



Flanders
State of the Art



**SNAPSHOT AT
THE AERONAUTICAL AND
SPACE INDUSTRY**

IN SOUTH-KOREA

FLANDERS INVESTMENT & TRADE MARKET SURVEY

Snapshot at the aeronautical and space industry in South Korea

Spring 2015

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Before you start reading

We advise you to check the latest Korean legislation and import regulations before sending your goods to South- Korea. This can be done by contacting your Koreans importer or inform yourself with the Koreans Customs Authorities. The Korean embassy in Brussels or Flanders Investment and Trade can also assist you.

Statistical material can vary depending on the source.

The terms “Korea” and “South Korea” are used in this sector overview. With both terms we talk about the Republic of Korea.

Exchange rates (5 May 2015):

1 EUR ≈ 1205 Korean Won (KRW)

1 USD ≈ 1079 Korean Won (KRW)

www.oanda.com/currency/converter/

The information given in this publication is intended as background information. It is with the greatest of care we collected this information based on the available data and documentation at the time of publication. This publication has therefore not the ambition of completeness or validity for your specific situation. They can therefore never be regarded as legal, financial or other specialist advice. Flanders Investment & Trade (FIT) cannot be held responsible in the sense for any incorrect entries, omissions or inaccuracies in this publication. FIT cannot be held responsible for the use or interpretation of information contained in this publication. References in this publication to specific entities, companies and / or individuals have no specific recommendations in which Flanders Investment & Trade could bring some responsibility.

This report was compiled by Flanders Investment and Trade in Seoul, Republic of Korea in spring 2015.

Introduction

The current South Korean government is investing heavily in new growth engines to upgrade and reconvert the Korean economy. Also the private companies are encouraged to invest in their products and services to reach the next level. They want to develop new industries in order to become world leaders and exporters in these areas. The aeronautical and space industry is one of these chosen sectors.

In the past, Korea has been mainly an importer of products and services for the aeronautical and space industry. By 2020, they want to be in the top 7 suppliers in this sector and have a fully developed domestic aeronautical and space industry.

But, at this stage, we still expect some potential business opportunities for the Flemish companies in this sector for high quality products, automation systems, robotics, software applications, IT convergence or technology and knowhow transfer.

In this snapshot of the aeronautical and space industry in South Korea, we will have a closer look at this emerging domestic production industry.

In a first chapter, we will shortly gaze at some figures and charts on how this sector is evolving. And give some more information on the Korean players on the market. We added also some trade statistics. Some attention-grabbing facts regarding the import regulation will be enumerated. In the second chapter, we give you some tips on how to approach this market in South Korea. And the last chapter, will consist out of practical info on local fairs and organizations active in the aeronautical and space industry.

1. Brief overview of the aeronautical and aerospace industry

1.1. The Korean aeronautical and space industry

Korea is the 15th country in the ranking of the global aerospace and defense industry sales figures. The local Korean industry is mostly focused on parts and military aircrafts.

Country ranking

Ranking	Country	Sales (US\$0.01 billion)	Ratio (%)	Employment (10,000 persons)	Main lines
01	USA	1,874	43.7	625	Finished aircraft, engines
02	France	502.88	11.7	162	Finished aircraft, engines
03	UK	373.8	8.7	101	Engines, parts
04	Germany	357.83	8.3	97	Parts, helicopters
05	Canada	226.47	5.3	87	Mid-size aircraft
06	China	177	4.1	501	Military aircraft
07	Russia	176.68	4.1	407	Military aircraft
08	Japan	175.83	4.1	32	Parts
09	Italy	133.34	3.1	35	Military aircraft, helicopters
10	Spain	92.52	2.2	33	Mid-size aircraft, parts
11	Brazil	58.03	1.4	17	Mid-size aircraft
12	Sweden	36.20	0.8	13	Military aircraft
13	Israel	34.40	0.8	16	Unmanned aircraft
14	Switzerland	28.84	0.7	9	Small-size aircraft
15	Korea	26.97	0.6	10	Military aircraft, parts
16	Singapore	15.27	0.4	8	MRO

Source: Performance of the Aerospace Industry in 2012 and Forecast for 2013, Korea Aerospace Industries Association (KAIA)

The production value in 2013 was 3.6 billion USD, an increase of 34% compared with 2012. This table gives you an idea in which programs the Korean companies are active. The main activities are situated in the commercial aircraft parts and the T-50 related projects.

Table 1. Production by Programs

Program	Unit : 1 million dollars	
	2013	2014(forecast)
T-50 related projects	771	940
KT-1 related projects	78	164
F-16 related projects	36	39
F-15 related projects	11	8
KUH	612	579
Commercial aircraft parts	1,166	1,387
Engine maintenance	81	46
Engine parts	238	324
Fuselage maintenance	281	327
Space project	78	91
UAV project	91	113
Other	163	173
Total	3,606	4,191

Korean companies and government are eager to mature in this industry. The Korean government has identified this industry as a new growth engine in the economic policy and invested about 300 billion KRW for the development of the Korean space industry in 2013. Their ambition is to place Korea among the top 7 global position by 2020. To enter the global 7 tier in aerospace industry by 2020 by producing 20 billion USD and exporting 10 billion USD.

The last years, Korea has celebrated some major achievements in this area:

- KAI FA-50: first locally produced multi-purpose fighter aircraft and export of it to other countries
- KAI KHP: Korean utility helicopter. Korea is globally the 11th largest producer to helicopters
- On 30 January 2013, Korea launched successfully the first homegrown rocket into space

And new projects are ongoing like for example:

- Moon exploration by 2020. The prototype of a lunar rover was presented in February 2015. If this launch will succeed, Korea will be the 4th nation in the world to successfully land something on the moon
- Unmanned attack aircraft with a 150HP engine and air-to-ground attack and reconnaissance functions by 2017
- Turbo-prop mid-size aircraft jointly with Bombardier Canada
- Korea satellite launch vehicle III development projects by 2021
-

Research and development is done internally at the manufacturers but also at the Korean Aerospace Research Institute. This Korean Aerospace Research Institute focuses on different aeronautics and space projects in order to develop new technologies but also emphasizes on the industrialization and commercialization of these innovative technologies. Next to that, they do quality certification of aircraft and space equipment, mandated by the government. More information on their R&D projects can be found on <http://new.kari.re.kr/english/>

Forecasts of domestic production of the aerospace equipment sector is optimistic. Although, the growth is remarkable, some wonder about the quality and sustainability of these products.

Forecast of domestic production of aerospace equipment by sector (Unit: US\$ 100 million)

Classification	2008	2010	2013	2015	2018	2020
Finished aircraft	7.6	6.0	10.5	25.5	27.2	35.0
Parts	3.2	7.2	17.8	32.2	51.5	66.2
MRO	9.6	18.7	30.5	41.9	67.1	86.3
RSP	0.0	0.0	3.1	8.2	14.7	18.7
Total	20.4	31.9	61.9	107.7	160.4	206.2

Source: "Basic Plan for the Development of the Aerospace Industry," Ministry of Trade, Industry & Energy

The main international companies have activities in Korea. Some opened up their own offices in Korea. Or they teamed up with Korean companies to jointly enter bids and have transfer of technology. Examples of companies in Korea are Boeing (Boeing Training Center), AgustaWestland, Lockheed Martin and Airbus (training center, defence and space and helicopters).

1.2. Korean companies active in aeronautical and aerospace industry

1.2.1. Korean airlines

Air Busan: [www.airbusan.com/AB/airbusan/english/main.jsp?](http://www.airbusan.com/AB/airbusan/english/main.jsp)

Air Incheon: www.air-incheon.com/en/

Asiana Airlines: <http://eu.flyasiana.com/C/en/main.do>

Korean Air: <https://kr.koreanair.com/global/en.html>

Eastar Jet: www.eastarjet.com/book/index.htm?lang=en

Jeju Air: www.jejuair.net/jejuair/main.jsp

Jin Air: www.jinair.com/Language/ENG/

Korean Express Air: www.keair.co.kr/main/main.php (only in Korean)

T'Way Airlines: www.twayair.com/Lang/EN/Main.aspx

1.2.2. Korean manufacturers

Korea has numerous companies manufacturing aircraft, aircraft parts, aerospace parts...

Korea Aerospace Industries is the only domestic aircraft manufacturer and total system integrator that designs and assembles aircrafts and satellite systems and provides life cycle support for its products. They produce fixed-wing aircrafts, rotary-wing aircrafts, UAVs, satellites and air frames for next-generation large commercial airplanes.

More information on www.koreaaero.com/english/

In this interesting study made by the Korean Aerospace Industry Association (KAIA), you can find from page 32 on, a list of all their members with description and website:

www.wko.at/Content.Node/service/aussenwirtschaft/kr/Korean-Aerospace-Industry_2015.pdf¹

1.3. Trade statistics

Korea exports mainly to the US and Europe. It originates from the fact that the commercial area takes up the majority of the Korean export. Boeing and Airbus being the main customers. The Korean export has been growing steadily the last years and by 2020 they would like to reach an export value of 10 billion USD. The forecasts are looking peachy. Korean companies have received the last years orders from Indonesia, Iraq, The Philippines and Turkey. Korean companies also partner up with international companies to be stronger in the world market.

¹ The link takes long time to open but should work. On the FIT website, we will add this document as an attachment

Table 5. Export and Import

Unit : 1 million dollars

Program		2012			2013			2014(forecast)		
		Export	Import	Trade Balance	Export	Import	Trade Balance	Export	Import	Trade Balance
Aircraft	Finished	108	2,044	-1,936	473	1,917	-1,444	523	1,889	-1,366
	Parts	1,292	1,733	-441	1,622	1,829	-207	1,779	1,805	-26
Space parts		178	85	93	161	66	95	189	91	98
Total		1,578	3,862	-2,284	2,256	3,812	-1,556	2,491	3,785	-1,294

N.B.) Based on customs clearance, not contracts (MTI)

Let us have a more in detailed look at the European and Belgian export statistics to Korea.

	2010	2011	2012	2013
88: Aircraft, spacecraft and parts thereof – Export value (1000€)				
Europe	481,968	1,270,754.40	806,167.18	1,106,161.87
Belgium	268.76	332.39	128.96	262.98
8801: Balloons and dirigibles, gliders, hand gliders and other non-powered aircraft				
Europe	30.75	3.68	140.35	135.23
Belgium	No data available			
8802: Other aircrafts (ex helicopters, aeroplanes); spacecrafts (incl satellites) and suborbital and spacecraft launch vehicles				
Europe	393,360.01	1,223,130.38	725,472.36	990,397.78
Belgium	160.4	286	80.2	160.4
8803: Parts of goods of heading 8801 or 8802				
Europe	85,174.74	45,290.90	71,258.91	99,017.57
Belgium	87.81	26.81	48.76	90.13
8804: Parachutes and rotochutes: parts and accessories				
Europe	715.45	197.14	497.63	313.49
Belgium	-	-	-	1
8805: Aircraft launching gear, deck-arrestor or similar gear ground flying trainers, parts of the foregoing articles				
Europe	1112.51	187.99	5767.48	7421.79
Belgium	20.54	19.58	-	11.45

1.4. Import regulations

1.4.1. Free Trade Agreement and import duties

There is a free trade agreement between the EU and South Korea. Thanks to this FTA many products are not subject to import duties or the import duties will be lowered year by year. For your importer to be able to benefit from this exemption of import duties, you as an exporter have to apply for an “Approved Exporter Status” at your local customs agency in Belgium. For more information:

http://trade.ec.europa.eu/doclib/docs/2011/october/tradoc_148303.pdf

According to the Market Access Database from the EU, there are no import duties to be paid for European products being imported in South Korea for most of the products under HS code 88. Only a few goods under HS code 8805, have 5% tariff duty and HS code 8801.00.90.10 has 8% tariff duty.

1.4.2. Import regulation

Before sending your products to South Korea, please check if any documents or certificates are required. For more information on import regulation, please consult the Market Access Database from the EU: <http://madb.europa.eu/madb/indexPubli.htm> or contact the “Reglementering” department from Flanders Investment and Trade in Brussels: reglementering@fitagency.be

Here are already some facts that might be interesting for you to know:

- At this moment, there is an exemption of import duties for re-entry of aircraft repair parts but this is only a temporary exemption.
- End User Certificate: In order to import those dual use goods, an End User’s Certificate has to be issued by the company receiving the materials. If that company is located in Korea, the aforementioned End User’s Certificate has to be legalized by Apostille at the Ministry of Foreign Affairs’ Apostille Service (www.0404.go.kr – only in Korea). The legalized certificate can then be brought to our Embassy, we’ll make sure it gets to the right authorities in Belgium. For more explanation on this issue, you can contact the “Dienst Controle Strategische Goederen” at the Flemish government: www.vlaanderen.be/csg or csg@iv.vlaanderen.be

2. Tips on how to approach the market

2.1. Taking the first steps on the Korean market

STEP 1: Prepare yourself

When considering the Korean market, exporters should conduct preliminary research to determine if the market is appropriate for their product. It may not be possible to market the exact same product in Korea as in Belgium or elsewhere in the world. Korean clients or legislation may have different demands. Do your homework by reading about Korea. We advise you to read the country profile or market overviews on South Korea on the FIT website. You can contact your provincial FIT offices in Flanders or FIT Seoul office to get more information on the South Korean market. Also the Korean embassy and Korean trade agencies (KITA and KOTRA) can be contacted in Brussels.

STEP 2: Meet Korean businessmen

The main challenges for the Flemish exporters are language barrier, local business culture and import regulations. A well-developed relationship with a Korean importer/agent is an asset when determining how best to market and sell your product. Direct sales can be done with Korean companies but they are concerned with after sales services, being able to be helped in Korean, developing a relationship and fast replies.

The best way to find an importer is through introduction. It is very helpful to have a formal introduction to the person or company with whom the seller wants to do business in Korea. Meeting the right person in a Korean company is almost always dependent on having the right introduction. "Cold callings" usually don't work with Korean businessmen.

Another way of finding potential importers is to participate in a local fair to showcase your products and services. Many Korean importers attending these shows are looking to establish reliable long-term trading relationships. Show participation enhances initial contacts with importers, agents, wholesalers, distributors, end-clients and others in the industry.

Korean businessmen also visit the big international fairs to meet foreign potential partners. So keep your eyes open during these fairs for Korean visitors.

STEP 3: Develop the relationship and start selling

Once you have met an interesting and potential Korean partner take the next step.

This might include sending catalogues, brochures, product samples, and price lists to prospective importers as a way of introducing the company and products.

When contact with an importer is established, it is advisable to visit the importer in person. There is no substitute for face-to-face meetings. The exporter should bring samples as well as product and company brochures including price lists, shipping dates, available quantities, and any other information needed for negotiating a contract. It is very important that all information should be available in English. Develop this into a personal relationship. Personal ties, trust and mutual respect are key words in business affiliations. Koreans will invite you to evening gatherings like dinners... Korean and Belgian businessmen might have different meanings to the trust in the business relationship. For Koreans a deal is looked at as a guide line. This can clash with the Belgian business culture who likes everything in writing. Be sure to understand each other's expectations.

Finally in the Korean market, never take anything for granted. Be ready for the unexpected. Be open for new information, attentive and patient.

2.2. Korean importers

The aeronautical or defense sector is not an easy sector. Finding an appropriate partner could be crucial for the success of your project. Business is done through introduction and having a network is important. Your local partner plays a vital role in this part of the prospection and business.

Direct business without a local partner can be challenging.

As for the official tenders, most of them will be published in Korean. From feedback we received, we can echo that Korean tender systems aren't always foreign friendly: most is published in Korean, not very transparent, careful and constant monitoring of the development is necessary....

For purchases of national defense, DAPA was inaugurated. This is a special agency for national defense acquisition. More info on www.dapa.go.kr/mbs/home/mbs/dapa_eng/index.jsp

For more tailor made lists of companies in South Korea, please contact FIT Seoul office or upload your request through your "MyFIT"-account on our website.

In spring 2016, Flanders Investment and Trade will organize a trade mission to South Korea with focus on high-tech companies. If Korea is in your scope, I would advise you to join this event to further discover the business opportunities for your company in Korea. If this could interest you, please send an email of interest to seoul@fitagency.com and we will keep you informed.

3. Information on fairs and organizations

3.1. Overview of fairs organized in South Korea

Name of the fair	Website	Timing
Seoul ADEX	www.seouladex.com	20-25 October 2015 Every 2 years
Defense Expo Korea	www.dx-korea.com	7–10 September 2016 Every 2 years

3.2. Contact details of interesting organizations

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(E) kaia@aerospace.or.kr

(W) www.aerospace.or.kr/

Conclusion

Although the Korean industry has the ambition to develop into a strong local manufacturing industry, we see opportunities for the Flemish companies in IT convergence technologies, high quality products, advanced core parts and innovative technologies.

As Korea is looking to develop their industry and venture more and more on the international scene, they need partnerships with foreign companies.

I hope that we were able to give you a brief overview of the aeronautical and space industry in South Korea and that it will help you to assess if Korea could be an interesting market for you.

Don't hesitate to contact your provincial FIT offices in Flanders or FIT Seoul office to get more information on the South Korean market. And join us on the high-tech mission to Korea in spring 2016.

Sources

www.wko.at/Content.Node/service/aussenwirtschaft/kr/Korean-Aerospace-Industry_2015.pdf

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