n° 1 - 2016

NEWS

FEDERATION IDEA

February 2016

Associations

AREI - South Africa
Association of Representatives for Electronics Industry

ASPEC - Russia
Association of Suppliers of Electronic Components

ASSODEL - Italy
Associazione Nazionale Fornitori Elettronica

CEDA - China
China Electronics Distributor Alliance

ECAANZ - Australia
Electronic Components Association Australia and New Zealand

ECIA - United States
Electronic Components Industry Association

ECSN - United Kingdom
Electronic Components Supply Network

ELCINA - India
Electronic Industries Association of India

FBDI - Germany
Fachverband der Bauelemente Distribution

FEDELEC - Tunisia
Tunisian Federation of Electric and Electronic Industries

SE - Sweden
Svensk Elektronik Trade Associations

SPDEI - France
Syndicat Professionnel de la Distribution en Electronique Industrielle

CEDA reveals 2015 Top 50 China franchised distributors

by Amy Wang
Member of the CEDA Board
www.cedachina.org

China Electronics Distributor Association (CEDA) recently released Top 50 China Franchised Distributors' Catalogue (the Catalogue) to serve China Innovation. The Catalogue covers franchised product lines, core markets, office locations and value-added service of CEDA members and major players in the China market. This makes it easier for OEM/EMS companies to find reliable electronics component supplies. Meanwhile, it helps electronics component manufactures find reliable channel partners.

CEDA's mission is to promote the value of franchised distributor services, to promote electronics design and supply chain service, under the leadership of China Information Commerce.

The input for the Catalogue started with data submitted by franchised distributors, including franchised product lines, then, CEDA checks the information with semiconductor suppliers' websites or channel managers to ensure accuracy of all the information submitted.

> **" CEDA has released the Catalogue of Top Distributors to promote the franchised electronic component service system "**

Chart 1: Executives of Major Franchised Distribution Companies in China Participated the Event.

Chart 2: Charles Tan,CEDA President Charles Tan announced *Top China 50 Franchised Distributors' Catalogue*

Companies listed in the Top 50 China Franchised Distributor Catalogue are major and active players in China Market, which accounted for **USD50 billion** sales revenue.

"CEDA has released the Catalogue to promote the franchised electronic component service system, to regulate the supply channel and to help OEM/ EMS companies get reliable partners into their purchase system," said Charles Tan, President of CEDA.

"The Catalogue is published at www.cedachina.org to service the electronics supply chain and to make it simple to find reliable supply channels for semiconductor companies."

The mission of CEDA is to promote the franchised service system while the Catalogue is an important factor. According to Tan, CEDA will release the Catalogue every year from now on.

"We have now launched a new CEDA website"

"We have now launched a new CEDA website to promote communication by members. Members can update their product information, newly opened branches and new market information." Said Dr. Michael Liu, Secretary General of CEDA,*"We encourage UGC content and welcome CEDA members' timely updates to their information.*

Chart 3: Dr. Michael Liu, CEDA Secretary General chaired panel discussion.

LIST OF TOP 50 CHINA FRANCHISED DISTRIBUTORS: *Table 1*

1	大联大投资控股有限公司	WPG Holdings Limited	台湾
2	Avnet	Avnet Electronics Marketing	美国
3	Arrow	Arrow Electronics	美国
4	科通芯城	Cogobuy Group	深圳
5	泰科源科技	Techtronics Technology	北京
6	深圳中电器材	CEACSZ	深圳
7	新晔电子	Serial System	新加坡
8	富昌电子	Future Electronics	加拿大
9	益登科技	EDOM Technology	台湾
10	北高智科技	Honestar Technologies	深圳
11	信和达	Xiamen Holding Electronics	厦门
12	增你强	Zenitron	台湾
13	威雅利	Willas-Array Electronics	香港
14	世健系统（香港）	Excelpoint Systems (H.K.)	新加坡
15	深圳世强先进科技	Shenzhen Sekorm Advanced Technologies	深圳
16	Tomen	TOMEN-ELE	日本
17	帕太集团	Powertek Electronics	上海
18	湘海电子	Sane Electronics	深圳
19	利尔达	Lierda	杭州
20	新营电子	Sunray Electronics	深圳
21	全科深圳股份	Alltek Technology (Shenzhen)	深圳
22	上海润欣科技	Fortune Techgroup	上海
23	威健	Weikeng Industrial Group	台湾
24	亚讯科技	Asiacom Technology (HK)	深圳
25	贝能国际	Burnon International	香港
26	上海美德电子	TTI Asia	美国
27	北京晶川电子技术	BJ Jingchuan Electronics Tech	北京
28	上海丰宝电子	Fengbao Electronics Info Tech (Shanghai)	上海
29	雷度电子	LETDO Electronics	厦门
30	广州周立功	ZLG MCU	广州
31	棋港	Kei Kong Electronics	香港
32	Cytech	Cytech	香港
33	星亮电子	EIL	香港
34	易达电子	EDAL Electronics	香港
35	Promate	Promate	台湾
36	儒卓力电子	Rutronik Electronics Asia	德国
37	武汉力源信息技术	Wuhan P&S Info Tech	武汉
38	深圳梦想电子	Mornsun Electronics	深圳
39	Digi-Key	Digi-Key	美国
40	Mouser Electronics	Mouser Electronics	美国
41	北京元六鸿远	BJ Yuanliu Hongyuan Elctronics	北京
42	深圳鼎芯科技	DXY Technology	深圳
43	博思达科技	Upstar Technology (HK)	深圳
44	南京商络电子	Nanjing Sunlord Electronics	南京
45	RS Components	RS Components	英国
46	e络盟	Element 14	英国
47	深圳中电华星	CEPower	深圳
48	深圳市仁天芯科技	Kingsky (China) limited	深圳
49	北京基创卓越	Zetron Excellence Eletronics	北京
50	赫联电子	Heilind Asia Pacific	美国

Chart 4: Amy Wang, CEDA executive board member introduced CEDA mission.

According to Dr. Liu, CEDA now has a system to present authentic and accurate information.
Meanwhile, CEDA will work with search engines to show CEDA members.

"This will be a great way to avoid counterfeit purchases. We welcome franchised distributors to join CEDA and promote franchised distribution service together", said Dr. Liu.

> *"Over 60 executives from distribution companies and OEM/EMS participated in this event"*

Over 60 executives from distribution companies and OEM/EMS participated in this event and an executive conference followed which explored innovation and IPO strategies for franchised distributors in China.

CEDA executive board members Lambert Hilkes, Paolo Wang and Amy Wang and Samuel Liu also gave speeches at the event.
Panel discussions were chaired by Dr. Michael Liu, executives from Future, Honestar, WPG, Mouser and Upstar Technology, Comtech and Mornsun.
Pin Wang from Huatai Securities and Shiming Lu from Zhonghua Accounting were invited to share with executives details of IPO strategies.

EID NEWS
MARKET

- **Microchip** has signed a definitive agreement to acquire **Atmel** for $8.15 per share in a combination of cash and Microchip common stock.
The acquisition price represents a total equity value of about $3.56 billion, and a total enterprise value of about $3.40 billion, after excluding Atmel's cash and investments net of debt on its balance sheet of approximately $155.0 million at December 31, 2015.

- **Acal**, announces the acquisition of Plitron Manufacturing. Plitron, based in Toronto, Canada, is a designer and manufacturer of custom toroidal transformers for transportation, medical and industrial applications.

- **Digi-Key Electronics** and **Aeris**, a pioneer in the Internet of Things (IoT) market, announced the availability of cellular connectivity through Neo SIM cards along with an innovative self-service portal designed for connectivity management.

- Headquartered in near Passau (Germany) and part of the Würth Elektronik eiSos Group, **Würth Elektronik iBE** has acquired **Büchele Group**.
The product portfolio encompasses customized rod core chokes, bent wire parts in various versions and SMD rod core chokes.

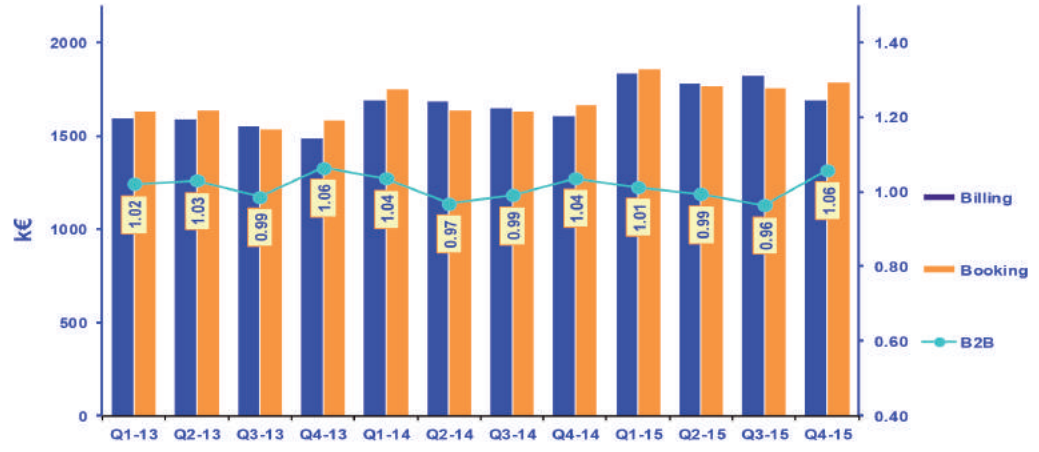
- **Sony** has reached an agreement with **Altair Semiconductor** and its major shareholders to acquire the **LTE** modem chips supplier.
The purchase price is $212 million, and Sony expects to complete the acquisition in early February, 2016.

Q4 2015. A reasonable quarter to end a good year and a positive book:bill!

by Gary Kibblewhite
www.ideaelectronics.com

A good year with total European Bookings up 7.1% for calendar year 2015 compared with 2014.
Also 7% up on this quarter compared with last year and 1.3% up on the prior quarter.
In addition, total billings were up 7.3% for calendar year 2015 compared with 2014 5.6% and up on the quarter compared with last year but unfortunately 7.5% down on the prior quarter.

4TH QTR. 2015 TOTAL COMPONENTS Booking, Billing & Book : Bill ratio — *Graphic T1*



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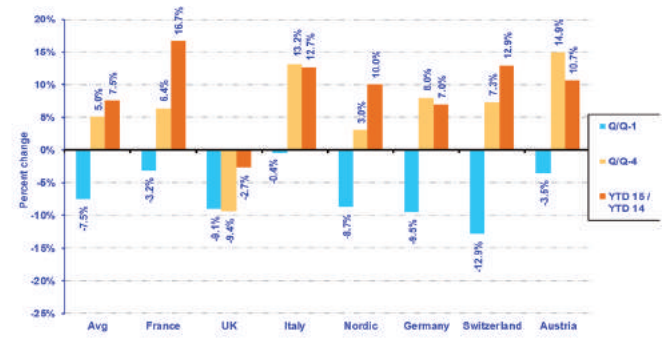
The slowdown in billings compared with the prior quarter is unfortunate but not necessarily a good indicator of future trend as the strong bookings performance will herald strong billings in Q1.
As one can see from *Graphic T1*, we have settled down to a current quarterly level above both 2013 and 2014.
The book:bill is the highest since Q3 2013.
Long may it continue!

The billings trend by country in *Graphic T3* shows that, once again this quarter, all regions apart from the UK are showing a strong billings growth on a year-on-year basis compared with last year. Italy, Nordic, Switzerland Austria and France are all showing a 7% plus growth but the UK is showing a 2.7% decline.

4TH QTR. 2015 TOTAL COMPONENTS Billing Trend — *Graphic T3*



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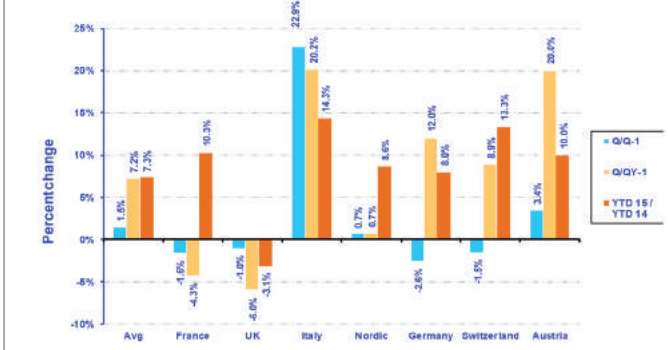
4TH QTR. 2015 TOTAL COMPONENTS Booking Trend — *Graphic T2*



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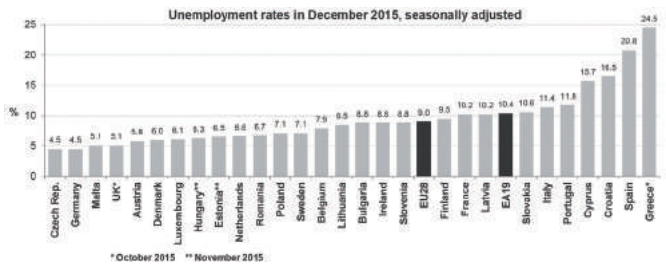
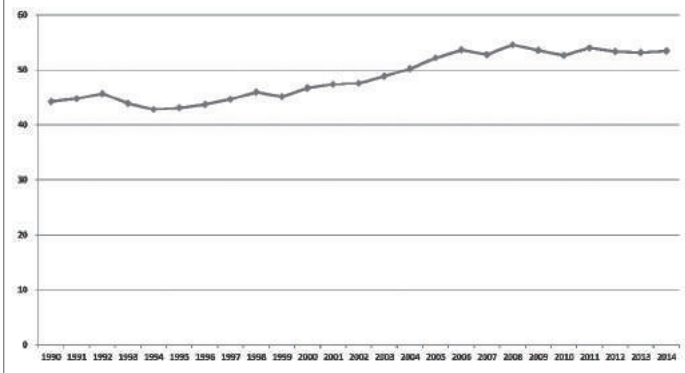
UNEMPLOYMENT RATES IN DECEMBER 2015, SEASONALLY ADJUSTED



Source: Eurostat Graphic A

EVOLUTION OF THE EU ENERGY DEPENDENCY, 1990-2014



Source: Eurostat Graphic B

> *" Total European Bookings up 7.1% for calendar year 2015 compared with 2014. "*

The bookings trend by country in *Graphic T2* shows that Italy had the largest growth in bookings of all European countries in all three of the parameters measured. The UK however, suffered the largest drop in bookings when compared with both the same quarter prior year and the full year 2015 compared to 2014. The total European bookings growth was influenced most heavily by an 8% growth in the largest market, Germany.

A SCENARIO OF THE ECONOMIC BACKGROUND

Graphic A (source Eurostat) shows that the highest unemployment level within the counties covered by this report are in Italy and France and the lowest in Germany and UK. When compared with the prior year all countries covered by these statistic, apart from Austria which posted a small increase, showed a drop in unemployment levels.

An interesting *Graphic B* shows that Europe has a growing dependency on imported energy with the EU now importing over half of all the energy it consumes. This is both a potential threat to users and an opportunity for alternative energy suppliers.

ELECTRONIC COMPONENT SALES IN Q4: OVERVIEW

Total components

The poor quarter's billings in Q4 shows up most clearly in the tendential index shown in *Graphic T6*.

All the countries, apart from Austria, showed signs of a slowing market with the UK continuing to show the most worrying drop in revenues.

QUARTERLY SALES BY PRODUCT FAMILY

Each quarter we look at both booking and billing trends by product and regional market.

> *" The UK electronic components market suffered the largest drop in both bookings and billings "*

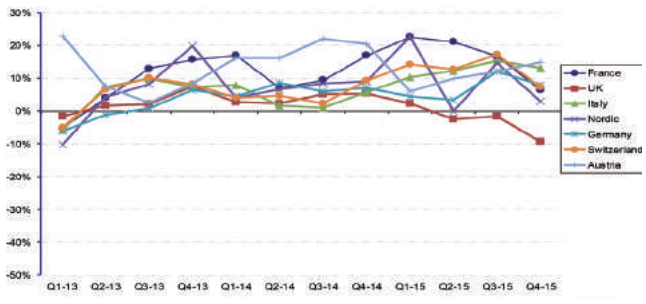
SEMICONDUCTORS

Graphic S1 covering semiconductors shows that, where in the past Semis have been the driver for growth, this quarter they have driven the market decline with Semi billings declining by 8.3% over the prior quarter but still increasing by 5.5% over the same quarter, prior year (2015). The worst performer was the UK with a 2% decline in billings compared with the same quarter prior year. *Graphic S6* shows the

Just to remind readers. If you would like to have the original graphics used in this article just email to the IDEA secretary at *segreteria@ideaelectronics.com*

The IDEA statistics are taken from actual bookings and billings returns made by a substantial percentage of the electronic component distributors in Europe, including all the major distribution groups.

4TH QTR. 2015 TOTAL COMPONENTS TENDENTIAL INDEX BY COUNTRY(Q/Q(Y-1) *Graphic T6*



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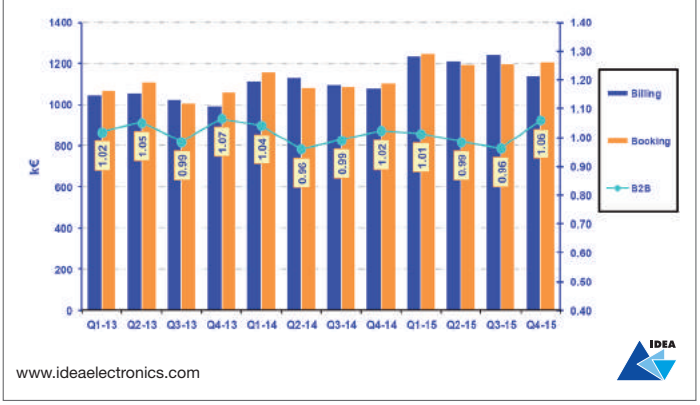
4TH QTR. 2015 SEMICONDUCTOR bookings, billing & book ratio *Graphic S1*



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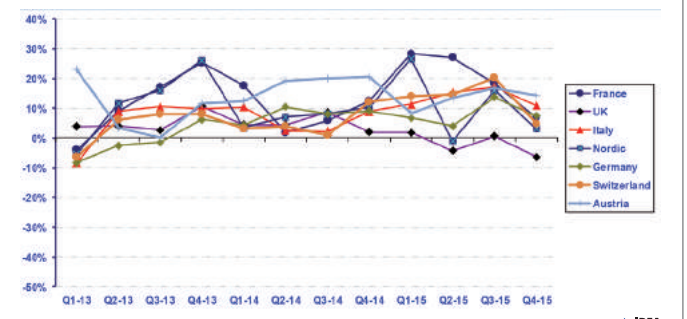
4TH QTR. 2015 SEMICONDUCTOR TENDENTIAL INDEX (Q/Q(Y-1) *Graphic S6*



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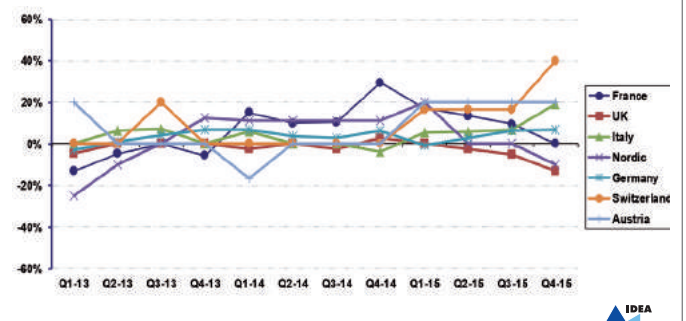
4TH QTR. 2015 PASSIVES TENDENTIAL INDEX BY COUNTRY(Q/Qy-1) *Graphic P6*



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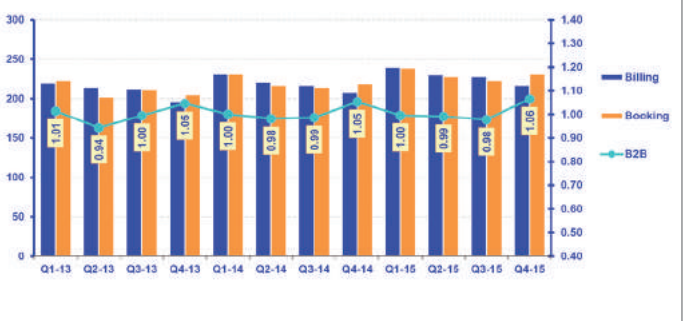
4TH QTR. 2015 PASSIVES bookings, billing & book ratio *Graphic P1*



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extent of the decline in semiconductor revenues this quarter in most market regions. The strong book:bill ratio should, however, produce a strong Q1 billings.

PASSIVE COMPONENTS

Graphic P1, which covers passive components, shows that this last quarter, bookings grew by 3.5% compared to the prior quarter but billings declined by 4.8%. Passives, however, have overall held up well during the year with a strong Q4 book:bill.

The regional *Graphic P6* shows the reason for the drop in total European passive component revenues with the largest drops in UK, France and Nordic.

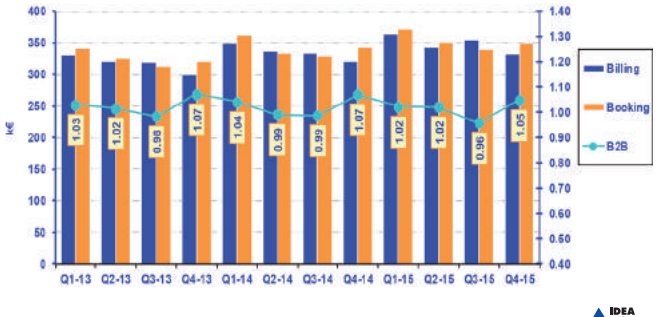
Note: since producing Graphic P6, small changes have been made to historical data for Q4 14 resulting in a lesser % decline for the UK this quarter"

E-MECH COMPONENTS

Graphic E1 covering electromechanical components shows that the drop last quarter in bookings has been reversed with a booking level at the highest since Q1 last year. This has precipitated a positive book:bill ratio which, at 1.05:1 is also the highest in the year. The book: bill ratio improvement has been helped by the poor billings!

Once again, the poor performance of the UK, which has dropped by 7.5% compared with the prior quarter and by 3.2% compared with the same quarter last year, has negatively affected the overall European results.

4TH QTR. 2015 EMECH COMPONENTS bookings, billing & book ratio *Graphic E1*



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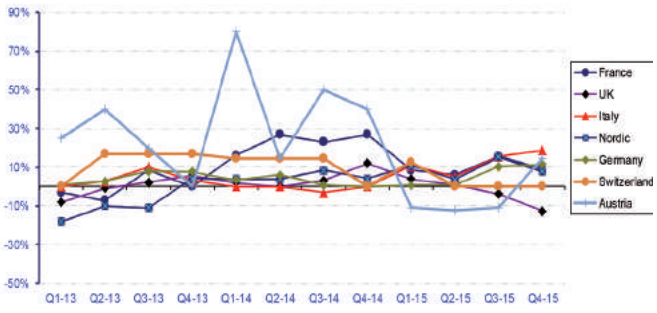
4TH QTR. 2015 EMECH COMPONENTS INDEX BY COUNTRY(Q/Q(Y-1) *Graphic E6*



www.ideaelectronics.com

The Real Top 10 Connector Manufacturers

by Ron Bishop
Bishop & Associates
FbDi e V.
www.bishopinc.com

The top 10 connector manufacturers are usually ranked by world sales, but when Bishop & Associates redefines "top 10," the list of companies moves around as well

Typically, Bishop & Associates ranks the top 10 connector manufacturers by total world sales *(Table 1)*. However, defining the top 10 by annual sales alone is misleading. The top 10 connector manufacturers change significantly if the definition of "top 10" changes.

For example, which are the 10 largest companies in China? Which are the 10 largest companies serving the automotive market? Which are the 10 largest companies that manufacture RF connectors? The answers to these questions are important if you are seeking the top connector suppliers in different geographic regions, end-use markets, or products.

TOP 10 BY REGION

When the top 10 is defined by geographic region, 25 companies achieve "top 10" status. *Table 2* identifies these companies.

> *" We now have 25 companies by geographic region with "top 10" status "*

You will note that only four companies achieved top 10 status in all regions – **TE Connectivity, Molex, Amphenol**, and **Yazaki**.

Delphi Connection Systems achieved top 10 status in all regions except Japan.

TOP 10 BY MARKET SECTOR

When "top ten" is defined as the 10 largest in each end-use equipment sector, 36 companies achieve top 10 status. These companies are identified in *Tables 3* and *4*.

2014 TOP 10 MARKET SHARE *Table 1*

2014 World Rank	Company	2014	Percent Market Share
1	TE Connectivity	$9,266.0	16.7%
2	Amphenol	$4,992.6	9.0%
3	Molex Incorporated	$3,910.6	7.1%
4	Delphi Connection Systems	$3,031.7	5.5%
5	Foxconn (Hon Hai)	$2,883.7	5.2%
6	Yazaki	$2,409.0	4.3%
7	JAE	$1,503.0	2.7%
8	JST	$1,394.0	2.5%
9	Hirose	$1,078.3	1.9%
10	Sumitomo Wiring Systems	$992.2	1.8%
	Total Top Ten	$31,461.1	56.8%
	All Other	$23,940.9	43.2%
	World Total	$55,402.0	100.0%

TOP 10 BY REGION 2014 *Table 2*

Rank	North America	Europe	Japan	China	Asia Pacific	ROW	Total World
1	TE Connectivity	TE Connectivity	TE Connectivity	Foxconn	TE Connectivity	TE Connectivity	TE Connectivity
2	Amphenol	Delphi	Yazaki	TE Connectivity	Foxconn	Yazaki	Amphenol
3	Molex	Amphenol	JST	Amphenol	Amphenol	Amphenol	Molex
4	Delphi	Molex	Molex	Molex	Yazaki	Delphi	Delphi
5	Yazaki	HARTING	JAE	LuxShare	Molex	Foxconn	Foxconn
6	CommScope	Rosenberger	Sumitomo	JAE	Delphi	Sumitomo	Yazaki
7	Samtec	Yazaki	Hirose	China Aviation	Hirose	Rosenberger	JAE
8	Carlisle	Souriau	3M	JST	JST	Korea Electric	JST
9	Rosenberger	Phoenix Contact	DDK	Delphi	Sumitomo	Belden	Hirose
10	ITT Interconnect	Weidmuller	Amphenol	Yazaki	Korea Electric	ITT Interconnect	Sumitomo

TOP 10 BY END-USE EQUIPMENT SECTOR 2014 *Table 3*

Rank	Computers and Peripherals	Business Retail Education	Instruments	Medical Equipment	Industrial Equipment	Automotive Equipment
1	Foxconn	Foxconn	TE Connectivity	TE Connectivity	TE Connectivity	TE Connectivity
2	Molex	TE Connectivity	Rosenberger	Molex	HARTING	Yazaki
3	LuxShare	JST	LuxShare	Amphenol	Amphenol	Delphi
4	TE Connectivity	Molex	LEMO SA	LEMO SA	Molex	JAE
5	Amphenol	Smiths	Molex	3M	JST	Sumitomo
6	FCI	LuxShare	Foxconn	Delphi	Belden, Inc.	JST
7	LEMO SA	Rosenberger	Radiall	Samtec	Phoenix Contact	AVX/Elco
8	LOTES Co. Ltd	IRISO	Hosiden	ODU	3M	Rosenberger
9	JAE	3M	IRISO	Radiall	Weidmüller	Amphenol
10	Shenzhen Deren	Sumitomo	3M	Phoenix	Samtec	Korea Electric

TOP 10 BY END-USE EQUIPMENT SECTOR 2014 *Table 4*

Rank	Transportation Equipment	Military Electronics	Telecom Datacom Equipment	Consumer Electronics	Other Electronics Equipment
1	Delphi	TE Connectivity	TE Connectivity	Molex	TE Connectivity
2	TE Connectivity	Amphenol	Amphenol	TE Connectivity	Hirose
3	Amphenol	China Aviation	Molex	JST	Delphi
4	Molex	Glenair	JAE	CommScope	Sumitomo
5	Yazaki	ITT	Hirose	Delphi	Multi-Contact
6	Sumitomo	Carlisle	LuxShare	IRISO	Foxconn
7	Carlisle	Souriau	Rosenberger	LuxShare	3M
8	Korea Electric	Radiall	CommScope	JAE	Samtec
9	Lear Corporation	Delphi	Foxconn	FCI	JAE
10	Kostal Kontakt	ODU	Delphi	Hirose	JST

TOP 10 BY PRODUCT TYPE 2014 *Table 5*

Rank	PCB	I/O Rectangular	IC Sockets	RF	Circular	Telephone/ Telecom
1	TE Connectivity	TE Connectivity	Foxconn	Rosenberger	Amphenol	Molex
2	Molex	Foxconn	TE Connectivity	Amphenol	Belden, Inc.	TE Connectivity
3	Foxconn	Molex	Molex	TE Connectivity	TE Connectivity	Amphenol
4	Amphenol	JAE	LOTES	HUBER+SUHNER	LEMO	CommScope
5	JST	LuxShare	Yamaichi	CommScope	Delphi	Foxconn
6	Hirose	JST	Foxlink	Hirose	Carlisle	LuxShare
7	JAE	Amphenol	Amphenol	LuxShare	Souriau	JST
8	Samtec	Delphi	BizLink	Radiall	China Aviation	Foxlink
9	AVX/Elco	Yazaki	Hirose	I-PEX Co., Ltd.	ODU	HARTING
10	LuxShare	3M	FCI	Foxconn	Glenair	Hirose

TOP 10 BY PRODUCT TYPE 2014 *Table 6*

Rank	Fiber Optic	Terminal Blocks	Heavy Duty	Power/ High Voltage	Application Specific	Other
1	TE Connectivity	Phoenix Contact	HARTING	Amphenol	Delphi	Amphenol
2	CommScope	Weidmüller	Amphenol	TE Connectivity	Yazaki	JAE
3	Amphenol	WAGO	TE Connectivity	JST	TE Connectivity	TE Connectivity
4	Molex	ABB Entrelec	Souriau	Yazaki	Amphenol	Yazaki
5	Delphi	TE Connectivity	Molex	Delphi	Molex	Delphi
6	Rosenberger	Molex	JST	ITT	Sumitomo	3M
7	China Aviation	FCI	China Aviation	Molex	Korea Electric	Molex
8	HUBER+SUHNER	HARTING	JAE	FCI	Kostal Kontakt	China Aviation
9	Radiall	AVX/Elco	ODU	Sumitomo	Lear	Hirose
10	Yazaki	SMK	AMETEK	China Aviation	JST	FCI

TE Connectivity achieved top 10 status in all 11 market sectors. Molex was top 10 in eight, Amphenol and Delphi in seven, and Foxconn, LuxShare, JAE, JST, and 3M achieved top 10 status in five market sectors.

TOP 10 BY PRODUCT

We classify products into 12 major product categories or types. When the 10 largest companies are defined by product type, 41 company names appear. These companies are identified in the *Tables 5* and *6*.

We now have 25 companies by geographic region with "top 10" status, 36 in market sectors, and 41 in products. This is a larger "top 10" list, but we have only just started identifying the largest connector providers.

What if you need to find the largest provider of a specific connector in a specific country?
The top 10 list would definitely change if you were looking for Mil-DTL-38999 connectors in Germany, France, or South Korea.

For information:
There are more than 1,000 connector companies in the world. **Bishop & Associates** has profiled more than 700 of these companies and archived the profiles on a sortable website called the World's Connector Companies.
To learn more, visit *www.wccreport.com* or contact *bishop@bishopinc.com*

20th Edition of the "Trophées du SPDEI"

by Pascal Fernandez
SPDEI France - VP Avnet Velocity - VP Business Develop
www.spdei.fr

For the 20th consecutive year the **SPDEI** has organised its annual award ceremony on December 2nd in Paris at the prestigious Automobile Club de France.
SPDEI presented awards to component manufacturers across 11 categories:

Optoelectronics,
Standard components,
Analog RF and Microwave,
High End digital,
Passive,
Connectors,
Cables and accessories,
Electromechanical,
Energy and for the first time *Embedded components,* taking into account the evolution of our profession.

We were particularly proud and touched to celebrate the 20 years of our annual event in front of such a broad panel, representing the different elements of the electronic value chain.

This is a clear sign of the dynamism of our industry and makes us very confident for the future. 2015 has been a positive year for French distribution with a growth in Euro close to **15%**.
The new industry challenges such as, energy and digital infrastructure, building industry, mobility, digital trust and Internet of Things represent all formidable growth opportunities for all of us.

> *" 2015 has been a positive year for French distribution with a growth in Euro close to 15% "*

> *" Many new industry challenges represent formidable growth opportunities "*

UK Modern Slavery Act 2015 more legislation for the Electronic Components Supply Network...

by Adam Fletcher
Chairman of IDEA and ECSN
www.ecsn-uk.org

Those of us who thought slavery was an unsavoury historical remnant would do well to think again following the enactment of the government's new Modern Slavery Act 2015, which has significant implications for the electronic components supply network. In this article ecsn / IDEA Chairman Adam Fletcher reviews the legislation and its implications for organisations across the Electronic Systems Community internationally, and suggests how organisations should proceed to ensure they are compliant...

The **UK Modern Slavery Act** legislation became law on 26 March 2015. Announcing its enactment the Home Secretary, the Rt. Hon. Theresa May MP, said, *"modern slavery is a heinous crime that affects communities and individuals across the globe."*
All right minded citizens will of course agree with her sentiment but sadly some individuals and organisations still seek to profit from 'vulnerable individuals exploited into slavery, servitude and forced or compulsory labour in contravention of Article 4 of the Human Rights Convention'.

The new legislation is necessarily complex, covering as it does offences, penalties & sentencing, prevention orders, trafficking risk orders, supplementary provisions, maritime enforcement, protection of victims etc. However the element of the new legislation most relevant to the electronic components supply network is Part 6, *'Transparency in Supply Chains'*, which seeks to address the role of businesses in preventing modern slavery from occurring in their supply chains and organisations.

According to the UK Home Secretary, Part 6 will require businesses to be transparent about what they are doing and will increase competition to drive up standards: *"I want to support, motivate and incentivise organisations to understand the complex issue of modern slavery and how they can tackle it,"* Mrs May said. *"Organisations with significant resources and purchasing power are in a unique and very strong position to influence global supply chains..."*

> **"Part 6 of the UK Modern Slavery Act will impact all organisations operating in the UK electronic components supply network with annual sales revenues greater that £36M"**

IMPACT

Part 6 of the UK Modern Slavery Act will impact all organisations operating in the UK electronic components supply network with annual sales revenues greater that £36M / $54M, which is a very substantial number of organisations. It mandates them to produce an annual statement setting out the steps they have taken in the financial year to ensure there is no modern slavery and human trafficking in any part of their business or anywhere else in their supply chains.

If a business fails to produce a **Slavery and Human Trafficking statement** for a particular financial year the Secretary of State may seek an injunction through the High Court requiring the organisation to comply. If the organisation fails to comply with the injunction, it could be held in contempt of a court order, which is punishable by an unlimited fine.

Organisations with a financial year-end from 29 October 2015 up to and including 30 March 2016 will not be required to make a slavery and financial statement for the financial year 2015/16. However organisations with a financial year-end of 31 March 2016 will be required to publish their statement for the financial year 2015/16 within 6 months of the end of their financial year.

Any organisation that is an autonomous part of a group structure will have to meet the requirements and is legally required to produce a statement. In the case of a parent company with one or more subsidiaries in the same group, the parent may produce a single compliance statement that subsidiaries can use to meet this requirement (provided that the statement fully covers the steps that each individual operation has taken in the relevant financial year). A non-UK based organisation or a foreign parent company

carrying on a business or part of a business in the UK, will be required to produce a statement.

ARE YOU SITTING COMFORTABLY...?

According to the new legislation a statement must be written in simple English (but may be translated into alternative languages as required) and set out the steps an organisation has taken to prevent modern slavery in its supply chains and its own business. It does not however dictate in precise detail what other information a statement must include or how it should be structured. That said there seems an expectation that a statement should for instance include information about:

(a) the organisation's structure, its business and its supply chains;

(b) its policies in relation to slavery and human trafficking; **(c)** its due diligence processes in relation to slavery and human trafficking in its business and supply chains;

(d) the parts of its business and supply chains where there is a risk of slavery and human trafficking taking place, and the steps it has taken to assess and manage that risk;

> *" Yet another 'headache' for the electronic components supply "*

(e) its effectiveness in ensuring that slavery and human trafficking is not taking place in its business or supply chains, measured against such performance indicators as it considers appropriate;

(f) the training and capacity building about slavery and human trafficking available to its staff.

The completed statement must be signed by a director, member or partner of the organisation. In a limited company it must be approved by the board of directors and be signed by a director.

The expectation is that compliant organisations will build upon their statements year on year and evolve and improve on them over time. However, companies that fail to comply with the provision, or submit a statement that indicates that they have taken insufficient steps towards compliance, risk serious damage to their commercial reputation.

It will be for consumers, investors and Non-Governmental Organisations to engage and/or apply pressure where they believe an organisation business has not taken sufficient steps. Among the key objectives of the new legislation is to **increase transparency** and it is therefore imperative that an organisation's statement can be easily accessible by anyone who wants to see it. Accordingly organisations are mandated to publish their slavery and human trafficking statement on their **company website** and include a link in a prominent place on the homepage.

ANOTHER 'HEADACHE'...

Unfortunately Part 6 of the Modern Slavery legislation looks likely to be yet another *'headache'* for the electronic components supply network of the sort it previously suffered because of RoHS and REACH legislation.

I predict a great flurry of money sapping activity as many customers seek to contact their suppliers, primarily manufacturer authorised distributors who serve 98% of customers, and/or those few manufacturers from whom they source directly requesting the information they are required to have in order to complete their statements. About the only positive element of this task is as I understand it, that organisations are able to 'stage' the process.

It's apparently OK for a company's first annual statement to be fairly vague as long as it's improved upon progressively in subsequent years. The reality is that I don't envisage a situation where the government has any appetite for hauling numerous organisations through the courts and is probably relying on pressure from customers and NGOs to ensure widespread compliance.

"So much for the UK governments' initiatives to reduce the burden of red tape and legislation on industry... It looks like those involved in the communication, notification and compliance with legislation will have another busy year," Fletcher concluded.

In force with immediate effect: Revised German ElektroG and new scale of fees applying to the Act!

by Wolfram Ziehfuss
Executive Director FBDi e.V.
www.fbdi.de

The European WEEE Directive (recast) (2012/19/EU) has now been implemented in German national law: On 23 October the "Gesetz zur Neuordnung des Rechts über das Inverkehrbringen, die Rücknahme und die umweltverträgliche Entsorgung von Elektro- und Elektronikgeräten", i.e. the revised ElektroG, Electrical and Electronic Equipment Act was published in the Bundesgesetzblatt (BGBl., Federal Gazette). At the same time the Gebührenverordnung zum ElektroG (ElektroGGebV) (new scale of fees applying to the revised Act) was published. As a result, the Act and the associated Regulation came into force on Saturday, 24 October 2015.

The most significant changes in the German ElektroG include:

- All **electronic and electrical products** are covered by the ElektroG; exceptions must be specified explicitly.
- **The definition of 'manufacturer'** has been broadened significantly. For instance, a company that has its headquarters outside Germany and offers products directly via remote communication technology (e.g. via advertising) without itself distributing the products is deemed to be a manufacturer.
- **LED lamps** are once again and with immediate effect included in a common collection category together with gas discharge lamps.
- **PV modules and light fittings** in private households will become subject to registration within 3 months of the ElektroG coming into force.
- Foreign manufacturers without a local subsidiary in Germany must either establish a subsidiary or commission an **authorized representative** and communicate this to the UBA (Umweltbundesamt, Federal Environment Agency).

This representative then takes on all obligations and rights pertaining to the manufacturer within Germany. Foreign manufacturers who are already registered must fulfil the new requirements within 6 months, otherwise the registration will lapse.

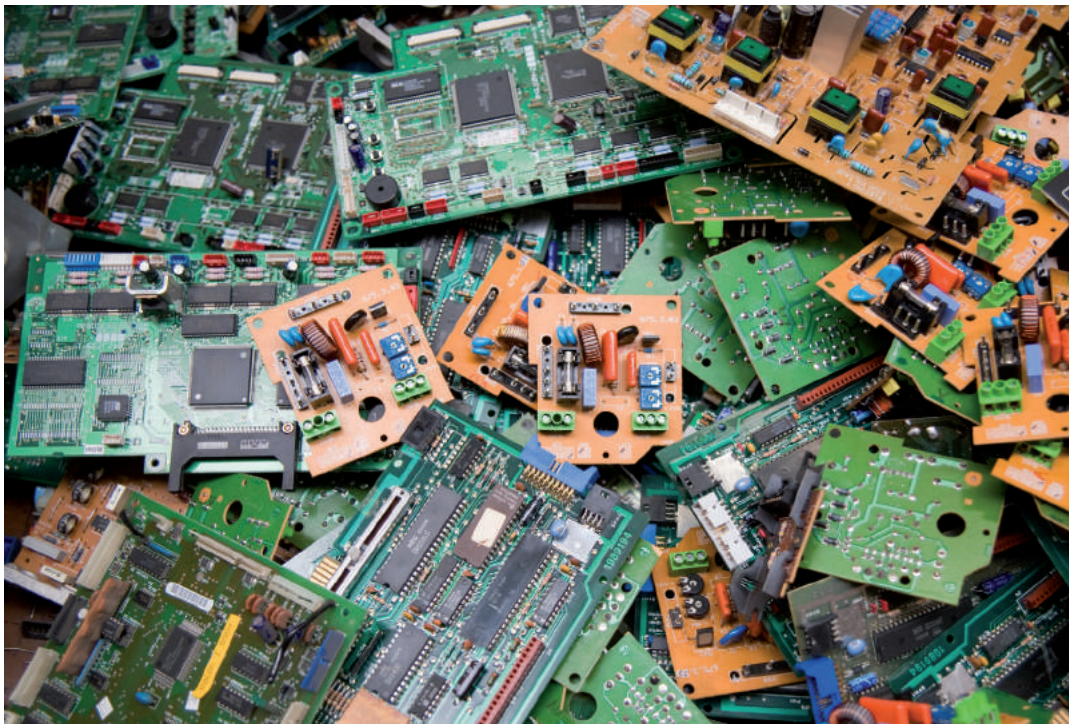
> **"The European WEEE Directive (recast) (2012/19/EU) has now been implemented in German national law"**

- **Obligation to take back:** From the 9th month following coming into force (or from 24 July 2016) traders in electronic products who have more than 400 m² of sales area must be prepared to take back old devices of which no external dimension measures more than 25 cm, without the bringer being under any obligation to buy something new. For larger devices the obligation to take back only applies when a similar product with similar functions is purchased.
- **Online traders** (with more than 400 m² of storage and dispatch area) must organize taking back the old devices within a 'reasonable distance' to the customer.
- **Financing guarantee:** Every calendar year, all manufacturers or their representatives must provide the respective authority with an insolvency-secured guarantee regarding the financing of taking back and disposal of the electrical and electronic devices that they have distributed to the market since 13 August 2005 within the scope of application of the ElektroG and that can be used in private households. The beneficiary of the guarantee must be the 'Stiftung EAR' (national register for waste electric equipment).

> **"Traders in electronic products who have more than 400 m² of sales area must be prepared to take back old devices of which no external dimension measures more than 25 cm"**

NEW SCALE OF FEES IN FORCE

In addition, the new scale of fees applying to the ElektroGElektro GesetzGebührenVerordnung (ElektroGGebV) was also published in the Federal



Gazette and is in force since 24 October 2015. It replaces the previous fee scale called the *ElektroGesetzKostenVerordnung (ElektroGKostV)*.

Contrary to what was to be hoped for, the fees are now even higher than before. For instance: €499.60 net for registering a B2C trader with a manufacturer-specific guarantee (€210.50 for the registration and €289.10 for the guarantee); or €407.40 plus VAT for a B2B trader (registration €210.50 and €196.90 for verification that credible evidence has been furnished). The cheaper supplementary registrations have been dropped, so that instead of €35 (net) as before each extra registration now costs €210.50 plus VAT.

" The definition of 'manufacturer' has been broadened significantly "

DEADLINES

All the ElektroG regulations enter into force immediately; the FBDi draws express attention to the following, important **transition periods:**

1 Jan. 2016	Change in the B2C guarantee disposition; collection rate increases to 45%.
24 Jan. 2016	Obligation to report for traders who already take back voluntarily (so-called 'own take-back systems').
1 Feb. 2016	Obligation to register for PV modules and light fittings in private households; reorganization of the collection categories.
24 Apr. 2016	Requirement to name a representative for foreign manufacturers without German subsidiaries.
24 Jul. 2016	Start of obligation to take back for major traders; start of requirement to provide information to consumers.
15 Aug. 2018	Reorganization of the product categories 'open scope of use' and all other changes in the ElektroG apply from this date.
1 Jan. 2019	Collection rate 65%

The confirmation of a named representative costs €264.90 plus VAT.
In this connection, a significant change has been the switch from the previous digital EAR system to a new web-based version.
The FBDi draws express attention to the fact that with this revision of the ElektroG changes to the KreislaufwirtschaftsG (Life-Cycle Management Act) and the BatterieG (Battery Act) have been made concurrently.

EID NEWS

MARKET

- **OriginGPS**, a manufacturer of miniature Global Navigation Satellite Systems (GNSS) modules, has struck a partnership with **Future Electronics**. As part of the agreement, OriginGPS' ultra-small form factor and low-power GNSS modules will be distributed around the globe via Future's dedicated wireless and radio frequency (RF) business unit, Future Connectivity Solutions.
- **TE Connectivity** has entered into a definitive agreement to acquire the **Creganna Medical** group for $895 million in an all cash transaction. Creganna Medical designs and manufactures minimally invasive delivery and access devices serving medical device original equipment manufacturers. The company, headquartered in Ireland, reported sales of approximately $250 million in 2015 and is a portfolio company of Permira Funds.
- **Electrocomponents** has issued its trading statement for the period from 1 October 2015 to 31 January 2016. For the four months to 31 January 2016 Group underlying sales growth was 2%. Continental Europe saw 10% growth with all major markets in the region performing well.
- **e2v,** a global supplier in the high-reliability semiconductor market, and **Peregrine Semiconductor**, founder of RF SOI (silicon on insulator), have signed a strategic reseller agreement. e2v will be the sole provider of Peregrine's high-reliability integrated circuits for the worldwide **space market**.

Top5 SSL TechTrends to look out for in 2016

by Franco Musiari
Technical Director, Assodel
www.assodel.it

by Silvio Baronchelli
President, Tecnoimprese
s.baronchelli@tecnoimprese.it

There are many technologies involved in Solid State Lighting (SSL) that are not only innovative solutions but also have the capability of adding substantial functionality to applications. The magic number for this kind of article is ten but time and space have led me to show my "Top5".

1. LED 2.0, A NEW LED TECHNOLOGY

The true history of LED started with Gallium Nitride – GaN - which allowed the Nobel prizewinner Shuji Nakamura, who is still in Nichia, to develop the first LED with a blue emission. But in the eighties, it was impossible to obtain reasonably sized crystals of GaN so the primary option was to grow the GaN on sapphire (Al_2O_3) or Silicon Carbide (SiC), both of which are still widely used. Recently Silicon has entered the arena so GaN-on-Si has been chosen by some LED players. However, none of the above materials has a crystalline structure similar to that of GaN as the base material is full of defects in the lattice, which is the main reason for the reduced efficiency in light generation.

But if you grow the GaN-on-GaN this problem is drastically reduced and Mr Nakamura, and his people at Soraa – the company he contributed to founding in 2008 – have demonstrated it: *"At Soraa, we have carefully measured light extraction efficiency for state-of-the-art triangular-shaped GaN-on-GaN LED chips at 90%, the highest reported in the industry. Operable current densities are up to 200A/cm^2 with complete power density uniformity, which is about ten times the operating power densities of LEDs based on foreign substrates.*
Mr Nakamura states that GaN-on-GaN is the technology of the future for LED.

> *" GaN-on-GaN is the technology of the future for LED "*

2. MORE EFFICIENT & EFFECTIVE SUPPLY ARCHITECTURE

Up until now, each LED lighting system has come with its own PSU - or driver – that converts AC into the proper format to drive the LEDs. Then in each and every module there must be a bulky AC/DC converter.
A solution in which there is only one central AC/DC capable of serving all module such as Tridonic's proposal for its TALEXengine, brings various advantages like the miniaturization of LED module, an easier and less bulky cabling and safer maintenance of every single light point whilst maintaining control thru DALI.

3. THE LAN CAN CARRY THE POWER

Another alternative to power SSL is the "Power over Ethernet (PoE)" which is covered by IEEE 802.3. Power is supplied by the PSE (Power-Sourcing Equipment) part of the network hub. Currently the 802.3 at standard states that the PSE can supply up to 30W.
But a new release – 802.3bt – will increase the power to 90W. More than enough for many lighting applications. With PoE each luminaire can become a device with its own IP address and adding sensors can transform it into a smart hub.

4. ZHAGA … A LIGHTING STANDARD

LED as components offer such a wide range of solutions and formats that SSL manufacturers have integrated them directly in their products insted of designing their systems around replaceable lamps (as has been done for years). But what happens in case of failure? And what happens if better and more efficient devices appear on the market? Zhaga is creating a set of Interface Specifications, known as Books, which define the conditions necessary for interchangeability.
Each Book defines an LED light engine and/or associated components by means of the mechanical, photometric, electrical, thermal, and control interfaces between the product and its environment.

> *" Li-Fi is the next killer app "*

5. LI-FI: THE NEXT KILLER APP

After Ethernet and Wi-Fi a new way to communicate wirelessly without using the overcrowded RF spectrum is to make use of the network of LED luminaires. In other words a high speed transmission network that is higher than the best Wi-Fi today available.
Wi-Fi radiates radiofrequencies that in many environments, like hospitals or aircraft, are not allowed. Li-FI overcomes such limitation.

Start-up Promoting Innovation

by Rajoo Goel
Elcina
www.elcina.com

India has come up with a **policy on Start-ups** for nurturing innovative ideas and new ventures. The scope of start-ups especially in technology areas is very promising in India where its people have demonstrated a high degree of entrepreneurship. Entrepreneurship and innovation are fuelled by free thinking which is in turn encouraged by democratic governance and a capitalistic economic system.

The year 2014-15 witnessed hyper growth in the technology start-up and software product domains with India ranking as the fourth largest start-up hub in the world with over **3,100 start-ups** in the country. As per reliable economic surveys, software products and services revenues for 2015-16 are projected to grow at 12-14%. Start-ups are contributing significantly to this growth. Unpredictable economic conditions and volatility due to rapid decline in oil prices and the slowing Chinese economy have raised new challenges for businesses in their infancy. In such an environment, start-ups face serious challenges and need a supportive system to survive and grow.

Start-up India campaign is based on an action plan aimed at providing easier bank financing for new ventures to boost entrepreneurship and jobs creation. The campaign, announced on 15th August 2015, India's independence day, focuses on unfettering start-ups from policies of State Governments, a less regulated policy environment as well as easier land permissions, approvals of foreign investment proposal and more.

> *"Start-ups will be provided a tax holiday of three years, ensuring that innovators won't lose the benefit"*

As per the recently announced Start-up scheme, a start-up is an entity that is headquartered in India which was established less than five years ago and has an annual turnover of less than **US$3.5 million** as per the present Indian Rupee vs USD exchange rate. The government has already launched PMMY *(Pradhan Mantri's Mudra Yojna)* which translates to Prime Minister's Monetary Scheme, to facilitate financing activities relating to start-up units with a refinancing Fund of US$ 3 bln. The salient features of Start-up India campaign are:

1. The government will set up a fund with an initial corpus of US$ 370 mn and a total corpus of US$ 1500 mln over a period of four years.
2. Start-ups will be provided a tax holiday of three years.
3. Credit-guarantee mechanisms to be set up to help Start-ups meet their fund requirements, with an annual corpus of US$ 75 mn for the next four years.
4. For public procurement, new Start-ups will be exempted from the criteria of prior experience and turnover.
5. In order to facilitate the exit of Start-ups, the government has come up with Bankruptcy Bill, 2015, which has provisions for voluntary closure of businesses.
6. A dedicated program is launched to help incubators, establishing 500 testing labs, facilitating pre-incubation training, and strengthening existing incubators.

In addition to the above, the **Ministry of Human Resource Development** (MHRD) and **Department of Science and Technology** (DST) have partnered in an initiative to set up over 75 start-up support hubs across the country.

Their focus has been on improving infrastructure, especially in the Tier-II cities. **Kerala,** the southernmost State in India, is well known for the government's start-up policy, focuses on fetching US$740 mln in investments for the start-up ecosystem. It also made India's first telecom incubator Start-up village in 2012.

> *"Credit-guarantee mechanisms to help Start-ups meet their fund requirements"*

There are other challenges being faced by most of the start-ups in India, like:
1. Availability of qualified employable manpower at an affordable cost;
2. Addressing high attrition rate among experienced employees and retaining trained manpower. Bigger players in the market poach from the enterprises which are in infancy stage;
3. Consistent capital adequacy is the biggest challenge;
4. Guidance, mentorship by experienced entrepreneurs;
5. Availability of required technical know-how/ assistanceat an affordable cost;
6. High gestation period: monetisation of efforts takes a longer time than expected.

Government of India is also trying to address these challenges partnering with academic institutions and industry bodies.
We believe this initiative would have a long lasting effect on the country's economy and would provide legroom for the innovators. Ultimately, entrepreneurship and innovation are the keys to a dynamic economy for spurring growth and prosperity for all.

Scandinavian Electronics Event,
April 19-21 in Stockholm

by Lena Norder
SE Swedish Electronics Trade Association

Upcoming event: The Swedish Electronics Trade Association (Svensk Elektronik) proudly presents this year's edition of the Scandinavian Electronics Event, S.E.E., the biggest trade show for the professional electronics industry in Sweden with hundreds of exhibitors and thousands of visitors on site.

Exhibitors representing the wide range of the value chain from idea to product, including design, components, manufacturing, machines and test & measurement equipment.

> *"This year the exhibition also includes Live Production"*

For those who want to find business connections in Sweden, this is a good event to attend.
Among other things, this year the exhibition also includes Live Production: on an area of over 250 square meters, two different circuit boards will be produced, before the eyes of visitors, then shipped to a section for purity measuring, washing and polishing all conducted by Bob Willis, a recognized expert in the field.

There is also a rich seminar programme, but presentations are mainly in Swedish although a few will be held in English. Find out more at *www.see-event.se*.
SE.E. planning and organization is achieved through a huge dedicated effort by members, creating the best possible venue for business, knowledge and innovations that strengthen competitiveness.

> *"For those who want to find business connections in Sweden, this is a good event to attend"*

South African electronics industry expo: SAIE expo 2016
16 & 17 August 2016, Venue: Kyalami International Convention Centre, Midrand, South Africa

by Arnold Perumal
Chairman AREI
adec@icon.co.za

The premier event to promote the South African electronics industry, the **SAIE Expo 2016** will encompass a wealth of conferences and seminars bringing together the likes of B2B, IoT, connectivity, LED lighting, automotive, metering, military, industrial and communications technologies. Over the 2 days, the event will give an insight into the dynamic electronics sector, with a uniquely local flavour.

TOP 7 HIGHLIGHTS TO EXPECT IN 2016

- **Buyer-Seller Meetings:** a unique platform for high-volume buyers of electronics to have face-to-face meetings with leading suppliers of electronics. Special facilities are available for high-volume buyers wanting to make use of this platform.
- **Vendor Development Talks:** while the Buyer-Seller Meetings provide a one-on-one platform, Vendor Development Talks enable top Buyers to share their sourcing requirements and vendor selection parameters with a larger number of sellers.
- **International Exhibitors:** exhibitors from leading electronics nations such as the UK will be exhibiting at **SAIE Expo 2016** and its co-located shows. Besides regular business, the event provides a platform for strategic business deals such as joint-ventures, distributorships to be made.
- **VIP Lounge:** we realise that closing business deals can be facilitated by providing the right environment. Thus, for our exhibitors and our VIP guests, a large and well managed VIP Lounge will be provided.
- **Innovators' Zone:** a unique area where you get to witness the latest innovations by South Africans. You are bound to get new business ideas from this and may also end up partnering with innovators.
- **TIKZN and Government Zone:** visitors will be able to engage with Trade and Investment Kwa Zulu Natal in a dedicated floor space.
- **Educational Zone:** celebrating AREI's commitment to science and engineering studies, a plethora of educational institutes to encourage studies in the engineering field.

For info: *info@arei.co.za*

Russian new challenges

by Ivan Pokrovsky
Executive Director
ASPEC

The Russian market dropped by **14%** in 2015 compared to 2014. We predicted minus 12% year ago, but the government continues their strange policy and we go down faster together with all manufacturing industries. It seems the future of some other countries is more important for the government than Russian economics.

The Central bank increased the rate of refinancing up to 16% to stop speculations on the currency market. It stopped the refinancing of industry at once. Manufacturing businesses can't take credits with an upper rate of 20%. The ruble rate continues to jump up and down. Sometimes 10% a day.

> *" The ruble rate continue to go up and down. Sometimes 10% a day "*

As a result, **business of distributors is like a lottery**. They don't know whether an invoice is profitable or not while payment is in a process. What is the Central bank going to do? They are going to increase the refinancing rate further. Only speculators can do business in this conditions. The good news is more and more people understand that changes are necessary. They see that the *"local to local" business model* is not working any more.

Demand for the government and oil and gas companies is going down. This leads to a reduction of the whole economy. But some industries are growing. Russian software developers increase their sales volume by **16%** in 2015. This industry is working for the global market, the export volume is about **6 billions** (10 times more than in 2005). Electronics companies hope to repeat the success of the software industry. We don't know is it really or not, but they are going to try. Some leading companies have decided to support the development of a new industrial strategy.

> *" The good news is that more and more people understand that changes are necessary "*

It will be strategy for business society and for the government. We hope establishment will be more perceptive while conditions will be harder. Every two weeks we hold meetings and discuss problems, opportunities and strategic visions. We work with OEMs, EMS companies and microelectronics manufacturers. We see they have different points of view and have differing needs.

It is **a challenge to expand visions** and to agree the strategy with maximum synergy. We need more information and more cases.

I would greatly appreciate it if **IDEA Newsletter readers** could share more examples and cases of electronics industry strategies and links to useful sources!
Please send any suggestion to: segreteria@ideaelectronics.com

IDEA NEWSLETTER
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I was delighted to see our Russian friend Ivan Pokrovsky finish 103rd out of just under 400 who completed the tough Pustertaler Ski Marathon in Italy a few weeks ago. Ivan was the fourth Russian to finish this prestigious 32 km event.

LUMEN

CONSORZIO ELINT

CONSORZIO ELETTRIMPEX LUMEN INTERNATIONAL

The Elint Consortium acts in the SSL (Solid State Lighting) and Electronics area to promote "made in Italy" products and applications internationally. Elint is a member of Federexport-Confindustria and actively cooperates with several public Institutions for matters regarding export

2016 PROGRAM

>Showroom

temporary showroom of lighting/LED solutions and design products

>International fairs

participation to the most important fairs and events in Italy and abroad

>Workshops & Events

conferences, events and forums devoted to new technologies

>Communication

Web, directories, newsletters, magazines

in partnership with

assodel

>Roadshows

itinerary events to promote smart technologies for lighting and home automation

>B2B meetings

One-to-one meetings with International operators in the SSL field

>International promotion

activities to promote SSL/Made in Italy applications and products

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