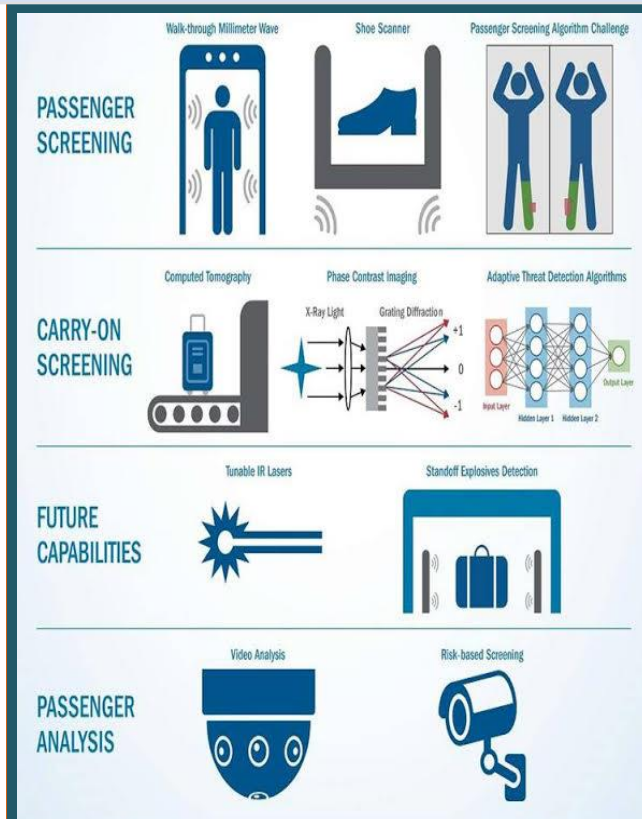


2018-2025

Explosives & Weapons Detection Systems Market, Technologies & Industry Volume 1 – Volume 5



Explosives & Weapons Detection Systems Market, Technologies & Industry

2018-2025

Volume 1

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 off-the-shelf and custom 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 2000 companies, HSRC earned the reputation as the industry's Gold Standard for Homeland Security & Public Safety market reports.

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

Table of Contents

1	Research Scope & Methodology	16
1.1	Research Scope	16
1.2	Information Sources.....	18
1.3	Market Definition.....	19
1.4	Market Analysis.....	19
1.5	Research Methodology	20
2	Executive Summary	23
2.1	Major Findings	23
2.2	Major Conclusions	28
2.1	Explosives & Weapons Detection Market Dynamics & Opportunities	33
2.2	Global Explosives & Weapons Detection Systems Market - 2016-2025.....	34
2.2.1	Global Explosives & Weapons Detection Vertical Markets.....	34
2.2.2	Global Explosives & Weapons Detection Systems Technology Markets	35
2.2.3	Global Explosives & Weapons Detection Systems Market by Region	37
	MARKET ANALYSIS	39
3	Explosives & Weapons Detection Systems: Market Drivers	39
4	Explosives & Weapons Detection Systems: Market Inhibitors	41
5	Explosives & Weapons Detection Industry: Business Opportunities & Challenges	42
6	Explosives & Weapons Detection Systems Industry: SWOT Analysis	44
6.1	Strengths	44
6.2	Weaknesses	45
6.3	Opportunities	45
6.4	Threats.....	46
7	Barriers to Entry, Supplier Power, Buyer Power & Barriers to Substitution	47
	VERTICAL MARKETS	48
8	Global Explosives & Weapons Detection Systems Market by Vertical Market	48
8.1	Vertical Markets – 2016-2025	48
8.2	Market Dynamics – 2016-2025	49
8.3	Market Breakdown – 2016-2025.....	50

9	Global Explosives & Weapons Detection Systems Aviation Security Market - 2016-2025	52
9.1	Airport Security Market Background	52
9.2	Aviation Explosives & Weapons Detection Systems Market: Drivers	61
9.3	Aviation Explosives & Weapons Detection Screening Systems Market: Inhibitors.....	62
9.4	Explosives & Weapons Detection Systems Aviation Security Market – 2016-2025	62
9.4.1	Market Size	62
9.4.2	Market Dynamics.....	63
9.4.3	Market Breakdown	63
10	Global Explosives & Weapons Detection Maritime Security Market - 2016-2025	65
10.1	Maritime Weapons & Explosives Detection: Market Background.....	65
10.2	Market Drivers.....	65
10.3	Market Inhibitors	66
10.4	Explosives & Weapons Detection Maritime Security Market – 2016-2025.....	67
10.4.1	Market Size	67
10.4.2	Market Dynamics.....	68
10.4.3	Market Breakdown	69
11	Global Explosives & Weapons Detection Land Transportation Security Market - 2016-2025	71
11.1	Land Transportation Security Market Background.....	71
11.2	Market Drivers.....	72
11.3	Market Inhibitors	72
11.4	Explosives & Weapons Detection Land Transportation Security Market – 2016-2025.....	74
11.4.1	Market Size	74
11.4.2	Market Dynamics.....	75
11.4.3	Market Breakdown	75
12	Global Explosives & Weapons Detection Secured Perimeters & Buildings Market - 2016-2025	77
12.1	Secured Perimeters & Buildings Market Background	77
12.2	Explosives & Weapons Detection Secured Perimeters & Buildings Market – 2016-2025	78
12.2.1	Market Size	78
12.2.2	Market Dynamics.....	79
12.2.3	Market Breakdown	80
13	Global Explosives & Weapons Detection Systems Postal Security Market - 2016-2025	82
13.1	Postal Explosives Detection Systems Market Background	82

13.2	Market Drivers.....	83
13.3	Market Inhibitors	83
13.4	Explosives & Weapons Detection Systems Postal Security Market – 2016-2025.....	84
13.4.1	Market Size	84
13.4.2	Market Dynamics.....	85
13.4.3	Market Breakdown	85
14	Global Explosives & Weapons Detection Systems Public Venue Security Market - 2016-2025.....	87
14.1	Public Venue Security Market Background.....	87
14.2	Police Modernization & Other 1st Responders: Market Background.....	87
14.2.1	Police Modernization Vectors	92
14.2.2	Law Enforcement Agencies and Police Modernization Funding	93
14.2.3	Police Modernization & Other 1st Responders Business Opportunities	93
14.3	Public Venue Security Market: SWOT Analysis.....	95
14.3.1	Strengths.....	95
14.3.2	Weaknesses.....	96
14.3.3	Opportunities	97
14.3.4	Threats	98
14.4	Public Venue Security Market: Competitive Analysis.....	99
14.5	Market Analysis.....	100
14.5.1	Market Drivers	100
14.5.2	Market Inhibitors.....	101
14.6	Explosives & Weapons Detection Systems Public Venue Security Market – 2016-2025.....	101
14.6.1	Market Size	101
14.6.2	Market Dynamics.....	102
14.6.3	Market Breakdown	102
15	Global Explosives & Weapons Detection Systems Other Vertical Markets - 2016-2025.....	104
15.1	Market Size.....	104
15.2	Market Dynamics	105
15.3	Market Breakdown	105
	TECHNOLOGY MARKETS	107
16	Global Explosives & Weapons Detection Systems Market by Technology	107
16.1	Overview.....	107
16.1.1	Consolidated Market – 2016-2025	107
16.1.2	Market Dynamics – 2016-2025.....	108
16.1.3	Market Breakdown – 2016-2025	109

17	Global Explosives Trace Detection (ETD) Market – 2016-2025	111
17.1	ETD Market Background.....	111
17.2	Global ETD Market Dynamics & Opportunities	116
17.3	ETD Industry: Business Opportunities & Challenges	118
18	ETD Market: SWOT Analysis	119
18.1	Strengths	119
18.2	Weaknesses	120
18.3	Opportunities	120
18.4	Threats.....	120
18.5	ETD Market: Barriers to Entry, Supplier Power, Buyer Power & Barriers to Substitution	122
18.6	Explosives Trace Detection (ETD) Systems Market – 2016- 2025.....	123
18.6.1	Market Size	123
18.6.2	Market Dynamics.....	124
18.6.3	Market Breakdown	124
19	Global Metal Detection Market – 2016-2025	126
19.1	Metal Detectors Market Background.....	126
19.1.1	Hand-Held Metal Detectors Market Background	126
19.1.1.1	Principles of Operation	126
19.1.1.2	Technology & Operational Essentials.....	127
19.1.1.3	Hand-Held Metal Detectors – Technology Trends	127
19.1.2	Metal Detection Portals	128
19.1.2.1	Metal Detection Portals Market Background.....	128
19.1.2.2	Metal Detection Portals Technology	129
19.2	Metal Detectors: Business Opportunities & Challenges.....	131
19.3	Metal Detectors Market: SWOT Analysis.....	132
19.3.1	Strengths	132
19.3.2	Weaknesses.....	132
19.3.3	Opportunities	132
19.3.4	Threats	133
19.4	Metal Detectors Market – 2016-2025.....	133
19.4.1	Market Size	133
19.4.2	Market Dynamics.....	134
19.4.3	Market Breakdown	134
20	Global Standoff Explosives & Weapons Detection Market – 2016-2025	136
20.1	Standoff IED Mitigation Systems Market Background.....	136
20.2	Counter-IED Technologies: Business Opportunities & Challenges.....	140
20.2.1	Maintenance and Upgrades (Particularly of Jammers & Armored Trucks).....	140
20.2.2	Sensors and Other Electronic Systems Upgrade	141
20.2.3	Standoff Suicide Bombers Detection	141
20.2.4	Suicide Bombers Detonation Neutralization	141

20.2.5	Standoff Detection of VBIED	141
20.2.6	VBIED Detonation Neutralization	142
20.2.7	Standoff Explosive Detection in Urban Environment	142
20.2.8	Large Area IED Detection Coverage	142
20.2.9	IED Placement Detection	143
20.2.10	Active Armors for Vehicles	143
20.3	Counter-IED Technologies Industry: SWOT Analysis	143
20.3.1	Strengths	143
20.3.2	Weaknesses	144
20.3.3	Opportunities	144
20.3.4	Threats	144
20.4	Market Drivers	145
20.5	Market Inhibitors	145
20.6	Standoff Explosives & Weapons Detection: Market Background	146
20.7	Standoff IED Detection Technologies	156
20.8	Standoff Detection Systems Market – 2016-2025	160
20.8.1	Market Size	160
20.8.2	Market Dynamics	161
20.8.3	Market Breakdown	162
21	Global Explosives & Weapons Detection - IoT & Predictive Maintenance Market – 2016-2025	164
21.1	Explosives & Weapons Detection – IoT & Predictive Maintenance Market Background	164
21.2	Explosives & Weapons Detection Systems IoT & Predictive Maintenance Market – 2016-2025	168
21.2.1	Market Size	168
21.2.2	Market Dynamics	169
21.2.3	Market Breakdown	169
22	Global Weapons & Explosives Detection Systems (EDS) & Baggage Handling Systems (BHS) Market – 2016-2025	171
22.1	EDS & BHS Market Background	171
22.2	EDS & BHS Market – 2016-2025	173
22.2.1	Market Size	173
22.2.2	Market Dynamics	174
22.2.3	Market Breakdown	174
23	Global X-Ray & MMWave Full Body Scanners (AIT) Market – 2016-2025	176
23.1	X-Ray & MMWave Full Body Scanners (AIT): Market Background	176
23.1.1	The Advanced Technology (AIT) X-ray Systems	176
23.1.2	Whole Body Scanners (AIT)	178
23.1.3	X-ray Backscatter AIT Portals	181
23.2	Backscatter Imaging Technology - Principles of Operation	181
23.2.1	Risks/Benefits of X-Ray AIT Systems	181

23.2.1.1	Sample System.....	183
23.2.2	Currently Available X-ray Backscatter Portals	183
23.3	Active MMWave Whole Body AIT Scanners	183
23.3.1	Principles of Operation	183
23.4	Techno-Tactical & Economic Considerations	188
23.4.1	Sample Systems	188
23.5	Passive MMWave Whole Body Scanners.....	189
23.5.1	Principle of Operation.....	190
23.5.2	System Example: Millivision 350 Portal.....	190
23.6	Other X-Ray Whole Body Scanners Technologies	192
23.7	Full Body Scanners (AIT) Market – 2016-2025.....	192
23.7.1	Market Size	192
23.7.2	Market Dynamics.....	193
23.7.3	Market Breakdown	193
24	Global X-Ray Scanners Market – 2016-2025	195
24.1	X-Ray Scanners: Market Background.....	195
24.2	Market Dynamics & Opportunities.....	197
24.3	X-ray Screening Systems: Market Drivers	198
24.4	X-ray Screening Systems: Market Inhibitors.....	200
24.5	X-ray Security Industry: Business Opportunities & Challenges.....	201
24.6	X-ray Screening Systems Industry: SWOT Analysis.....	202
24.6.1	Strengths.....	202
24.6.2	Weaknesses.....	203
24.6.3	Opportunities	203
24.6.4	Threats	203
24.7	Barriers to Entry, Supplier Power, Buyer Power & Barriers to Substitution	205
24.8	X-Ray weapons & Explosives Detection Technologies.....	206
24.9	Explosives & Weapons Detection X-ray Scanners (w/o AIT) Market – 2016-2025.....	206
24.9.1	Market Size	206
24.9.2	Market Dynamics.....	207
24.9.3	Market Breakdown	207
25	Global Explosives & Weapons Detection: Big Data Systems Market – 2016-2025.....	209
25.1	Explosives & Weapons Detection & Screening: Big Data & Data Analytics Systems: Market Background	209
25.1.1	Summary	209
25.1.2	Proliferation of Data.....	211
25.1.3	Main Personal Data Sources for Explosives & Weapons Detection Big Data & Data Analytics Projects	212
25.1.4	Big Data and Data Analytics in Explosives & Weapons Detection Systems	212
25.1.5	Market Drivers	213

25.1.6	Market Inhibitors	214
25.1.7	Big Data in Homeland Security Vendors	214
25.2	Explosives & Weapons Detection Systems Big Data & Data Analytics Market – 2016-2025	215
25.2.1	Market Size	215
25.2.2	Market Dynamics.....	216
25.2.3	Market Breakdown	216
REGIONAL & NATIONAL MARKETS		218
26	Global Explosives & Weapons Detection Systems Market by Region	218
26.1	Consolidated Market – 2016-2025.....	218
26.2	Market Dynamics – 2016-2025	219
26.3	Market Breakdown – 2016-2025.....	219

List of Tables

Table 1 - Global Air Passengers & Cargo Traffic on International & Domestic Scheduled Flights - 2016–2018	27
Table 2 - Global Explosives & Weapons Detection Systems Market Size [\$M] by Vertical Market – 2016-2025	34
Table 3 - Global Explosives & Weapons Detection Systems Market Size [\$M] by Technology – 2016-2025	36
Table 4 - Global Explosives & Weapons Detection Systems Market Size [\$M] by Region – 2016-2025.....	37
Table 5 - Explosives & Weapons Detection Market: Business Opportunities	42
Table 6 - Global Explosives & Weapons Detection Systems Market Size [\$M] Vertical Markets – 2016-2025	48
Table 7 - Global Explosives & Weapons Detection Systems Market AGR [%] by Vertical Market – 2016-2025	49
Table 8 - Global Explosives & Weapons Detection Systems Market Share [%] by Vertical Market – 2016-2025	50
Table 9 - Global Air Passengers & Cargo Traffic on International & Domestic Scheduled Flights - 2016–2018	57
Table 10 - Global Explosives & Weapons Detection Systems Aviation Security Market Size [\$M] by Region – 2016-2025.....	62
Table 11 - Global Explosives & Weapons Detection Systems Aviation Security Market AGR [%] by Region – 2016-2025.....	63
Table 12 - Global Explosives & Weapons Detection Systems Aviation Security Market Share [%] by Region – 2016-2025	64
Table 13 - Global Explosives & Weapons Detection Maritime Security Market Size [\$M] by Region – 2016-2025.....	68
Table 14 - Global Explosives & Weapons Detection Maritime Security Market AGR [%] by Region – 2016-2025.....	69
Table 15 - Global Explosives & Weapons Detection Maritime Security Market Share [%] by Region – 2016-2025	69
Table 16 - Global Explosives & Weapons Detection Land Transportation Security Market Size [\$M] by Region – 2016-2025.....	74
Table 17 - Global Explosives & Weapons Detection Land Transportation Security Market AGR [%] by Region – 2016-2025.....	75
Table 18 - Global Explosives & Weapons Detection Land Transportation Security Market Share [%] by Region – 2016-2025	76
Table 19 - Global Explosives & Weapons Detection Secured Perimeters & Buildings Market Size [\$M] by Region – 2016-2025	79
Table 20 - Global Explosives & Weapons Detection Secured Perimeters & Buildings Market AGR [%] by Region – 2016-2025	80
Table 21 - Global Explosives & Weapons Detection Secured Perimeters & Buildings Market Share [%] by Region – 2016-2025	80
Table 22 - Global Explosives & Weapons Detection Systems Postal Security Market Size [\$M] by Region – 2016-2025.....	84

Table 23 - Global Explosives & Weapons Detection Systems Postal Security Market AGR [%] by Region – 2016-2025.....	85
Table 24 - Global Explosives & Weapons Detection Systems Postal Security Market Share [%] by Region – 2016-2025	86
Table 25 - Ranking of Manmade & Natural Disasters, Crime and Terror Threats as a Market Driver	92
Table 26 - Police Modernization & Other 1st Responders Market: Business Opportunities	94
Table 27 - Police Modernization & Other 1st Responders Market: Competitive Analysis	99
Table 28 - Global Explosives & Weapons Detection Systems Public Venue Security Market Size [\$M] by Region – 2016-2025.....	101
Table 29 - Global Explosives & Weapons Detection Systems Public Venue Security Market AGR [%] by Region – 2016-2025.....	102
Table 30 - Global Explosives & Weapons Detection Systems Public Venue Security Market Share [%] by Region – 2016-2025	103
Table 31 - Global Explosives & Weapons Detection Systems Other Vertical Markets Size [\$M] by Region – 2016-2025.....	104
Table 32 - Global Explosives & Weapons Detection Systems Other Vertical Markets AGR [%] by Region – 2016-2025.....	105
Table 33 - Global Explosives & Weapons Detection Systems Other Vertical Markets Share [%] by Region – 2016-2025	105
Table 34 - Global Explosives & Weapons Detection Systems Market Size [\$M] by Technology – 2016-2025	107
Table 35 - Global Explosives & Weapons Detection Systems Market AGR [%] by Technology – 2016-2025	109
Table 36 - Global Explosives & Weapons Detection Systems Market Share [%] by Technology – 2016-2025	110
Table 37 - ETD Screening Market: Business Opportunities.....	118
Table 38 - Global Explosives Trace Detection (ETD) Systems Market Size [\$M] by Region – 2016-2025.....	123
Table 39 - Global Explosives Trace Detection (ETD) Systems Market AGR [%] by Region – 2016-2025	124
Table 40 - Global Explosives Trace Detection (ETD) Systems Market Share [%] by Region – 2016-2025.....	125
Table 41 - Metal Detectors Market: Business Opportunities.....	131
Table 42 - Global Metal Detectors Market Size [\$M] by Region – 2016-2025.....	133
Table 43 - Global Metal Detectors Market AGR [%] by Region – 2016-2025 ...	134
Table 44 - Global Metal Detectors Market Share [%] by Region – 2016-2025.....	135
Table 45 - Standoff IED Detection Technologies	159
Table 46 - Global Standoff Detection Systems Market Size [\$M] by Region – 2016-2025.....	161
Table 47 - Global Standoff Detection Systems Market AGR [%] by Region – 2016-2025.....	162

Table 48 - Global Standoff Detection Systems Market Share [%] by Region – 2016-2025.....	162
Table 49 - Global Explosives & Weapons Detection Systems IoT & Predictive Maintenance Market Size [\$M] by Region – 2016-2025.....	168
Table 50 - Global Explosives & Weapons Detection Systems IoT & Predictive Maintenance Market AGR [%] by Region – 2016-2025.....	169
Table 51 - Global Explosives & Weapons Detection Systems IoT & Predictive Maintenance Market Share [%] by Region – 2016-2025.....	170
Table 52 - Global EDS & BHS Market Size [\$M] by Region – 2016-2025	173
Table 53 - Global EDS & BHS Market AGR [%] by Region – 2016-2025	174
Table 54 - Global EDS & BHS Market Share [%] by Region – 2016-2025.....	174
Table 55 - Backscatter People Screening AIT Portals – Advantages & Disadvantages	182
Table 56 - Reflectivity of Basic Explosives and Human Tissue.....	184
Table 57 - Examples of Object Emissivity.....	186
Table 58 - Active MMWave Screening: Advantages & Disadvantages	188
Table 59 - Global Full Body Scanners (AIT) Market Size [\$M] by Region – 2016-2025.....	192
Table 60 - Global Full Body Scanners (AIT) Market AGR [%] by Region – 2016-2025.....	193
Table 61 - Global Full Body Scanners (AIT) Market Share [%] by Region – 2016-2025.....	194
Table 62 - Airport X-ray Screening Market Opportunities by Region	198
Table 63 - X-ray Screening Market: Business Opportunities	201
Table 64 - Global Explosives & Weapons Detection X-ray Scanners (w/o AIT) Market Size [\$M] by Region – 2016-2025	206
Table 65 - Global Explosives & Weapons Detection X-ray Scanners (w/o AIT) Market AGR [%] by Region – 2016-2025.....	207
Table 66 - Global Explosives & Weapons Detection X-ray Scanners (w/o AIT) Market Share [%] by Region – 2016-2025	208
Table 67 - Global Explosives & Weapons Detection Systems Big Data & Data Analytics Market Size [\$M] by Region – 2016-2025.....	215
Table 68 - Global Explosives & Weapons Detection Systems Big Data & Data Analytics Market AGR [%] by Region – 2016-2025.....	216
Table 69 - Global Explosives & Weapons Detection Systems Big Data & Data Analytics Market Share [%] by Region – 2016-2025	217
Table 70 - Global Explosives & Weapons Detection Systems Market Size [\$M] by Region – 2016-2025.....	218
Table 71 - Global Explosives & Weapons Detection Systems Market AGR [%] by Region – 2016-2025	219
Table 72 - Global Explosives & Weapons Detection Systems Market Share [%] by Region – 2016-2025	220

List of Figures

Figure 1 - Explosives & Weapons Detection Technologies: Global Market & Industry 207 Submarkets: 5 Granulation Vectors	17
Figure 2 - Explosives & Weapons Detection Market Trends	23
Figure 3 - Types of Airport Attacks by Weapons Used [%]	26
Figure 4 - Boeing Aviation Passengers 2015-2034 CAGR [%] Forecast	30
Figure 5 - Global Explosives & Weapons Detection Systems Market Size [\$M] by Vertical Market – 2016-2025	35
Figure 6 - Global Explosives & Weapons Detection Systems Market Size [\$M] by Technology – 2016-2025	36
Figure 7 - Global Explosives & Weapons Detection Systems Market Share [%] by Region – 2016-2025	38
Figure 8 - Explosives & Weapons Detection Systems Market: Barriers to Entry, Supplier Power, Buyer Power and Barriers to Substitution	47
Figure 9 - Global Explosives & Weapons Detection Systems Market Size [\$M] by Vertical Market – 2016-2025	49
Figure 10 - Global Explosives & Weapons Detection Systems Market Share [%] by Vertical Market – 2016-2025	51
Figure 11 - Aviation & Maritime Multi-Layered Security Infrastructure	54
Figure 12 - Airport Security: Hand-Held Baggage & People Explosives & Weapons Detection Screening	55
Figure 13 - Types of Airport Attacks by Weapons Used [%]	56
Figure 14 - A Multi-lane People & Baggage Screening Site	58
Figure 15 - Airport Passengers [RPK] by Region 1994- 2034	59
Figure 16 - Global Explosives & Weapons Detection Systems Aviation Security Market Size [\$M] by Region – 2016-2025	63
Figure 17 - Global Explosives & Weapons Detection Systems Aviation Security Market Share [%] by Region – 2016-2025	64
Figure 18 - Global Explosives & Weapons Detection Maritime Security Market Size [\$M] by Region – 2016-2025	68
Figure 19 - Global Explosives & Weapons Detection Maritime Security Market Share [%] by Region – 2016-2025	70
Figure 20 - Global Explosives & Weapons Detection Land Transportation Security Market Size [\$M] by Region – 2016-2025	75
Figure 21 - Global Explosives & Weapons Detection Land Transportation Security Market Share [%] by Region – 2016-2025	76
Figure 22 - Perimeters & Buildings Security Systems, Layers of Security	77
Figure 23 - Global Explosives & Weapons Detection Secured Perimeters & Buildings Market Size [\$M] by Region – 2016-2025	79
Figure 24 - Global Explosives & Weapons Detection Secured Perimeters & Buildings Market Share [%] by Region – 2016-2025	81
Figure 25 - Global Explosives & Weapons Detection Systems Postal Security Market Size [\$M] by Region – 2016-2025	85

Figure 26 - Global Explosives & Weapons Detection Systems Postal Security Market Share [%] by Region – 2016-2025	86
Figure 27 - Future 1 st Responders Communications Services	90
Figure 28 - First Responders' Mobile Devices Network	91
Figure 29 - Global Explosives & Weapons Detection Systems Public Venue Security Market Size [\$M] by Region – 2016-2025	102
Figure 30 - Global Explosives & Weapons Detection Systems Public Venue Security Market Share [%] by Region – 2016-2025	103
Figure 31 - Global Explosives & Weapons Detection Systems Other Vertical Markets Size [\$M] by Region – 2016-2025	104
Figure 32 - Global Explosives & Weapons Detection Systems Other Vertical Markets Share [%] by Region – 2016-2025	106
Figure 33 - Global Explosives & Weapons Detection Systems Market Size [\$M] by Technology – 2016-2025	108
Figure 34 - Global Explosives & Weapons Detection Systems Market Share [%] by Technology – 2016-2025	110
Figure 35 - ETD Systems Market: Barriers to Entry, Supplier Power, Buyer Power and Barriers to Substitution	122
Figure 36 - Global Explosives Trace Detection (ETD) Systems Market Size [\$M] by Region – 2016-2025	124
Figure 37 - Global Explosives Trace Detection (ETD) Systems Market Share [%] by Region – 2016-2025	125
Figure 38 - Metal Detection Portals Technologies	130
Figure 39 - Global Metal Detectors Market Size [\$M] by Region – 2016-2025	134
Figure 40 - Global Metal Detectors Market Share [%] by Region – 2016-2025	135
Figure 41 - IED Ready for Detonation	137
Figure 42 - IED Food Chain and Its Relevant Time Frame	138
Figure 43 - Counter-IED – Mixed Mode Approach	140
Figure 44 - Global IED Suicide Attack	147
Figure 45 - IED Suicide Attacks in 5 Countries	147
Figure 46 - 148	
Figure 47 - Terror Suicide Attacks by IEDs (left) and by Targets (Right)	148
Figure 48 - Improvised Explosives Device Kill Chain	149
Figure 49 - Suicide Vest PBIEDs Configurations	150
Figure 50 - Suicide Attack Sequence	152
Figure 51 - Standoff & Non-Standoff IED Bulk Detection Technologies	157
Figure 52 - Standoff IED Trace Detection Technologies	158
Figure 53 - Global Standoff Detection Systems Market Size [\$M] by Region – 2016-2025	161
Figure 54 - Global Standoff Detection Systems Market Share [%] by Region – 2016-2025	163
Figure 55 - Global Explosives & Weapons Detection Systems IoT & Predictive Maintenance Market Size [\$M] by Region – 2016-2025	169

Figure 56 - Global Explosives & Weapons Detection Systems IoT & Predictive Maintenance Market Share [%] by Region – 2016-2025.....	170
Figure 57 - Global EDS & BHS Market Size [\$M] by Region – 2016-2025	173
Figure 58 - Global EDS & BHS Market Share [%] by Region – 2016-2025	175
▪ Figure 59 - People Screening Technologies - Threats and Associated Detection Technologies.....	177
Figure 60 - Passenger Screening Process Using Advanced Imaging Technology	180
Figure 61 - Dose Comparison: Environmental Radiation vs. Backscatter Scan	182
Figure 62 - Spectrum of MMWave Technologies.....	184
Figure 63 - Active MMWave Imaging Technology – Principles of Operation	186
Figure 64 - A Passive MMWave Whole-Body Scanner Layout.....	191
Figure 65 - Passive MMWave Scanner: Typical Threat Images	191
Figure 66 - Global Full Body Scanners (AIT) Market Size [\$M] by Region – 2016-2025.....	193
Figure 67 - Global Full Body Scanners (AIT) Market Share [%] by Region – 2016-2025.....	194
Figure 68 - X-ray Security Systems Market: Barriers to Entry, Supplier Power, Buyer Power and Barriers to Substitution.....	205
Figure 69 - Global Explosives & Weapons Detection X-ray Scanners (w/o AIT) Market Size [\$M] by Region – 2016-2025	207
Figure 70 - Global Explosives & Weapons Detection X-ray Scanners (w/o AIT) Market Share [%] by Region – 2016-2025	208
Figure 71 - Global Big Data and Data Analytics, Homeland Security and Public Safety Market Size (\$M) - 2015-2022	210
Figure 72 - Main Data Sources for Explosives & Weapons Detection Big Data Projects	212
Figure 73 - Global Explosives & Weapons Detection Systems Big Data & Data Analytics Market Size [\$M] by Region – 2016-2025.....	216
Figure 74 - Global Explosives & Weapons Detection Systems Big Data & Data Analytics Market Share [%] by Region – 2016-2025	217
Figure 75 - Global Explosives & Weapons Detection Systems Market Size [\$M] by Region – 2016-2025.....	219
Figure 76 - Global Explosives & Weapons Detection Systems Market Share [%] by Region – 2016-2025.....	221

***Explosives & Weapons Detection Systems
Market, Technologies & Industry***

2018-2025

Volume 2

Table of Contents

NORTH AMERICA MARKET	26
1 North America Explosives & Weapons Detection Systems Market - 2016-2025	26
1.1 North America Explosives & Weapons Detection Vertical Markets	26
1.1.1 Market Size – 2016-2025	26
1.1.2 Market Dynamics – 2016-2025.....	27
1.1.3 Market Breakdown – 2016-2025	28
1.2 North America Explosives & Weapons Detection Technology Markets.....	29
1.2.1 Consolidated Market – 2016-2025	29
1.2.2 Market Dynamics – 2016-2025.....	31
1.2.3 Market Breakdown – 2016-2025	31
1.3 North America Explosives & Weapons Detection Systems Market by Country.....	33
2 U.S. Explosives & Weapons Detection Systems Market - 2016-2025	34
2.1 U.S. Explosives & Weapons Detection Systems Market.....	34
2.1.1 Market Forecast – 2016-2025	34
2.1.2 Market Dynamics – 2016-2025.....	36
2.1.3 Market Breakdown – 2016-2025	36
3 Canada Explosives & Weapons Detection Systems Market - 2016-2025	38
3.1 Canada Explosives & Weapons Detection Systems Market	38
3.1.1 Market Forecast – 2016-2025	38
3.1.2 Market Dynamics – 2016-2025.....	40
3.1.3 Market Breakdown – 2016-2025	40
LATIN AMERICA MARKET	42
4 Latin America Explosives & Weapons Detection Systems Market - 2016-2025	42
4.1 Latin America Explosives & Weapons Detection Vertical Markets	42
4.1.1 Market Size – 2016-2025	42
4.1.2 Market Dynamics – 2016-2025.....	43
4.1.3 Market Breakdown – 2016-2025	44
4.2 Latin America Explosives & Weapons Detection Technology Markets.....	45
4.2.1 Consolidated Market – 2016-2025	45
4.2.2 Market Dynamics – 2016-2025.....	47
4.2.3 Market Breakdown – 2016-2025	47
4.3 Latin America Explosives & Weapons Detection Systems Market by Country.....	49

5	Mexico Explosives & Weapons Detection Systems Market - 2016-2025	50
5.1	Mexico Explosives & Weapons Detection Systems Market	50
5.1.1	Market Forecast – 2016-2025	50
5.1.2	Market Dynamics – 2016-2025	52
5.1.3	Market Breakdown – 2016-2025	52
6	Colombia Explosives & Weapons Detection Systems Market - 2016-2025	54
6.1	Colombia Explosives & Weapons Detection Systems Market	54
6.1.1	Market Forecast – 2016-2025	54
6.1.2	Market Dynamics – 2016-2025	56
6.1.3	Market Breakdown – 2016-2025	56
7	Brazil Explosives & Weapons Detection Systems Market - 2016-2025	58
7.1	Brazil Explosives & Weapons Detection Systems Market	58
7.1.1	Market Forecast – 2016-2025	58
7.1.2	Market Dynamics – 2016-2025	60
7.1.3	Market Breakdown – 2016-2025	60
8	Argentina Explosives & Weapons Detection Systems Market - 2016-2025	62
8.1	Argentina Explosives & Weapons Detection Systems Market	62
8.1.1	Market Forecast – 2016-2025	62
8.1.2	Market Dynamics – 2016-2025	64
8.1.3	Market Breakdown – 2016-2025	64
9	Other Latin America Explosives & Weapons Detection Systems Market - 2016-2025	66
9.1	Other Latin America Explosives & Weapons Detection Systems Market	66
9.1.1	Market Forecast – 2016-2025	66
9.1.2	Market Dynamics – 2016-2025	68
9.1.3	Market Breakdown – 2016-2025	68
	EUROPE MARKET	70
10	Europe Explosives & Weapons Detection Systems Market - 2016-2025	70
10.1	Europe Explosives & Weapons Detection Vertical Markets	70
10.1.1	Market Size – 2016-2025	70
10.1.2	Market Dynamics – 2016-2025	71
10.1.3	Market Breakdown – 2016-2025	72
10.2	Europe Explosives & Weapons Detection Technology Markets	73
10.2.1	Consolidated Market – 2016-2025	73

10.2.2	Market Dynamics – 2016-2025.....	75
10.2.3	Market Breakdown – 2016-2025	75
10.3	Europe Explosives & Weapons Detection Systems Market by Country	76
11	U.K. Explosives & Weapons Detection Systems Market - 2016-2025	79
11.1	U.K. Explosives & Weapons Detection Systems Market.....	79
11.1.1	Market Forecast – 2016-2025	79
11.1.2	Market Dynamics – 2016-2025.....	81
11.1.3	Market Breakdown – 2016-2025	81
12	Sweden Explosives & Weapons Detection Systems Market - 2016-2025	83
12.1	Sweden Explosives & Weapons Detection Systems Market.....	83
12.1.1	Market Forecast – 2016-2025	83
12.1.2	Market Dynamics – 2016-2025.....	85
12.1.3	Market Breakdown – 2016-2025	85
13	Denmark Explosives & Weapons Detection Systems Market - 2016-2025	87
13.1	Denmark Explosives & Weapons Detection Systems Market.....	87
13.1.1	Market Forecast – 2016-2025	87
13.1.2	Market Dynamics – 2016-2025.....	89
13.1.3	Market Breakdown – 2016-2025	89
14	Netherlands Explosives & Weapons Detection Systems Market - 2016-2025.....	91
14.1	Netherlands Explosives & Weapons Detection Systems Market.....	91
14.1.1	Market Forecast – 2016-2025	91
14.1.2	Market Dynamics – 2016-2025.....	93
14.1.3	Market Breakdown – 2016-2025	93
15	Belgium Explosives & Weapons Detection Systems Market - 2016-2025	95
15.1	Belgium Explosives & Weapons Detection Systems Market.....	95
15.1.1	Market Forecast – 2016-2025	95
15.1.2	Market Dynamics – 2016-2025.....	97
15.1.3	Market Breakdown – 2016-2025	97
16	Germany Explosives & Weapons Detection Systems Market - 2016-2025	99
16.1	Germany Explosives & Weapons Detection Systems Market.....	99
16.1.1	Market Forecast – 2016-2025	99
16.1.2	Market Dynamics – 2016-2025.....	101
16.1.3	Market Breakdown – 2016-2025	101

17	France Explosives & Weapons Detection Systems Market - 2016-2025	103
17.1	France Explosives & Weapons Detection Systems Market	103
17.1.1	Market Forecast – 2016-2025	103
17.1.2	Market Dynamics – 2016-2025	105
17.1.3	Market Breakdown – 2016-2025	105
18	Spain Explosives & Weapons Detection Systems Market - 2016-2025	107
18.1	Spain Explosives & Weapons Detection Systems Market	107
18.1.1	Market Forecast – 2016-2025	107
18.1.2	Market Dynamics – 2016-2025	109
18.1.3	Market Breakdown – 2016-2025	109
19	Italy Explosives & Weapons Detection Systems Market - 2016-2025	111
19.1	Italy Explosives & Weapons Detection Systems Market	111
19.1.1	Market Forecast – 2016-2025	111
19.1.2	Market Dynamics – 2016-2025	113
19.1.3	Market Breakdown – 2016-2025	113
20	Austria Explosives & Weapons Detection Systems Market - 2016-2025	115
20.1	Austria Explosives & Weapons Detection Systems Market	115
20.1.1	Market Forecast – 2016-2025	115
20.1.2	Market Dynamics – 2016-2025	117
20.1.3	Market Breakdown – 2016-2025	117
21	Czech Republic Explosives & Weapons Detection Systems Market - 2016-2025	119
21.1	Czech Republic Explosives & Weapons Detection Systems Market	119
21.1.1	Market Forecast – 2016-2025	119
21.1.2	Market Dynamics – 2016-2025	121
21.1.3	Market Breakdown – 2016-2025	121
22	Poland Explosives & Weapons Detection Systems Market - 2016-2025	123
22.1	Poland Explosives & Weapons Detection Systems Market	123
22.1.1	Market Forecast – 2016-2025	123
22.1.2	Market Dynamics – 2016-2025	125
22.1.3	Market Breakdown – 2016-2025	125
23	Russia Explosives & Weapons Detection Systems Market - 2016-2025	127
23.1	Russia Explosives & Weapons Detection Systems Market	127
23.1.1	Market Forecast – 2016-2025	127
23.1.2	Market Dynamics – 2016-2025	129
23.1.3	Market Breakdown – 2016-2025	129

24	Other European Countries Explosives & Weapons Detection Systems Market - 2016-2025	131
24.1	Other European Countries Explosives & Weapons Detection Systems Market	131
24.1.1	Market Forecast – 2016-2025	131
24.1.2	Market Dynamics – 2016-2025	133
24.1.3	Market Breakdown – 2016-2025	133
	MIDDLE EAST & AFRICA MARKET	135
25	Middle East & Africa Explosives & Weapons Detection Systems Market - 2016-2025	135
25.1	Middle East & Africa Explosives & Weapons Detection Vertical Markets	135
25.1.1	Market Size – 2016-2025	135
25.1.2	Market Dynamics – 2016-2025	136
25.1.3	Market Breakdown – 2016-2025	137
25.2	Middle East & Africa Explosives & Weapons Detection Technology Markets	138
25.2.1	Consolidated Market – 2016-2025	138
25.2.2	Market Dynamics – 2016-2025	140
25.2.3	Market Breakdown – 2016-2025	140
25.3	MEA Explosives & Weapons Detection Systems Market by Country	142
26	Turkey Explosives & Weapons Detection Systems Market - 2016-2025	143
26.1	Turkey Explosives & Weapons Detection Systems Market	143
26.1.1	Market Forecast – 2016-2025	143
26.1.2	Market Dynamics – 2016-2025	145
26.1.3	Market Breakdown – 2016-2025	145
27	Israel Explosives & Weapons Detection Systems Market - 2016-2025	147
27.1	Israel Explosives & Weapons Detection Systems Market	147
27.1.1	Market Forecast – 2016-2025	147
27.1.2	Market Dynamics – 2016-2025	149
27.1.3	Market Breakdown – 2016-2025	149
28	Saudi Arabia Explosives & Weapons Detection Systems Market - 2016-2025	151
28.1	Saudi Arabia Explosives & Weapons Detection Systems Market	151
28.1.1	Market Forecast – 2016-2025	151
28.1.2	Market Dynamics – 2016-2025	153
28.1.3	Market Breakdown – 2016-2025	153

29	UAE Explosives & Weapons Detection Systems Market - 2016-2025	155
29.1	UAE Explosives & Weapons Detection Systems Market	155
29.1.1	Market Forecast – 2016-2025	155
29.1.2	Market Dynamics – 2016-2025.....	157
29.1.3	Market Breakdown – 2016-2025	157
30	Qatar Explosives & Weapons Detection Systems Market - 2016-2025	159
30.1	Qatar Explosives & Weapons Detection Systems Market.....	159
30.1.1	Market Forecast – 2016-2025	159
30.1.2	Market Dynamics – 2016-2025.....	161
30.1.3	Market Breakdown – 2016-2025	161
31	Kuwait Explosives & Weapons Detection Systems Market - 2016-2025	163
31.1	Kuwait Explosives & Weapons Detection Systems Market	163
31.1.1	Market Forecast – 2016-2025	163
31.1.2	Market Dynamics – 2016-2025.....	165
31.1.3	Market Breakdown – 2016-2025	165
32	Iraq Explosives & Weapons Detection Systems Market - 2016-2025	167
32.1	Iraq Explosives & Weapons Detection Systems Market	167
32.1.1	Market Forecast – 2016-2025	167
32.1.2	Market Dynamics – 2016-2025.....	169
32.1.3	Market Breakdown – 2016-2025	169
33	Nigeria Explosives & Weapons Detection Systems Market - 2016-2025	171
33.1	Nigeria Explosives & Weapons Detection Systems Market	171
33.1.1	Market Forecast – 2016-2025	171
33.1.2	Market Dynamics – 2016-2025.....	173
33.1.3	Market Breakdown – 2016-2025	173
34	South Africa Explosives & Weapons Detection Systems Market - 2016-2025	175
34.1	South Africa Explosives & Weapons Detection Systems Market.....	175
34.1.1	Market Forecast – 2016-2025	175
34.1.2	Market Dynamics – 2016-2025.....	177
34.1.3	Market Breakdown – 2016-2025	177
35	Other MEA Countries Explosives & Weapons Detection Systems Market - 2016-2025	179
35.1	Other MEA Countries Explosives & Weapons Detection Systems Market	179
35.1.1	Market Forecast – 2016-2025	179

35.1.2	Market Dynamics – 2016-2025.....	181
35.1.3	Market Breakdown – 2016-2025	181
ASIA-PACIFIC MARKET		183
36	Asia-Pacific Explosives & Weapons Detection Systems Market - 2016-2025.....	183
36.1	Asia-Pacific Explosives & Weapons Detection Vertical Markets.....	183
36.1.1	Market Size – 2016-2025	183
36.1.2	Market Dynamics – 2016-2025.....	184
36.1.3	Market Breakdown – 2016-2025	185
36.2	Asia-Pacific Explosives & Weapons Detection Technology Markets.....	186
36.2.1	Consolidated Market – 2016-2025	186
36.2.2	Market Dynamics – 2016-2025.....	188
36.2.3	Market Breakdown – 2016-2025	188
36.3	APAC Explosives & Weapons Detection Systems Market by Country.....	190
37	Azerbaijan Explosives & Weapons Detection Systems Market - 2016-2025.....	192
37.1	Azerbaijan Explosives & Weapons Detection Systems Market.....	192
37.1.1	Market Forecast – 2016-2025	192
37.1.2	Market Dynamics – 2016-2025.....	194
37.1.3	Market Breakdown – 2016-2025	194
38	Kazakhstan Explosives & Weapons Detection Systems Market - 2016-2025.....	196
38.1	Kazakhstan Explosives & Weapons Detection Systems Market.....	196
38.1.1	Market Forecast – 2016-2025	196
38.1.2	Market Dynamics – 2016-2025.....	198
38.1.3	Market Breakdown – 2016-2025	198
39	Pakistan Explosives & Weapons Detection Systems Market - 2016-2025	200
39.1	Pakistan Explosives & Weapons Detection Systems Market.....	200
39.1.1	Market Forecast – 2016-2025	200
39.1.2	Market Dynamics – 2016-2025.....	202
39.1.3	Market Breakdown – 2016-2025	202
40	India Explosives & Weapons Detection Systems Market - 2016-2025	204
40.1	India Explosives & Weapons Detection Systems Market.....	204
40.1.1	Market Forecast – 2016-2025	204
40.1.2	Market Dynamics – 2016-2025.....	206
40.1.3	Market Breakdown – 2016-2025	206

41	China Explosives & Weapons Detection Systems Market - 2016-2025	208
41.1	China Explosives & Weapons Detection Systems Market	208
41.1.1	Market Forecast – 2016-2025	208
41.1.2	Market Dynamics – 2016-2025	210
41.1.3	Market Breakdown – 2016-2025	210
42	Taiwan Explosives & Weapons Detection Systems Market - 2016-2025	212
42.1	Taiwan Explosives & Weapons Detection Systems Market	212
42.1.1	Market Forecast – 2016-2025	212
42.1.2	Market Dynamics – 2016-2025	214
42.1.3	Market Breakdown – 2016-2025	214
43	South Korea Explosives & Weapons Detection Systems Market - 2016-2025	216
43.1	South Korea Explosives & Weapons Detection Systems Market	216
43.1.1	Market Forecast – 2016-2025	216
43.1.2	Market Dynamics – 2016-2025	218
43.1.3	Market Breakdown – 2016-2025	218
44	Japan Explosives & Weapons Detection Systems Market - 2016-2025	220
44.1	Japan Explosives & Weapons Detection Systems Market	220
44.1.1	Market Forecast – 2016-2025	220
44.1.2	Market Dynamics – 2016-2025	222
44.1.3	Market Breakdown – 2016-2025	222
45	Singapore Explosives & Weapons Detection Systems Market - 2016-2025	224
45.1	Singapore Explosives & Weapons Detection Systems Market	224
45.1.1	Market Forecast – 2016-2025	224
45.1.2	Market Dynamics – 2016-2025	226
45.1.3	Market Breakdown – 2016-2025	226
46	Malaysia Explosives & Weapons Detection Systems Market - 2016-2025	228
46.1	Malaysia Explosives & Weapons Detection Systems Market	228
46.1.1	Market Forecast – 2016-2025	228
46.1.2	Market Dynamics – 2016-2025	230
46.1.3	Market Breakdown – 2016-2025	230
47	Indonesia Explosives & Weapons Detection Systems Market - 2016-2025	232
47.1	Indonesia Explosives & Weapons Detection Systems Market	232
47.1.1	Market Forecast – 2016-2025	232

47.1.2	Market Dynamics – 2016-2025.....	234
47.1.3	Market Breakdown – 2016-2025	234
48	Australia Explosives & Weapons Detection Systems Market - 2016-2025	236
48.1	Australia Explosives & Weapons Detection Systems Market.....	236
48.1.1	Market Forecast – 2016-2025	236
48.1.2	Market Dynamics – 2016-2025.....	238
48.1.3	Market Breakdown – 2016-2025	238
49	Other APAC Countries Explosives & Weapons Detection Systems Market - 2016-2025	240
49.1	Other APAC Countries Explosives & Weapons Detection Systems Market	240
49.1.1	Market Forecast – 2016-2025	240
49.1.2	Market Dynamics – 2016-2025.....	242
49.1.3	Market Breakdown – 2016-2025	242

List of Tables

Table 1 - North America Explosives & Weapons Detection Systems Market [\$M] by Vertical Market – 2016-2025	26
Table 2 - North America Explosives & Weapons Detection Systems Market AGR [%] by Vertical Market – 2016-2025	27
Table 3 - North America Explosives & Weapons Detection Systems Market Share [%] by Vertical Market – 2016-2025	28
Table 4 - North America Explosives & Weapons Detection Systems Market [\$M] by Technology – 2016-2025	30
Table 5 - North America Explosives & Weapons Detection Systems Market AGR [%] by Technology – 2016-2025	31
Table 6 - North America Explosives & Weapons Detection Systems Market Share [%] by Technology – 2016-2025.....	32
Table 7 - North America Explosives & Weapons Detection Systems Market [\$M] by Country – 2016-2025	33
Table 8 - U.S. Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	34
Table 9 - U.S. Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	36
Table 10 - U.S. Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	36
Table 11 - Canada Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	38
Table 12 - Canada Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	40
Table 13 - Canada Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	40
Table 14 - Latin America Explosives & Weapons Detection Systems Market [\$M] by Vertical Market – 2016-2025	42
Table 15 - Latin America Explosives & Weapons Detection Systems Market AGR [%] by Vertical Market – 2016-2025	43
Table 16 - Latin America Explosives & Weapons Detection Systems Market Share [%] by Vertical Market – 2016-2025	44
Table 17 - Latin America Explosives & Weapons Detection Systems Market [\$M] by Technology – 2016-2025	46
Table 18 - Latin America Explosives & Weapons Detection Systems Market AGR [%] by Technology – 2016-2025	47
Table 19 - Latin America Explosives & Weapons Detection Systems Market Share [%] by Technology – 2016-2025.....	48
Table 20 - Latin America Explosives & Weapons Detection Systems Market [\$M] by Country – 2016-2025	49
Table 21 - Mexico Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	50
Table 22 - Mexico Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	52

Table 23 - Mexico Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	52
Table 24 - Colombia Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	54
Table 25 - Colombia Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	56
Table 26 - Colombia Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	56
Table 27 - Brazil Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	58
Table 28 - Brazil Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	60
Table 29 - Brazil Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	60
Table 30 - Argentina Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	62
Table 31 - Argentina Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	64
Table 32 - Argentina Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	64
Table 33 - Other Latin America Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	66
Table 34 - Other Latin America Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	68
Table 35 - Other Latin America Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	68
Table 36 - Europe Explosives & Weapons Detection Systems Market [\$M] by Vertical Market – 2016-2025	70
Table 37 - Europe Explosives & Weapons Detection Systems Market AGR [%] by Vertical Market – 2016-2025	71
Table 38 - Europe Explosives & Weapons Detection Systems Market Share [%] by Vertical Market – 2016-2025	72
Table 39 - Europe Explosives & Weapons Detection Systems Market [\$M] by Technology – 2016-2025	74
Table 40 - Europe Explosives & Weapons Detection Systems Market AGR [%] by Technology – 2016-2025	75
Table 41 - Europe Explosives & Weapons Detection Systems Market Share [%] by Technology – 2016-2025.....	76
Table 42 - Europe Explosives & Weapons Detection Systems Market [\$M] by Country – 2016-2025	77
Table 43 - U.K. Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	79
Table 44 - U.K. Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	81
Table 45 - U.K. Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	81

Table 46 - Sweden Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	83
Table 47 - Sweden Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	85
Table 48 - Sweden Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	85
Table 49 - Denmark Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	87
Table 50 - Denmark Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	89
Table 51 - Denmark Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	89
Table 52 - Netherlands Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	91
Table 53 - Netherlands Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	93
Table 54 - Netherlands Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	93
Table 55 - Belgium Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	95
Table 56 - Belgium Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	97
Table 57 - Belgium Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	97
Table 58 - Germany Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	99
Table 59 - Germany Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	101
Table 60 - Germany Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	101
Table 61 - France Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	103
Table 62 - France Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	105
Table 63 - France Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	105
Table 64 - Spain Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	107
Table 65 - Spain Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	109
Table 66 - Spain Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	109
Table 67 - Italy Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	111
Table 68 - Italy Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	113

Table 69 - Italy Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	113
Table 70 - Austria Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	115
Table 71 - Austria Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	117
Table 72 - Austria Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	117
Table 73 - Czech Republic Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	119
Table 74 - Czech Republic Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	121
Table 75 - Czech Republic Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	121
Table 76 - Poland Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	123
Table 77 - Poland Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	125
Table 78 - Poland Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	125
Table 79 - Russia Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	127
Table 80 - Russia Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	129
Table 81 - Russia Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	129
Table 82 - Other European Countries Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025...	131
Table 83 - Other European Countries Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025...	133
Table 84 - Other European Countries Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016- 2025.....	133
Table 85 - Middle East & Africa Explosives & Weapons Detection Systems Market [\$M] by Vertical Market – 2016-2025	135
Table 86 - Middle East & Africa Explosives & Weapons Detection Systems Market AGR [%] by Vertical Market – 2016-2025	136
Table 87 - Middle East & Africa Explosives & Weapons Detection Systems Market Share [%] by Vertical Market – 2016-2025	137
Table 88 - Middle East & Africa Explosives & Weapons Detection Systems Market [\$M] by Technology – 2016-2025	139
Table 89 - Middle East & Africa Explosives & Weapons Detection Systems Market AGR [%] by Technology – 2016-2025.....	140
Table 90 - Middle East & Africa Explosives & Weapons Detection Systems Market Share [%] by Technology – 2016-2025.....	141

Table 91 - MEA Explosives & Weapons Detection Systems Market [\$M] by Country – 2016-2025	142
Table 92 - Turkey Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	144
Table 93 - Turkey Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	145
Table 94 - Turkey Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	145
Table 95 - Israel Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	147
Table 96 - Israel Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	149
Table 97 - Israel Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	149
Table 98 - Saudi Arabia Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	151
Table 99 - Saudi Arabia Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	153
Table 100 - Saudi Arabia Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	153
Table 101 - UAE Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	155
Table 102 - UAE Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	157
Table 103 - UAE Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	157
Table 104 - Qatar Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	159
Table 105 - Qatar Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	161
Table 106 - Qatar Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	161
Table 107 - Kuwait Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	163
Table 108 - Kuwait Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	165
Table 109 - Kuwait Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	165
Table 110 - Iraq Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	167
Table 111 - Iraq Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	169
Table 112 - Iraq Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	169
Table 113 - Nigeria Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	171

Table 114 - Nigeria Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	173
Table 115 - Nigeria Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	173
Table 116 - South Africa Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	175
Table 117 - South Africa Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	177
Table 118 - South Africa Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	177
Table 119 - Other MEA Countries Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025...	179
Table 120 - Other MEA Countries Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025...	181
Table 121 - Other MEA Countries Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016- 2025.....	181
Table 122 - Asia-Pacific Explosives & Weapons Detection Systems Market [\$M] by Vertical Market – 2016-2025	183
Table 123 - Asia-Pacific Explosives & Weapons Detection Systems Market AGR [%] by Vertical Market – 2016-2025	184
Table 124 - Asia-Pacific Explosives & Weapons Detection Systems Market Share [%] by Vertical Market – 2016-2025	185
Table 125 - Asia-Pacific Explosives & Weapons Detection Systems Market [\$M] by Technology – 2016-2025	187
Table 126 - Asia-Pacific Explosives & Weapons Detection Systems Market AGR [%] by Technology – 2016-2025	188
Table 127 - Asia-Pacific Explosives & Weapons Detection Systems Market Share [%] by Technology – 2016-2025.....	189
Table 128 - APAC Explosives & Weapons Detection Systems Market [\$M] by Country – 2016-2025	190
Table 129 - Azerbaijan Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	192
Table 130 - Azerbaijan Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	194
Table 131 - Azerbaijan Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	194
Table 132 - Kazakhstan Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	196
Table 133 - Kazakhstan Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	198
Table 134 - Kazakhstan Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	198
Table 135 - Pakistan Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	200

Table 136 - Pakistan Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	202
Table 137 - Pakistan Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	202
Table 138 - India Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	204
Table 139 - India Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	206
Table 140 - India Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	206
Table 141 - China Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	208
Table 142 - China Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	210
Table 143 - China Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	210
Table 144 - Taiwan Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	212
Table 145 - Taiwan Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	214
Table 146 - Taiwan Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	214
Table 147 - South Korea Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	216
Table 148 - South Korea Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	218
Table 149 - South Korea Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	218
Table 150 - Japan Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	220
Table 151 - Japan Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	222
Table 152 - Japan Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	222
Table 153 - Singapore Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	224
Table 154 - Singapore Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	226
Table 155 - Singapore Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	226
Table 156 - Malaysia Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	228
Table 157 - Malaysia Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	230
Table 158 - Malaysia Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	230

Table 159 - Indonesia Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	232
Table 160 - Indonesia Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	234
Table 161 - Indonesia Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	234
Table 162 - Australia Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	236
Table 163 - Australia Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025	238
Table 164 - Australia Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	238
Table 165 - Other APAC Countries Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025...	240
Table 166 - Other APAC Countries Explosives & Weapons Detection Systems Market AGR [%] by Revenue Segment – 2016-2025...	242
Table 167 - Other APAC Countries Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016- 2025.....	242

List of Figures

Figure 1 - North America Explosives & Weapons Detection Systems Market [\$M] by Vertical Market – 2016-2025	27
Figure 2 - North America Explosives & Weapons Detection Systems Market Share [%] by Vertical Market – 2016-2025	29
Figure 3 - North America Explosives & Weapons Detection Systems Market [\$M] by Technology – 2016-2025	30
Figure 4 - North America Explosives & Weapons Detection Systems Market Share [%] by Technology – 2016-2025	32
Figure 5 - North America Explosives & Weapons Detection Systems Market [\$M] by Country – 2016-2025	33
Figure 6 - U.S. Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	35
Figure 7 - U.S. Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	37
Figure 8 - Canada Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	39
Figure 9 - Canada Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	41
Figure 10- Latin America Explosives & Weapons Detection Systems Market [\$M] by Vertical Market – 2016-2025	43
Figure 11 - Latin America Explosives & Weapons Detection Systems Market Share [%] by Vertical Market – 2016-2025	45
Figure 12 - Latin America Explosives & Weapons Detection Systems Market [\$M] by Technology – 2016-2025	46
Figure 13 - Latin America Explosives & Weapons Detection Systems Market Share [%] by Technology – 2016-2025.....	48
Figure 14 - Latin America Explosives & Weapons Detection Systems Market [\$M] by Country – 2016-2025	49
Figure 15 - Mexico Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	51
Figure 16 - Mexico Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	53
Figure 17 - Colombia Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	55
Figure 18 - Colombia Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	57
Figure 19 - Brazil Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	59
Figure 20 - Brazil Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	61
Figure 21 - Argentina Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	63
Figure 22 - Argentina Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	65

Figure 23 - Other Latin America Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	67
Figure 24 - Other Latin America Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	69
Figure 25- Europe Explosives & Weapons Detection Systems Market [\$M] by Vertical Market – 2016-2025	71
Figure 26 - Europe Explosives & Weapons Detection Systems Market Share [%] by Vertical Market – 2016-2025	73
Figure 27 - Europe Explosives & Weapons Detection Systems Market [\$M] by Technology – 2016-2025	74
Figure 28 - Europe Explosives & Weapons Detection Systems Market Share [%] by Technology – 2016-2025.....	76
Figure 29 - Europe Explosives & Weapons Detection Systems Market [\$M] by Country – 2016-2025	78
Figure 30 - U.K. Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	80
Figure 31 - U.K. Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	82
Figure 32 - Sweden Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	84
Figure 33 - Sweden Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	86
Figure 34 - Denmark Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	88
Figure 35 - Denmark Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	90
Figure 36 - Netherlands Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	92
Figure 37 - Netherlands Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	94
Figure 38 - Belgium Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	96
Figure 39 - Belgium Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	98
Figure 40 - Germany Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	100
Figure 41 - Germany Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	102
Figure 42 - France Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	104
Figure 43 - France Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	106
Figure 44 - Spain Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	108
Figure 45 - Spain Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	110

Figure 46 - Italy Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	112
Figure 47 - Italy Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	114
Figure 48 - Austria Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	116
Figure 49 - Austria Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	118
Figure 50 - Czech Republic Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	120
Figure 51 - Czech Republic Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	122
Figure 52 - Poland Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	124
Figure 53 - Poland Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	126
Figure 54 - Russia Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	128
Figure 55 - Russia Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	130
Figure 56 - Other European Countries Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025...	132
Figure 57 - Other European Countries Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016- 2025.....	134
Figure 58- Middle East & Africa Explosives & Weapons Detection Systems Market [\$M] by Vertical Market – 2016-2025	136
Figure 59 - Middle East & Africa Explosives & Weapons Detection Systems Market Share [%] by Vertical Market – 2016-2025	138
Figure 60 - Middle East & Africa Explosives & Weapons Detection Systems Market [\$M] by Technology – 2016-2025	139
Figure 61 - Middle East & Africa Explosives & Weapons Detection Systems Market Share [%] by Technology – 2016-2025.....	141
Figure 62 - MEA Explosives & Weapons Detection Systems Market [\$M] by Country – 2016-2025	143
Figure 63 - Turkey Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	144
Figure 64 - Turkey Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	146
Figure 65 - Israel Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	148
Figure 66 - Israel Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	150
Figure 67 - Saudi Arabia Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	152

Figure 68 - Saudi Arabia Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	154
Figure 69 - UAE Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	156
Figure 70 - UAE Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	158
Figure 71 - Qatar Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	160
Figure 72 - Qatar Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	162
Figure 73 - Kuwait Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	164
Figure 74 - Kuwait Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	166
Figure 75 - Iraq Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	168
Figure 76 - Iraq Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	170
Figure 77 - Nigeria Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	172
Figure 78 - Nigeria Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	174
Figure 79 - South Africa Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	176
Figure 80 - South Africa Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	178
Figure 81 - Other MEA Countries Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025...	180
Figure 82 - Other MEA Countries Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016- 2025.....	182
Figure 83- Asia-Pacific Explosives & Weapons Detection Systems Market [\$M] by Vertical Market – 2016-2025	184
Figure 84 - Asia-Pacific Explosives & Weapons Detection Systems Market Share [%] by Vertical Market – 2016-2025	186
Figure 85 - Asia-Pacific Explosives & Weapons Detection Systems Market [\$M] by Technology – 2016-2025	187
Figure 86 - Asia-Pacific Explosives & Weapons Detection Systems Market Share [%] by Technology – 2016-2025.....	189
Figure 87 - APAC Explosives & Weapons Detection Systems Market [\$M] by Country – 2016-2025	191
Figure 88 - Azerbaijan Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	193
Figure 89 - Azerbaijan Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	195

Figure 90 - Kazakhstan Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	197
Figure 91 - Kazakhstan Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	199
Figure 92 - Pakistan Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	201
Figure 93 - Pakistan Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	203
Figure 94 - India Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	205
Figure 95 - India Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	207
Figure 96 - China Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	209
Figure 97 - China Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025	211
Figure 98 - Taiwan Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	213
Figure 99 - Taiwan Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	215
Figure 100 - South Korea Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	217
Figure 101 - South Korea Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	219
Figure 102 - Japan Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	221
Figure 103 - Japan Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	223
Figure 104 - Singapore Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	225
Figure 105 - Singapore Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	227
Figure 106 - Malaysia Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	229
Figure 107 - Malaysia Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	231
Figure 108 - Indonesia Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	233
Figure 109 - Indonesia Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	235
Figure 110 - Australia Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025	237
Figure 111 - Australia Explosives & Weapons Detection Systems Market Share [%] by Revenue Segment – 2016-2025.....	239
Figure 112 - Other APAC Countries Explosives & Weapons Detection Systems Market Size [\$M] by Revenue Segment – 2016-2025 ...	241

Figure 113 - Other APAC Countries Explosives & Weapons Detection Systems
Market Share [%] by Revenue Segment – 2016-2025

***Explosives & Weapons Detection Systems
Market, Technologies & Industry***

2018-2025

Volume 3

Table of Contents

VENDORS	7
1 Leading Explosives Trace Detectors Vendors	7
1.1 1st Detect Corporation.....	7
1.1.1 Company Profile.....	7
1.1.2 Contact Info.....	7
1.1.3 Products.....	8
1.2 3DX-RAY.....	9
1.2.1 Company Profile.....	9
1.2.2 Contact Info.....	9
1.2.3 Products.....	9
1.3 Adani.....	10
1.3.1 Company Profile.....	10
1.3.2 Contact Info.....	10
1.3.3 Products.....	11
1.4 Analysed Images.....	11
1.4.1 Company Profile.....	11
1.4.2 Contact Info.....	12
1.4.3 Products.....	12
1.5 Astrophysics Inc.....	12
1.5.1 Company Profile.....	12
1.5.2 Contact Info.....	13
1.5.3 Products.....	13
1.6 Autoclear LLC.....	15
1.6.1 Company Profile.....	15
1.6.2 Contact Info.....	15
1.6.3 Products.....	16
1.7 Biosensor Applications AB.....	18
1.7.1 Company Profile.....	18
1.7.2 Contact Info.....	18
1.7.3 Products.....	19
1.8 Bruker Corporation.....	20
1.8.1 Company Profile.....	20
1.8.2 Contact Info.....	20
1.8.3 Products.....	21
1.9 C.E.I.A. S.p.A.....	21
1.9.1 Company Profile.....	21
1.9.2 Contact Info.....	22
1.9.3 Products.....	22
1.10 DetectaChem, LLC.....	23
1.10.1 Company Profile.....	23
1.10.2 Contact Info.....	23
1.10.3 Products.....	24
1.11 EG&G Middle East.....	24

1.11.1	Company Profile	24
1.11.2	Contact Info	25
1.11.3	Products	25
1.12	Electronic Sensor Technology	27
1.12.1	Company Profile	27
1.12.2	Contact Info	27
1.12.3	Products	27
1.13	Eurologix Security Ltd	28
1.13.1	Company Profile	28
1.13.2	Contact Info	28
1.13.3	Products	29
1.14	FLIR Systems, Inc.....	30
1.14.1	Company Profile	30
1.14.2	Contact Info	31
1.14.3	Products	31
1.15	Gilardoni SpA.....	33
1.15.1	Company Profile	33
1.15.2	Contact Info	33
1.15.3	Products	34
1.16	Hitachi, Ltd.....	37
1.16.1	Company Profile	37
1.16.2	Contact Info	37
1.16.3	Products	37
1.17	Ion Applications, Inc.....	38
1.17.1	Company Profile	38
1.17.2	Contact Info	38
1.17.3	Products	39
1.18	Ketech Defence	39
1.18.1	Company Profile	39
1.18.2	Contact Info	40
1.18.3	Products	40
1.19	L-3 Communications Security & Detection Systems	41
1.19.1	Company Profile	41
1.19.2	Contact Info	41
1.19.3	Products	42
1.20	Leidos, Inc	47
1.20.1	Company Profile	47
1.20.2	Contact Info	47
1.20.3	Products	48
1.21	LIXI, Inc.....	48
1.21.1	Company Profile	48
1.21.2	Contact Info	48
1.21.3	Products	49
1.22	MINXRAY, Inc.....	50
1.22.1	Company Profile	50
1.22.2	Contact Info	50

1.22.3	Products	51
1.23	Mistral Security, Inc.....	51
1.23.1	Company Profile	51
1.23.2	Contact Info	51
1.23.3	Products	52
1.24	Morpho Detection Inc.....	52
1.24.1	Company Profile	52
1.24.2	Contact Info	52
1.24.3	Products	53
1.25	MS Tech	58
1.25.1	Company Profile	58
1.25.2	Products	58
1.25.3	Contact Info	59
1.26	Nuctech Co. Ltd	59
1.26.1	Company Profile	59
1.26.2	Contact Info	59
1.26.3	Products	60
1.27	Optosecurity.....	70
1.27.1	Company Profile	70
1.27.2	Contact Info	70
1.27.3	Products	71
1.28	OSI Systems.....	71
1.28.1	Company Profile	71
1.28.2	Contact Info	72
1.28.3	Products	72
1.29	RedXDefense	73
1.29.1	Company Profile	73
1.29.2	Contact Info	73
1.29.3	Products	74
1.30	SAIC	74
1.30.1	Company Profile	74
1.30.2	Contact Info	75
1.30.3	Products	75
1.31	SCANNA MSC Ltd.....	76
1.31.1	Company Profile	76
1.31.2	Contact Info	76
1.31.3	Products	77
1.32	Sibel Ltd.....	78
1.32.1	Company Profile	78
1.32.2	Contact Info	78
1.32.3	Products	79
1.33	Smiths Detection.....	80
1.33.1	Company Profile	80
1.33.2	Contact Info	80
1.33.3	Products	81
1.34	Todd Research Ltd.....	92

1.34.1	Company Profile	92
1.34.2	Contact Info	93
1.34.3	Products	93
1.35	Vidisco Ltd.	94
1.35.1	Company Profile	94
1.35.2	Contact Info	94
1.35.3	Products	95
1.36	Rapiscan Systems, Inc.	95
1.36.1	Company Profile	95
1.36.2	Contact Info	96
1.36.3	Products	96
1.37	Reveal Imaging Technologies Inc.	99
1.37.1	Company Profile	99
1.37.2	Contact Info	99
1.38	Syagen Technology	100
1.38.1	Company Profile	100
1.38.2	Contact Info	100
1.38.3	Products	100
1.39	Thermo Fisher Scientific Inc.	101
1.39.1	Company Profile	101
1.39.2	Contact Info	102
1.39.3	Products	102
1.40	Westminster International Ltd.	103
1.40.1	Company Profile	103
1.40.2	Contact Info	103
1.40.3	Products	104

***Explosives & Weapons Detection Systems
Market, Technologies & Industry***

2018-2025

Volume 4

Table of Contents

Appendix A: Countries Market Background	21
1 U.S. Explosives & Weapons Detection Systems - Market Background	21
1.1 U.S. Federal Homeland Security & Public Safety Agencies.....	21
1.2 Department of Homeland Security (DHS).....	23
1.2.1 Department of Homeland Security: Agencies and Units.....	24
1.2.2 DHS – Transportation Security Administration (TSA).....	26
1.2.3 DHS – U.S. Customs & Border Protection (CBP).....	28
1.2.4 DHS – Federal Emergency Management Agency (FEMA).....	28
1.2.5 DHS – U.S. Immigration & Customs Enforcement (ICE).....	29
1.2.6 DHS – U.S. Coast Guard (USCG).....	29
1.2.7 U.S. Secret Service (USSS).....	30
1.2.8 DHS – Science & Technology Directorate (S&T).....	30
1.2.9 DHS – Domestic Nuclear Detection Office (DNDO).....	31
1.2.10 DHS – U.S. Citizenship & Immigration Services (USCIS).....	32
1.2.11 DHS – National Protection and Programs Directorate (NPPD).....	33
1.3 Department of Defense (DOD).....	34
1.4 Department of Justice (DOJ).....	34
1.5 Federal Bureau of Investigation (FBI).....	37
1.6 Department of State (DOS).....	38
1.7 Department of Transportation (DOT).....	39
1.8 Department of Commerce (DOC).....	39
1.9 U.S. Police Forces.....	40
1.10 276 Major U.S. Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019.....	41
2 Canada Explosives & Weapons Detection Systems - Market Background	53
2.1 Canada Overview.....	53
2.2 Crime in Canada.....	53
2.3 Terror in Canada.....	54
2.4 Canada Counter Terror & Law Enforcement Legislation.....	54
2.5 Canada Homeland Security & Public Safety Agencies.....	56
2.6 Canada Police Forces.....	57
2.7 Canada Intelligent Services.....	57
2.8 Canada Defense Forces.....	58
2.9 Aviation Security.....	58
2.9.1 Aviation Security Mandated Activities.....	60
2.9.2 Air Cargo Screening.....	61
2.9.3 Full Body Scanner (AIT) Screening.....	62

2.10	20 Major Canada Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport – 2016 & 2019	62
3	Mexico Explosives & Weapons Detection Systems - Market Background.....	64
3.1	Mexico Overview.....	64
3.2	Mexico Homeland Security & Public Safety Industry	65
3.3	Crime in Mexico	68
3.4	Terror in Mexico	69
3.5	Mexico Counter Terror Legislation & Law Enforcement.....	70
3.6	Mexico Security Policy	70
3.7	Mexico Homeland Security & Public Safety Agencies	72
3.8	Mexico Police Forces.....	72
3.9	50 Major Mexico Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019	74
4	Colombia Explosives & Weapons Detection Systems - Market Background	77
4.1	Colombia Overview.....	77
4.2	Colombia Homeland Security & Public Safety Industry.....	78
4.3	Crime in Colombia	79
4.4	Terror in Colombia	80
4.5	Colombia Counter Terror Legislation & Law Enforcement.....	80
4.6	Colombia Police Forces	81
4.7	Colombia Defense Forces	81
4.8	15 Major Colombia Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019	82
5	Brazil Explosives & Weapons Detection Systems - Market Background.....	83
5.1	Brazil Overview	83
5.2	Brazil Homeland Security & Public Safety Industry	85
5.3	Crime in Brazil.....	86
5.4	Terror in Brazil	87
5.5	Brazil Counter Terror Legislation & Law Enforcement	87
5.6	Brazil Homeland Security & Public Safety Agencies.....	88
5.7	Brazil Police Forces	88
5.8	Brazil Defense Forces.....	89
5.9	41 Major Brazil Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019	89
6	Argentina Explosives & Weapons Detection Systems - Market Background	92
6.1	Argentina Overview.....	92
6.2	Crime in Argentina	92
6.3	Terror in Argentina	93
6.4	Argentina Counter Terror Legislation & Law Enforcement.....	93
6.5	Argentina Police Forces.....	94

6.6	Argentina Defense Market	94
6.7	2 Major Argentina Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019	97
7	UK Explosives & Weapons Detection Systems - Market	
	Background.....	98
7.1	Facts & Figures.....	98
7.2	UK Overview	98
7.3	Brexit Effects on the Homeland Security & Public Safety Market.....	99
7.4	UK Homeland Security & Public Safety: Market Background	101
7.4.1	UK National Security Risk Assessment 2016.....	104
7.5	Crime in the UK.....	106
7.6	Terror in the UK	106
7.6.1	The New Realities of Terror.....	107
7.6.2	United Kingdom Counter Terror Strategy	110
7.6.3	Countering International Terrorism.....	111
7.6.4	Countering Terrorism Financing.....	111
7.7	UK Homeland Security and Public Safety Strategy.....	112
7.8	UK Counter Terror & Law Enforcement Legislation	113
7.8.1	Counter Terror Policy Transformation	114
7.8.2	UK Public Safety Challenges.....	115
7.9	UK Homeland Security & Public Safety Agencies.....	116
7.10	UK Police Forces	117
7.10.1	Background	117
7.10.2	UK Police Forces Statistics	119
7.11	UK Intelligent Services.....	120
7.11.1	UK Intelligence Agencies Funding.....	120
7.11.2	Security Service – MI5.....	120
7.11.3	National Domestic Extremism & Disorder Intelligence Unit (NDEDIU).....	121
7.11.4	National Crime Agency (NCA).....	121
7.11.5	National Ballistics Intelligence Service (NBIS).....	121
7.11.6	National Fraud Intelligence Bureau (NFIB).....	121
7.11.7	MI6, Secret Intelligence Service	121
7.11.8	Defense Intelligence (DI)	122
7.11.9	Communications Headquarters (GCHQ).....	122
7.11.10	Joint Intelligence Organization	123
7.11.11	Parliament Intelligence and Security Committee	123
7.11.12	UK Intelligence Agencies Budgets	124
7.12	UK Defense Forces.....	125
7.13	38 Major UK Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019	125
7.14	UK Airport security	127

8	France Explosives & Weapons Detection Systems - Market	
	Background	132
8.1	Terror in France	132
8.1.1	The New Realities of Terror.....	132
8.1.2	Terror Attacks and Terror Threats	136
8.1.3	Counter Terror Policy Transformation	137
8.1.4	Threat Levels.....	138
8.2	France Homeland Security & Public Safety Agencies.....	139
8.3	France Police Forces	139
8.3.1	The National Police	140
8.3.2	Research, Assistance, Intervention, Deterrence (RAID).....	140
8.3.3	National Police Intervention Groups (GIPN)	141
8.3.4	The National Gendarmerie	141
8.3.5	National Gendarmerie Intervention Group.....	141
8.3.6	Paris Police Prefecture.....	142
8.3.7	Police Forces Statistics	142
8.4	France Intelligent Services.....	143
8.4.1	Domestic Counter-terrorism & Counter-espionage Intelligence (DGSI)	143
8.4.2	Central Directorate of the Judicial Police (DCPJ)	144
8.4.3	General Directorate for External Security (DGSE)	144
8.4.4	Directorate of Protection and Defense Security (DPSD)	144
8.4.5	Directorate of Military Intelligence (DRM)	145
8.4.6	Anti-Terrorist Bureau (BLAT).....	145
8.4.7	Inter-Departmental Coordination on Terrorism Matters	145
8.5	France Defense Forces	146
8.6	France Safe City Projects	147
8.7	France Airport security.....	148
8.8	57 Major France Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport – 2016 & 2019	151
8.9	France Border Security	153
8.10	Migration to France	155
9	Netherlands Explosives & Weapons Detection Systems - Market Background	157
9.1	Netherlands Overview.....	157
9.2	Netherlands Homeland Security & Public Safety Industry	157
9.3	Crime in the Netherlands	158
9.4	Terror in the Netherlands.....	158
9.5	Netherlands Counter Terror Legislation & Law Enforcement.....	159
9.6	Netherlands Homeland Security & Public Safety Agencies	160
9.7	Netherlands Police Forces.....	160
10	Belgium Explosives & Weapons Detection Systems - Market	
	Background	161
10.1	Belgium Overview	161
10.2	Belgium Homeland Security & Public Safety Industry.....	161

10.3	Crime in Belgium.....	163
10.4	Terror in Belgium	163
10.4.1	Overview	163
10.4.2	Terror Attack Statistics	170
10.5	Belgium Counter Terror Legislation & Law Enforcement	173
10.6	Belgium Homeland Security & Public Safety Agencies	177
10.7	Belgium Police Forces	177
10.7.1	Belgium Federal Police.....	178
10.7.2	Belgium Local Police Forces	179
10.8	Belgium Intelligence Services	179
10.8.1	Overview	179
10.8.2	State Security Service	180
10.8.3	General Information and Security Service	180
10.9	Migration to Belgium	180
10.9.1	Belgium Immigration Data	181
11	Sweden Explosives & Weapons Detection Systems - Market Background.....	183
11.1	Sweden Overview	183
11.2	Sweden Homeland Security & Public Safety Industry	183
11.3	Crime in Sweden.....	183
11.4	Terror in Sweden	184
11.5	Sweden Counter Terror Legislation & Law Enforcement	184
11.6	Sweden Homeland Security & Public Safety Agencies	185
11.7	Sweden Police Forces	186
11.8	24 Major Sweden Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019	187
12	Denmark Explosives & Weapons Detection Systems - Market Background	188
12.1	Denmark Overview	188
12.2	Denmark Homeland Security & Public Safety Industry	188
12.3	Crime in Denmark.....	189
12.4	Terror in Denmark.....	189
12.5	Denmark Counter Terror Legislation & Law Enforcement.....	190
12.6	Denmark Police Forces.....	191
12.7	7 Major Denmark Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019	192
13	Germany Explosives & Weapons Detection Systems - Market Background	193
13.1	Germany Overview	193
13.2	Germany Homeland Security & Public-Safety Industry	193
13.3	Crime in Germany.....	199
13.4	Terror in Germany.....	199
13.5	Germany Counter Terror Legislation & Law Enforcement	200
13.6	Germany Terror Challenge & Counter Terror Strategy	202
13.7	The New Realities of Terror	202

13.7.1	Germany Approach to Homeland Security and Public Safety	209
13.7.2	Germany Migration Surge	209
13.7.3	German Asylum and Refugee Status	212
13.8	Germany Homeland Security & Public Safety Agencies	213
13.9	German Police Forces	213
13.9.1	BPOL - Federal Police	213
13.9.2	GSG 9 - Special Operations & Counterterrorism Unit	214
13.9.3	BFE/BFHu Units - Special Anti-Terrorist Unit of Federal Anti-Riot Police	214
13.9.4	ASSIK - Special Task Force Protection in Crisis Areas	215
13.9.5	ZKA - Customs Investigation Bureau	215
13.9.6	ZUZ - Customs SWAT Unit	215
13.9.7	Military Police	216
13.9.8	State Police Forces	216
13.9.9	SEK - State Special Operations Command Part of Uniformed Police	216
13.9.10	MEK – Mobile Task Force Units, Part of Criminal Police	217
13.10	Germany Intelligent Services	217
13.10.1	Federal Intelligence Service (BND)	217
13.10.2	Federal Office for the Protection of the Constitution (BfV)	218
13.10.3	Military Counterintelligence Service (MAD)	218
13.10.4	The State Office for the Protection of the Constitution	219
13.11	Defense Forces	219
13.12	Germany Airport Security	219
13.13	26 Major German Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport – 2016 & 2019	221
14	Austria Explosives & Weapons Detection Systems - Market Background	223
14.1	Austria Homeland Security & Public Safety Industry	223
14.2	Crime in Austria	223
14.3	Terror in Austria	223
14.4	Austria Counter Terror Legislation & Law Enforcement	224
14.5	Austria Homeland Security & Public Safety Agencies	224
14.6	Austria Police Forces	225
15	Italy Explosives & Weapons Detection Systems - Market Background	226
15.1	Italy Overview	226
15.2	Italy Homeland Security & Public Safety Industry	226
15.3	Crime in Italy	229
15.4	Terror in Italy	229
15.5	Italy Counter Terror Legislation & Law Enforcement	230
15.6	Italy Homeland Security & Public Safety Agencies	231
15.7	Italy Police Forces	232

15.8	Italy Airport Security	233
15.9	31 Major Italy Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019	234
16	Spain Explosives & Weapons Detection Systems - Market Background.....	236
16.1	Counter Terror Legislation & Law Enforcement	236
16.2	Spain Homeland Security & Public Safety Agencies.....	237
16.3	Spain Police Forces	237
16.3.1	Spain National Police	238
16.3.2	Spain Civil Guard	239
16.4	Spain Airport security	240
16.5	30 Major Spain Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019	241
17	Poland Explosives & Weapons Detection Systems - Market Background.....	243
17.1	Poland Police Forces	243
17.2	11 Major Poland Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019	244
18	Czech Republic Explosives & Weapons Detection Systems - Market Background	245
18.1	Czech Republic Overview	245
18.2	Czech Republic Homeland Security & Public Safety Industry	245
18.3	Crime in the Czech Republic	245
18.4	Czech Republic Police Forces	246
19	Russia Explosives & Weapons Detection Systems - Market Background.....	247
19.1	Russia Market Overview	247
19.2	Russia Homeland Security & Public Safety Industry	248
19.3	Crime in Russia.....	248
19.4	Terror in Russia	249
19.5	Russia Counter Terror Legislation & Law Enforcement	250
19.6	Russia Homeland Security & Public Safety Agencies.....	251
19.7	Russia Airport security	252
19.7.1	Aviation Industry.....	252
19.7.2	Aviation Security: New Measures.....	252
19.8	58 Major Russia Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport – 2016 & 2019	253
20	Turkey Explosives & Weapons Detection Systems - Market Background.....	256
20.1	Facts & Figures.....	256
20.2	Turkey Overview	256
20.3	Turkey Homeland Security & Public Safety Market.....	258
20.4	Crime in Turkey.....	260

20.5	Terror in Turkey	260
20.6	Turkey Counter Terror Legislation & Law Enforcement	262
20.7	Turkey Homeland Security & Public Safety Agencies	263
20.8	Turkey Police Forces	263
20.9	Turkey Defense Forces	264
20.10	Turkey Airport security	265
20.11	43 Major Turkey Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019	266
21	Israel Explosives & Weapons Detection Systems - Market Background.....	268
21.1	Facts & Figures	268
21.2	Israel Overview	268
21.3	Israel Homeland Security & Public Safety Market	270
21.4	Crime in Israel	272
21.5	Terror in Israel	273
21.6	Counter Terror Legislation & Law Enforcement	275
21.7	Israel Homeland Security & Public Safety Agencies	276
21.8	Israel Police Forces	277
21.9	Israel Defense Forces	277
21.10	Israel Airport Security	278
21.11	2 Major Israel Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019	279
22	Saudi Arabia Explosives & Weapons Detection Systems - Market Background	280
22.1	Facts & Figures	280
22.2	Saudi Arabia Overview	280
22.3	Saudi Arabia Homeland Security & Public Safety Market	283
22.4	Crime in Saudi Arabia	284
22.5	Terror in Saudi Arabia	284
22.6	Saudi Arabia Counter Terror Legislation & Law Enforcement	285
22.7	Saudi Arabia Homeland Security & Public Safety Agencies	286
22.7.1	Ministry of Interior	290
22.7.2	Saudi National Guard	290
22.7.3	Paramilitary Security Forces	291
22.8	Saudi Arabia Police Forces	291
22.9	Saudi Arabia Defense Forces	292
22.9.1	Armed Services	293
22.9.2	Independent Forces	294
22.10	5 Major Saudi Arabia Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019	294

23	Iraq Explosives & Weapons Detection Systems - Market	
	Background.....	295
23.1	Facts & Figures.....	295
23.2	Iraq Overview.....	295
23.3	Iraq Homeland Security & Public Safety Market	296
23.4	Crime in Iraq	298
23.5	Terror in Iraq	298
23.6	Iraq Counter Terror Legislation & Law Enforcement.....	300
23.7	Counter Terror Market	300
23.8	Iraq Homeland Security & Public Safety Agencies.....	301
23.9	Iraq Police Forces.....	301
23.10	Iraq Defense Forces	302
23.10.1	Iraq Army.....	302
23.10.2	Iraq Air Force.....	303
23.10.3	Iraq Navy	303
23.11	Iraq Defense Forces Market 2017-2022	303
23.11.1	Intelligence Surveillance and Reconnaissance (ISR)	304
23.11.2	Army Modernization.....	304
23.11.3	Army Aviation Upgrades.....	305
23.11.4	Air Force Modernization	305
23.11.5	Naval Capabilities Upgrade.....	306
23.11.6	Air Defense Command	306
24	UAE Explosives & Weapons Detection Systems - Market	
	Background.....	308
24.1	Facts & Figures.....	308
24.2	UAE Overview.....	308
24.3	UAE Homeland Security & Public Safety Market	309
24.4	Crime in the UAE	314
24.5	Terror in the UAE.....	315
24.6	UAE Counter Terror Legislation & Law Enforcement.....	315
24.7	UAE Homeland Security & Public Safety Agencies	317
24.8	UAE Police Forces.....	317
24.9	UAE Defense Forces	320
24.10	3 Major UAE Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019	320
25	Qatar Explosives & Weapons Detection Systems - Market	
	Background.....	321
25.1	Facts & Figures.....	321
25.2	Qatar Overview.....	321
25.3	Qatar Homeland Security & Public Safety Market.....	322
25.4	Crime in Qatar.....	326
25.5	Terror in Qatar	327
25.6	Qatar Counter Terror Legislation & Law Enforcement	328
25.7	Qatar Police Forces	329
25.8	Defense Forces.....	330

26	Kuwait Explosives & Weapons Detection Systems - Market	
	Background	332
26.1	Facts & Figures.....	332
26.2	Kuwait Overview.....	332
26.3	Kuwait Homeland Security & Public Safety Market.....	334
26.4	Crime in Kuwait.....	334
26.5	Terror in Kuwait.....	335
26.6	Kuwait Counter Terror Legislation & Law Enforcement.....	335
26.7	Kuwait Homeland Security & Public Safety Agencies.....	336
26.8	Kuwait Police Forces.....	336
26.9	Kuwait Defense Forces.....	337
26.10	Kuwait Airport Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019.....	338
27	Nigeria Explosives & Weapons Detection Systems - Market	
	Background	339
27.1	Facts & Figures.....	339
27.2	Nigeria Overview.....	339
27.3	Nigeria Homeland Security & Public Safety Market.....	340
27.4	Crime in Nigeria.....	341
27.5	Terror in Nigeria.....	341
27.6	Nigeria Counter Terror Legislation & Law Enforcement.....	343
27.7	Nigeria Homeland Security & Public Safety Agencies.....	344
27.8	Nigeria Police Forces.....	345
27.8.1	Nigeria Police Force (NPF).....	345
27.8.2	Other Security-Related Departments.....	346
27.9	Nigeria Defense Forces.....	347
27.10	12 Major Nigeria Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019.....	348
28	South Africa Explosives & Weapons Detection Systems - Market Background	349
28.1	Facts & Figures.....	349
28.2	South Africa Overview.....	349
28.3	Crime in South Africa.....	351
28.4	Terror in South Africa.....	352
28.5	South Africa Counter Terror Legislation & Law Enforcement.....	353
28.6	South Africa Police Forces.....	353
28.7	South African Defense Forces.....	354
28.8	9 Major South Africa Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019.....	355
29	India Explosives & Weapons Detection Systems - Market	
	Background	356
29.1	Facts & Figures.....	356
29.2	India Overview.....	356

29.3	India Homeland Security & Public Safety Market.....	357
29.4	Crime in India.....	359
29.4.1	Crime in New Delhi.....	359
29.4.2	Crime in Mumbai.....	359
29.4.3	Crime in Hyderabad.....	360
29.5	Terror in India.....	360
29.6	India Counter Terror Legislation & Law Enforcement.....	361
29.7	India Homeland Security & Public Safety Agencies.....	362
29.8	India Police Forces.....	363
29.9	India Defense Market.....	364
29.10	India Defense Forces.....	367
29.11	46 Major India Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019.....	368
30	China Explosives & Weapons Detection Systems - Market Background.....	370
30.1	Facts & Figures.....	370
30.2	China Overview.....	370
30.3	China Security Threat Assessment.....	372
30.4	China Security Industry.....	373
30.5	China Homeland Security & Public Safety Market.....	376
30.6	Crime in China.....	376
30.7	Terror in China.....	378
30.8	China Homeland Security & Public Safety Agencies.....	379
30.9	China Police Forces.....	380
30.10	China Ministry of Public Security.....	380
30.11	Public Security Bureau.....	381
30.12	China Ministry of State Security.....	381
30.13	China Defense Forces.....	382
30.14	100 Major China Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport – 2016 & 2019.....	387
31	South Korea Explosives & Weapons Detection Systems - Market Background.....	391
31.1	Facts & Figures.....	391
31.2	South Korea Overview.....	391
31.3	South Korea Homeland Security & Public Safety Market.....	393
31.4	Crime in South Korea.....	395
31.5	Terror in South Korea.....	395
31.6	South Korea Homeland Security & Public Safety Agencies.....	396
31.7	South Korea Police Forces.....	397
31.8	South Korea Defense Forces.....	397
31.9	13 Major South Korea Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019.....	398

32	Japan Explosives & Weapons Detection Systems - Market	
	Background	399
32.1	Facts & Figures.....	399
32.2	Japan Overview.....	399
32.3	Japan Homeland Security & Public Safety Market.....	401
32.4	Crime in Japan.....	402
32.5	Terror in Japan.....	402
32.6	Japan Homeland Security & Public Safety Agencies.....	403
32.7	Japan Police Forces.....	404
32.8	Japan Defense Forces.....	404
32.9	Japan Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019.....	405
33	Australia Explosives & Weapons Detection Systems -	
	Market Background	407
33.1	Facts & Figures.....	407
33.2	Australia Overview.....	407
33.3	External Security.....	407
33.4	Crime in Australia.....	408
33.5	Terror in Australia.....	408
33.6	Australia Counter Terror Legislation & Law Enforcement.....	409
33.7	Australia Homeland Security & Public Safety Agencies.....	410
33.8	Australia Police Forces.....	412
33.9	Australia Intelligence Services.....	412
33.10	20 Major Australia Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019.....	413
34	Azerbaijan Explosives & Weapons Detection Systems -	
	Market Background	414
34.1	Facts & Figures.....	414
34.2	Azerbaijan Overview.....	414
34.3	Azerbaijan Homeland Security & Public Safety Market.....	415
34.4	Crime in Azerbaijan.....	415
34.5	Terror in Azerbaijan.....	416
34.6	Azerbaijan Counter Terror Legislation & Law Enforcement.....	416
34.7	Azerbaijan Police Forces.....	417
35	Kazakhstan Explosives & Weapons Detection Systems -	
	Market Background	419
35.1	Facts & Figures.....	419
35.2	Kazakhstan Overview.....	419
35.3	Crime in Kazakhstan.....	420
35.4	Terror in Kazakhstan.....	421
35.5	Kazakhstan Counter Terror Legislation & Law Enforcement.....	421
35.6	Kazakhstan Police Forces.....	421

36	Pakistan Explosives & Weapons Detection Systems - Market	
	Background	422
36.1	Facts & Figures.....	422
36.2	Pakistan Overview.....	422
36.3	Crime in Pakistan.....	422
36.4	Terror in Pakistan.....	422
36.5	Pakistan Counter Terror Legislation & Law Enforcement.....	424
36.6	Pakistan Homeland Security & Public Safety Agencies.....	424
36.7	Pakistan Police Forces.....	425
36.8	Pakistan Defense Forces.....	427
37	Taiwan Explosives & Weapons Detection Systems - Market	
	Background	428
37.1	Facts & Figures.....	428
37.2	Taiwan Overview.....	428
37.3	Taiwan Homeland Security & Public Safety Market.....	428
37.4	Crime and Terror in Taiwan.....	429
37.5	Taiwan Homeland Security & Public Safety Agencies.....	429
37.6	Taiwan Police Forces.....	430
37.7	Taiwan Defense Forces.....	430
38	Singapore Explosives & Weapons Detection Systems - Market Background	431
38.1	Facts & Figures.....	431
38.2	Singapore Overview.....	431
38.3	Singapore Homeland Security & Public Safety Market.....	431
38.4	Terror in Singapore.....	432
38.5	Singapore Homeland Security & Public Safety Agencies.....	433
38.6	Singapore Police Forces.....	433
38.7	Singapore Defense Forces.....	434
38.8	Singapore Statistics: Number of Screened Passengers & Screened Baggage - 2016 & 2019.....	434
39	Malaysia Explosives & Weapons Detection Systems - Market	
	Background	436
39.1	Facts & Figures.....	436
39.2	Malaysia Overview.....	436
39.3	Malaysia Homeland Security & Public Safety Market.....	437
39.4	Crime in Malaysia.....	437
39.5	Terror in Malaysia.....	439
39.6	Malaysia Police.....	439
39.7	Malaysia Defense Forces.....	439
39.8	18 Major Malaysia Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019.....	442

40	Indonesia Explosives & Weapons Detection Systems - Market Background	443
40.1	Facts & Figures	443
40.2	Indonesia Overview	443
40.3	Indonesia Homeland Security & Public Safety Market	443
40.4	Crime in Indonesia	445
40.5	Terror & Civil Unrest in Indonesia	446
40.6	Indonesia Homeland Security & Public Safety Agencies	448
40.7	Indonesia Police Forces	449
40.8	Indonesia Defense Forces	449
40.9	The Defense Market	450
40.10	30 Major Indonesia Airports Statistics: Number of Screened Passengers & Screened Baggage by Airport - 2016 & 2019	451

List of Tables

Table 1 - Major U.S. Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019.....	41
Table 2 - Major Canadian Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	62
Table 3 - Major Mexican Airports: Number of Screened Passengers & Screened Baggage (Carry-on & Checked Baggage) [M] by Airport - 2016 & 2019.....	74
Table 4 - Major Colombian Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	82
Table 5 - Major Brazilian Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	90
Table 6 - Major Argentina Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	97
Table 7 - Major UK Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019.....	125
Table 8 - French Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by 57 Airports - 2016 & 2019.....	151
Table 9 - Migrant Stock in Belgium by Country of Origin	181
Table 10 - Major Swedish Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	187
Table 11 - Major Danish Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	192
Table 12 - Major German Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	221
Table 13 - Major Italian Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	234
Table 14 - Major Spanish Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	241
Table 15 - Major Poland Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	244
Table 16 - Major Russian Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	253
Table 17 - Major Turkish Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport – 2016 & 2019.....	266
Table 18 - Major Israeli Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	279
Table 19 - Major Saudi Arabian Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	294
Table 20 - Major UAE Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	320
Table 21 - Kuwait Airport: Passengers Screening, Carry-on & Checked Baggage Screening [M] - 2016 & 2019.....	338
Table 22 - Nigeria Police Departments & Responsibilities	345

Table 23 - Major Nigerian Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	348
Table 24 - Major South African Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	355
Table 25 - Major India Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	368
Table 26 - Major Chinese Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	387
Table 27 - Major South Korean Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	398
Table 28 - Japan Passenger Screening [M] in 50 Airports – 2016-2019.....	405
Table 29 - Major Australian Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	413
Table 30 - Azerbaijan Ministry of Internal Affairs Crime Statistics.....	416
Table 31 - 2013 Ministry of Internal Affairs Crime Statistics.....	420
Table 32 - Singapore Airport: Number of Screened Passengers & Screened Baggage (Carry-on & Checked Baggage) [M] - 2016 & 2019	434
Table 33 - Major Malaysian Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	442
Table 34 - Major Indonesian Airports: Passengers Screening, Carry-on & Checked Baggage Screening [M] by Airport - 2016 & 2019	451

List of Figures

Figure 1 - U.S. Federal Homeland Security Organogram	22
Figure 2 - Department of Homeland Security –Organizational Structure	24
Figure 3 - Canada Homeland Security & Public Safety Agencies Organogram.....	56
Figure 4 - Canada Aviation Security Infrastructure	59
Figure 5 - Canada Aviation Security: Key Data.....	59
Figure 6 - Canada Aviation Security Mandated Activities	60
Figure 7 - Canadian Air-Cargo Security Screening Process	61
Figure 8 - Mexico Homeland Security & Public Safety Agencies Organogram.....	72
Figure 9 - Brazil Homeland Security & Public Safety Agencies Organogram	88
Figure 10 - Percentage of UK Muslim Population Vs. Other EU Countries.....	109
Figure 11 - UK Homeland Security & Public Safety Agencies Organogram	116
Figure 12 - Police Officers 31 March 2006 to 2015, England and Wales.....	119
Figure 13 - Allocation of MI5 Resources by Core Activity (2015).....	124
Figure 14 - UK Aviation Security Layers	128
Figure 15 - A UK Airport Security Process.....	129
Figure 16 - UK 2015 Passengers Share [%] by Airport.....	131
Figure 17 - Percentage of France Muslim Population Vs. Other EU Countries	135
Figure 18 - France Counter Terror & Public Safety Agencies Organogram	139
Figure 19 - France Aviation Security Layers	149
Figure 20 - France Borders.....	155
Figure 21 - Netherlands Counter Terror & Public Safety Agencies Organogram.....	160
Figure 22 - Belgium Counter Terror & Public Safety Agencies Organogram	177
Figure 23 - The Balkan Migration Route to Germany.....	195
Figure 24 - Percentage of Germany Muslim Population in Germany Vs. Other EU Countries	208
Figure 25 - Main Migrant Routes to Germany.....	211
Figure 26 - Germany Homeland Security & Public Safety Agencies Organogram.....	213
Figure 27 - Italy Homeland Security & Public Safety Agencies Organogram....	231
Figure 28 - Spain Homeland Security & Public Safety Agencies Organogram.....	237
Figure 29 - Turkey Homeland Security & Public Safety Agencies Organogram.....	263
Figure 30 - Israel West Bank Separation Barrier	271
Figure 31 - Israel Homeland Security & Public Safety Agencies Organogram.....	276
Figure 32 - Three Tiers of Saudi Security Infrastructure	287
Figure 33 - Saudi Government Security Organogram.....	289
Figure 34 - UAE Homeland Security & Public Safety Agencies Organogram ...	317
Figure 35 - Dubai Police Organization Chart	319

Figure 36 - India Homeland Security & Public Safety Agencies Organogram...	362
Figure 37 - China Homeland Security & Public Safety Agencies Organogram.....	379
Figure 38 - South Korea Homeland Security & Public Safety Agencies Organogram.....	396
Figure 39 - Japan Security & Public Safety Agencies Organogram	403
Figure 40 - Australia Homeland Security & Public Safety Agencies Organogram.....	411
Figure 41 - Indonesia Homeland Security & Public Safety Agencies	448

***Explosives & Weapons Detection Systems
Market, Technologies & Industry***

2018-2025

Volume 5

Table of Contents

1	Appendix B: Improvised Explosives & Military Grade Explosives	14
1.1	Background.....	14
1.2	Explosives Categories	14
1.2.1	Chemical Explosives	14
1.2.2	Explosives Train Materials.....	16
1.2.3	Low Explosives.....	16
1.2.4	Nitrocellulose.....	17
1.2.5	High Explosives.....	18
1.2.6	Primary High Explosives.....	19
1.3	Secondary High Explosives	21
1.3.1	PETN.....	21
1.3.2	RDX.....	22
1.3.3	Main Charges.....	22
1.4	Improvised Explosives	26
1.4.1	Introduction.....	26
1.4.2	Hexamethylene Triperoxide Diamine (HMTD).....	27
1.4.3	Triacetone Triperoxide (TATP).....	27
2	Appendix C: X-Ray Baggage, Cargo, People, Container & Vehicle Explosives & Weapons Screening Technologies	28
2.1	Explosive Materials Classification	28
2.2	Security Screening Technologies.....	30
2.2.1	Major Technologies	30
2.2.2	2D X-ray, EDS and ETD Technologies - Pros and Cons.....	32
2.2.3	Bulk Screening Technologies: Price Comparison.....	32
2.3	X-ray Explosives & Weapons Screening Technologies: Background.....	33
2.3.1	X-ray Systems – Characteristics	33
2.3.2	X-ray Explosives & Weapons Screening Systems - Principles of Operation	34
2.3.3	Innocuous Materials Interference	35
2.3.4	Threat Image Projection (TIP)	36
2.3.5	Automated Target Detection.....	36
2.4	X-ray Security Systems by Technology	37
2.4.1	Overview	37
2.4.2	Conventional 2D X-ray	37
2.4.3	Dual Energy X-ray	38
2.4.4	Quasi Dual Energy X-ray.....	41
2.4.5	Variable View X-ray.....	42
2.4.6	Quasi 3-D Dual View Dual-Energy X-ray Imaging.....	43
2.4.7	The Advanced Technology (AT) X-ray Systems.....	44
2.4.8	Backscatter Screening X-ray.....	46
2.4.9	X-ray and MMwawe People Screening AIT	47

2.4.10	Backscatter AIT Sample System	50
2.4.11	Coherent Scatter 2D X-ray	51
2.5	Cast and Artificial Limbs X-ray Backscatter Screening Technologies	52
2.6	Transportable X-Ray Screening Checkpoints	53
2.7	X-ray Technologies: Performance Comparison	53
2.8	Product Certification.....	54
2.9	National Standards	55
3	Appendix D - Global Security Concerns.....	57
3.1	Introduction	57
3.2	Global Risks: A Regional Perceptive	58
4	Appendix E: Standoff IED Detection Technologies.....	62
4.1	Comparison of Standoff IED Detection Technologies	62
4.2	Standoff Walk-by & Pass-through Threat Detection Corridors Technologies.....	64
4.2.1	Walk-through Corridors: Active Electromagnetic Weapons Detection Present & Pipeline Technologies	64
4.2.2	Passive Electro Magnetic Signature Corridor.....	65
4.2.3	Standoff Passive MMWave Doorways.....	65
4.2.4	Focal Plane Array Passive MMWave	66
4.2.5	Walk-through Corridors: Fourier Transform Infrared (FTIR) Spectroscopy Systems.....	69
4.2.6	Covert Walk-through Biometric Identification Corridors.....	70
4.2.7	Fused Standoff PBIED Detection & Video-based Biometrics.....	72
4.2.8	Walk-by Active Centimeter Range (Ku band) Microwave System	73
4.3	Open Space Standoff Explosives & Weapon Detection Technologies	76
4.3.1	Introduction.....	76
4.3.2	Open Space Standoff Explosives & Weapon Detection Technologies Challenges	77
4.3.3	Bi-Modal Standoff IED, PBIED & VBIED Explosives & Weapon Detection Systems	78
4.3.4	Sample: Standoff Fused MMWave & Infrared System	78
4.4	Standoff Vehicle-Borne Explosives Detection: Technologies.....	79
4.4.1	Overview	79
4.4.2	VBIED Detection: Challenges.....	79
4.4.3	Example: Raman Spectroscopy Based Vehicle Standoff Detector - P. Eye	82
4.5	Standoff IED UGV Based Detection Technologies	82
4.5.1	UGV Expectation Management	82
4.5.2	UGV Requirements Management	83
4.5.3	UGV Mobility	84
4.5.4	UGV Function.....	84

4.5.5	The Human Operator.....	84
4.5.6	Future IED, PBIED & VBIED Detection UGV	85
4.5.7	Cobham Antenna Systems Standoff IED, PVIED & VBIED UGV IED Detection Technology	86
4.5.8	Israel Aerospace Industries CIMS System	87
4.5.9	Rafael – EZ-K9e Stand-off MMWave IED Detection System	90
4.6	Multi-Modal Fused IED, PBIED and VBIED Detection Technologies	91
4.6.1	Technology Review	91
4.6.2	Example: The CounterBomber® System	93
4.7	Standoff IED Detection Pipeline Technologies	94
4.7.1	Introduction.....	94
4.8	Standoff Active MMWave PBIED, VBIED & IED Detection	97
4.8.1	Principle of Operation.....	97
4.8.2	Active Standoff MMWave Imaging Systems.....	98
4.8.3	Disadvantages of Standoff Active MMWave Technology	100
4.8.4	Standoff Passive MMWave Imaging.....	101
4.8.5	Principle of Operation.....	101
4.8.6	Advantages of a Passive Millimeter Wave (PMMW) System:	104
4.8.7	TREX Enterprises Standoff Passive MMWave Technology.....	105
4.8.8	GEN2 Standoff Passive MMWave PBIED Detection Technology.....	106
4.8.9	Standoff “Illuminators of Opportunity” Passive MMWave Imaging.....	106
4.8.10	Mechanically Scanning Standoff MMWave PBIED, VBIED & IED Detection	107
4.8.11	Standoff MMWave PBIED Gait Characteristics Detection	108
4.8.12	Infra-red Standoff Detection Technologies	109
4.8.13	Standoff Terahertz Explosives & Weapons Detection Technologies	110
4.8.14	Standoff Terahertz Contraband Detection Technology	111
4.8.15	Terahertz Detection Advantages over Other Technologies	112
4.8.16	Standoff Active Terahertz Heterodyne Concealed Explosives & Weapons Standoff Detection Imagers	113
4.8.17	Standoff Active Terahertz Absorption Spectroscopy Using Principal Component Analysis.....	114
4.8.18	Example: Active Terahertz Standoff Explosives Detection System of TeraView	118
4.8.19	Passive Terahertz Standoff Weapons & Explosives Detection	118

4.8.20	Passive Terahertz Detection System: ThruVision Systems.....	120
4.9	Laser-Based Standoff Explosives Detection	121
4.9.1	Introduction.....	121
4.9.2	Standoff Laser-induced Breakdown Spectroscopy (LIBS)	124
4.9.3	Next Generation Standoff LIBS Systems.....	126
4.9.4	Laser-Based Molecular Signatures Technologies	127
4.9.5	Laser-Based Stimulated Raman Adiabatic Passage (STIRAP) Technologies	128
4.9.6	External Cavity Quantum Cascade Lasers Standoff IED Detection	128
4.9.7	Standoff Laser Induced Fluorescence (PLP/LIF) Technology	131
4.10	Standoff Raman Spectroscopy	132
4.10.1	Introduction.....	132
4.10.2	Standoff Coherent Anti-Stokes Raman Spectroscopy	135
4.10.3	Standoff Resonant Raman Spectroscopy.....	135
4.10.4	Next-Generation Standoff CARS Systems	136
4.11	Standoff Non-linear Wave Mixing Detection Technology	137
4.11.1	Principle of Operation.....	137
4.11.2	Next-Generation Standoff Non-linear Wave Mixing PBIED, VBIED & IED Detection Technology	137
4.12	Standoff Light Detection and Ranging (LIDAR) Explosives Detection.....	137
4.12.1	Overview	137
4.12.2	Next-Generation LIDAR Systems.....	138
4.13	Triple Modality Standoff Detection Technology.....	139
4.14	Differential Phase-Contrast X-ray Imaging.....	139
4.15	The University of Puerto Rico Advanced Detection Techniques R&D.....	140
4.16	Rydberg Spectroscopy/Microwave Scattering Based Detection.....	140
5	Appendix F: TSA Apex Checkpoint of the Future.....	142
6	Appendix G: Business & Technological Opportunities and Challenges	143
6.1	Introduction	143
6.2	Tele-Interpretation.....	144
6.3	Medium Capacity Multi-Threat Screening Systems	146
6.4	Upgraded Multi Threat Screening System	146
6.5	Third Party Service Business	146
7	Appendix H: The Explosives & Weapons Detection Products Industry	147
7.1	The Globalization of the Explosives & Weapons Detection Systems Business.....	147

7.2	Classification of the Industry Business and Industrial Activities.....	147
7.3	Forces that Shape the Explosives & Weapons Detection Systems Industry & Markets	148
7.4	Barriers to Market Entry	150
7.5	Explosives & Weapons Detection Supply-Side & Demand-Side Analysis	151
8	Appendix I: Explosives & Weapons Detection Systems Industry: Business Models & Strategies	154
8.1	Variable Funding Conditions.....	154
8.2	Explosives & Weapons Detection Products: Market Tiers	154
8.3	Inroads into the Market	154
8.4	Entry Strategies toward the Explosives & Weapons Detection Security Screening Systems Market	155
8.5	Price Competition.....	156
9	Appendix J: Cargo Facility Regulations	158
9.1	Introduction to Cargo Security	158
9.2	Airport - Cargo Processing Facilities	158
9.3	Operational Considerations	158
9.4	Access Control Considerations.....	159
9.5	Information and Requirement Resources	160
10	Appendix K: Air Cargo Approved Explosives & Weapons Screening Systems (ACSTL)	162
10.1	Certified Air Cargo Screening Product Manufacturers Contact Information.....	163
10.2	Qualified Technology	163
10.3	Certified Explosives & Weapons Detection Products	164
10.4	Certified 2D X-ray Devices	166
11	Appendix L: Authorized Air-Cargo Screening Facilities Roster	167
12	Appendix M: IATA, Boeing, Airbus & ICAO Air Travel and Air Cargo Forecast to 2034	191
13	Appendix N: IATA Airport Screening Checkpoints Recommended.....	193
14	Appendix O: Israel Ben Gurion Airport Security Procedures.....	198
15	Appendix P: Explosives & Weapons Detection Related Product Standards	199
16	Appendix Q: International X-ray Explosives & Weapons Detection Systems Related Legislation.....	223
16.1	ICAO	223
16.2	IATA.....	223
16.3	U.S. Legislation.....	225

17	Appendix R: Security & Screening Related Big Data Technologies	226
17.1	Big Data Technology Background	226
17.2	Big Data Collection and Analysis Process	226
17.3	Data Sources Collection and Recording	227
17.3.1	Digital and Analog Data Production	228
17.4	Machine Learning	228
17.4.1	Machine Learning Methods	229
17.4.2	Deep Machine Learning	230
17.4.3	Application Types	230
17.5	Data Exploration Vs. Machine Learning Model	231
17.6	Legacy Analytics Vs. Big Data Analytics	231
17.7	Storage & Communications Equipment	231
17.8	Data Warehouses & Data Management	232
17.9	SQL (Structured) and NoSQL (Un-Structured) Database Software	232
17.9.1	SQL (Structured) Database Software	233
17.9.2	NoSQL (Un-Structured) Database Software	233
17.10	Data Analytics & Visualization Applications	233
17.10.1	Data Analytics	233
17.10.2	Visualization and Presentation	234
17.11	Compute Engine	235
17.12	Professional Services	235
17.13	Mission Critical Applications	236
17.13.1	Mission Critical Applications	236
17.14	Government Intelligence Agencies	237
17.14.1	Use Cases	237
18	Appendix S: Glossary & Abbreviations	239
19	Type of Data Sources	259
19.1	Passive Data Sources	259
19.2	Active Data Sources	259
20	Data Sources	260
20.1	Communications (including GPS)	260
20.1.1	GPS Sources	260
20.1.2	Application Types	260
21	Disclaimer & Copyright	261

List of Tables

Table 1 - EDS, ETD and 2D X-ray Technologies - Pros and Cons	32
Table 2 - Price Comparison of Bulk Explosives Screening Technologies	32
Table 3 - Explosives, Drugs, and Common X-ray "Interruption" Materials	35
Table 4 - Backscatter People Screening Portals – Advantages & Disadvantages	49
Table 5 - Comparison of X-ray Detection Technologies.....	54
Table 6 - X-ray Standards for Bulk Explosives Detection.....	56
Table 7 - Comparison of Standoff IED, PBIED & VBIED Detection Technologies	62
Table 8 - Retica Standoff Biometric System Performance	72
Table 9 - Standoff IED, PVIED & VBIED UGV Detection Technology: Features & Benefits	83
Table 10 - Mechanically Scanning MMWave Camera Performance	108
Table 11 - Comparison of Laser Based Standoff Explosives Detection Technologies	123
Table 12 - Manufacturer Points of Contact.....	163
Table 13 - Certified Explosives & Weapons Detection Products.....	164
Table 14 - Certified Non-EDS 2D X-ray Devices.....	166
Table 15 - List of Authorized Air-Cargo on Passenger Plans Screening Facilities.....	167
Table 16 - European Explosives & Weapons Detection Related Product Standards	199
Table 17 - Machine Learning Method Types.....	229
Table 18 - Legacy Analytics Vs. Big Data Analytics.....	231
Table 19 - Mission Critical Applications and Scope of Activity	236
Table 20 - Passive Data Sources.....	259
Table 21 - Active Data Sources	259

List of Figures

Figure 1 - Explosives Classification Tree	15
Figure 2 - Explosive Train	16
Figure 3 - Black Powder	17
Figure 4 - Smokeless Powder	17
Figure 5 - Nitrocellulose	18
Figure 6 - Flash Powder	18
Figure 7 - High Explosives Tree	19
Figure 8 - Lead Azide	20
Figure 9 - Lead Styphnate	20
Figure 10 - Mercury Fulminate Salt	20
Figure 11 - Diazodinitrophenol (DDNP)	21
Figure 12 - Pentaerythrite Tetranitrate (PETN)	22
Figure 13 - Cyclotrimethylenetrinitramine (RDX)	22
Figure 14 - Dynamite (EGDN)	23
Figure 15 - Plastic Bottles Containing Unidentified Binary Explosives.	23
Figure 16 - Water Gel in a Glass Bubble Sensitizer	24
Figure 17 - Tubes of Emulsion Explosives	24
Figure 18 - Yellow TNT Solids	25
Figure 19 - Ammonium Nitrate and Fuel Oil (ANFO)	25
Figure 20 - Dinitrotoluene (DNT)	25
Figure 21 - High Melting Point Explosive (HMX)	26
Figure 22 - Hexamethylene Triperoxide Diamine (HMTD)	27
Figure 23 -TATP (Crude and Dry) and Preparation Ingredients	27
Figure 24 - Explosive Materials Classification	29
Figure 25 - Major Explosives Detection Technologies: Bulk vs. Trace	31
Figure 26 - X-ray Conveyor-Based Screening Systems – Principles of Operation	34
Figure 27 - Conventional X-ray	38
Figure 28 - Dual Energy X-ray	39
Figure 29 - Material Differentiation by Dual Energy X-ray	40
Figure 30 - Dual Energy Z Map	41
Figure 31 - Quasi-Dual Energy X-ray	41
Figure 32 - Variable View X-ray Option	42
Figure 33 - Multi-View Dual Energy X-ray Explosives & Weapons Screening	43
Figure 34 - Convectional 2D Image (Left) vs. Quasi 3D Image (Right)	43
Figure 35 - The Rapiscan 620DV AT - Dual View Advanced Technology X-ray System	45
Figure 36 - Smiths Detection HI-SCAN 6040aX	46
Figure 37 - Backscatter Cargo Screening X-ray	47
Figure 38 - MMwave AIT	48
Figure 39- MMwave VS. X-Ray AIT Systems	48
Figure 40 - Dose Comparison : Environmental Radiation vs. Backscatter AIT Scan	49

Figure 41 - AIT Screening Procedure	50
Figure 42 - Coherent X-ray Scheme	51
Figure 43 - Cast and Artificial Limbs Screening System	52
Figure 44 - A Prosthetic Limbs Backscatter Image Showing a Gun Hidden Underneath a Cast.....	53
Figure 45 - Rapiscan Mobile Check ES002 Contains Two Screening Lanes a Mobile Container.....	53
Figure 46 - Global Risks Landscape 2017	58
Figure 47 - Top Global Risks by Impact and Likelihood.....	59
Figure 48 - The Global Risks Interconnections Map	60
Figure 49 - Global Risks: A Regional Perceptive - Most Likely Global Risk.....	61
Figure 50 - Spectrum of Evolving PBIED, VBIED & IED Detection Technologies	63
Figure 51 - Standoff Electromagnetic Concealed Weapons Detection	64
Figure 52 - Magnetic Signature Analysis System: Functional Block Diagram	65
Figure 53 - Covert MMWave Sensor at a Door	66
Figure 54 - Screening of Hand-held Baggage.....	66
Figure 55 - Focal Plane Array Passive Standoff MMWave System	67
Figure 56 - A Walk-by Passive MMWave Imaging System	67
Figure 57 - Covert Walk-by Passive MMWave Images.....	68
Figure 58 - Example of FTIR Application at Border Checkpoint Facilities.....	70
Figure 59 - Biometric PBIED Detection Corridor	71
Figure 60 - Field of View of a Fused Video Surveillance and Biometrics	72
Figure 61 - Active MMWave HSR Bi-portal.....	73
Figure 62 - Active MMWave HSR Bi-Portal on Mass Transit Object.....	74
Figure 63 - Automatic PBIED Detection of Multiple Persons, Test Ground.....	75
Figure 64 - Cobham Antenna Systems Standoff IED, PVIED & VBIED UGV IED Detection System.....	86
Figure 65 - Cobham Antenna Systems Standoff IED, PVIED & VBIED UGV IED Detection Operation	87
Figure 66 - IAI CIMS System	88
Figure 67 - IAI CIMS System Performance.....	89
Figure 68 - Multi-Modal Fused Standoff Explosives Detection System.....	91
Figure 69 - The CounterBomber® System.....	93
Figure 70 - Atmospheric Transmission Windows of Electromagnetic Radiation.....	97
Figure 71 - Active Standoff MMWave Imaging Technologies Using Separate and Integrated Sources of Scene Illumination	98
Figure 72 - Standoff Open Space Threat Detection	99
Figure 73 - Active Standoff MMWave Imaging Experiment.....	100
Figure 74 - A Passive MMWave Imager	101
Figure 75 - Standoff MMWave Technology Used in a Tactical Checkpoint Environment.....	103
Figure 76 - Passive MM-Wave Image of a Person with a Concealed Weapon	104
Figure 77 - CCTV, IR & MMWave Images	105

Figure 78 - PMC-2 Imager, System Architecture	105
Figure 79 - PMC-2 Imager System Flowchart	106
Figure 80 – Standoff Infrared Radiation Measurement from a Human.....	109
Figure 81 - Open-Path FTIR Method	110
Figure 82 - The Electromagnetic Spectrum Showing the THz-Region.....	111
Figure 83 - “Terahertz Fingerprints” of Explosives	112
Figure 84 - “Terahertz Fingerprints” of Clothing.....	112
Figure 85 - Ceiling Mounted Standoff Passive Terahertz Imager	113
Figure 86 - Illustration of a Terahertz Standoff Imaging System at 50m Target Distance	113
Figure 87 - Basic Terahertz Standoff Person-borne Explosives & Weapon Detection Technology Concept.....	114
Figure 88 - Block Diagram of Frequency Modulate Continuous Wave (FMCW) RADAR.....	116
Figure 89 - The Sub MMWave Multiplier and Mixer	117
Figure 90 - Radar Photograph and Optics Schematic.....	117
Figure 91 - Active Terahertz Concealed Explosives & Weapons Standoff Detection.....	117
Figure 92 - A Standoff Passive Terahertz Weapons and Explosives System ...	120
Figure 93 - Short Range Standoff Vehicle-Borne Explosives Detection Setup	121
Figure 94 - Vapor Pressure of Important Explosives.....	122
Figure 95 - LIBS Principle of Operation	124
Figure 96 - Standoff Laser-Induced Breakdown Spectroscopy Real-time Explosive Detection	125
Figure 97 - LIBS Emission Temporal Resolution as a Tool to Discriminate Between Different Explosives.	126
Figure 98 - Absorbance Spectra of Various Explosives and Tuning Range of External Cavity Quantum Cascade Laser Source.....	130
Figure 99 - PLP/LIF Technology: Principle of Operation.....	131
Figure 100 - Fluorescence Energy Levels	131
Figure 101 - Micro Raman Spectroscopy.....	133
Figure 102 - Example of Raman Spectroscopy Systems.....	134
Figure 103 - Comparison of Excitation Wavelengths for TNT	136
Figure 104 - Comparison Between 4- Nitrotoluene & 2,4,6-Trinitrotoluene.....	136
Figure 105 - Some LIDAR Measurement Techniques Distances are not Applicable to Explosives	138
Figure 106 - Apex Checkpoint of the Future	142
Figure 107 - TSA RDT&E Strategic Vision.....	143
Figure 108 - The 2D X-ray Performance Criteria	144
Figure 109 - Remote Cargo Tele-Screening	145
Figure 110 - World Passenger Traffic vs. GDP.....	191
Figure 111 - RPK Traffic by Airline Domicile [Billions].....	192
Figure 112 - Single Queue Serving Multiple Explosives & Weapons Detection Security Checkpoints	195
Figure 113 - A Single Queue Serving Multiple Screening Positions.....	195

Figure 114 - Two Single Lanes Serving Multiple Screening Positions	196
Figure 115 - Separated Lines in Single Queue Serving Multiple Screening Positions	196
Figure 116 - Checkpoint Staff Allocation	197
Figure 117 - Big Data Technology Platforms and Solutions Ecosystem	226
Figure 118 - Big Data Collection and Analysis Flow Chart.....	227
Figure 119 - Digital vs. Analog Forms of Data	228
Figure 120 - Data Exploration Vs. Machine Learning Model.....	231