



# Internet of Things (IoT) Newsletter

**Q3 2018 M&A NEWSLETTER**

**KPMG Corporate Finance LLC**



# Internet of Things ("IoT") Overview

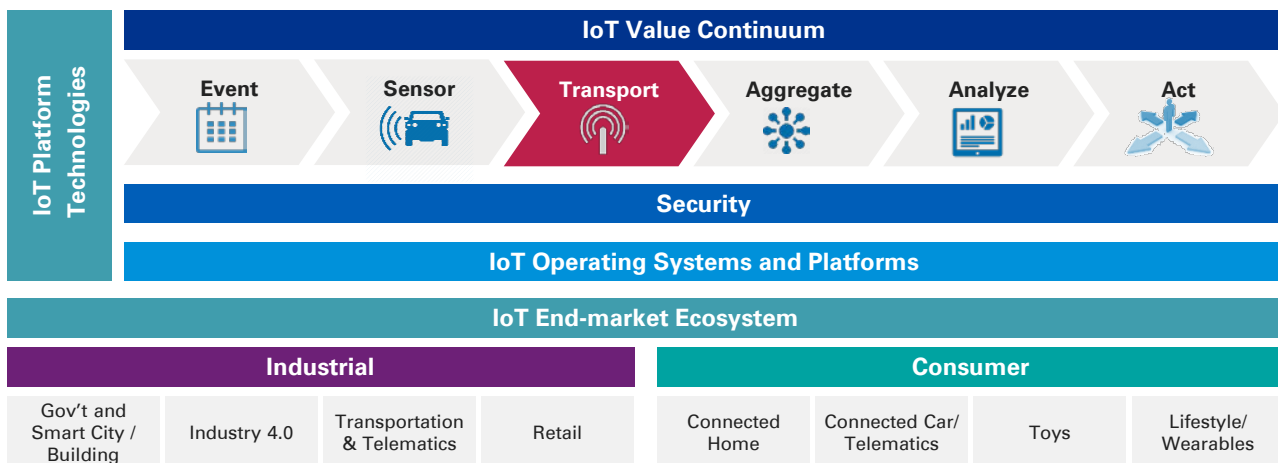
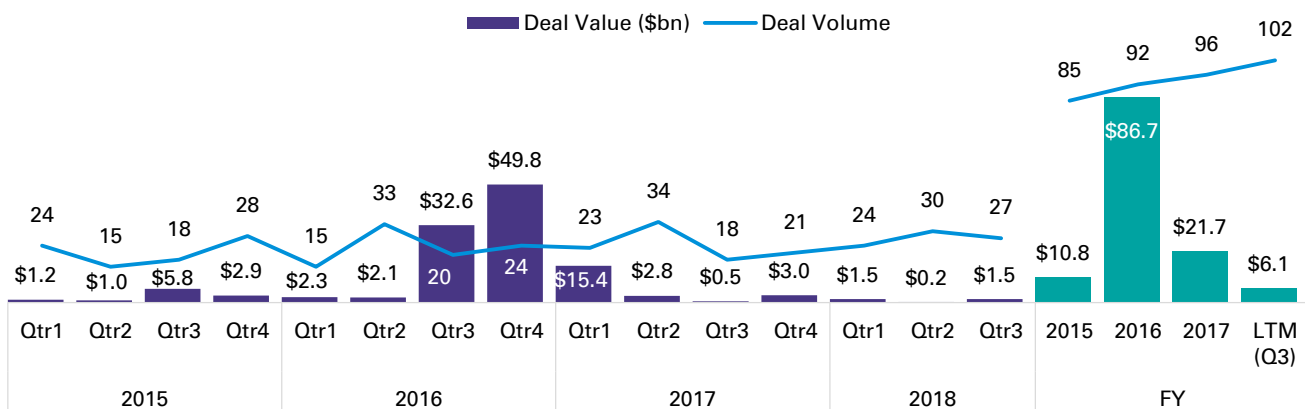
## IoT deal value and volume<sup>(1)</sup>

Total global deal volume in Q3'18 **27**

The IoT sector saw **27** deals announced in Q3'18, up from **18** deals in Q3'17 but sequentially down from **30** deals announced in Q2'18

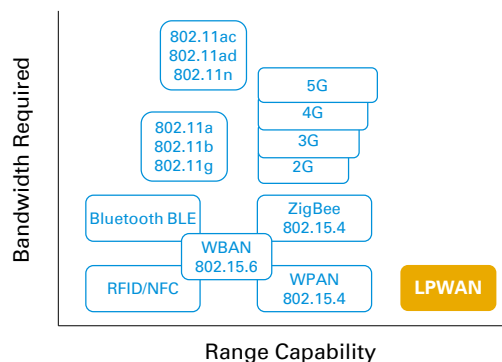
**\$1.5bn** Aggregate deal value in Q3'18

The aggregate deal value in Q3'18 was **\$1.5n**, largely comprising of small-size deals with undisclosed values



As the number of IoT devices rises to over 125 billion units<sup>(2)</sup> by 2030, new connectivity standards have been developed to handle the growing number of applications in the IoT space. This quarter we will take a deep dive into connectivity of IoT applications, specifically LPWAN (Low Power Wide Area Network) connectivity technologies.

Every IoT application has its own unique requirements including high / low bandwidth, long-battery life, short / long range, and cost, which thus require its own connectivity requirements. LPWAN solutions are specifically designed for connecting low-power devices like sensors over a very long range. This makes them well suited for a wide range of IoT use cases like smart agriculture and smart cities. LPWANs can connect these low-power devices at a cheaper cost and lower bandwidth requirements than existing cellular networks, have cheaper hardware costs and data subscription costs.



Sources: 451Research, Capital IQ and KPMG research

Notes:  
 (1) M&A analysis is based on the deals announced during the respective periods. Deal value represents aggregate deal value for disclosed transactions for the time period noted.  
 (2) As per IHS Markit.



# LPWAN Technologies Market

The market for LPWAN is forecasted to grow rapidly from \$1.01bn in 2016 to over \$24bn\* by 2021, growing at a CAGR of 89.3% during the period 2016-2021.

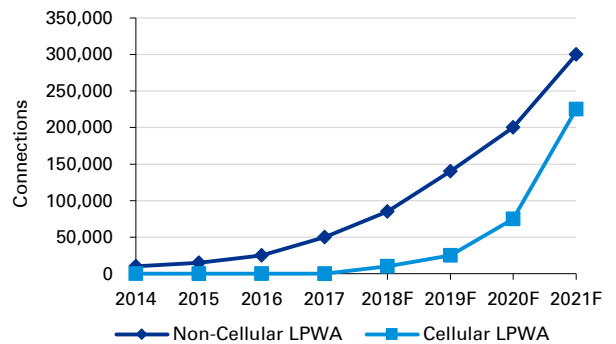
BI Intelligence estimates that the total number of IoT devices connected over LPWANs will reach 700 million by 2021, which represents remarkable growth for such a new technology.

The demand is growing on the back of increasing volumes of IoT/M2M applications, rising need of long range connectivity between the devices, and low cost and low power consumption of LPWAN technologies.

As the connectivity needs evolve, multiple connectivity options will be available. LPWAN technologies are gaining traction for applications with long-range, modest data, and long-life requirements.

\*Source: MarketsandMarkets research.

## Wireless LPWA Growth Trends



## Key end-markets

Logistics & asset management




Infrastructure & environmental monitoring


























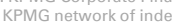

Smart metering

Security & smart buildings

Energy production

## Comparison of LPWAN Technologies

			
<b>Summary</b>	<ul style="list-style-type: none"> <li>Designed to extend the range of LPWAN for IoT and M2M applications</li> </ul>	<ul style="list-style-type: none"> <li>Enables a wide range of cellular devices and services</li> <li>Deployed in any LTE network as a software overlay</li> </ul>	<ul style="list-style-type: none"> <li>Leverages ultra-narrowband (UNB) modulation in the form of binary phase-shift keying (BPSK) to transmit short messages at low</li> </ul>
<b>Founder</b>	IBM/Cisco	3GPP	Sigfox
<b>Availability</b>	2015	2016	2009
<b>License</b>	Unlicensed	Licensed	Unlicensed
<b>Spectrum</b>	<ul style="list-style-type: none"> <li>ISM band</li> <li>Sub-1GHz</li> </ul>	<ul style="list-style-type: none"> <li>In-band LTE</li> <li>LTE guard bands</li> <li>Standalone (700-900MHz)</li> </ul>	<ul style="list-style-type: none"> <li>ISM band</li> <li>Sub-1GHz</li> </ul>
<b>Two-way data</b>	Class dependent	Yes	No
<b>Capacity (/cell)</b>	40,000	200,000	50,000
<b>Bandwidth</b>	125-500kHz	180kHz	100Hz
<b>Coverage (dB)</b>	157	164	149
<b>Range</b>	Urban: 3-5km; Rural: 15km	15km	Urban: 10km; Rural: 50km

Technology	Frequency	Data rate (max)	Range	Power	Cost
2G/3G	Cellular bands	~10 Mb/s			
Ingenu	2.4 GHz	624 kb/s			
LoRa	915 MHz	<50 kb/s			
LTE-M	Cellular bands	1 Mb/s			
NB-IoT	Cellular bands	250 kb/s			
SigFox	<1 GHz	100-1000 b/s			
Symphony	915 MHz	<50 kb/s			
Weightless	<1 GHz	0.1-24 Mb/s			
Wi-Fi (11af/ah)	<1 GHz	0.1-1 Mb/s			

Sources: ABI Research, 3GPP, KGI Research and electronicdesign.com



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# Transactions in Focus

**Munich Re via its subsidiary Hartford Steam Boiler (HSB), a US-based specialty insurer and reinsurer, announced the acquisition of Relayr, a US-based provider of commercial and industrial IoT solutions**

**Announced Date:** Sep 4, 2018    **Deal Value:** \$300mm    **EV/Revenue:** N/A    **EV/EBITDA:** N/A

Munich acquired Relayr, a Boston-based developer of middleware platform which enables industrial companies to collect and analyze operational readings from their equipment. The combined business will offer technology, risk management, data analysis and financial instruments.

**Best Buy Co. announced the acquisition of GreatCall, Inc., a US-based provider of mobile health and safety solutions for older adults and their family caregivers**

**Announced Date:** Aug 15, 2018    **Deal Value:** \$800mm    **EV/Revenue:** 2.7x    **EV/EBITDA:** N/A

Best Buy acquired GreatCall, provider of connected health and personal emergency response services. The acquisition will augment Best Buy's existing efforts in the health space, help bring compelling solutions to more customers, and help fuel Best Buy's further growth in the consumer and commercial markets.

**Solbright Group, a US-based provider of IoT solutions for commercial and industrial facilities announced a merger with M2M Spectrum Networks, LLC, a US-based provider of IoT connectivity solutions**

**Announced Date:** Jul 31, 2018    **Deal Value:** \$54mm    **EV/Revenue:** N/A    **EV/EBITDA:** N/A

Solbright Group, an industrial AI, machine learning and energy management company announced a merger with M2M Spectrum Networks, a dedicated IoT network access and IoT solutions company, to create Iota Communications, Inc. (Iota). The merger brings together two companies at the leading edge of the proliferation of the IoT to form a new company that is the first publicly-traded, pure-play, fully-featured IoT network operating company in the U.S.

**TUS International Limited announced the acquisition of automotive division of Telit Communications, a UK-based provider of integrated products and services to support and enable Internet of Things (IoT) deployments**

**Announced Date:** Jul 13, 2018    **Deal Value:** \$105mm    **EV/Revenue:** 1.7x    **EV/EBITDA:** 10.4x

TUS International acquired the automotive division of Telit Communications, an industrial IoT company. The transaction will strengthen the intelligent driving systems business of the TUS International, increase the company's camera-based ADAS segment backlog, and enable significant cross-selling opportunities based on the existing sales and service network.

## KPMG CF Transaction Spotlight



### Overview:

- In May 2018, KPMG Corporate Finance\* ('KPMG CF') acted as the lead financial advisor to GCI Managed Services Group ('GCI') on its sale to Mayfair Equity Partners ("Mayfair"), a buyout and growth capital investor.
- Based in U.K., GCI offers converged ICT services. It provides a suite of managed services designed around five integrated technologies: Cloud, Unified Communications, Security & Compliance, Network & Infrastructure, and Full IT Support.

### Engagement:

- KPMG CF was appointed as the lead financial advisor to GCI for the transaction following a competitive tender process and undertook the lender education to support the sale.
- In addition, KPMG Tax advised the management on the transaction.
- The acquisition by Mayfair, offers GCI significant firepower to finance further strategic acquisitions.
- As one of the key deals in the TMT mid-market, this transaction strengthens KPMG's position in the technology deal advisory market. The deal also represents a great example of successfully leveraging the cross-border and multi-disciplinary expertise of KPMG in the TMT space.

Sources: 451Research, Capital IQ, Mergermarket and KPMG research

\*Refers to the global Corporate Finance practices of KPMG International's network of independent member firms.



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# Q3'18 IoT Transactions

Announced	Target	Acquirer	Target HQ	Deal Value (\$mm)	EV / Revenue	EV / EBITDA
09/28/2018	Laird Ltd. [Advent International] (connected vehicle assets)	Molex Electronic Technologies [Koch Industries]	UK	-	-	-
09/28/2018	Grupo Detector	Viasat Group	Spain	-	-	-
09/26/2018	Smart Pet Technologies	Wagz	US	-	-	-
09/26/2018	Vasona Networks	ZephyrTel [ESW Capital]	US	-	-	-
09/04/2018	Relayr	Munich Re	US	\$300.0	-	-
09/03/2018	OmniPHY	NXP Semiconductors	US	-	-	-
08/31/2018	Hikob (assets)	TagMaster	France	\$1.2	-	-
08/20/2018	Groeneveld ICT Solutions [Timken Company]	Vehco	N/A	-	-	-
08/15/2018	GreatCall [GTCR]	Best Buy Co.	US	\$800.0	2.7x	-
08/07/2018	Objective Software	Luxoft Holding	Germany	-	-	-
08/02/2018	Treasure Data	ARM Holdings [SoftBank]	US	-	-	-
07/31/2018	M2M Spectrum Networks	Solbright Group	US	\$54.4	-	-
07/26/2018	Zepp Labs (core assets)	Huami	US	-	-	-
07/26/2018	Milestone Sports	Zwift	US	-	-	-
07/25/2018	Shield Aviation	Cubic	US	-	-	-
07/23/2018	Abracon [Evergreen Pacific Partners]	The Riverside Company	US	-	-	-
07/19/2018	Yanzi Networks	Pegasus Capital Advisors	Sweden	-	-	-
07/18/2018	HawXeye	Bossa Nova Robotics	US	-	-	-
07/17/2018	FairConnect	Palamon Capital Partners	Switzerland	\$116.8	-	-
07/13/2018	Telit Communications (automotive division)	TUS International	UK	\$105.0	1.7x	10.4x
07/12/2018	Fibar Group	Nice S.p.A.	Poland	\$73.8	2.3x	-
07/10/2018	FeedbackNow	Forrester Research	Switzerland	\$1.3	-	-
07/10/2018	AblePlus Solutions	Oravel Stays	India	-	-	-

Sources: 451Research, Capital IQ, Mergermarket and KPMG research



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# Q3'18 IoT Transactions (cont'd)

Announced	Target	Acquirer	Target HQ	Deal Value (\$mm)	EV / Revenue	EV / EBITDA
07/09/2018	Open Access [Alder Fund]	HQ Equita	Australia	-	-	-
07/09/2018	r2p [Alder Fund]	HQ Equita	Germany	-	-	-
07/05/2018	Digame Systems	SensThys	US	-	-	-
07/04/2018	Flashnet	ENGIE	Romania	-	-	-

Sources: 451Research, Capital IQ, Mergermarket and KPMG research



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# Trading Companies

IoT and M2M								
Company	Share price <sup>(1)</sup> (\$)	% of 52 Week High	Market Cap <sup>(1)</sup> (\$mm)	Enterprise Value <sup>(2)</sup> (\$mm)	LTM Revenue (\$mm)	LTM EBITDA <sup>(3)</sup> (\$mm)	EV/ LTM Revenue	EV/ LTM EBITDA
<b>M2M / IoT</b>								
PTC	106.19	98.9%	12,512.3	12,916.5	1,235.7	141.3	10.5x	NM
Advantech	7.46	95.2%	5,204.4	4,871.2	1,542.1	257.1	3.2x	18.9x
USA Technologies	10.86	90.9%	853.4	1,062.4	284.1	29.7	3.7x	35.7x
CalAmp	23.96	94.1%	832.9	796.9	379.0	31.0	2.1x	25.7x
ORBCOMM	20.14	86.3%	725.6	648.6	746.2	33.4	0.9x	19.4x
Sierra Wireless	7.20	42.8%	432.0	455.4	128.2	9.6	3.6x	47.3x
Digi International	13.45	91.5%	366.4	314.0	207.8	15.1	1.5x	20.8x
Telit Communications	2.25	88.6%	294.4	319.7	398.6	(8.8)	0.8x	NM
Inseego	3.85	85.7%	278.8	396.1	199.8	6.5	2.0x	NM
<b>Mean</b>		<b>86.0%</b>					<b>3.1x</b>	<b>28.0x</b>
<b>Median</b>		<b>90.9%</b>					<b>2.1x</b>	<b>23.2x</b>
<b>Telematics</b>								
FleetCor Technologies	227.84	99.0%	20,138.4	23,966.8	2,358.4	1,247.0	10.2x	19.2x
Trimble	43.46	95.1%	10,863.1	11,578.9	2,911.4	503.0	4.0x	23.0x
u-blox	144.04	63.9%	1,022.0	1,020.9	411.4	79.3	2.5x	12.9x
Quartix	3.65	71.8%	174.6	168.2	33.4	9.0	5.0x	18.6x
Trakm8	0.94	43.9%	33.9	38.2	42.2	4.5	0.9x	8.5x
<b>Mean</b>		<b>74.7%</b>					<b>4.5x</b>	<b>16.4x</b>
<b>Median</b>		<b>71.8%</b>					<b>4.0x</b>	<b>18.6x</b>

Source: Capital IQ

Notes:

- (1) Market Data including Market Capitalization amounts are based on closing share prices as of September 30, 2018.
- (2) Enterprise Value (EV) equals Market Capitalization plus Debt, Preferred Equity, and Minority Interest, minus Cash and Cash Equivalents.
- (3) EBITDA equals Earnings before Interest, Taxes, Depreciation, and Amortization.

# CST Coverage Team

**KPMG** 

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Enabling your future®

has been acquired by

**MAYFAIR**  
EQUITY PARTNERS

UCaaS

**KPMG**

**TRS Technologies**

has been acquired by

**TAYCA** TAYCA CORPORATION

Sensor Technologies

**KPMG**

**3M**

Smart Traffic and Tolling business has been sold to:

**NEOLOGY**

Intelligent Transportation

**KPMG**

**smiths interconnect**  
bringing technology to life

Microwave Telecoms Business has been acquired by

**INFINITO**  
ELECTRONICS, INC.

Communication Networks

\$110 MM

**KPMG** 

**CLIFFORD THAMES**

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**OEC** OEC CONNECTION

Connected Car / IoT

**KPMG**

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**POSIFLEX**

IoT and Embedded Computing

\$105 MM

**KPMG**

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Communication Networks

**KPMG**


**CONTROLTEC**  
UNLOCKING THE POWER OF DATA

has been acquired by

**DELPHI**

Connected Car / IoT

\$145 MM

**KPMG** 

**ADVANTECH**

has acquired

**BB SMARTWORX**

Embedded Computing Components & Systems

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The Corporate Finance practices of KPMG International's network of independent member firms (KPMG) have been ranked collectively as the number one investment bank according to Thomson Reuters SDC's global M&A transaction volume league tables. KPMG firms operate in 155 countries with more than 2,600 professionals who are able to meet the needs of clients across the globe.

## KPMG Corporate Finance LLC

KPMG Corporate Finance LLC (KPMGCF) provides a broad range of investment banking and advisory services to its domestic and international clients. Our professionals have the experience and depth of knowledge in global M&A and project finance to advise clients on mergers and acquisitions, sales and divestitures, buyouts, financings, debt restructurings, equity recapitalizations, infrastructure project finance, capital advisory, real estate, portfolio solutions, and other advisory initiatives. For more information on KPMGCF, please visit [www.kpmgcorporateline.com](http://www.kpmgcorporateline.com)

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