

KORUM

Korea Unternehmen Märkte

Nr. 73 I Februar 2018



Schwerpunkt

Wirtschaft und Branchen

KGCCI Membership Drive

Because Members Know Best...

Recommend membership at KGCCI to your friends and business partners. Benefit from an even larger network and attractive bonuses! For each new corporate member you recruite, you receive an extra free ticket to one of our attractive KGCCI event for your business partner, friend or spouse.*



Building Synergies <

Special interest groups within the KGCCI ensure that topics of various perspectives are given a voice. YLG (Young leaders group), WIR (Female leadership group) and KEF (Korean executive forum) were established to inspire and to create even more synergies for the Korean and German society.

Expanding Opportunities

Enter the Korean-German business community and meet influencers as well as decision-makers from a wide range of industries to build a valuable network. KGCCI organizes various events on current topics (Economic Outlook, Energiedialog) and provides numerous opportunities to expose your company and to connect with potential partners. One example is our yearly Innovation Award.





BENEFITS INFORMATION

0



► Knowledge is Power

Stay up-to-date on the latest issues and market trends in Korea through our newsletters, magazines and other publications and enjoy exclusive access to our membership directory with contact information of all KGCCI members.

► Maximizing the Success

We provide a wide range of services focused on market access and market expansion. Our services include market analysis, business partner search, tradeshow support, HR and office space solutions, VAT refund and more. KGCCI members enjoy a discount on service fees.

▶ One Strong Voice

As the voice of the Korean-German business community and supported by the German Federal Ministry for Economic Affairs and Energy we strive to support our members through open dialogues with governmental bodies.

Share these advantages with your business partners and friends! Membership form and application information:



korea.ahk.de/members-korea

+82 2 37804 630



members@kgcci.com



+82 2 37804 637



Medizintechnik

Liebe Leserinnen und Leser,

die olympischen Winterspiele 2018 haben in Pyeongchang begonnen und das Augenmerk richtet sich sowohl aufgrund des sportlichen Spektakels als auch der zahlreichen hochkarätigen Gäste der Weltpolitik auf Korea. Auch Bundespräsident Dr. Frank-Walter Steinmeier war im Rahmen seines offiziellen Besuchs bei der Eröffnungsfeier dabei. Im Vorfeld weiterer offizieller Termine hatte sich Bundespräsident Steinmeier bei einem Roundtable auch mit Mitgliedern der AHK-Korea über Aussichten und Herausforderungen deutscher Investoren in Korea ausgetauscht.

Mit der Aufgabe betraut, die wirtschaftlichen Beziehungen zwischen der Bundesrepublik Deutschland und der Republik Korea zu fördern sowie die Interessen der Wirtschaft in beiden Ländern zu repräsentieren, war es uns ein wichtiges Anliegen, insbesondere die Forderungen der deutschen Wirtschaft in Korea zu vertreten. Denn jüngste Umfragen hatten ergeben, dass Korea unverändert ein wichtiger Markt für deutsche Unternehmen bleibt, jedoch das koreanische Geschäftsumfeld weiterhin eine Herausforderung darstellt.

Wir blicken dennoch optimistisch auf das neue Jahr und sind gespannt, welche Faktoren die Wirtschaft 2018 ankurbeln wird. So widmet sich diese Ausgabe des KORUMs der Medizintechnik, einem vielversprechenden Sektor, der aufgrund demografischer Entwicklungen und auch im Zusammenhang mit dem Gesundheitsprogramm der Moon-Regierung gute Aussichten verspricht.

Wir wünschen einen erfolgreichen Start ins neue Jahr und viel Spaß beim Lesen!



Barbara Zollmann Geschäftsführerin AHK Korea / KGCCI

Dear readers,

the PyeongChang Winter Olympics 2018 finally began and all eyes are on Korea, not only because of the spectacular sports event but also due to the top-level guests of world politics. German Federal President Dr. Frank-Walter Steinmeier also joined the opening ceremony as part of his official visit to Korea. Ahead of further official schedules President Steinmeier joined the roundtable with KGCCI members to communicate perspectives and challenges of German investors in Korea.

With the mission to promote economic and commercial relations between the Federal Republic of Germany and the Republic of Korea, and to represent the interests of business and industry in both countries, it is our concern to particularly advocate demands of the German business in Korea. A recent survey has stated that Korea remains an important market for German companies, however the business environment in Korea is as well perceived as continuously challenging.

Nevertheless, we look optimistically into this new year and are excited to see, which factors will drive the economy in 2018. Therefore, this issue of the KORUM is dedicated to the medical device industry, a promising sector, which not only due to the demographic development but also in relation to the Moon administration offers good prospects.

We wish you a successful start into the new year and hope you will enjoy reading!







Medical Device Industry in Korea

Schwerpunkt – Medizintechnik Sehr gute Aussichten für den Medizintechnikmarkt in Südkorea Medical devices regulations The Korean medical device market 12 Wirtschaft und Branchen Smart textronics centre 14 Auslandsgeschäft südkoreanischer Baufirmen legte 2017 wieder zu Trends in Korea 2018 19 Recht und Steuern One year President Moon - New labor policies 20 Korean national assembly approves tax law 22 amendments for 2018 Arbeitsmarkt Ausbildung - Train the trainer 24 Inside KGCCI Official visit of the German President Steinmeier to Korea KGCCI Economic Outlook 2018 27 Supporting parasport in Korea 28 Kontakte News and people 29 New members 30 Upcoming 31 Contacts 32

Korea Life

Brennende Nadeln und wilde Kräuter

33

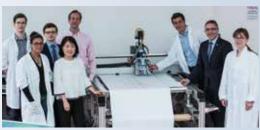
KORUM Korea I Unternehmen I Märkte

6 Schwerpunkt



The medical device industry represents a sector that is constantly gaining significance due to the demographic change of the aging population not only in Korea but worldwide. This concludes in growing market opportunities, however encompasses regulatory challenges as well. Nevertheless, innovative technology and advanced designs may open doors to a promising market in Korea.

14 Wirtschaft und Branchen



The increasing demand for digital products has reached various consumer goods such as smart wearables like fitness trackers, smart watches and smart glasses. German and Korean research institutions cooperate to expand their global leadership positions in the market. Find out what other trends and social issues will drive Korea's market in 2018.

20 Recht und Steuern



What's new in 2018? President Moon's administration emphasizing a "people-centered economy" has reached nearly one year of its tenure. New labor policies and tax law amendments effective as of January 2018, such as the minimum wage or the increase in top marginal tax rates, will have a significant impact on foreign investors and business in Korea.

Sehr gute Aussichten für den Medizintechnikmarkt in Südkorea

Krankenversicherung soll mehr Behandlungskosten übernehmen

Alexander Hirschle

Der Binnenmarkt und die Produktion von Medizintechnik in Südkorea zeigen weiterhin eine hohe Dynamik. Auch der Außenhandel florierte 2017 wieder mit deutlichen Zuwächsen. Nun will Präsident Moon Jae-in ein Programm für den Gesundheitssektor auflegen, das den Leistungsumfang der öffentlichen Krankenkassen erweitert. Dies dürfte gepaart mit der demografischen Entwicklung Südkoreas und einer stark alternden Bevölkerung zu einer anhaltend hohen Nachfrage nach Medizintechnik führen.

Marktchancen

VERKÄUFE VON MEDIZINTECHNIK STEIGEN ZWEISTELLIG

Der südkoreanische Markt für Medizintechnik kann das hohe Wachstumstempo der Vorjahre aufrechterhalten und sogar noch an Dynamik zulegen. 2016 (letzte verfügbaren Zahlen) stiegen die Verkäufe auf Basis der Landeswährung Won sogar zweistellig um 11,5 Prozent auf 5.871 Milliarden Won (circa 5,1 Milliarden US-Dollar (US\$); durchschnittlicher Wechselkurs 2016: 1 US\$ = 1.160 Won).

Bereits 2014 und 2015 stieg das Marktvolumen nach Angaben des Ministeriums MFDS (Ministry of Food and Drug Safety) um 7,4 Prozent beziehungsweise 5,8 Prozent und lag damit deutlich über den Wachstumsraten des Bruttoinlandsprodukts (BIP).

Die Produktion von medizinischen Geräten in Korea (Rep.) stieg 2016 sogar um 12 Prozent auf 4,8 Milliarden US \$, nach einem Plus im Vorjahr Plus von 8,6 Prozent. Im Durchschnitt der vergangenen fünf Jahre stieg der Output der Branche somit um 9,6 Prozent. Auch die Ex- und Importe von Medizintechnik legten im Vorjahr deutlich zu, während der Außenhandel Südkoreas 2016 übergreifend starke Verluste hatte hinnehmen müssen.

Der Markt für Medizintechnik in Korea

Veränderung in Prozent

	2015	2016	Veränderung 2016/15
Lokale Produktion (in Mio. US\$) 1)	4.418	4.830	9,3
Import (in Mio. US\$) ¹⁾	2.944	3.151	7,0
Export (in Mio. US\$) ¹⁾	2.711	2.919	7,7
Marktvolumen (in Mio. US\$)1)	4.652	5.061	8,8

1) umgerechnet zum Wechselkurs 1 US\$ = 1.131 Won (Durchschnitt 2015); 1.160 Won (Durchschnitt 2016)

Quellen: Ministry of Food and Drug Safety (MFDS); KEB Hana Bank; Berechnungen von GTAI



NEUES REGIERUNGSPROGRAMM SOLL GESETZLICHE LEISTUNGEN **ERHÖHEN**

Der Sektor könnte in den kommenden Jahren zusätzlich von einer neuen Initiative profitieren, die der im Mai 2017 gewählte Präsident Südkoreas Moon Jae-in im August 2017 vorstellte. Im Rahmen des "Mooncare" genannten Programms soll der Leistungsumfang der gesetzlichen Krankenkassen erheblich erweitert werden. Hierfür werden bis zum Jahr 2020 circa 26 Milliarden US\$ zur Verfügung gestellt.

Ziel der geplanten Maßnahmen ist, den hohen Anteil privat getragener Behandlungskosten von rund 37 Prozent der gesamten medizinisch bedingten Aufwendungen - und damit dem zweithöchsten Wert innerhalb der OECD-Mitgliedsstaaten - zu senken. Auf diese Weise dürften sich die aus eigener Tasche pro Kopf getragenen medizinischen Kosten von 431 US\$ pro Jahr auf 355 US\$ reduzieren.

Künftig sollen 3.800 Behandlungsarten von der staatlichen Versicherung gedeckt werden inklusive beispielsweise Magnetresonanztomografie (MRI: Magnetic Resonanz Imaging) und Ultraschall. Vor allem einkommensschwache Bevölkerungsschichten und Personen ohne Versicherungsschutz sollen hiervon umfangreich profitieren. Der Plan muss vor Inkrafttreten allerdings noch final vom koreanischen Parlament abgesegnet werden.

AUSGABEN FÜR GESUNDHEIT STEIGEN

Mit dem gestiegenen Wohlstand und einer zunehmenden Lebenserwartung wachsen die Ansprüche der Koreaner an die medizinische Versorgung. Tatsächlich untermauern belegbare Erfolge den Fortschritt im Gesundheitssystems Koreas. So stieg die Überlebensrate bei Krebspatienten (gemessen fünf Jahre nach Diagnose der Krankheit) von 44 Prozent im Zeitraum 1996 bis 2000 auf mittlerweile 70 Prozent (2010 bis 2014). Nach Angaben des Gesundheitsministeriums sank die Zahl neu an Krebs erkrankter Personen zwischen 2011 und 2014 von 324,9 Patienten pro 100.000 Einwohnern auf 289,1 Menschen.

Die durchschnittlichen Ausgaben eines Haushalts für medizinische Leistungen steigen kontinuierlich an von 64,4 US\$ pro Monat im Jahr 2010 auf 91,6 US\$ im vergangenen Jahr. Darüber hinaus sinkt die Fruchtbarkeitsrate weiter von 1,24 (2015) auf 1,17 (2016) und liegt damit wieder am unteren Ende des OECD-Rankings. Insbesondere durch die schnelle Alterung der Bevölkerung werden sich auch große Herausforderungen für das Gesundheitssystem ergeben.

Bereits 2016 entfiel auf die Altersgruppe der über 65-Jährigen fast 40 Prozent der ärztlichen Behandlungskosten bei einem Anteil an allen Versicherten im Krankensystem Südkoreas von knapp 13 Prozent. Die Behandlungskosten für diese Bevölkerungsgruppe erhöhten sich 2016 um 14,8 Prozent, die gesamten Kosten in Höhe von 56 Milliarden US\$ waren um 11,4 Prozent angestiegen. Branchenexperten sehen einen Mangel an Altersheimen, da bisher die häusliche Pflege häufig noch traditionell im familiären Umfeld erfolate.

TELEMEDIZIN BRAUCHT NEUE GESETZE

Neben dem stärkeren Einsatz von Robotern, der von staatlicher Seite gefördert wird, dürften vor allem nichtinvasive und minimalinvasive Analysegeräte und Behandlungsapparate insbesondere für ältere Menschen gute Absatzmöglichkeiten generieren. Geschäftschancen werden sich auch im Bereich der Vernetzung von Geräten ergeben. Das Marktvolumen der Telemedizin in Südkorea wird bis 2018 auf 7,3 Milliarden US\$ geschätzt.

Allerdings wurde ein Gesetzentwurf bezüglich der umfassenderen Nutzung von Telemedizin schon vor Jahren beim Parlament eingereicht, noch nicht verabschiedet. Zunehmend mehr Branchenvertreter beklagen die starken Restriktionen in diesem Bereich, insbesondere was den internationalen Datenaustausch und die schleppende Genehmigungspraxis betrifft. Dies dürfte sich insbesondere auf die Entwicklungsperspektiven kleiner Krankenhäuser auswirken.

Rahmendaten zum Gesundheitssystem in Korea (Rep.)

Indikator	Wert
Einwohnerzahl (2017 in Millionen)	51,8
Bevölkerungswachstum (2017 in Prozent p.a.)	0,2
Altersstruktur der Bevölkerung (2017)	
- Anteil der unter 14-Jährigen (in Prozent)	13,1
- Anteil der über 65-Jährigen (in Prozent)	14,2
Durchschnittliche Lebenserwartung bei Geburt (2016 in Jahren)	82,4
Durchschnittseinkommen (2016 US\$)	3.115
Gesundheitsausgaben pro Kopf (2016 US\$)	1.096,5
Anteil der Gesundheitsausgaben am BIP)(2016)	7,7
Ärzte/100.000 Einwohner (2016)	232
Krankenhausbetten/1.000 Einwohner (2016)	13,5

Quellen: Statistics Korea; Ministry of Health and Welfare; Health Insurance Review and Assessment Service; OECD Health Data; IWF; World Bank

Lokale Branchenstruktur

DENTALIMPLANTATE UND DERMALFILLER LEGEN DEUTLICH ZU

Nach Angaben des Ministeriums MFDS gab es im vergangenen Jahr 2.943 inländische Hersteller von medizinischen Geräten und Ausrüstungen in Südkorea, die insgesamt 14.071 verschiedene Erzeugnisse produzierten. Die Branche zeichnet dabei für 0,3 Prozent des Bruttoinlandsprodukts und 1,2 Prozent des Outputs der verarbeitenden Industrie in Korea (Rep.) verantwortlich.

Bei der lokalen Produktion waren 2016 Dentalimplantate (724,7 Millionen

Schwerpunkt

US\$ beziehungsweise mit einem Anteil von 15 Prozent am gesamten Volumen) führend. Deren Output konnte 2016 um fast 30 Prozent zulegen, da die Deckung der öffentlichen Krankenkassen für dieses Segment erweitert wurde. An zweiter Stelle folgten bildgebende Systeme mit Ultraschall (396,6 Millionen US\$, 8,2 Prozent) vor Dermalfiller zur Injektionsbehandlung (154,7 Millionen US\$, 3,4 Prozent). Die Produktion dieser Kategorie stieg 2016 aufgrund der stark steigenden Nachfrage nach kosmetischen Eingriffen um fast 73 Prozent.

Südkorea stellt vor allem einfachere medizinische Geräte her. Die größten Hersteller von Medizintechnik in Südkorea waren im vergangenen Jahr Osstem Implant, Samsung Medison und GE Ultrasound Korea, die zusammen für fast 20 Prozent der gesamten Branchenproduktion verantwortlich zeichneten. Samsung konzentriert sich angesichts der Marktsättigung bei Smartphones verstärkt auf den Gesundheitssektor.

PATENTANMELDUNGEN STEIGEN DEUTLICH

Allerdings musste Samsung Medison 2016 einen Produktionsrückgang von 6 Prozent verbuchen. Um den Trend ins Positive

Führende Branchenunternehmen in Südkorea

Produktion in Millionen US\$, Veränderung in Prozent

Harta and allowers	Produktion	Veränderung
Unternehmen	2016	2016/15
Osstem Implant (Dentalimplantate)	560,0	33,9
Samsung Medison (Ultraschallgeräte)	205,7	-6,3
GE Ultrasound Korea (Ultraschallgeräte)	134,3	26,4
Siemens Healthcare (Ultraschallgeräte)	94,3	22,8
Dentium (Dentalgeräte)	81,7	0,9
Vatech (Dentalgeräte)	72,4	-12,1
Vieworks	66,9	8,1
Standard Diagnostics	61,3	9,0

Quellen: MFDS; Recherchen von Germany Trade & Invest

zu kehren, will sich das Unternehmen auf neue Geschäftsfelder fokussieren wie etwa den Markt für Tierdiagnose sowie Absatzchancen in Drittländern wie vor allem den USA. Branchenbeobachter sehen die Notwendigkeit, dass sich die lokalen Firmen stärker auf Premiumprodukte fokussieren müssen. Zumindest scheint die Innovationskraft der Branchenfirmen zuzunehmen. So stiegen die Patentanmeldungen Südkoreas im Bereich Medizintechnik zwischen 2013 und 2016 um rund 30 Prozent auf 9.163 Fälle.

Außenhandel

IMPORTE ZIEHEN WIEDER AN

Korea exportierte 2016 Medizintechnik im Wert von 2,9 Milliarden US\$, was einem Anstieg von 7,7 Prozent entsprach. Die Importe zogen im Vergleich zum Vorjahr um 7 Prozent auf 3,1 Milliarden US\$ an, woraus sich ein leichtes Handelsbilanzdefizit von rund 230 Millionen US\$ ergab. Während Korea seinen Bedarf an einfacher Medizintechnik vielfach aus eigener Produktion decken kann, ist das Land bei technologisch fortgeschrittenen Geräten stark importabhängig.

Die größten internationalen Lieferanten waren 2016 nach Angaben des Ministeriums MFDS die USA (1.473,9 Millionen US\$), vor Deutschland (473,9 Millionen US\$), Japan (333,4 Millionen US\$) und der Schweiz (147,1 Millionen US\$). Die Importe aus Deutschland stiegen im Gleichschritt wie die gesamten Branchenimporte um 7 Prozent an. Die anderen Konkurrenten konnten ihre Lieferungen in einer ähnlichen Größenordnung ausweiten, nur die Brancheneinfuhren aus der VR China stiegen um moderate 1,4 Prozent.

Geschäftspraxis

Der Einstieg in den koreanischen Markt gelingt in der Regel am besten über einheimische Importeure. Gute persönliche

Einfuhr ausgewählter medizintechnischer Produkte nach Korea

in Millionen US\$

SITC-Pos.	Warenbenennung	2016	2017	Veränd. 2017/16,%	davon aus Deutschland (2017)	Veränd. 2017/16,%
774.1	Elektrodiagnoseapparate und -geräte	298,3	347,0	16.3	40,0	18.7
774.2	Röntgenapparate etc.	488,5	509,5	4.3	111,7	1.3
741.83	Sterilisierapparate	18,3	12,8	-30.1	0,2	-33.3
785.31	Rollstühle	10,3	11,7	13.6	1,3	30.0
872.1	Zahnmedizinische Instrumente; a.n.g.	73,7	79,0	7.2	21,2	-10.9
872.21	Spritzen, Nadeln, Katheter, Kanülen etc.	446,3	509,5	14.2	10,9	0.9
872.25	Ophthalmologische Instrumente	71,1	79,2	11.4	17,2	-0.6
872.29	Andere Instrumente, Apparate und Geräte	758,7	799,1	5.3	124,0	12.3
872.3	Therapiegeräte, Atmungsgeräte etc.	377,6	494,7	31.0	7,0	-28.6
872.4	Medizinmöbel	23,7	28,2	19.0	4,0	42.9
899.6	Orthopädietechnik, Prothesen etc.	641,6	696,7	8.6	46,2	2.4

Quellen: KITA (Korea International Trade Association)

Beziehungen zu den Entscheidungsträgern sind eine Grundvoraussetzung für den geschäftlichen Erfolg. Die Südkoreaner schätzen eine hohe Produktqualität, einen guten After-Sales-Service und wettbewerbsfähige Preise. Das öffentliche Ausschreibungswesen wird von Firmenvertretern als relativ transparent im asiatischen Kontext bezeichnet.

Da die Privatisierung im Krankenhausbereich noch nicht weit fortgeschritten ist, sind staatliche Hospitäler im Regelfall die Hauptzielgruppe für internationale Firmen. Die Geräte in Korea sind im Allgemeinen nicht überaltert, der Austausch erfolgt im Regelfall nach acht bis zehn Jahren. Allerdings gibt es dabei erhebliche Unterschiede zwischen großen und Universitätskliniken auf der einen sowie einfachen Krankenhäusern in ländlichen Regionen auf

der anderen Seite. Dort können sich die Nutzungszeiten auf bis zu 20 Jahre belaufen.

Im seit Juli 2011 angewendeten Freihandelsabkommen zwischen der EU und Korea (Rep.) wurde ein vollständiger Zollabbau für alle Industriegüter innerhalb von sieben Jahren vereinbart. Die konkreten Zollsätze können in der Market Access Datenbank der EU (http:/ madb.europa.eu) unter dem Stichwort "Tariffs" abgerufen werden. Der Präferenzzollsatz "EU" gilt jedoch nur für Ursprungswaren der EU.



Alexander Hirschle Representative Correspondent Germany Trade and Invest www.gtai.de/korea

Internetadressen

Bezeichnung	Internetadresse	Anmerkungen
Evportinitiative Conundhaiteuristeehaft	www.exportinitiativegesundheitswirtsc	Portal der Exportinitiative des Bundesministeriums für
Exportinitiative Gesundheitswirtschaft	haft.de	Wirtschaft und Energie
Ministry of Health and Welfare	www.mohw.go.kr	Gesundheitsministerium
Ministry of Food and Drug Safety, Medical Device	www.mofdc.go.kr	Zuständig für Zulassung von Madizintaahnik
Safety Bureau, Medical Policy Division	www.mfds.go.kr	Zuständig für Zulassung von Medizintechnik
Korea Health Industry Development Institute	www.khidi.or.kr	Institut
Korea Medical Devices Industry Association	www.kmdia.or.kr	Fachverband
Korea Medical Devices Industrial Coop. Association	www.medinet.or.kr	Fachverband
Korea E & Ex Inc - Secretariat of KIMES	www.kimes.kr	Fachmesse; nächster Termin: 15. bis 18.3.2018 in Seoul

Medical Devices Regulations

Regulations in Korea and in other countries

Jae-Sung Kwon

Global medical device markets are expanding at extreme rate. According to the report produced by TrendForce back in 2016^[1], the market was reported to be around 3,800 billion US Dollar with a year-on-year growth rate of 7%, which is estimated to rise to over 5,500 billion US Dollar with a year-on-year growth rate of 9% in a 2020.

With such international trends, the medical devices market in Korea has been also rapidly expanding. The Korea Health Industry Development Institute reported that the market size of medical devices in Korea was 58 billion US Dollar in 2016, which was estimated to be 1.7% of world medical devices market share, and ranked 9th in the world^[2].

Reflecting the market size in Korea, there has been a large volume of registrations, approvals and certifications of medical

devices, with more than 1,000 applications to the Ministry of Food and Drug Safety (MFDS) for the domestic production of medical devices, while more than 150 applications for import of the medical devices have been submitted in 2016.

Medical devices regulations in Korea

The regulatory process for medical devices in Korea is somewhat similar to the USA and Europe. However, there are some unique features of the system, which has been applied in Korea in accordance with historical and administrative reasons.

Following steps may be useful in terms of understanding the process of medical devices regulation in Korea, which is also summarized in Figure 1.

STEP 1 - Determination of device classification

First thing that must be considered in order to gain registration, approval or certification of medical devices in Korea is determining the classification of the medical devices. The MFDS lists all of medical devices according to the generic device name (product name), such as ,Implant Endosseous Fixture' (also known as dental implant fixture)^[3]. If the device is completely new, and there would be no existing generic device name, then it is advisable to discuss the process with representing administrative organizations. Individual devices have assigned device codes (product code), where for the example mentioned earlier (Implant Endosseous Fixture), the code would be ,C20030.01'. Also, each device name and code indicates the classifications of the device.

There are in total four classes in Korea for the medical devices; Class I, Class II, Class III and Class IV. As the regulatory process is different according to the class, it is important to determine the class first.

STEP 2 - Determination of predicate devices

Predicate devices are devices that have been already approved and are currently sold in the market, which are equivalent to the applying devices. Determination of predicate devices and comparing device under application with such predicate devices is important as some differences would require additional documents including clinical data (in other words, the differences would determine the need of clinical trial). The MFDS classifies the device under application in following three categories, by comparing with predicate devices; 1) New Device, 2) Modified Device and 3) Equivalent Device to Predicate Device. Table 1 illustrates how to determine these three categories

STEP 3 – Application and gaining Korea Good Manufacturing Practices (KGMP) certification

The regulatory process for medical devices in Korea require two main applications. First is the Korea Good Manufacturing Practices (KGMP) and second is the Technical File. Like many other countries, GMP is essential for the medical devices manufacturing. Current KGMP process is based on international standard, ISO 13485, where some adaptations were made in accordance to domestic circumstances. Manufacturers for Class II devices are usually audited on-site by a Third Party Auditor (TPA) whereas Class III and IV manufacturer are audited on-site by a TPA and the MFDS. KGMP certification requires a renewal in every 3 years.

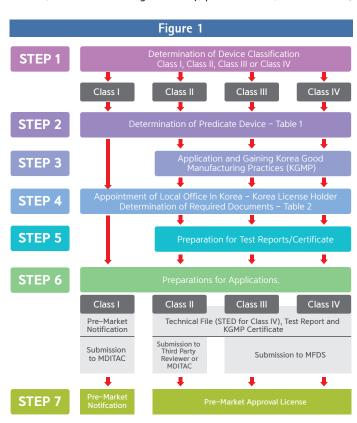
STEP 4 – Appointment of local office in Korea and determination of required documents

If the company does not have a local office within Korea, one must appoint a local office (Korea License Holder) where the application

would be managed. Following the appointment, the additional steps depend on the classification of the device and also state with predicate devices. Class I devices have a different regulatory process as the devices require a notification (registration) process of which the details can be found in Figure 1. For the other classes (Class II, III, and IV), Table 2 provides an example of required/ exempt documents, which are stated in ,Regulation of Medical Devices Approval, Registration, Review etc' published by MFDS. It is required to note that this example is for the electronic medical devices (active medical devices) and different to other state of medical devices. Also, the state of required/exempt documents depend on the class of the devices (for example, even though the clinical data would be required in certain cases, Class II devices may not require clinical trial). Finally, there are around 350 Class II devices that MFDS considers as 'Special Equivalent' devices. These would require a less robust application, and no Technical File

STEP 5 - Preparations for test reports/certificates

As indicated earlier in Table 2, test reports and certifications related to electronic, radiological, biological, performance and physical/chemical information must be provided along with Technical File in some cases. Tests can be carried out in Korea in test and inspection institutes that are assigned and certified/listed by MFDS. For example, the Yonsei University College of Dentistry has a Dental Devices Testing and Evaluation Center, which is an assigned and certified institute by MFDS for dental medical devices, in terms of biological safety, performances, and chemical/



physical analyses. If the tests have been already carried out outside Korea, it would be important to check if the tests were carried out in accordance to Korea specific product standards.

STEP 6 - Preparation of applications

Once all documents are ready, applications must be prepared in Korean, which would include the Technical File, along with test reports related to earlier steps and KGMP certificate. In terms of Class IV devices, a Technical File must be in special format known as Summary of Technical Documentation (STED). Once all these documents are prepared, the Korean license holder would submit the registration dossier. Submission is to Third Party Reviewer/ Medical Device Information and Technology Assistance Center (MDITAC) for Class II devices, while it is to MFDS for Class III and IV devices.

STEP 7 - Pre-market approval license

The review would normally take 4 to 6 months for Class II devices and 6 to 10 months for Class III or IV devices (including initial review and responses). After successful review, either MDITAC (for

Table 1								
	Type of Device	Intended Purpose	Mechanism of Action	Raw Materials	Performances	Test Standards	Methods of Use	
New Device	Electronic Device (Active Device)	Ø or Ø	Ø or Ø	X	Ø	Ø or Ø	Or O	
New Device	Non-electronic Device (Non-active Device)	Ø or Ø	Ø or Ø	Ø or Ø	Ø	Ø or Ø	or 餐	
Modified	Electronic Device (Active Device)			X	Ø	Ø or Ø	or 餐	
Device	Non-electronic Device (Non-active Device)	P	P	P	Ø	Ø or Ø	or 餐	
Equivalent Device to	Electronic Device (Active Device)	P	P	X	P	Ø	P	
Predicate Device	Non-electronic Device (Non-active Device)	P		P		Ø	Ø	

🔎: Identical to Predicate Device(s), 澯: Not Identical to Predicate Device(s), X: Not Applicable

	Table 2													
			Substantial Equivalent Table	Intended Purpose	Mechanism of Action	Electronic	Radiological	Electromagnetic Wave	Biological	Physical Chemical	Stability	Clinical	History of Origin, Discovery and	Use in Other Countries
		Different Intended Purpose					Δ						Development	
N	lew Device	Different Mechanism of Action					Δ							
		Different Raw Material												
		Different Performance			3	3	(2)						Δ	
	Modified Device	Different Test Standards					Δ			(2)		(2)		
		Different Methods of Use											Δ	
	Equivale	ent Device									(2)			

🗐: Documents Required, 🔃: Documents Not Required, 🛆: Requirement Depends on Individual Medical Devices Circumstances

Schwerpunkt

most of Class II devices) or MFDS (for novel Class II and Class III/IV devices) will issue a final Pre-Market Approval license. The status of approval will be posted on the website. There is currently no renewal system in the Korean regulatory process and therefore registration will not expire as long as there are no changes to devices or its intended use.

Regulatory process in other countries

As mentioned earlier, the regulatory process in Korea shares some similarities with systems in other countries. However, there are some key differences. The regulatory process in the USA by Food and Drug Administration (FDA), classifies medical devices in three classes rather than four. The process involves simple registration (exempt devices), 510(k) process, and Pre-Market Approval (PMA) process. These processes depend on the risk related to the device, while for 510(k) process, comparison in terms of similarity and differences to predicate devices are key to the application.

In Europe, medical device regulatory process is governed by the Conformité Européene (CE) Mark. Medical devices are classified

References

- [1] TrendForce (2016) Scale of the Global Medical Device Market 2015 2020.
- [2] Korean Health Industry Development Institute, 2016 Medical Device Industry Analysis Report (Article in Korean).
- [3] Ministry of Food and Drug Safety, Regulation on Medical Devices Groups and Class by Group. English version may be found on www.mfds.go.kr/eng/ and under ,Medical Devices' and ,Regulation', but may not be up to date.

into four classes; Class I, Class IIa, Class IIb and Class III. The auditing and review process is carried out by each individual Notified Body (NB) that are located in member bodies of the European Union, and accredited accordingly. CE requires a technical file which would include a series of evaluation reports including clinical evaluation reports.

Future of regulatory process of medical devices

Despite the differences in regulatory process for medical devices, huge changes are expected both in Korea and other countries. Korea has now joined the International Medical Devices Regulators Forum (IMDRF), and changes are expected in terms of adaptations of GMP process and other processes. Evaluation based assessment has been considered in dental medical devices for biological safety, rather than the need of actual testing for each device. Further changes are expected as Europe would adapt Medical Device Regulation from previous Medical Device Directives. The publication of the Real-World Evidence based regulatory decision process by the US FDA will also be interesting to see how it will influence changes. It is certainly a complicated but interesting time for the medical device regulatory process.



Jae-Sung Kwon
Research Professor
Yonsei University College of Dentistry

The Korean Medical Device Market

Many lights - Some shadows

Andreas Harbauer

Market Trends

Medical technology is encompassing a wide range of different disciplines in diagnostics and treatment. Nevertheless, the majority of medical device companies is influenced in the same way by several megatrends.

Like many industrialized countries Korea has to deal with an aging population in combination with the lowest birth rate of all OECD countries. Hence the number of elder patients with specific needs for medical care is continuously increasing. Another consequence is that less young people are paying into the health and social insurance system and are available for becoming qualified care givers.

Due to this the costs for healthcare are steadily increasing. New and better technologies and methodologies for diagnostics and

treatment are reinforcing this even further. In order to get this cost explosion under control the Korean government introduced the DRG system (Diagnosis Related Group) for selected clinical procedures already some years ago as it has been applied in several countries before. By this, hospitals receive a fixed payment for a certain procedure or therapy rather than fees for single items and services. This is also influencing the hospitals' decisions on what type of medical equipment they are focusing their investment. Next to the therapeutic outcome the ROI (Return of Investment) and commercial success is becoming an increasingly important success factor for hospitals.

There is also an increasing grouping trend of hospitals utilizing big purchasing companies with stronger procurement power. In this context hospitals are also becoming more business driven and are focusing their investments on profitable departments and disciplines. Also replacement cycles of medical investment goods are continuously extended.

From a therapy perspective there is a new major challenge by the increasing amount of healthcare-associated infections (HCAI) becoming more and more resistant against all known medications. Therefore, improved and new hygiene regimen in- and outside hospitals are becoming essential.

Last but not least there is an ongoing consolidation of established medical device manufacturers and new, specialized players are entering into profitable niche markets. Also global technology- and IT leaders like e. g. Google, Apple, Microsoft or Samsung identified the healthcare market as new strategic growth area. Focusing on digitalization, data management and AI (Artificial Intelligence).

Chances

New technologies, improved design and standardization of medical devices, their human- and x-device communication interfaces are chances for manufacturers to address the previously described trends and challenges.

For example, innovative design concepts of incubators can support giving even more pre-mature newborns a good start into their lives. Independent and synchronized heat sources ensuring a stable temperature in open- or closed mode, noise minimization through different inbuilt components or new materials supporting IPC (Infection Prevention and Control) are just a few design innovations that are extremely important for the therapy outcome and brain development of those very fragile newborns.

In addition, highest quality standards, easy service and maintenance concepts and combination approved accessories ensure that the hospital can use the device very effectively and efficiently with least possible downtimes.

German quality, based on long-term experience in the hospital environment and the accumulation of clinical data over centuries, is enjoying a high level of trust in Korea and is a foundation for sustainable growth.

Compared to some other countries the business environment in Korea is quite friendly and open minded for pilot testing and new technologies ("early adopters").

Despite the described cost pressure, we also see the continued willingness in Korea to invest in improved healthcare technologies, building on its benchmark IT infrastructure.

The close cooperation between established global players in this field and Korean technology leaders may open new doors and markets. Today there are several initiatives in place to liaise global players with local manufacturers. Several "medical clusters" have been established to support such investments and cooperation (e. g. Wonju Medical Industry Techno Valley Incorporated Foundation or Daegu-Gyeongbuk Medical Innovation Foundation), which is doubtless a great opportunity for both parties.

Challenges

As a matter of course, there are also areas for improvement in Korea. Certain regulatory barriers are sometimes not fully



Wirtschaft und Branchen

transparent and understandable. International manufacturers still have to invest a lot of time, efforts and money to fulfill country specific, regulatory standards, although most of them are actually based on international standards like e. g. ISO 13485. More efforts to accommodate those international standards within the country specific standards could make things for both countries much more efficient.

Based on the rather conservative nature of the healthcare business the direct distribution between manufacturers and end customers (b2c business) is still not strongly promoted and supported in Korea. In most cases the distribution has to be done through local dealer partnerships.

This can work very well when mutual and trusted partnerships can be established.

On the other hand, it is not trivial to find such qualified and trustable distribution channels for this quite complex and demanding application field.

In this context new regulations like e. g. the FDTA (Fairness in Distributor Transaction Act) have been issued with best intentions by the authorities. Those regulations shall define more clearly the cooperation principles, rights and duties between manufacturers and distributors. However, the main trigger for this initiative has been an indeed very sad case of abuse of power in a very different

industry. It is very difficult to compare it with the medical device industry and its fundamental partnership principals that have been established since many years. "One size fits all" cannot be applied in this aspect and it can result in unwanted uncertainties for both sides when it comes e. g. to mutual target agreements, guaranteed territorial allocation for distribution partners and similar. The idea of such regulations can fully be supported. However more options to adapt and reflect those ground rules in harmony with specific industry needs and in mutual respect with the respective partners would be desired.

Overcoming shadows

Korea is a very attractive, dynamic and important medical device market. Like every country Korea has its lights and its shadows from a business perspective. Overall, it is required and recommended to focus on the lights, chances and opportunities for a sustainable growth and success in Korea. The remaining shadows shall be worked out in close dialog and cooperation between relevant stakeholders and authorities. Listening to each other and mutual respect is essential for the success.



Andreas Harbauer

Representative Director/
Managing Director at Dräger Korea Co., Ltd.
www.draeger.com

Smart Textronics Centre: A German-Korean Synergy

Future digitalized production of digital products

Hyunji Park, Andreas Blaeser, Thomas Gries

Background

Textiles are very close to people because they surround us daily in all areas of our life such as clothing, habitation, or as fiber reinforced high-performance materials (e.g. cars, airplanes, etc.). Amongst those, textiles for medical applications, e.g. wound dressings, hernia meshes, or vascular grafts are even more intimate. Complementing such textile structures with electronic sensors and actors upgrades their usability even further and opens up so far unknown market opportunities and business models.

Issues in the Smart Textronics market

Smart Textronics, so called smart textiles, combine fibre-like architecture with electronic functions by integrating electronic components on and in the fibre-like architecture. Smart Textronics

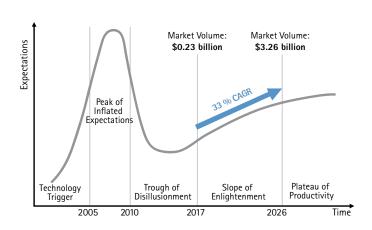
are conquering the consumer goods market at an overwhelming speed. After the rapid breakthrough of smartphones in the last decade, consumers are now increasingly relying on smart wearables such as fitness trackers, smart watches and smart glasses. The digital networking of everyday objects has already become a matter of course for future generations. German and Korean companies and research institutions will strengthen and expand their global leadership positions in the market, with a forecast volume of \$3.26 billion in 2026 and an anual growth rate of 33%. The vision of digitizing and integrating electronic properties into textiles triggered a hype in 2005, which led to numerous patent applications and product prototypes in the field of smart textiles. Due to a lack of implementation possibilities, hardly any of the innovative Smart Textiles have been brought to market maturity, so that the general enthusiasm around the year 2015 has reached a low point.

German-Korean cooperation in Smart Textronics

Korea's strength lies in electronics and information technology, whereas Germany is dominated in production and system engineering. In order to extend their competitive advantages, both countries are forced to invest their expertise together in the future. In order to achieve this, a new, innovative concept will be presented, which represents a groundbreaking milestone in German-Korean cooperation. In addition, overcoming the low point in Figure 1 can only be achieved if core competencies from the textile technology and electronics departments come together to systematically promote product development in line with production requirements.

The German-Korean cooperation project, Smart Textronics Center (STC), forms a platform for a holistic approach to the development of materials, production processes and services for market-ready next-generation Smart Textronics. The STC is based on the collaboration between research and industry in the production of Smart Textiles for small and medium-sized

- Figure 1 - A prosperous future of textronics facilitated by STC



enterprises (SME) and combines various knowledge databases from different sectors of two economically strong countries. The STC is realized as bilateral research facilities between the Korea Institute of Industrial Technology and Institut für Textiltechnik of RWTH Aachen University with location in Ansan, South Korea and Aachen, Germany in a separate research building. Rheinisch-Westfälische Technische Hochschule Aachen, Germany, and Sungkyunkwan University, South Korea, and Fraunhofer Institut FIT are the key partners. Knowledge transfer to industry will be based on an open innovation approach. Figure 2 shows the possibility forms of cooperation in STC.

Application fields of Smart Textronics

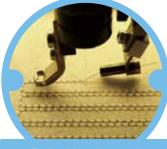
In the healthcare sector, Smart Textronics encompass four fields of application, health monitoring, smart therapy, ambient assisted living in an aging society, as well as healthy living and sleep. As example, recently a t-shirt integrating electrocardiogram sensor was developed at STC (Figure 3). The shirt can be used to monitor heart function of patients, athletes, or healthy beings without effort. Additional examples for smart textronic applications developed at STC are pillow integrated pressure sensors, to control the quality of sleep, embroidered wound dressing sensors, that monitor healing of (chronic) wounds, or bandages for in-situ stimulation of the spine, for patients suffering chronic pain (Figure 3). Besides the healthcare sector, Smart Textronics found their way in almost all areas of textile applications. In the mobility field, the characteristic automotive industries of Germany and Korea could benefit from applications such as textile-integrated controls in car seats or modern interior fittings, as well as in bodywork and secondary structures made of composite materials. For the field of communication, Smart Textronics can lead to a combination of user interface and home textiles for domestic applications. Home electronics and interior textiles expand the home network in our own home and enable a completely new experience and communicative solutions. Monitoring of children and elderly people







Pillow integrated pressure sensors



Embroidered wound dressing sensors



Bandage for electric lubar stimulation

Wirtschaft und Branchen

increases safety and soft, fibrous input and output devices open up new avenues for computer and communication interaction. These approaches developed in STC could improve future life.

The main tasks of the STC can be summarized as follows:

 Smart Products: development of new, smart and connected textronic products

Figure 3 – art Textronics applications for the healthcare sector developed at STC

Different Smart Textronics applications for the healthcare sector developed at STC **Joint** Peer group **Proprietary** proprietary know-how and solution know-how know-how Large scale public funded Basic research collaborative 8-20 industry and Engineering Covering the value Crowd funded basic chain research Testina R+D contract DFG contract Long 1 year 3 years 5 years Time Direct Short term Mid term

- Production technology: development and optimization of solutions for modern production facilities in the field of textiles and electronics
- Business cases (Smart Services): definition of new services, designing of the whole business model and formation of transition roadmap to implement the smart solutions.

Future perspective of STC

This exemplary Korea-German cooperation will create the world's largest Center for Smart Textronics. It will combine complementary strength of both nations: production technology, microelectronics, technical and functional textiles. In this way, STC will generate a synergistic effect in order to open up a promising billion USD dollar market for Smart Textronics. Within the framework of STC, entrepreneurs and especially SMEs have the great opportunity to develop production processes for market-ready, intelligent textronic products and thus enter this new market.



Dr. rer. nat. Hyunji Park

Korea Representative Institut für Textiltechnik der RWTH Aachen University www.ita.rwth-aachen.de



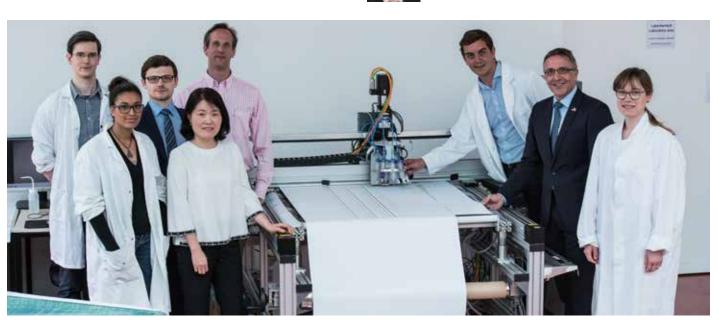
Dr.-Ing. Andreas Blaeser

Head of Biohybrid and Medical Textiles (BioTex) Institut für Textiltechnik der RWTH Aachen University www.ita.rwth-aachen.de



Univ.-Prof. Prof. h.c. (MGU) Dr.-Ing. Dipl.-Wirt. Ing. Thomas Gries

Director / Institut für Textiltechnik der RWTH Aachen University www.ita.rwth-aachen.de



The STC team in front of a new developed digital printer for electronic inks

Auslandsgeschäft südkoreanischer Baufirmen legte 2017 wieder zu

Leichter Auftragsanstieg nach Jahren mit hohen Verlusten Ausblick gedämpft optimistisch

Alexander Hirschle

Die Auslandsprojektaufträge südkoreanischer Baufirmen sind 2017 leicht angestiegen, nachdem sie seit 2015 hohe Verluste hinnehmen mussten. Die Bestellungen aus dem Nahen und Mittleren Osten zogen im vergangenen Jahr deutlich an und konnten Rückgänge in anderen Regionen kompensieren. Die Aussichten für 2018 sind vorsichtig optimistisch. Der stabile Rohölpreis sowie eine stärkere Fokussierung der lokalen Hochbaufirmen auf Auslandsvorhaben deuten auf eine Fortsetzung des positiven Trends hin.

Die internationalen Bauaufträge südkoreanischer Firmen konnten 2017 nach einer Durststrecke wieder leicht um knapp 3 Prozent zulegen. Noch in den beiden Vorjahren waren die Projektsummen um 30 Prozent beziehungsweise um 40 Prozent eingebrochen. Insgesamt belief sich 2017 der Auftragswert nach Angaben des Verbands ICAK (International Contractors Association of Korea) auf 29,0 Milliarden US-Dollar (US\$).

Beobachter gehen davon aus, dass damit die Talsohle der Branche vorerst durchschritten ist. Ursächlich für den leichten Aufschwung waren die stark zulegenden Bestellungen aus dem Nahen und Mittleren Osten. Diese zeichneten in der Vergangenheit für den Löwenanteil der Auslandsorders verantwortlich und hatten in den Vorjahren unter dem gesunkenen Ölpreis gelitten. Aufgrund knapperer Mittel hielten sich die Länder der Region bei der Umsetzung von Bauprojekten zurück, worunter vor allem südkoreanische Firmen zu leiden hatten.

Aufträge aus dem Nahen und Mittleren Osten sind deutlich angestiegen

Im Jahr 2017 zeigten die Aufträge aus dem Nahen und Mittleren Osten wieder deutlich um 36,3 Prozent auf 14,6 Milliarden US\$ nach oben. Damit zeichnete die Region mit 50,3 Prozent für den Löwenanteil der bei südkoreanischen Firmen eingegangenen Orders aus dem Ausland verantwortlich. Noch 2010 hatten sich die Aufträge aus der Region auf 47,2 Milliarden US\$ belaufen.

Beobachter gehen allerdings davon aus, dass es für südkoreanische Firmen schwer sein wird, in absehbarer Zeit wieder das alte Niveau an Bestellungen zu erreichen. Zwar habe sich der Rohölpreis stabilisiert. Allerdings sei das Niveau noch nicht ausreichend, um einen signifikanten Aufschwung im Projektgeschäft auszulösen - so die Stimmen. Auch würden politische Unsicherheiten in Teilen der Region die Aktivitäten bremsen.

Entwicklung der Übersee-Bauaufträge südkoreanischer Firmen

in Milliarden US\$, Veränderung gegenüber dem Vorjahr in Prozent

Jahr	Wert	Veränd.
2013	65,2	0,5
2014	66,0	1,3
2015	46,1	-30,1
2016	28,2	-38,9
2017	29,0	2,9

Quelle: International Contractors Association of Korea (ICAK)



Darüber hinaus hätten sich die Auftraggeber in den vergangenen Jahren aufgrund knapperer Budgets weg vom reinen Auftragsgeschäft im Erdölsektor hin zum Ausbau der Infrastruktur in Form von PPP-Projekten (Public- Private Partnership; öffentlichprivate Partnerschaft) bewegt. Aus diesem Grund müssten die ausländischen Auftragnehmer selbst Finanzierungen mitbringen, um einen Zuschlag zu erhalten.

Die Rolle staatlicher Förderung sei deshalb wichtiger geworden. Offiziellen Meldungen zufolge unterzeichnete das Ministerium Molit (Ministry of Land, Infrastructure and Transport) 2017 ein Abkommen mit der Entwicklungsbank KDB (Korea Development Bank) und der Korea Eximbank (Export-Import Bank of Korea) über die Gründung des 85 Milliarden US\$ schweren Fonds GIVF (Global Infrastructure Venture Fund).

Projektgeschäft in Europa und Nordamerika hat stark nachgelassen

Mit dem hohen Zuwachs der Orders aus dem Nahen und Mittleren Osten konnten 2017 die zum Teil starken Verluste beim Auftragseingang aus anderen Regionen kompensiert werden. Aus Asien – dem zweitgrößten Kunden – kamen 1,4 Prozent weniger Bestellungen. Bei einigen "Stammkunden" mussten erhebliche Einbußen hingenommen werden, so etwa im Projektgeschäft mit Vietnam (-48 Prozent), Singapur (-66 Prozent) und den Philippinen (-78 Prozent).

Auf der anderen Seite konnten diese Verluste durch gewonnene Orders in Märkten wie Myanmar (316 Prozent), Thailand (847 Prozent), Indonesien (619 Prozent), Bangladesch (1.044 Prozent) und Indien (282 Prozent) fast wieder wettgemacht werden. Indien und Bangladesch schoben sich durch diese Entwicklung auf den ersten und dritten Platz im innerasiatischen Ranking der wichtigsten Auftraggeber südkoreanischer Baufirmen vor.

Dramatisch waren hingegen die Rückgänge aus Nordamerika mit einem Einbruch um 60 Prozent und aus Europa mit minus 47 Prozent. Auch die Orders aus Afrika und Lateinamerika mussten mit Verlusten von 43 beziehungsweise 78 Prozent erhebliche Einbußen hinnehmen.Industrieprojekte haben kräftig zugenommen

Industrieprojekte haben kräftig zugenommen

Nach Sektoren entfiel 2017 der größte Anteil mit fast 70 Prozent auf den Industriebau, der wertmäßig um satte 50,3 Prozent zulegen konnte. Dabei entwickelte sich insbesondere das Segment Petrochemie sehr dynamisch. Der Bau von Petrochemieanlagen ist damit die wichtigste Untergruppe im Industriebau mit einem Anteil von 22 Prozent aller Orders.

Im Gegenzug musste der Tiefbau mit einem Minus von 20 Prozent erhebliche Einbußen hinnehmen, wobei vor allem die Auslandsnachfrage nach Eisenbahn-, Damm- und Flughafenbauvorhaben nahezu austrocknete, mit Einbrüchen von mehr als 90 Prozent. Stark entwickelten sich hingegen die internationalen Auftragseingänge im Straßen- und Hafenbau mit Steigerungen von 259 Prozent beziehungsweise 540 Prozent.

Noch höhere Verluste als der Tiefbau musste der Hochbau mit einer Reduzierung der Bestellungen um mehr als die Hälfte verbuchen. Besonders starke Einbußen entfielen hier unter anderem auf die Segmente Hotels, Büros und Condominiums (Wohnanlagen). Experten erklären dies unter anderem damit, dass genau diese Bereiche in Südkorea zuletzt einen starken Boom durchliefen und die lokalen Bauunternehmen ihren Fokus somit mehr auf den Heimatmarkt gerichtet hätten.

Die gesamte Kategorie Hochbau zeichnete somit 2017 nur für 8,3 Prozent der Auslandsaufträge verantwortlich; 2015 hatte der Anteil noch fast das Doppelte erreicht. Beobachter gehen davon aus, dass angesichts der Maßnahmen der Regierung Moon zur Abkühlung des lokalen Immobilienmarktes auch das Interesse südkoreanischer Baufirmen an Auslandsprojekten wieder steigen wird.

Als weiteren Pluspunkt für die nähere Zukunft wird der Zuschlag für die staatliche Energiegesellschaft Kepco (Korea Electric Power Corporation) als "Preferred Bidder" für den Bau eines Kernkraftwerks im Vereinigten Königreich gewertet, da dieser hohe Folgeaufträge nach sich ziehen dürfte. Zusammen mit einem stabilisierten Rohölpreis sollte dies weiter zu leicht steigenden Auslandsorders für südkoreanische Firmen führen, wobei die alten Rekordwerte allerdings kurzfristig noch nicht wieder erreicht werden.

Übersee-Bauaufträge südkoreanischer Firmen nach Regionen 2017

in Millionen US\$, Veränderung und Anteil in Prozent

Region	Wert	Veränd. 17/16	Anteil
Naher und Mittlerer Osten	14.578	36,3	50,3
Asien	12.492	-1,4	43,1
Afrika	698	-43,0	2,4
Nordamerika und Pazifik	555	-59,8	1,9
Süd- und Zentralamerika	362	-77,6	1,2
Europa	320	-46,6	1,1
Insgesamt	29.006	2,9	100,0

Quelle: ICAK

Übersee-Bauaufträge südkoreanischer Firmen nach Sektoren 2017

in Millionen US\$, Veränderung und Anteil in Prozent

Sektor	Wert	Veränd. 17/16	Anteil		
Industrieanlagen	19.913	50,3	68,7		
Tiefbau	5.139	-20,2	17,7		
Hochbau	2.409	-54,8	8,3		
Ingenieurleistungen	836	-50,6	2,9		
Elektrizität	730	-50,6	2,5		
Telekommunikation	-20 ^{*)}	-100,0	0,0		
Insgesamt	29.006	2,9	100,0		

*) Negative Auftragssumme wegen veränderten Projekten

Quelle: ICAK

Trends in Korea 2018

Top 4 market drivers and social issues you need to know

Min-Seo Kang

Era "1conomy"



Dependency on others is reducing as many things can be done with a smartphone - communicating with social network services, consuming cultural contents as per individual taste, eating or cooking alone by food or ingredients delivery, and decorating one's own space. Accordingly, simple and safe technology around payment

systems (Kakao Pay), food delivery or courier services (Food Fly or Coupang man) and online shopping platforms (Naver Shopping, Zigzag) are developing rapidly. As the time of 'being alone' increases, the instinctive desire for sociality tends to intensify. It is likely that people will focus more on relationships with those tied by a common interest or issue.

Value consumption

There is an increasing number of people who value present over future and put their happiness upfront. Consumers tend to be satisfied by products providing immediate effects and experiences. Primarily concerned are 'fast moving consumer goods such as food and beverage, lowcost household items, cosmetics



and stationary. In the service sector, consumers tend to value prompt feedback. A similar concept of value consumption is YOLO (You Only Live Once) but it has been perceived rather negatively due to excessive commercial use. Recently, the concept 'value consumption' has been extended to an experience that is pursued and led by each individual rather than simply seeking immediate satisfaction. It emphasizes self-initiated purchase experience that guarantees 'high price-benefit-ratio' or 'small but certain happiness'.

Social fairness

During the past two years, Korea has developed an increasing interest in politics: A number of people believe that politics is directly related to their wealth, daily life and future. However,

Source: Trends in Korea 2018, The Korea Economic Daily BP, 2017

they believe that 'fairness' is the most important value that the society does not guarantee and is therefore to be pursued in the first place. According to a survey on social justice in Korea, only 12% of respondents stated that Korea is a country where opportunities are given equally. The percentage of respondents who evaluated Korea



as being fair in assessment, compensation or promotion only accounted for 5%. As chronic problems such as income gap and abuses of power due to hierarchical structure are being bit by bit unearthed, discussions and movements for tackling these issues will be continued.

New professionalism

Whereas consumers in the past tended to buy products that are promoted by celebrities or store clerks on-site, a large number of consumers nowadays are apt to judge based on their own experiences or information they gained. As mobile search became daily practice, information about any product can be checked in real time. Although 'power blog



marketing' is considered as a popular marketing strategy, consumers do not trust their opinions at face value. They rather refer to the number of reviews and negative comments more actively. As a result, Korean consumers consult others' opinions but ultimately, they trust the results they verify. This is due to the fact that trust in expert groups has decreased. For they are regarded as being unable to maintain consistency due to their own interests and political views. It seems that there is a certain level of trust in doctors or lawyers but people also tend to routinely check whether their opinions are true. As experts' authority is diminishing and celebrity alone cannot guarantee the success of the product, it is expected that the impact of marketing based on influencers' reviews and comments of consumers will increase.



Min-Seo Kang

Manager, Trade Promotion & Market Access KGCCI DEinternational Ltd. www.kacci.com

One Year President Moon - New Labor Policies

How labor climate will change for businesses

Young Seok Ki, Peter Insoo Kimm

Ever since President Moon Jae-In and his administration took office in May 2017, there have been plenty of discussion and debate on what type of labor policies would take center stage and shape the Korean economic environment. President Moon, a liberal who favors labor-friendly policies, emphasized two agendas: to increase quality jobs and to increase the quality of life of employees.

Employment situation board

In order to achieve the first agenda, the current administration installed an employment situation board in the Cheongwadae to practice the governing philosophy of a "people-centered economy." Furthermore, President Moon stated in his opening remarks at the New Year press conference that "at the core of the people-centered economy are jobs."

The Ministry of Employment and Labor announced a 19.2 trillion won fiscal budget in 2018 which aimed to create jobs and increase subsidies for small and medium sized business. The administration believes the stimulus will also have a trickle-down effect to the private sector as the private sector's contribution will be imperative in lowering the unemployment rates of young adults.

New labor policies

While President Moon has rolled out a number of policies that are geared towards increasing the quality of life for employees, the policies with the greatest implications to corporations are as follows: increase minimum wage, convert temporary workers into permanent workers, alleviate discrimination against temporary workers, reduce employee working hours and expand female employee rights.

Starting from January 1, 2018, the minimum wage in Korea was raised to 7,530 won/hour. This is a 16.4% increase compared to last year's minimum wage. The Moon administration feels the minimum wage is still low and is pushing hard to raise the wage floor up to 10,000 won/hour by 2020.

Another key component of President Moon's quality of life labor policy involves converting temporary workers into regular, permanent positions. President Moon campaigned hard on this message and after becoming president officially stated that "I will try to reduce the number of temporary workers to zero within my term." Public agencies such as the Incheon International Airport

have already responded by announcing that they would convert about 10,000 temporary workers into permanent employees within 2018. While many expected the public agencies to fall in-line with President Moon's promise, the business world was caught off guard when the government pronounced illegal on the practice of companies relying on subcontract workers for a long time. Such companies were issued corrective orders to convert such subcontract workers into permanent employees. In addition, the Moon administration plans to restrict the use of contract employees and agency workers and alleviate unreasonable discrimination between regular and non-regular employees.

One of the main factors that affect an employee's quality of life is the maximum number of working hours an employee can work in one week. There has been some debate and confusion as to what is the maximum number of hours an employee can generally work in one week. Some argues that it is 52 hours a week while the Ministry of Employment and Labor has interpreted that it's 68 hours a week (i.e., 40 normal working hours and 12 hours of overtime and 16 hours work on the weekend). In order to achieve a work-life balance, the Moon administration believes the maximum number of hours an employee should be able to work in one week (i.e., from Monday to Sunday) is 52 hours. The administration is currently undertaking the relevant steps to reflect the 52 hours/week maximum in the law.

Another main proponent of the Moon administration's work-life balance is improving the working environment for female employees. The administration will strengthen monitoring and inspection on employer's and its employees' compliance with sexual harassment related laws including protection of sexual harassment victims. The administration also plans to increase monetary support for maternity and childcare leave, and offer additional paid leave to female employees undergoing infertility, maternity and childcare.

Obstacles to implementation

Many of President Moon's labor policies have not yet been enacted into law. Moon's administration faces a stiff challenge because while President Moon's political party (i.e., the Democratic Party of Korea) is the ruling party, they do not have the sufficient number of votes to pass legislation on their own. Relevantly, with local elections (mayor, governor, etc.) set to be held in June 2018, it does not appear the other political parties will be willing to cooperate in passing such laws. As a result, many of President Moon's labor policies will not likely be enacted until

the second half of 2018.

Increase in labor investigations

Considering the current political climate and divide, the Moon administration faces several hurdles it must clear before it can pass its labor-friendly policies into legislation. However, instead of waiting on the sidelines, the Moon administration has chosen to enforce its policies through random labor inspections. Since last year, the administration has increased labor inspection officers. In 2018, those labor inspections officers are expected to target at least 25,000 companies, which is a 25% increase compared to 2017. All companies, ranging from large conglomerates to small and medium-sized enterprises, will be subject to random labor inspection.

The labor inspection officers will conduct comprehensive inspections with the goal of cracking down employer abuse and discrimination against employees. The officers will primarily focus on whether the employers have paid wages fully to employees (including whether they have implemented the new minimum wage), whether businesses are conducting discriminatory practices (temporary vs permanent, wage scheme, etc.), whether businesses have implemented appropriate sexual harassment policies and

preventive measures, and whether employee human rights are respected as part of the business' working environment.

Companies subject to investigation should be concerned as the Moon administration has armed the labor inspection officers with the ability to directly impose criminal sanctions against violating companies. In the past, companies usually received corrective orders or warnings first where they were provided with an opportunity to cure their violations before they were penalized. This will no longer be the case. Businesses should acknowledge these implications and should be proactive in being well equipped to face the labor inspector officers.



Young Seok Ki
Partner at Shin & Kim
www.shinkim.com



Peter Insoo Kimm Partner at Shin & Kim www.shinkim.com





The Wurth Group is the global market leader in the trade in fastening and assembly materials. Our high-quality standards are applied to more than 100,000 products; Screws, screw accessories, bolts, anchors, chemical products, furniture and building fittings, tools, storage and retrieval systems, and protection equipment for professional users.

Wuerth Korea Co., Ltd.
93-8, Seohanam-ro 451beon-gil,
Hanam-si, Gyeonggi-do, Korea
T 1588 6322 · F 031 791 5445
info@wuerth.co.kr · www.wuerth.co.kr

Korean National Assembly Approves Tax Law Amendments for 2018

Tom Kwon, Yeonho Chang

In December 2017, the Korean National Assembly enacted the final version of tax law amendments ("Tax Amendment(s)"). Most of the Tax Amendments became effective as of January 1, 2018.

The Tax Amendments are generally in line with the tax reforms proposed by President Moon Jae-in last year to impose higher taxes on companies and wealthy individuals, while increasing incentives for low-income households. These tax reforms were part of President Moon's campaign pledge to make Korean taxation "fairer". The changes in Korea are in contrast to the trend in some other jurisdictions (e.g., the United States) to reduce tax rates and increase incentives for companies to do business within its borders.

The following are some key highlights of the enacted Tax Amendments that are likely to impact foreign-invested companies and investors in Korea.

Increase in top marginal tax rates

The highest marginal tax rate for corporate income tax ("CIT") increased from 24.2% to 27.5% for taxable income over KRW 300 billion.

Therefore, the new CIT rates from January 1, 2018 are as follows:

Tax Base	Previous rates (Rate Including Local Surtax)	New rates from 2018 (Rate Including Local Surtax)
KRW 200M or less	10% (11%)	(Unchanged)
Exceeding KRW 200M but not more than KRW 20B	20% (22%)	(Unchanged)
Exceeding KRW 20B but not more than KRW 300B	22% (24.2%)	(Unchanged)
Exceeding KRW 300B		25% (27.5%)

The tax impact of this change may be limited for subsidiaries or branches of foreign companies, since not too many entities are expected to have taxable income exceeding KRW 300 billion. But for any business impacted, the financial modeling may need to reflect the increase in the highest marginal rate from 24.2% to 27.5% for future taxable income over KRW 300 billion.

The highest marginal tax rate for individual income tax ("IIT") also increased from 44% to 46.2%. Thus the new IIT rates from January 1, 2018 are as follows:

Tax Base	Previous rates (Rate Including Local Surtax)	New rates from 2018 (Rate Including Local Surtax)
KRW 12M or less	6% (6.6%)	(Unchanged)
Exceeding KRW 12M but not more than KRW 46M	15% (16.5%)	(Unchanged)
Exceeding KRW 46M but not more than KRW 88M	24% (26.4%)	(Unchanged)
Exceeding KRW 88M but not more than KRW 150M	35% (38.5%)	(Unchanged)
Exceeding KRW 150M but not more than KRW 300M	38% (41.8%)	(Unchanged)
Exceeding KRW 300M but not more than KRW 500M	38% (41.8%)	40% (44%)
Exceeding KRW 500M	40% (44%)	42% (46.2%)

For foreign executives of multinational companies and other high-income earners, what this Tax Amendment may mean is that if the special 20.9% flat tax rate for foreign nationals is not extended after 2018/2019, then the foreign individual's Korean income tax liability may increase very dramatically (e.g., from 20.9% up to 46.2%). For foreign executives who have tax equalization packages and/or who are eligible for foreign tax credit relief in their home countries, this Tax Amendment may not be a serious problem. But for many individuals, this Tax Amendment is expected to create significant economic hardship and may even be a deal-breaker for multinational companies to locate high value-added functions/positions in Korea.

Expansion of capital gains tax on foreign persons on sale of publicly-listed securities

Up to 2017, sale of publicly-traded securities by a foreign person was exempt from CGT if certain requirements were met. Specifically, the foreign person and related parties should hold less than 25% of the total outstanding shares during the current fiscal year, as well as during the preceding 5 years ("25/5 rule").

Under this Tax Amendment, the 25% threshold was reduced to 5%. In other words, if a foreign person holds 5% or more of publicly-listed shares in the current fiscal year or during the past 5 fiscal years, the foreign person would be subject to Korean CGT. The new rule applies to transfers on or after January 1, 2018. But under a grandfather clause, the old 25/5 rule should apply until December 31, 2018 for shares acquired prior to January 1, 2018.

This new rule may have significant impact on foreign financial institutions and investors who hold interest in publicly-listed shares.

However, even after this law change, CGT can still be exempt under many Korean tax treaties.

Additional limitations on interest deductions (BEPS Action Plans 2 and 4)

The Tax Amendments also introduced (i) rules denying deductions for hybrid mismatch arrangements (BEPS Action Plan 2); and (ii) additional limitations on interest deductions (BEPS Action Plan 4).

The former Tax Amendment denies deductions for the payor in Korea if the interest is treated as dividends and not taxed in the foreign recipient's jurisdiction. This applies to related-party transactions from January 1, 2018 in Korea.

The latter Tax Amendment provides for additional limitations on the deductibility of interest paid to foreign related parties. Briefly, net interest in excess of 30% of "adjusted taxable income" is not deductible. Unlike the thin cap rule, this applies not just to certain shareholder borrowings, but to all related-party borrowings. This will be effective from January 1, 2019 in Korea.

The introduction of these BEPS Action Plans should come as no surprise since Korea was one of the early supporters of the BEPS initiative, and plans to fully implement the BEPS Action Plans.

Revision to the standard for Korean tax residency

Up to 2017, a foreign individual could be considered a Korean tax resident if, inter alia, he/she has resided in Korea for 183 days or more over 2 years.

The Tax Amendment loosened this standard to 183 days or more over 1 year. This new rule addresses complaints from foreign taxpayers that the current standard for Korean tax residency rule is unduly strict and may also conflict with the threshold for taxation of personal services under many Korean tax treaties (which is



typically triggered when a foreign individual is in Korea for 183 days in a year). This is effective from January 1, 2018.

Exit tax

Korea introduced an "exit tax" for Korean residents who leave Korea permanently on or after January 1, 2018.

Under the Tax Amendment, individuals who leave Korea permanently (and thus lose Korean tax residency) could be subject to a deemed capital gains tax on Korean shares that he/she holds at the time of exit. Specifically, the Korean tax residents subject to this taxation are "major shareholders"¹⁾ who have maintained a domestic address or residence in Korea for at least 5 years out of the last 10 years.

This new tax could have significant impact on many long-term foreign residents who decide to return to their home countries. Such individuals should review their investment portfolio to assess whether this exit tax may impact them.

Other changes

In addition, other significant Tax Amendments that may impact foreign companies or its subsidiaries in Korea include the following.

- 1. Improvement and harmonization for advance pricing agreement ("APA") and advance customs valuation arrangement ("ACVA") request.
- 2. Additional incentives for foreign-invested companies that create jobs in Korea.
- 3. Further reduction in the limit to utilize net operating loss carryovers.
- 4. Change in the formula to calculate accumulated earnings tax (which is an additional tax on a company's undistributed profit).
- 5. More requirements for tax-free business reorganization.
- 6. Increase in withholding tax rate for service fees paid to foreign company for dispatched employees to Korea from 17% to 19%.
- "Major shareholders" are defined in the tax law and include, inter alia, shareholders who have 1% or more shareholding in a company listed on the Korea Stock Exchange (KSE) or shares valued at KRW 2.5 billion or more.



Tom Kwon

Foreign Attorney
Tax Practice Group of Lee & Ko
www.leeko.com



Yeonho Chang
Certified Public Accountant
Tax Practice Group of Lee & Ko
www.leeko.com

Train the Trainer

A key pillar of Ausbildung

Susanne Woehrle

Background

BMW Korea and Mercedes Benz Korea in cooperation with KGCCI started Ausbildung effectively on 1st of September 2017 with 90 trainees. The trainees are having on-the-job training for professional skills as well as academic education in two colleges for the theoretical basis for 3 years in total. In order to conduct Ausbildung in the workshops of participating dealerships of BMW Korea and Mercedes Benz Korea, qualified trainers in each workshop are necessary. In addition, this is a mandatory requirement by the DIHK (Association of German Chambers of Commerce and Industry) in order to obtain the German certificate. Trainers have a key role in the implementation of the training content on site. Overall, they are required to be capable of relationship management and pedagogical skills. In view of the changes in work organization and the high technical and interdisciplinary requirements in modern companies, efficient training and the promotion of young talents can only be provided by qualified instructors

Qualification

Who wants to train, must have the necessary technical knowledge, but also acquire organizational, educational, psychological and legal knowledge. Therefore, future trainers have to be trained before they start working with young people. You can already complete the training without special prior knowledge. After passing the exam, you will then obtain the trainer certificate. The actual training entitlement, however, only comes when the candidate has good professional skills and professional experience. In Korea trainers have to be at least 24 years old and have minimum 2 years of work experience. The training for the AdA (TtT) International Vollversion is designed for 100 hours of training. In the end there are two parts for the exam: a theoretical test with 60 questions and a demonstration lesson. The very first Train-the-Trainer workshop in



Train-the-Trainer workshop BMW Korea

Korea was conducted by a German Expert on Dual Vocational Education. BMW Korea and Mercedes Benz Korea have successfully qualified 44 trainers in this first generation. Nevertheless, there is an ongoing high demand for trainees and trainers. Therefore, the second Train-the-Trainer workshop took place in December 2017, where another 33 trainers were trained and prepared for their exam in February 2018. The second workshop was conducted by a team of a German expert and trainers from BMW Korea and Mercedes Benz Korea. During this second Train-the-Trainer workshop these trainers received the qualification as master trainers. This enables BMW Korea and Mercedes Benz to train and qualify trainers internally which is a unique structure for the Korean system. At KGCCI, two people have also successfully completed a Train-the-Trainer program. Ms. Barbara Zollmann and Ms. Young-Jin Kim took part in a Train-the-Trainer workshop at IHK Berlin in June 2017, together with other German chamber representatives who offer Ausbildung in their countries, and passed their exam successfully in July 2017.

Content of training

Train-the-Trainer workshop contains four Action Fields. They were 100% adopted from Germany; only some minor adaptations were made in order to fulfill Korean legal requirements. The four Action Fields are structured in the following way:

In Action Field 1:

1	Check of training requirements
2	Planning of training

In Action Field 2:

1	Preparation of training
2	Participation in the hiring procedure of apprentices



Train-the-Trainer workshop Mercedes Benz Korea

In Action Field 3:

Implementation of the training	Learning culture and learning conditions
	Probationary period
	Developing work tasks
	Learning difficulties
	Additional qualifications
	Social and personal development of apprentices
	Performance appraisal and appraisal interviews

In Action Field 4:

1	Completion of Training
2	Preparation of assessment

Every apprenticeship aims for a successful completion in order to give the trainee a good start to his professional life. For this to succeed, the future trainer learns in this field of action everything that is necessary for a successful exam preparation.

Considering the intense training of trainers, this part of Ausbildung can be considered as the center piece of the program. It gives added value not only to the trainees but also to the workshop employees who decided to go for this challenge.

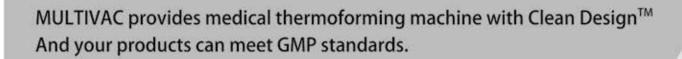


The new signboard for companies participating in the Ausbildung program



Susanne Woehrle

Project Manager Ausbildung KGCCI DEinternational Ltd. www.kgcci.com





Safe, reliable and renewable

Tel. 82 70 4895 4040 https://kr.multivac.com INFO@kr.multivac.com





Official Visit of the German President Steinmeier to Korea

Business roundtable with KGCCI members







President Steinmeier meeting KGCCI members in Seoul

On 8th February, KGCCI held a small business roundtable with German Federal President Dr. Frank-Walter Steinmeier and KGCCI members from various industries to communicate opportunities and challenges of German investors in Korea. This roundtable provided background information on Korean-German business matters ahead of President Steinmeier's further program in Korea, and addressed topics such as Innovation, Energy Transition, Industrie 4.0, or Ausbildung. The participants also mentioned challenges for investors in Korea, such as unclear regulations, multiple audits and investigations, IPR issues, missing incentives for re-investments and the necessity to advance with the planned revision of the EU-Korea Free Trade Agreement and removal of non-tarriff-barriers. After two days in Seoul, President Steinmeier and his delegation headed to PyeongChang for the opening ceremony of the PyeongChang Winter Olympics 2018.







"Let the games begin!" was the motto of the kick-off event organized by the German Embassy with special guest President Steinmeier.

KGCCI Economic Outlook 2018

2018 - The reality check for Korea

KGCCI invited Korean and German business leaders to its Economic Outlook 2018 to share insights into the economic development as well as trends for this year and to jointly discuss future directions. The event was held on January 25th in cooperation with Incheon Free Economic Zone (IFEZ). Dr. Jong Kap Kim, KGCCI Chairman, welcomed more than 100 guests to this event which started with a presentation by IFEZ emphasizing the region's benefits to international investors.

German Ambassador to Korea Stephan Auer opened the first part of the evening by accentuating the significance of German-Korean bilateral relations and said that the remaining homework of both trading partners, in particular concerning non-tariff trade barriers, can be solved in joint advocacy of the EU commission and the Korean government.

Will Korea gain a healthy economic growth structure?

Mr. Alexander Hirschle, Director of Korea of Germany Trade & Invest, prospected a growth rate of around 3% for 2018 and said that this year will be Korea's reality check for gaining a balanced, healthy and sustainable economic growth and that interesting shifts will happen. In the previous years the Korean economy had a "savior" that significantly pushed the economic growth, such as the construction sector in 2016 or the semiconductor sector in 2017. Hirschle, however, prospected that a new savior for 2018 is not needed as Korea will enter a phase of normalization of its economic growth structure. He presumed that the semiconductor boom will continue in 2018 due to the high demand from IOT, self-driving technology and smart factories, but with less dynamics. South Korea's 2017 economy was a positive year with a GDP growth rate of 3.1% that was based on a regained political stability with Moon Jae-In's presidency which concluded in the increase of consumer confidence and a new record high of the KOSPI (+20%). Nevertheless, risk factors like the new record high of Korea's household debt remain. Hirschle underlined that despite the positive development, growth is not reaching all areas of society, as the current job market shows, because growth is heavily dependent on exports of few items like



Panel Discussion on "The Future of Work in Korea"

semiconductors that create relatively few jobs.

Innovation and proactive leadership to face the new labor market

The second part of KGCCI's Economic Outlook 2018 was a panel discussion on "The Future of Work in Korea". All panelists agreed that a time of transition has started, facing the challenges of digitalization and 4th industrial revolution. New leadership styles are required in companies that involve and empower the younger ones. And more innovation and self-esteem on all employee levels are demanded to counter this phase of uncertainty. Furthermore, the panelists agreed that the dramatically low employment of women is not only a Korean topic, but that the lack of affordable child care in Korea is an important barrier for women to participate in the labor market. In conclusion, the panelists called for a proactive leadership from companies, investment in the education of the future and a stronger confidence from all sectors of economy and society to respond to the challenges such as the rise of labor costs, the 4th industry revolution or youth unemployment.

Ms. Barbara Zollmann, President & CEO of the KGCCI, thanked all participants of the Economic Outlook 2018 and emphasized that KGCCI does its share to help foster solutions to bring Korean youth into the labor market, e.g. by projects such as "Ausbildung" – a German Vocational Education Program – and the KGCCI's new female leadership group "WIR" which is planning to launch a mentoring program to encourage and inspire future female leaders.



KGCCI Economic Outlook 2018: Alexander Hirschle, Director Korea of Germany Trade & Invest



Speakers & Panelists: Mr. Oliver Grohmann, Prof. Dr. Young-Bum Park, Ms. Barbara Zollmann, Dr. Florian Kohlbacher, Mr. Markus Stehle, Mr. Sven Schwersensky, Mr. Alexander Hirschle, Mr. Weert Boerner, Mr. Jong Kap Kim (from left to right)

Supporting Parasport in Korea

KGCCI donates to young athletes of the Korea Para Ski Association

The 14-year-old twin sisters Gil-La Choi and Sa-Ra Choi are currently waiting for the final admission announcement of the alpine skiing forerunners at the 2018 Paralympic Winter Games in PyeongChang. Since 2015, both visually impaired girls have been training in the young athletes team of the Korea Para Ski Association (KPSA) and are about to debut on the Paralympic slopes.

The KPSA rookies team consists of one sit-ski and three visually impaired athletes, their three guides, one trainer and one coach. All nine members are strongly motivated to constantly improve their skills and try to stay in best condition even in seasons when winter sports are not possible in Korea. For this purpose, the team travels to training facilities in Europe and New Zealand despite the physical handicap and the logistical struggles that come along with it, as their common goal is the 2022 Beijing Winter Paralympics participation.

The KPSA strives to realize an integrated society in which handicapped and non-handicapped people can socialize together without discrimination through the sports of skiing. In this respect, KGCCI is honored and pleased that a donation of 5 million KRW could be handed over directly to the young athletes on behalf of the entire KGCCI and its member companies, as German companies

best condition even in seasons when continuous interest will be given in our Paralympic sports especially by visiting and following the Paralympic games."

Europe and New Zealand despite the istical struggles that come along with the 2022 Beijing Winter Paralympics

continuous interest will be given in our Paralympic sports especially by visiting and following the Paralympic games."

KGCCI is crossing all fingers for the successful Paralympic debut of these young athletes.

If you wish to support Parasport in Korea, please contact the Korea Paralympic Committee (KPC) for further information. Donations can be addressed to specific associations such as the KPSA through KPC.

in Korea are actively involved in various projects supporting

This donation was raised from the 2017 KGCCI Christmas Dinner's

charity raffle to which numerous member companies as well as

the KGCCI jointly contributed to support the rookies. Mr. Jong-Lak Hong, Executive Secretary of the KPSA, expressed his gratitude during the donation ceremony and said, "We greatly appreciate

the KGCCI and German companies' donation which will be a

tremendous help and motivation to our athletes" and "we hope that

underprivileged groups to contribute to the Korean society.

Korea Paralympic Committee http://english.koreanpc.kr

Korea Para Ski Association http://kpsa.koreanpc.kr





January 16th 2018, KGCCI CEO & President Barbara Zollmann visiting KPSA and handing over the donation to the athletes.





KPSA alpine skiing young athletes team during their training

News and People



Accenture has entered into an agreement to acquire Germany-based Mackevision and its global subsidiaries, amongst them Mackevision Korea, a leading global producer of 3D-enabled and immersive product content. The acquisition will add state-of-the-art visualization capabilities to Accenture Interactive's digital services portfolio - strengthening its ability to create

compelling, next-generation customer experiences and industrial, extended reality applications. Stefan Ernst will continue leading Mackevision Korea as Managing Director.



Mr. Peter I. Kimm has joined Shin & Kim as Head of the German desk. Mr. Kimm's practice focuses on M&A, Corporate Governance, Employment Law, Financial Markets, and Compliance. As attorney with more than 10 years of experience in Germany, he has been practicing in Korea for the past four years. Shin & Kim ranks in the top tier of full service law firms in Korea with

almost 500 professionals offering legal services to domestic and international clients.



■ Ms. Antje Resech has been appointed as Vice President of KGCCI DEinternational Ltd. (AHK Korea) as of January 2018. In 2013, she joined the Delegation of German Industry and Commerce in Vietnam (AHK Vietnam) as Head of Operations and also worked on management projects with the AHK in Myanmar and Peru. Ms. Resech came to Vietnam in 2010 to start her career with Häfele Vina JSC. as Marketing and Sales manager. Ms. Resech holds a diploma from Vienna University of Economics and Business, Austria.

Contact information: aresech@kgcci.com / +82 2 3780 4680



Ms. Young-In Sun joined the KGCCI (AHK Korea) as PR & Communications Manager as of January 2018. She is in charge of all KGCCI publications, media relations as well as corporate communications. Ms. Sun has gained marketing and PR experiences in previous roles at the European headquarter of Hyundai Mobis and several major German media institutions. She holds a master's degree from Marburg Philipps University in Media studies and is fluent in German, Korean, English and Japanese.

Contact information: yisun@kgcci.com / +82 2 3780 4652



Ms. Soobin Ahn started as Membership Manager at the KGCCI (AHK Korea) from January 2018. Prior to joining the AHK Korea she worked as event manager at the Korean Cultural Center, Cultural Department of the Embassy of the Republic of Korea, in Berlin between 2010 and 2013. After that Ms. Ahn also worked for KOTRA (Korea Trade-Investment Promotion Agency) as marketing manager in Frankfurt until 2017.

Contact information: sbahn@kgcci.com / +82 2 3780 4630

New Members

Corporate Member

BNP Paribas

Mr. Philippe Noirot Head of Country, BNP Paribas South Korea CEO, BNP Paribas SA Seoul Branch philippe.noirot@asia.bnpparibas.com Banking, Financial Services



HANNURI Tax & Accounting

Mr. Jin Ho Bae CPA jhbae@hannuricpa.co.kr Accounting, Auditing, Tax



Framas Korea Co., Ltd.

Mr. II Nam CFO

namil@framas.co.kr Injection molding, accessories for footwear



KNF Neuberger Ltd.

Mr. Hansoo Lim General Manager hansoo.lim@knf.com

Diaphragm pump technology for Medical, Environment, Printer, Energy, Semicon and Laboratory solution

THE 13th FOOD WEEK KOREA

November 28 – December 1, 2018 | Coex Halls A-D, Seoul, Korea



Korea's Most Established Food Industry Trade Show

Food Week Korea, organized by Coex, serves as the business platform to both domestic and overseas visitors through its exclusive business matching program. Food Week Korea 2017 welcomed 871 companies from 27 different countries including Korea, Japan, Turkey, Malaysia, Peru, Germany, Australia and more, and organized various concurrent programs. Food Week Korea 2018', which is held from November 28 to December 1 at Coex Halls A, B, C, & D, is expected bring more than 1,000 companies from 40 different countries. For more information, please contact the Secretariat of Food Week Korea.

Concurrent Programs *

- -Kitchen Fair
- -1:1 Biz-matching Program
- -HMR Pavilion
- -Food related Symposiums & Conferences
- -Cooking demonstration

Booth Information & Fee

Booth Type	Space Only	Shell Scheme	Premium Booth
Early Bird Registration (~ April 30, 2018)	2,800USD/booth	3,100USD/booth	
General Registration (~ Sept. 28, 2018)	3,000USD/booth	3,300USD/booth	3,600USD/booth

Food Week Korea Secretariat

T. 82.2.6000.8160 E. foodweek.info@coex.co.kr W. www.koreafoodweek.com



Preh Car Connect GmbH Korea Liason Office

Dr. Ken Riebensahm Director Ken.Riebensahm@preh.de Automotive Supply, IT, Telecommunication, Software



Siltronic Korea Ltd.

Dr. Christian Parthey Managing Director christian.parthey@siltronic.com



Semiconductor Industry, Raw Material Supply, Sales of Silicon Wafers

SCC Scientific Consulting CompanyGmbH

Dr. Hans-Josef Leusch Director Strategic Business Develpment hans-josef.leusch@scc-gmbh.de



Wooribank Global Investment Center

Mr. Jae Ho Jung JAEJUNG@wooribank.com FDI & ESCROW Services



Membership benefits and registration: www.korea.ahk.de/members-korea | Contact: Ms. Soobin Ahn | members@kgcci.com

Upcoming

KGCCI Events

• AMK February 27	● February 28	
Member to Member Seminar: KGCCI Law Update with Shin & Kim Topic: "Policies of the MJI (Moon Jae-in) Administration" Shin & Kim Office, 8th Floor Conference Room	Luncheon discussion "Lessons of the German Energy Transition for South Korea" Conrad Seoul Hotel, 6Fl. Studio 4	
March 13	⊙ ^{AHK} March 22	
Self-Development Seminar with VECTIS: Effective Communications Skills Target: Koreans who wish to improve communications with expat managers and overseas business partners KGCCI 7th Floor, Conference Room	KGCCI Sundowner 6.30pm – 10.00pm KGCCI Veranda	
OAHK April 2	• April 18	
KGCCI Breakfast seminar with Allianz Global Corporate & Speciality SE "Introduction and overview of the Korean Corporate & Specialty and MidCorp/ SME insurance market"	KGCCI Annual General Meeting (AGM)	
	Member to Member Seminar: KGCCI Law Update with Shin & Kim Topic: "Policies of the MJI (Moon Jae-in) Administration" Shin & Kim Office, 8th Floor Conference Room March 13 Self-Development Seminar with VECTIS: Effective Communications Skills Target: Koreans who wish to improve communications with expat managers and overseas business partners KGCCI 7th Floor, Conference Room April 2 KGCCI Breakfast seminar with Allianz Global Corporate & Speciality SE "Introduction and overview of the Korean Corporate & Specialty and	

Registration: www.kgcci.com/events | Contact: Ms. Sun-Hi Kim | events@kgcci.com

Contacts

Korean Language Course Beginner & Intermediate 1 Level



Enjoy learning Korean among colleagues from the German business community! We kindly invite you to participate in the next Korean Language Course for KGCCI members from March until May 2018. The class will be held by the German-speaking teacher Ms. Sung-hee Shin at the KGCCI Conference Room (8th Floor).

Beginner Level: Every Monday, 8.00 – 9.30 am
 Intermediate 1 Level: Every Wednesday, 8.00 – 9.30 am

We are looking forward to your participation!

Please contact: Ms. Seong-Eun Cho

E-mail: secho@kgcci.com / Tel.: 02-3780-4665

Innovation Awards 2018



Application for the 4th KGCCI Innovation Awards will be opened on 1st March 2018! This award provides companies a great opportunity to display their creativity and innovative power, to leverage their business and brand. We are looking forward to exciting participants who can apply for one of the three award categories of the KGCCI Innovation Awards:

- Innovation in Business
- Innovation in Sustainability
- Innovation in Digitalization

Award winners will be announced at the festive awards ceremony on September 14, 2018 in Seoul, which will include guests from business and politics. All details can be found on the website innovation-award.kr

For further information please contact: Ms. Sun-Hi Kim E-mail: innovation@kgcci.com / Tel: 02-37804-659

KGCCI Green Cabbage Dinner



The traditional KGCCI Green Cabbage Dinner took place on February 2 at the Oak Room at Millennium Hilton Seoul. Around 70 guests gathered for the event, most of them wearing the traditional northern German fishermen's shirt and red bandana. During the event, Mr. Holger Detje, President of Bayer Cropscience Korea, was crowned as the new "Grünkohlkönig" by last year's "Grünkohlkönig" Mr. Ludwig Feuchtmeyer, CFO at Continental Automotive Electronics LLC. The Grünkohlessen was made possible thanks to the support of the German Embassy as well as Lufthansa Cargo and Schenker Korea. Special thanks go to the speakers for their humoristic contributions and Mr. Volker Minnert from Contitech Fluid Korea for his musical contribution.

Brennende Nadeln und wilde Kräuter

Traditionelle koreanische Medizin – Der etwas andere Medizintourismus in Korea

Joanna Wagner

Spitze Nadeln, blutsaugende Gefäße und ein exotischer Duft in der Luft. Die ersten Eindrücke sind zugegeben nicht ganz einfach zu verdauen für Neulinge in der traditionellen koreanischen Medizin (TKM). Doch vor allem die ältere Generation in Korea setzt noch auf die traditionellen Heilmethoden, aber auch Studenten und ganze Familien gehen bei verschiedensten Beschwerden zu einer Praxis für TKM. In den letzten Jahren hat TKM auch unter Ausländern an Beliebtheit gewonnen.

Die TKM ist der Traditionellen Chinesischen Medizin (TCM) sehr ähnlich. Beide arbeiten vorwiegend mit Akupunktur und heimischen Kräutern. Eine Besonderheit der TKM ist die Sasang-Typology, welche auf eine Art 4-Typen-Biopsychosozialsystem basiert und Empfehlungen zur Behandlung der unterschiedlichen Typen (Taeyangin, Taeumin, Soyangin and Soeumin) gibt. Eines der ältesten und wichtigsten Werke zur TKM ist das Dongeui Bogam von 1613, welches 2009 in das Weltdokumentenerbe der UNESCO aufgenommen wurde.

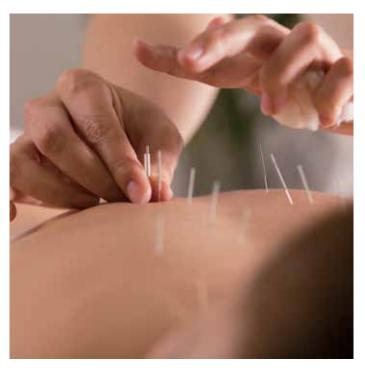
Wenn man zu einer Praxis für TKM geht, unterscheidet sich diese optisch nicht unbedingt von einer für westliche Medizin: der Arzt trägt einen weißen Kittel, die Krankenschwestern normale Uniformen, es gibt Besprechungs- und Behandlungszimmer. Nur der Kräutergeruch mag für den westlichen Besucher ungewöhnlich sein. Nach dem Konsolidierungsgespräch erfolgt die Behandlung mit Akupunktur, Schröpfen, Moxa oder, je nach Ausbildung des Arztes, auch mit Akupressur und Chiropraktik.

In den USA wurde 1979 die Akupunktur als Heilmittel durch die Gesundheitsbehörde anerkannt. In Deutschland werden seit 2007 Akupunkturbehandlungen unter bestimmten Umständen von der

gesetzlichen Krankenkasse bezahlt. Die Behandlungskosten in Deutschland liegen bei 30-70 EUR. In Korea wird immer ein Teil der Kosten einer Akupunkturbehandlung von der koreanischen Krankenversicherung übernommen. Die Behandlung in Korea kostet etwa 20.000 KRW. Wer aber eine koreanische Krankenversicherung hat, zahlt nur 6.000 KRW. Die Kräutermedizin kann mit bis zu 400,000 KRW sehr teuer werden.

Laut dem Ministerium für Gesundheit und Wohlfahrt in Korea stieg die Zahl der Ausländer, die Ärzte der TKM besuchten, seit 2009 um 110,8%. Die meisten der ausländischen Patienten kamen aus Russland und Japan, an dritter Stelle aus den USA. Es kommen auch vermehrt Patienten aus Deutschland sowie aus China.

Die TKM wird mehr und mehr von Ausländern geschätzt, da sie als Schmerztherapie angewendet werden kann und keine Operation erfordert. Vor allem bei Rückenproblemen soll die TKM sehr effektiv sein. Sehr bekannt ist das Jasang Hospital of Oriental Medicine, welches sich auf Rückenmarkerkrankungen spezialisiert hat. Dort Arbeitet auch der bisher einzige und auch deutschsprachige westliche Arzt mit Lizenz für TKM in Südkorea.





Joanna Wagner Junior Economist at KGCCI

Media Data

KORUM, the bimonthly magazine of KGCCI publishes articles on Korea's economy, markets, companies, technologies as well as on tax, legal or intercultural issues. The journal also contains information on the activities of KGCCI and its member companies.

KORUM target group consists of KGCCI members in Korea and abroad, decision makers of companies doing business with Korea, business associations and relevant public sector institutions.

Circulation: 1,000 copies Language: German/English

minimum 32 (full colour) Pages:

Frequency: bimonthly (February, April, June, August, October, December)

ADVERTISEMENT RATES

Rates per issue, all pages full colour. Prices exclude VAT.

Advartisament tuna	Prices (Mil. KRW)		Trim size	Non-bleed size
Advertisement type	Member	Non-member	(W x H mm)	(W x H mm)
Inside front cover page spread	1.98	2.2	420 x 297	426 x 303
Outside back cover page	1.98	2.2	210 x 297	216 x 303
Inside back cover page spread	1.89	2.1	420 x 297	426 x 303
Inside double page spread	1.8	2.0	420 x 297	426 x 303
Inside front cover page	1.53	1.7	210 x 297	216 x 303
Inside back cover page	1.44	1.6	210 x 297	216 x 303
Inside page	1.26	1.4	210 x 297	216 x 303
Inside 1/2 page	0.72	0.8	210 x 149	

NEXT ISSUE

Advertisements and contributions for issue 74: March 15th, 2018

Main topic: "Zukunftssparten"

PREMIUM PARTNER PROGRAM 2018

KGCCI DEinternational has launched its Premium Partner Program. If you want to become a Premium Partner as of 2018 please refer to our website or contact us at members@kgcci.com or korea.ahk.de/premium-partner/

PremiumPartnerPlatinum 2018







PremiumPartners 2018













KORUM

Korea I Unternehmen I Märkte

Nr. 73 | Februar 2018

Herausgeber:

Deutsch-Koreanische Industrie- und Handelskammer 8th Fl., Shinwon Plaza, 85, Dokseodang-ro, Yongsan-gu, Seoul 04419, Republic of Korea www.kgcci.com

Redaktion:

PR Abteilung Tel. +82-2-37804-652 Fax +82-2-37804-655 pr@kgcci.com

Editor-in-Chief: Young-In Sun

Anzeigen:

Hee-Kyung Choi Tel. +82-2-37804-698 Fax +82-2-37804-655 hkchoi@kgcci.com

Layout und Druck:

Design Sidae Co., Ltd.

© Deutsch-Koreanische Industrie- und Handelskammer Alle Rechte vorbehalten

Mit Namen gekennzeichnete Beiträge stellen die Meinung des Autors, nicht unbedingt die Meinung der AHK Korea dar.

INTELLIGENT DRIVING ANYTIME, ANYWHERE.

THE ALL-NEW BMW 5 SERIES WITH BMW xDRIVE.

BMW 커뮤니케이션 센터 (080) 269-2200 **BMW 공식 홈페이지** www.bmw.co.kr **BMW 5시리즈 마이크로사이트** www.bmw5series.co.kr

BMW 커뮤니케이션 센터 (080) 269-2200 BMW 공식 홈페이지 www.bmw.co.kr BMW 5시리즈 마이크로사이트 www.bmw5series.co.kr
BMW 페이스북 www.facebook.com/BMWKorea BMW 인스타그램 www.instagram.com/bmw_korea BMW 유튜브 www.youtube.com/BMWKorea
정부 공인 표준 연비 및 등급 BMW 530d M Sport Package 배기량 2,993cc, 공차중량 1,845kg, 자동 8단, 복합연비 13.5km// (도심연비 12.0km//, 교속도로
연비 15.9km//), 복합CO2배출량 147gkm, 3등급 *이 연비는 표준모드에 의한 연비로서 도로상태 운전방법 - 치량적재 · 정비상태 및 외기온도에 따라 실주행간비와 차이가 있습니다. 본 광고 이미지는 실제 차량과 차이가 있을 수 있으며 사양 및 제원은 성능 개선을 위하여 사전 예고 없이 변경될 수 있습니다. 정확한 모델별 옵션 적용 사항은 가까운 BMW 공식 달러 전시장에 문의하시기 바랍니다.

나눔, 더 나은 미래의 시작입니다. BMW 코리아 미래재단



M₀BB 4102

Sheer Driving Pleasure

