Pierre-Alain Fonteyne, Chairman of the IMG-S Security Research Roadmap (SRR), Catholic University of Louvain. Roger Forsberg, Chief Information Security Officer, Swedish Fortifications Agency. Ulrike Freyert, Policy Officer, Justice and Interior Representation of Brandenburg to the EU. Octávia Frota, Senior Advisor, Conrad International. Marino Gallego, Innovation Business Director, Everis. Hugo Ganet-Sénoko, Senior Manager, Indra. Jim Gaudoin, Managing Director, L-3 Communication Systems Security & Detection Systems Division. Antoine Gérard, Head of the Brussels Liaison Office, United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA). Andrea Ghianda, Project Manager, Security & Defence Agenda (SDA). Pierluigi Massimo Giansanti, Director, NATO/EU Sales Department, Selex Sistemi Integrati, S.p.A. Bill Giles, Director General Europe, BAE Systems. Laurent

Giquello, French National Expert, NATO Air Command and Control System Management Agency (NACMA). Lt. Gen. Jo Godderij, Director, NATO International Military Staff (IMS). Timo Harkonen, Director of Government Security, Office of the Prime Minister, Finland. Michael Hartinger, Project Officer, Capability Development Planning, European Defence Agency (EDA). Robert Havas, Chairman, Board of Directors, European Organization for Security (EOS). Rear Admiral Giorgio Lazio, Chief of Staff Maritime Command, NATO. James A. Lewis, Director and Senior Fellow of the Strategic Technologies Program of the Center for Strategic and International Studies (CSIS). Michael Printzos, Programme Director of The Hellenic Initiative. Lee Litzenberger, U.S. Deputy Permanent Representative to NATO. Didier Reynders, Belgian Deputy Prime Minister and Minister of Foreign Affairs and European Affairs. Katrin Suder, German Secretary of State at the Ministry of Defence. Carne Ross, Executive Director of Independent Diplomat. Sir Adam Thomson, UK Permanent Representative to NATO. Michael Roth, German Minister of State for Europe. Marietje Schaake, Member of the European Parliament, Vice-Chair of the Delegation for Relations with the United States, Member of the Committee on International Trade. Waldemar Very, Deputy Special Representative for the Rule of Law at the United Nations Mission in Liberia (UNMIL). Marriet Schuurman, NATO Special Representative. Catherine Woollard, Secretary General of the European Council on Refugees and Exiles (ECRE). Jamie Shea, NATO Deputy Assistant Secretary General for Emerging Security Challenges. Maria zakharova, Spokesperson of the Russian Ministry of Foreign Affairs, Julianne smith, Senior Fellow and Director of the Strategy and Statecraft Program at the Center for a New American Security (CNAS). Lamberto Zannier, Secretary General of the Organization for Security and Co-operation in Europe (OSCE). Javier Solana, Former NATO Secretary General and EU High Representative for CSDP and Trustee of Friends of Europe.

## **Table of Contents**

1	Europe's Terror & Migration Crisis: Key Findings	14
2	Europe's Terror & Migration Crisis: Key Conclusions	30
3	European Police Agencies Counter Terror & Counter Crime Strategy 3.1 Introduction	42 44 44 45
4	Police Modernization & 1st Responders Technologies	48
5	European, Police Modernization & 1st Responders: Market Background	50
6	EU Law Enforcement Agencies  6.1 Internal Security Fund (ISF)  6.2 The EU Situation Room.  6.3 EUROJUST  6.4 EUROPOL  6.5 EURODAC	55 56 57
7	European Law Enforcement, Police Modernization & 1st Responder Business Opportunities	
8	European, Police Modernization & 1st Responder Market: SWOT  Analysis  8.1 Strengths  8.2 Weaknesses  8.3 Opportunities  8.4 Threats	63 64 65
9	European Police Modernization & 1st Responder Market: Competitive Analysis	
10	European Police Modernization & Other 1st Responders Market – 2015-2022	68 70 71 71
11	UK Police Modernization & 1 <sup>st</sup> Responders Market - 2016-2022	<b>73</b> 73

	11.1.1 National Domestic Extremism & Disorder Intelligence Unit	
	(NDEDIU)	
	11.1.2 UK Police Forces Statistics (2015)	
40	·	
12	France Police Modernization & 1 <sup>st</sup> Responders Market - 2016-2022	
	12.1 France Police Modernization & 1 <sup>st</sup> Responders Market Background	
	12.2 French Police Agencies	
	12.2.1 The National Police	
	12.2.1.1 Research, Assistance, Intervention, Deterrence (RAID)	
	12.2.2 The National Gendarmerie	
	12.2.2.1 National Gendarmerie Intervention Group	
	12.2.3 Paris Police Prefecture	
	12.2.4 Police Forces Statistics	
	12.3 France Police Modernization & 1 <sup>st</sup> Responders Market - 2015-2022	
40	·	
13	Belgium Police Modernization & 1 <sup>st</sup> Responders Market - 2016-2022	
	13.1 Belgian Police Forces	
	13.1.1 Belgium Federal Police	
	13.1.2 Belgium Local Police Forces	
	·	02
14	Sweden, Norway, Finland & Denmark: Police Modernization & 1 <sup>st</sup>	
	Responders Market - 2016-2022	
	14.1 Swedish Police Agencies	
	14.1.1 The Swedish Police Authority	
	14.1.2 The Swedish Economic Crime Authority	
	14.1.3 Swedish Security Service (Säkerhetspolisen)	
	14.1.5 Customs Service	
	14.1.6 Norwegian Police Agencies	
	14.1.7 National Criminal Investigation Service	
	14.2 Finnish Police Agencies	
	14.2.1 Finnish Police	
	14.2.2 Finnish Customs	
	14.2.3 Finnish Border Guard	
	14.3 Danish Police Agencies	
	14.3.1 Danish Police	
	14.3.2 Danish Tax and Customs Authorities (SKAT)	88
	14.4 Sweden, Norway, Finland & Denmark: Police Modernization & 1st	
	Responders Market - 2015-2022	88
15	Germany Police Modernization & 1 <sup>st</sup> Responders Market - 2016-2022	89
	15.1 German Police Agencies	
	15.1.1 BPOL - Federal Police	
	15.1.2 GSG 9 - Special Operations & Counterterrorism Unit	89

	15.1.3	BFE/BFHu Units - Special Anti-Terrorist Unit of Federal Anti-	
	45 4 4	Riot Police	
	15.1.4 15.1.5	ASSIK - Special Task Force Protection in Crisis AreasZKA - Customs Investigation Bureau	
	15.1.5	ZUZ - Customs SWAT Unit	
	15.1.7	Military Police	
	15.1.8	State Police Forces	
	15.1.9	SEK - State Special Operations Command Part of Uniformed	
		Police	92
	15.1.10	MEK - Mobile Task Force units, Part of Criminal Police	92
	15.2 Germ	nany Police Modernization & 1 <sup>st</sup> Responders Market - 2015-2022.	93
16	Austria & S 2016-2022	witzerland: Police Modernization & 1 <sup>st</sup> Responders Market -	94
		ian Police Agencies	
	16.1.1	Federal Ministry of The Interior	
	16.1.2	Criminal Intelligence Service	
	16.1.3	Federal Agency for State Protection and Counter Terrorism	94
	16.1.4	The Federal Police	
	16.1.5	Federal Ministry of Finance/Customs Administration	
	16.2 Swiss	s Police Agencies	95
		ia & Switzerland: Police Modernization & 1 <sup>st</sup> Responders Market 5-2022	
17	<b>Italy Police</b>	Modernization & 1 <sup>st</sup> Responders Market - 2016-2022	98
		n Police Agencies	
	17.1.1	Carabinieri Corps	
	17.1.2	Penitentiary Police Corps	
	17.1.3	Finance Corps	
	17.1.4	State Police	
	17.1.5	Corps of National Foresters	
	-	Police Modernization & 1 <sup>st</sup> Responders Market - 2015-2022	
18		e Modernization & 1 <sup>st</sup> Responders Market - 2016-2022	
	-	ish Police Agencies	
	18.1.1	National Police	
	18.1.2	Customs Surveillance Directorate	
	18.1.3	Civil Guard Police Modernization & 1 <sup>st</sup> Responders Market - 2015-2022	
	•	·	
19		ce Modernization & 1 <sup>st</sup> Responders Market – 2016 -2022	
		n Police Agencies	
	19.1.1	National Police	
	19.1.2	Border Guard	
	19.1.3	Internal Security AgencyCustoms Service	
	19.1.4 19.1.5	Central Anticorruption Bureau	. 105 105

	19.2 Poland Police Modernization & 1 <sup>st</sup> Responders Market - 2015-2022	106
20	Hungary & Czech Republic: Police Modernization & 1 <sup>st</sup> Responders  Market - 2016-2022	
	20.1 Hungarian Police Agencies	107
	20.1.1 Hungarian National Police	107
	20.1.2 The Hungarian Customs and Finance Guard	107
	20.2 Czech Republic Police Agencies	108
	20.2.1 Czech National Police	
	20.2.2 Czech Customs Administration	108
	20.3 Hungary & Czech Republic: Police Modernization & 1 <sup>st</sup> Responders Market - 2015-2022	109
21	Russia Police Modernization & 1 <sup>st</sup> Responders Market – 2016-2022	110
	21.1 Russian Police Agencies	
	21.1.1 The Federal Security Service (FSB)	110
	21.1.2 The Internal Troops	
	21.2 Russia Police Modernization & 1 <sup>st</sup> Responders Market - 2015-2022	111
22	Rest of Europe: Police Modernization & 1 <sup>st</sup> Responders Market - 2016-2022	112
	22.1 Rest of Europe: Police Modernization & 1 <sup>st</sup> Responders Market –	
	2015-2022	112
23	Appendix A: European Homeland Security & Public Safety Related Product Standards	
	23.1 European Committee for Standardization (CEN)	
	23.3 EU Buildings & Perimeter Security Standards & Specifications	
24	Appendix B: The European Union Challenges and Outlook	
	24.1 Summary	
	24.2 The EU Economy	
	24.3 Anti-EU Trends24.4 The EU Frail Leadership and Poor Strategic Vision	
	24.5 Migration and Refugee Crisis	
	24.6 European Security Worries	
	24.7 Terrorism	
	24.8 EU Future Scenarios	
25	Appendix C: Europe Migration Crisis & Border Security	
25	25.1 Introduction	
	25.2 EU Migration: Background	
	25.3 The European Borders Security	
	25.3.1 Introduction	
	25.3.2 The Schengen Area	
	25.3.3 The European Integrated Border Management System (IBM)	

	25.3.4	The EU Smart Borders Initiative	165
	25.3.5	The Schengen Zone: Passenger Name Record (PNR) System	
		Outlook	166
	25.3.6	Temporary Reintroduction of Border Control	171
	25.4 Euro	pean Smart & Secure Border Market	173
26	Appendix	D: Abbreviations	176
27	Scope, Me	thodology & Disclaimer	188
		earch Scope	
	27.2 Rese	earch Methodology	188
28	Disclaimer	<sup>.</sup> & Copyright	190

## **List of Tables**

Table 1 - European Population, Muslim-Population, GDP, GDP/Capita and	
Defense-Budget 2014 Data by 17 Countries	21
Table 2 - European Police Forces, 1 <sup>st</sup> Responders, Airports & Air-Passengers	
Statistics by Country	29
Table 3 - Ranking of Manmade & Natural Disasters, Crime and Terror Threats as	
a Market Driver	49
Table 4 - Ranking of Manmade & Natural Disasters, Crime and Terror Threats as	
a Market Driver	54
Table 5 - European, Police Modernization & 1st Responder Market: Business	
Opportunities	61
Table 6 - Police Modernization & 1st Responder Market - Competitive Analysis	67
Table 7 - European Police & Other 1st Responders Security Market [\$M] by	
Country – 2015-2022	68
Table 8 - European Police & Other 1st Responders Security Market [\$M] by	
Revenue Source (Sales, Aftersale and Other Revenues) – 2015-	
2022	71
Table 9 - UK Police Modernization & 1st Responders Market Share [\$M] by	
Revenue Source – 2015-2022	75
Table 10 - France Police Modernization & 1st Responders Market Share [\$M] by	
Revenue Source – 2015-2022	79
Table 11 - Belgium Police Modernization & 1st Responders Market Share [\$M]	0
by Revenue Source – 2015-2022	82
Table 12 - Sweden, Norway, Finland & Denmark: Police Modernization & 1st	
Responders Market Share [\$M] by Revenue Source – 2015-2022	88
Table 13 - Germany Police Modernization & 1st Responders Market Share [\$M]	00
by Revenue Source – 2015-2022	93
Table 14 - Austria & Switzerland Police Modernization & 1st Responders Market	00
Share [\$M] by Revenue Source – 2015-2022	97
Table 15 - Italy Police Modernization & 1st Responders Market Share [\$M] by	07
Revenue Source – 2015-2022	.100
Table 16 - Spain Police Modernization & 1st Responders Market Share [\$M] by	. 100
Revenue Source – 2015-2022	.103
Table 17 - Poland Police Modernization & 1st Responders Market Share [\$M] by	. 103
Revenue Source – 2015-2022	106
Table 18 - Hungary & Czech Republic: Police Modernization & 1st Responders	. 100
· · · · · · · · · · · · · · · · · · ·	100
Market Share [\$M] by Revenue Source – 2015-2022	.109
Table 19 - Russia Police Modernization & 1st Responders Market Share [\$M] by Revenue Source – 2015-2022	111
	. 1 1 1
Table 20 - Rest of Europe: Police Modernization & 1st Responders Market Share	440
[\$M] by Revenue Source – 2015-2022	
Table 21 - European Homeland Security and Public Safety Standards	
Table 22 - Membership in the EU, Eurozone, and Schengen Area	.140

## **List of Figures**

Figure 1 - Europe Three-Key Challenges	16
Figure 2 - Number of European ISIS-Da'esh Fighters by Country	17
Figure 3 - 2015 Refugee Applications to Europe by Month	22
Figure 4 - 2015 Migrant Applications to Europe by Country of Origin	23
Figure 5 - Main Routes of Migration to Europe	
Figure 6 - European Asylum-Seeker Decisions by Country	24
Figure 7 - Refugee Acceptance by Country 2015	25
Figure 8 - Asylum Claims per 100.000 Local Populations 2015	26
Figure 9 - EU Defense Expenditure [%] Drop- 2007-2014 [Constant 2005 Euros]	28
Figure 10 - Future 1st Responders Communications Services	52
Figure 11 - First Responders' Mobile Devices Network	
Figure 12 - European Police & Other 1st Responders Security Market [\$M] by	
Country – 2015-2022	69
Figure 13 - European Police & Other 1st Responders Security Market Shares [%]	
by Country – 2015-2022	70
Figure 14 - European Police & Other 1st Responders Security Market [\$M] by	
Revenue Source (Sales, Aftersale and Other Revenues) – 2015-	
2022	71
Figure 15 - European Police Modernization & Other 1st Responders Market	
Share [%] by Revenue Source - 2015-2022	72
Figure 16 - Police Officers 31 March 2006 to 2015, England and Wales	75
Figure 17 - The European Union: Member States and Candidate Countries	139
Figure 18 - EU Countries Currency Status - 2016	141
Figure 19 - European 2015-2016 GDP Growth Forecast [%] By Country	142
Figure 20 - Europe GDP per Capita By Country	142
Figure 21 - 2015 Refugee Applications to Europe by Month	.151
Figure 22 - 2015 Migrant Applications to Europe by Country of Origin	.152
Figure 23 - Main Routes of Migration	
Figure 24 - European Asylum-Seeker Decisions by Country	154
Figure 25 - Refugee Acceptance by Country 2015	
Figure 26 - Asylum Claims per 100.000 Local Populations 2015	157
Figure 27 - Fragility and Instability in Europe Neighborhood MEA Countries	.159
Figure 28 - Europe Inflows of Threats	160
Figure 29 - European Borders	161
Figure 30 - The 2016 Schengen Border Map	162
Figure 31 - The Advanced Passenger Analysis (APA) System	.171
Figure 32 - Migrant Arrivals by Sea and Land Borders in 2015	173