IMAP MARCH 2018



Cybersecurity

M&A SECTOR REPORT

Cybersecurity Opportunities in Numbers

Strong underlying fundamentals and high valuations make the cybersecurity sector extremely attractive

€ 172bn

EXPECTED GLOBAL CYBERSECURITY MARKET WORTH BY 2021 9.5%

GLOBAL CYBERSECURITY MARKET PROJECTED CAGR 2016-2020 505

NUMBER OF CYBERSECURITY TRANSACTIONS IN 2017 4.6x

AVERAGE EV/ REVENUE MULTIPLE 2014-2016









STRONG MARKET DEMAND

 Threat levels are growing and corporations continue to fall victim to damaging and costly data breaches.

STRONG GROWTH

 The global and endless magnitude of information security issues leaves end-users asking for security solutions.

INCREASED TRANSACTION ACTIVITY

 Technology, human capital, knowledge and a limited number of cybersecurity companies to acquire are key drivers.

HIGH VALUATIONS

 High valuation levels due to the exceptionally strong market outlook.

Conversion rate applied: 1 USD = 0,95 EUR (per 31.12.16. Source: www.oanda.com. This conversion rate is applied throughout the entire report, unless otherwise mentioned).

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Market Outlook and Summary



Strong M&A activity and a growing market

- The global cybersecurity market shows strong performance as security threats continue to escalate.
 Attacks & Data Breaches are increasingly severe.
- Over the last 12 months, several major cybersecurity breaches have occurred. Amongst some of the high profile breaches, was the theft from a cryptocurrency exchange in Japan where hackers stole over €500 million, the ransomware attack "WannaCry" which affected over 230,000 computers in 150 different countries and the "Petya" attack, which shut down large corporations, public institutions and among others, A.P. Møller-Maersk's booking system, which paralyzed the entire cargo shipping market with an estimated cost of \$300 million.
- The cybersecurity sector has a strong growth path ahead. The average cost of a data breach was €3 million in 2017, an increase of 6% from the previous year.
- The expected available market across New Threat Vectors* is expected to grow from €7.03 million in 2015 to €15.32 million in 2018.

- Certain segments, such as Cloud (SaaS) Security & Data Protection and Next Generation Endpoint/Malicious Detection are expected to outperform the overall cybersecurity growth and reach a 2014-2020 CAGR of between 37-50%.
- The European cybersecurity threat is accelerating at a rapid pace over 10% of European account registrations are now being rejected as fraudulent.
- M&A and Financing activity has been strong in 2017 reaching 500+ transactions (436 in 2016).
- Global cybersecurity M&A volume totaled €19.4 billion in 2017, an increase of 94% compared to 2015 (€10.0 billion).
 In 2017, there were a total of 178 M&A deals and 326 financing transactions in the cybersecurity sector.

^{*} New Threat Vectors include: Next Generation Network Security, Next Generation Endpoint/Malicious Detection, Cloud (SaaS) Security and Data Protection, Identity and Access Management-The New Perimeter, Security Threat Intellignce and Analytics, Data Security, Discovery, Classification, Control & Intel, Inside Threat Protection, Compliance Automation and Data Governance, Mobile Security and Protection and Social Media (Marketing Platforms).

Industry Trends

Four trends are driving the cybersecurity market

1. DIGITIZATION

- "Everything becomes digital" and linked to the internet, which implies that data is accessible anywhere at any time.
- Technology in cars and houses, as well as the IoT wave represent new cybersecurity niches.
- Critical infrastructure such as electricity, water and hospitals, etc. can be managed digitally.
- The frequency of data breaches increases from digitalization and is often a result of poor internal competence. It's critical that the "human firewall" is turned on.

2. REGULATION

- The General Data Protection Regulation (GDPR) is going to be implemented in May 2018.
- The GDPR's primary objective is to give citizens and residents back control over their personal data and to simplify the regulatory environment for international businesses by unifying regulations within the EU.
- Companies will only be permitted to use personal information for the purpose for which the information was collected.

3. LOSS OF INTELLECTUAL PROPERTY

- Negligence and lack of awareness are the most common reasons for up to 70% of all data losses.
- Hacking is a new form of warfare. Certain countries are developing expertise and knowledge to counter cyberattacks on governments and corporations.
- In late June 2017, the shipping conglomerate Maersk, which handles one out of seven containers shipped globally, fell victim to a global IT breakdown caused by the "Petya" cyberattack.

4. TECHNOLOGY & NEW MARKETS

- Introduction of Payment Service Directive 2 (PSD 2) which allows consumers to use Facebook or Google to pay their bills implies higher risk of cybersecurity attacks. Banks are obligated to provide third parties with open APIs.
- This opens up a new market for cybersecurity, as third parties are allowed to build financial services on top of the banks' data.
- Blockchain-based security platforms address the fundamental flaws in general security by removing the human factor from the equation (usually the weakest link). As a result, blockchain-based security platforms seem to have a bright future.

THE TOP FIVE INDUSTRIES HACKED IN 2017









FINANCIAL SERVICES





TRANSPORTATION

Data Breach Trends & Top Breach Types

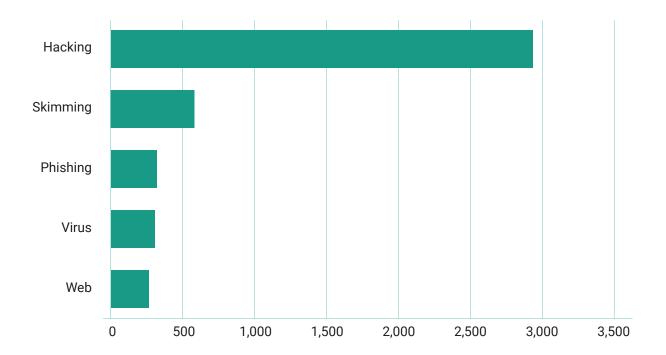
Cybersecurity sector

Data Breach Trends



- 2017 saw a record breaking year for most data breaches, with a total of 5,000+ breaches and 7.89 billion records exposed.
- Over 55% of reported breaches in 2017 were the result of hacking, but for the first time hacking was not the number one cause for exposed records.
- The 5 largest breaches in 2017 exposed approximately 5.7 billion records or 72.2% of all records exposed.
- The Business sector accounted for 84% of reported breaches in 2017, followed by Medical (8%), Government (7%) and Education (5%).
- In terms of geography, breaches related to U.S. entities accounted for 45% of total breaches and 32% of total exposed records.

2017 Incidents - Top 10 Breaches

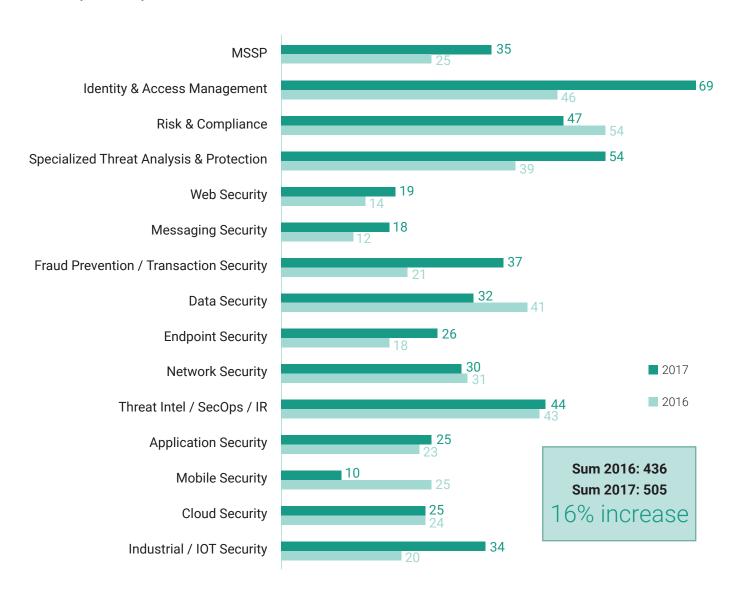


Cyberattacks are evolving. Hackers have shifted from breaking into systems by means of cracking the code, to attacking the human element, such as targeting individuals through spear phishing attacks, in order to gain entry in a company network or personal system.

Global Transactions

Strong transaction activity and a growing market

Global Cybersecurity Transactions* 2016 & 2017



 $^{^{\}star}$ M&A and Financing Transactions.



€19.38 billion

2017 M&A Value

 4.1χ M&A EV / Rev Multiples

50%

Private Equity Transaction Value Share of Disclosed M&A Transactions

Buying Patterns in Europe

Geographic overview



- The graph shows that certain geographic areas, such as Scandinavia, the UK and the Netherlands predominantly cater to international buyers.
- This is due to tehnological scalability, market penetration, market acces and market adaptativeness.
- Other countries such as Spain, Italy and Germany have prodominantly domestic buyers.

Examples of Active Buyers in Europe

2014-2017

F-SECURE

AVAST

SECURELINK









F - Secure is listed on the NASDAQ OMX in Helsinki, Finland. The company has over 25 offices around the globe and is headquartered in Helsinki. Over 100,000 corporate customers apply F-Secure. Their largest market is Europe, which accounted for 77.0% of company revenue in 2016.

AVG Technologies was acquired by Avast in 2016. The company is headquartered in Amsterdam, Holland. During the last seven years, AVG (backed by CVC European Equity Partners) acquired several companies both in the US and in Europe. Together with Avast, the company secures 400M+ users, including 160 million+ on mobile.

SecureLink is owned by the investment firm Investcorp, is headquartered in Belgium and operates in 9 countries. With 1,300 customers, 25,000 devices monitored and four acquisitions during the last two years, SecureLink is identified as a leading Managed Security Service (MSS) provider.

Sales (2016) €166 million EBITDA (2016) €24 million 1.000 **Employees**

Sales (2015)* €393 million EBITDA(2015)* €114 million 1.500 Employees*

Sales (2016) €250 million EBITDA (2016) NA **Employees** 650

Recent acquisitions in European cybersecurity development:

05/2017: Digital Assurance Ltd (GB) 02/2017: Invers Path Srl (IT)

06/2015: Nsense Group Aps (DK)

Recent acquisitions in European cybersecurity development:

07/2016: Avast acquires Avg (NL)

05/2015: Privax LTD (GB)

11/2014: Norman Safeground AS (NO)

Recent acquisitions in European cybersecurity development:

08/2016: Nebulas Solutions Ltd. (GB) 06/2016: Coresec Systems AB (SE) 06/2016: Zion Security N.V (BE)

*Financials for AVG Technologies B.V.

Business Cases

Examples of recent deals in Europe 2015-2017

CONSULTANCY





ITC provides organizations with assured IT and specializes in providing its NetSure360° managed infrastructure and security services solution ("MSS"). Located in the UK.

"The acquisition of ITC is the first step in C5's broader strategy to consolidate the fast-growing and fragmented IT MSS market in Europe and provide outsourced cybersecurity services. C5 has identified ITC, an established UK provider of MSS with a broad technology platform and strong product roadmap, as its first acquisition and the foundational investment in this strategy."

Deal value: €28.5 million

Deal type: Institutional buy-out 100%

SOFTWARE



Transunion Netherlands B.V, stock listed at NYSE, acquired Trustev, an Irish company specialized in stopping fraud for e-commerce and financial companies.

"With Trustev's online risk analytics and TransUnion's deep datasets, the combined platform offers customers new levels of confidence to support account acquisition, account management and digital payments. TransUnion has already integrated Trustev technology into its ID Manager product and customers have experienced up to a 60% decrease in fraud losses while boosting approvals."

Deal value: €41.8 million

Deal type: Institutional buy-out 100%

Source: Zephyr Database by Bureau Van Dijk and Press Releases.

SOFTWARE

SOFTWARE & INFRASTRUCTURE





Avast Software B.V, a global security software provider headquartered in The Netherlands, acquired AVG Technologies N.V listed on NYSE for €23.8 per share in cash.

"Avast is pursuing this acquisition to gain scale, technological depth and geographical breadth. The technological depth and geographical reach will help Avast serve customers with more advanced security offerings in the core business and new innovations in emerging markets, such as security for IoT devices."

Deal value: €1,205 million Deal type: Public takeover







Leading PE firm BC Partners and Medina Capital, a PE firm that focuses on investing in companies in the cybersecurity, data analytics and IT infrastructure markets, announced the formation of joint venture.

"The new venture will deliver a global secure data infrastructure platform by combining 57 premium data centers along with a suite of highly-differentiated security and data analytics services from the Medina Capital portfolio, including Cryptozone, Catbird, Easy Solution and Brainspace."

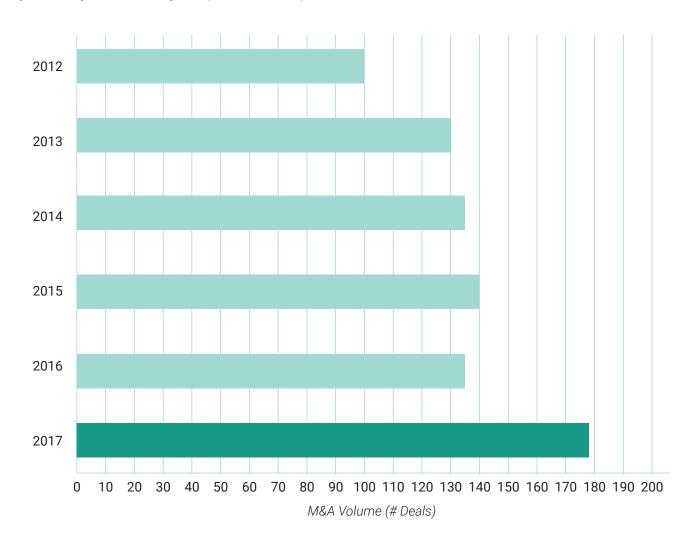
Deal value: €2,566 million

Deal type: Institutional buy-out 100%

Cybersecurity M&A Activity & Valuation

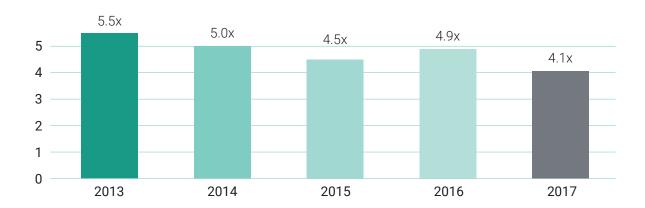
High valuation multiples due to a strong market outlook

Cybersecurity M&A Volume by Year (Number of Deals)

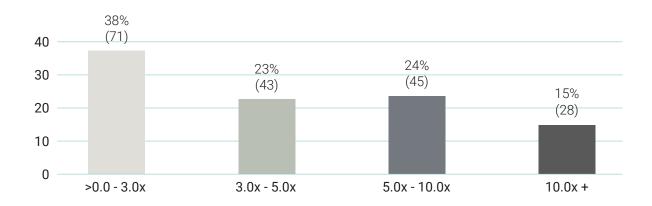


- Despite normalizing median EV/ Revenue multiples in 2017, the cybersecurity sector is one of the highest valued sectors, due to expected marked growth, regulatory requirements and increased customer demand.
- The change in median transaction multiples can be explained by targets now being larger and more mature companies, as opposed to smaller high growth technology companies with untapped potential.
- Valuation levels are explained by the exceptionally good overall market outlook for the cybersecurity sector.

Median EV/LTM* Revenue Multiples



M&A by Valuation Multiples (EV/LTM Rev) 2017



*TTM = Trailing Twelve Months. LTM = Last Twelve Months.

- The M&A volume increased by 30% from 2016 to 2017.
- Transactions with known valuation multiples vary in range, often exceeding the EV/Revenue multiple of 5.

Credentials From Across IMAP

Deals in the cybersecurity sector

















IMAP Europe Cybersecurity Market Survey Feedback

Lack of resources and internal knowhow are both current and future bottlenecks

BACKGROUND & INTRODUCTION TO THE SURVEY

- IMAP Europe conducted a survey in 2017 to understand local cybersecurity markets and how these compare and contrast to each other.
- The team interviewed some of the largest European cybersecurity companies. Below is an extract of some of the major findings and conclusions:

1.SECTORS MOST LIKELY TO EXPERIENCE CYBERATTACKS:

According to the survey, data providers, email providers, those which offer data center solutions, as well as the public sector, are the most vulnerable sectors for future cyberattacks.

2.PRODUCTS MOST IN DEMAND BY CUSTOMERS TO PREVENT ATTACKS:

- Data loss protection services and firewalls in the cloud are the cybersecurity products expected to see the largest growth over the coming years.
- Software to prevent Ransomware and firewalls to protect employees who utilize both business and personal devices (smartphones, tablets, computers), are likely to be very attractive and in high demand.

3.THE MOST COMMON REASONS FOR DATA LOSS:

- Survey respondents emphasize personal behavior, too little knowhow and negligence/lack of awareness as the most common reasons for data loss.
- In the future, respondents expect more "smarter" attacks along with industry spying. Sophisticated crime with economic gain, as well as public sector manipulation through cyberattacks, are likely to increase in the future.

10-20% CAGR

■ Expected general market growth in % per annum over the following two years.

AS-A-SERVICE SECURITY PRODUCTS

■ SaaS products and firewalls in the cloud will be the most attractive cybersecurity products in the near future.

PERSONAL BEHAVIOR AND LITTLE KNOWHOW

■ Are the most common reasons for loss of data over the coming years.

Appendix 1/3

Selected M&A transactions in the cybersecurity sector with known deal value - Europe

Date	Target	Buyer	Deal Value (EUR'000)
21.12.2017	DELTA TECH SRL	VIDATA SRL	600
08.11.2017	BUSINESS-E SPA	MATICMIND SPA	12,212
26.10.2017	MAKERS IT SERVICES GMBH	DELOITTE DIGITAL GMBH	9,000
10.10.2017	DRIVELOCK SE	EXISTING INVESTORS	5,110
28.09.2017	ATM SA	AAW III SP Z00	33,443
25.09.2017	ERYMA SAS	SOGETREL SAS	15,000
20.09.2017	CDL SYSTEM AS	SOLITEA AS	7,661
30.07.2017	BIO OBSERVATIONS SYSTEMS LTD	LUCEY TECHNOLOGY LTD	2,400
26.07.2017	PARSELAYA SL	EUSKALTEL SA	701,000
06.07.2017	GETRONICS BELGIUM SA/NV	DIGITRAN INNOVATIONS BV	220,000
03.07.2017	NEBULA TOP OY	TELIA COMPANY AB	165,000
29.06.2017	CANYON HOLDINGS SARL	CAPITOL ACQUISITION HOLDING COMPANY LTD	2,109,000
21.06.2017	GENERIC SYSTEMS SWEDEN AB	MSC GROUP AB	1,176
02.05.2017	CRYPTZONE GROUP AB	CYXTERA TECHNOLOGIES INC.	2,566,221
16.03.2017	AVG TECHNOLOGIES NV	AVAST SOFTWARE BV	1,183,381
07.03.2017	RACZAM SP ZOO	INNOVATIVE COMMERCE AS	14
20.02.2017	APLITT SA	STEFCZYK NIERUCHOMOSCI-TOWARZYSTWO ZARZADZAJACE SKOK SP ZOO SP KA	514
06.02.2017	ALS TECHNOLOGIES LTD	TP GROUP PLC	3,182
27.01.2017	TELEFONICA OPEN FUTURE SL	TELEFONICA SA	500
11.01.2017	DIALECT AB	GOLDCUP 13681 AB	25,913
06.01.2017	DOCDATA NV	MS GJ VAN LOOKEREN CAMPAGNE	1,254
06.01.2017	UNIFIED MESSAGING SYSTEMS AS	IPO	6,951
04.01.2017	NSG GIS GMBH	CPU SOFTWAREHOUSE AG	1,000
31.12.2016	GROUP BUSINESS SOFTWARE EUROPA GMBH	BULPROS CONSULTING AD -ZWEIGNIEDERLASSUNG FRANKFURT AM MAIN	10,800
14.12.2016	ECSC GROUP PLC	IPO	6,989

Appendix 2/3

Selected M&A transactions in the cybersecurity sector with known deal value - Europe

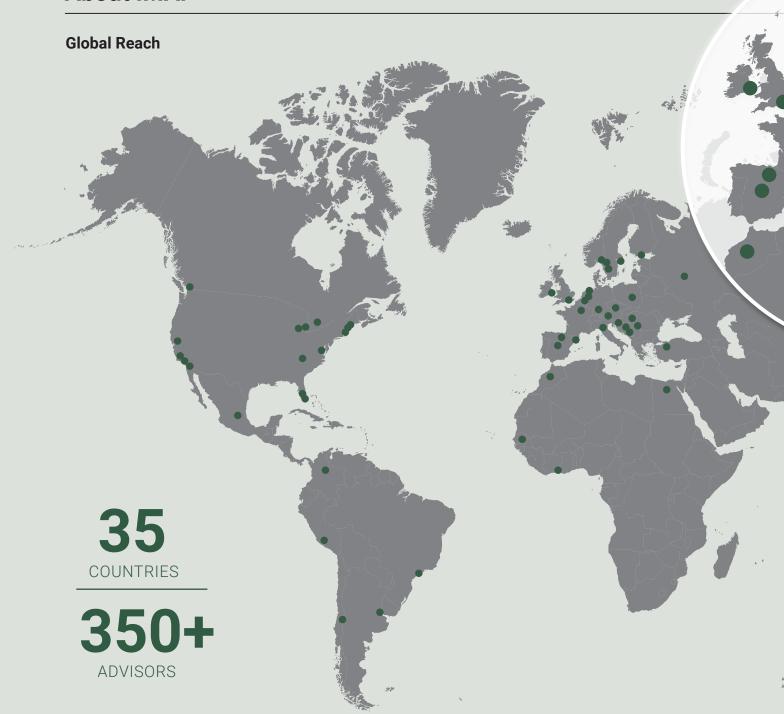
Date	Target	Buyer	Deal Value (EUR'000)
16.11.2016	INEXIO INFORMATIONSTECHNOLOGIE UND TELEKOMMUNIKATION GMBH	DEUTSCHE BETEILIGUNGS AG	250,000
07.11.2016	ITC GLOBAL SECURITY LTD	C5 HOLDINGS (UK) LTD	26,999
19.10.2016	FUNKWERK AG	HOERMANN FUNKWERK HOLDING GMBH	19,695
30.09.2016	BOXER TV ACCESS AB	COM HEM COMMUNICATIONS AB	138,239
30.09.2016	CATAPS SRO	WORLDLINE SA	27,200
27.09.2016	DOCDATA NV	COCOONDD BV	666
14.09.2016	VINDICIA INC.	AMDOCS LTD	231,829
31.08.2016	EDEVICE SA	ANDON HEALTH CO., LTD	93,884
30.08.2016	PHENIXID AB	CLAVISTER HOLDING AB	6,758
29.08.2016	ATEVIA AG	CINETIC GESELLSCHAFT ZUR ENTWICKLUNG UND VERTRIEB VON MEDIENTECHNIK MBH	8,460
05.08.2016	STONEWORK SOLUTIONS SL	EURONA WIRELESS TELECOM SA	1,000
02.08.2016	CROWDSOFT TECHNOLOGY AB	IPO	1,924
30.06.2016	ENIRAM OY	WARTSILA OYJ	43,000
06.06.2016	XCHANGING PLC	CSC COMPUTER SCIENCES INTERNATIONAL OPERATIONS LTD	611,154
02.06.2016	NTT COM SECURITY AG	NTT COMMUNICATIONS DEUTSCHLAND GMBH	7,972
31.05.2016	SAMARIND LTD	MS GJ VAN LOOKEREN CAMPAGNE	2,385
15.04.2016	OSIRIUM TECHNOLOGIES PLC	IPO	11,081
17.03.2016	VORMETRIC INC.	THALES SA	356,657
26.01.2016	CLINISYS GROUP LTD	ROPER UK LTD	223,173
25.01.2016	SMART CARD SOFTWARE LTD	RAMBUS INC.	85,526
11.01.2016	GESTIONE DUE SRL	INFRASTRUTTURE WIRELESS ITALIANE SPA	7,900
05.01.2016	LEADERS IN COMMUNITY ALTERNATIVES INC.	SUPERCOM LTD	2,770
22.12.2015	IAI INDUSTRIAL SYSTEMS BV	ASSA ABLOY NEDERLAND HOLDING BV	22,000

Appendix 3/3

Selected M&A transactions in the cybersecurity sector with known deal value - Europe

Date	Target	Buyer	Deal Value (EUR'000)
14.12.2015	SURFRIGHT BV	SOPHOS GROUP PLC	28,985
09.12.2015	TRUSTEV LTD	TRANSUNION	40,388
08.12.2015	CYBERCOM GROUP AB	Delisting	29,627
03.12.2015	DEFENX PLC	IPO	2,972
18.11.2015	SOFTCAT PLC	IPO	219,308
06.11.2015	CO.STATION BRUSSELS SA	MOBISTAR SA	200
03.09.2015	TURVATIIMI OYJ	ATINE GROUP OY	1,444
20.07.2015	MEZZACAP GMBH	BITRUSH CORPORATION	5,936
16.06.2015	WALLIX SARL	IPO	9,056
02.06.2015	CROSS INDUSTRIES AG	BF HOLDING AG	409,500
01.06.2015	PROCESSFLOWS (UK) LTD	MBO TEAM - UNITED KINGDOM	6,350
08.05.2015	EVRY ASA	LYNGEN BIDCO AS	448,597
07.05.2015	CELLNEX TELECOM SA	IPO	2,140,753
30.04.2015	ACCUMULI PLC	NCC GROUP PLC	75,446
30.04.2015	OUTSIDE BROADCAST NV	NEP GROUP INC.	16,750
09.04.2015	BALTNETOS KOMUNIKACIJOS UAB	ATEA BALTIC UAB	10,400
25.02.2015	VODAFONE ROMANIA M-PAYMENTS SRL	VODAFONE ROMANIA SA	990
23.02.2015	UNIZETO TECHNOLOGIES SA	ASSECO SYSTEMS SA	4,516
23.02.2015	VODAFONE ROMANIA M-PAYMENTS SRL	VODAFONE ROMANIA SA	1,316
13.02.2015	TURVATIIMI OYJ	ATINE GROUP OY	1,143
08.01.2015	SAFENET INC.	GEMALTO NV	752,062
06.01.2015	ACCESS FIRE AND SECURITY LTD	BELGRAVIUM TECHNOLOGIES PLC	638
05.01.2015	I LOGIC SOLUTIONS SDN BHD	GALASYS PLC	1,660

About IMAP



Argentina | Belgium | Bosnia and Herzegovina | Brazil | Canada | Chile | China | Colombia | Croatia | Czech Republic | Egypt | Finland | France | Germany | Hungary | India | Ireland | Italy | Ivory Coast | Japan | Mexico | Morocco | Netherlands I Norway I Peru I Poland I Russia I Senegal I Serbia I Slovenia I Spain I Sweden I Turkey I United Kingdom I United States

IMAP is an International Mergers and Acquisitions Partnership with a presence in 35 countries. IMAP has closed over 2,100 transactions valued at \$90bn in the last 10 years and is consistently ranked in the world's top ten M&A advisors (Thomson Reuters) for mid-market transactions.

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