

The Korean Wave



K-pop fans in Paris, France

South Korea is increasingly well connected with the rest of the globe. These connections occur as diplomatic ties, trade relations, educational exchanges, and tourism, for example. Perhaps the most widely-dispersed Korean export, especially among the young, is the export of Korean culture: K-pop, K-dramas, Korean designed video and computer games, animations, and comics. Korean pop culture has washed across the world’s shores rapidly and extensively like a global ocean wave: the Korean Wave.

The early ripples of interest in all things Korean started in 1997 when Korean dramas were first broadcast on television in China, quickly becoming very popular there. Korean K-pop music gained popularity on radio and in dance venues in China and other Asian countries. By the mid-2010s the Internet and social media had

helped spread K-pop to a much wider audience including Europe, the Americas, and elsewhere. Fans, mostly in their teens and twenties, could easily view and share K-pop music and dance via internet video sites. For many people, an initial interest in K-pop and K-dramas expanded to include other aspects of Korean culture: traditional art, history, and language. The growing interest in “K-culture” is growing to include people across the globe and of all ages.

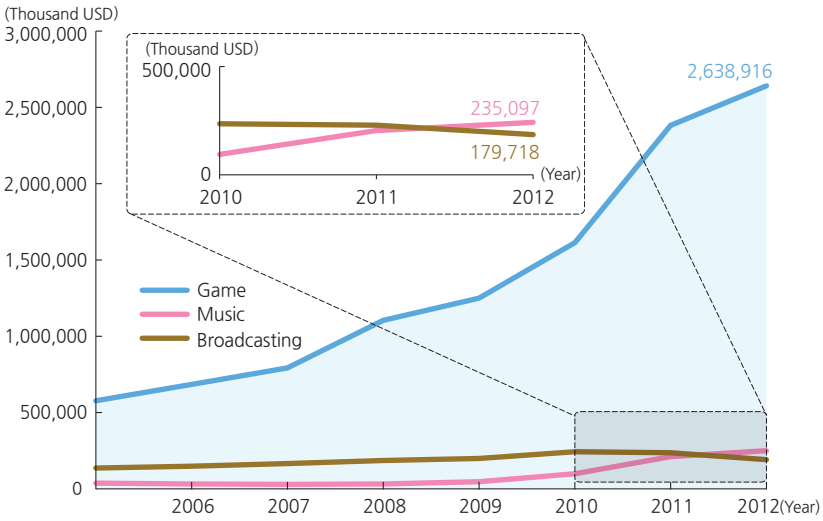
The economic value of K-culture exports is shown on the chart below and in the map at right. The gaming industry accounts for the largest monetary value. Most exports of games, music, associated merchandise and other media go to countries in Asia, followed closely by North America and Europe.

Characteristics of the Korean Wave by Period

Classification	Korean Wave 1.0	Korean Wave 2.0	Korean Wave 3.0
Duration	From 1997 to the mid 2000s	From the mid-2000s to the early 2010s	Since the early 2010s
Characteristics	Advent of the Korean Wave Focused on Visual Contents	Diffusion of the Korean Wave Focused on Idols	Diversity of the Korean Wave
Main Genre	Drama	K-pop	K-Culture
Genres	Drama, Movie, Korean Pop Song	Public Culture, Some parts of Art and Culture	Traditional Culture, Art and Culture, Popular Culture
Countries	Asia	Asia, Some Parts of Europe, Africa, Middle East, Middle and South America and the US	Whole World
Major Consumers	Manias	Teens and Twenties	World Citizens
Major Media	Cable TV, Satellite TV, Internet	Popular video website, Social Networking Services	All Media Types

Ministry of Culture, Sports and Tourism (2013)

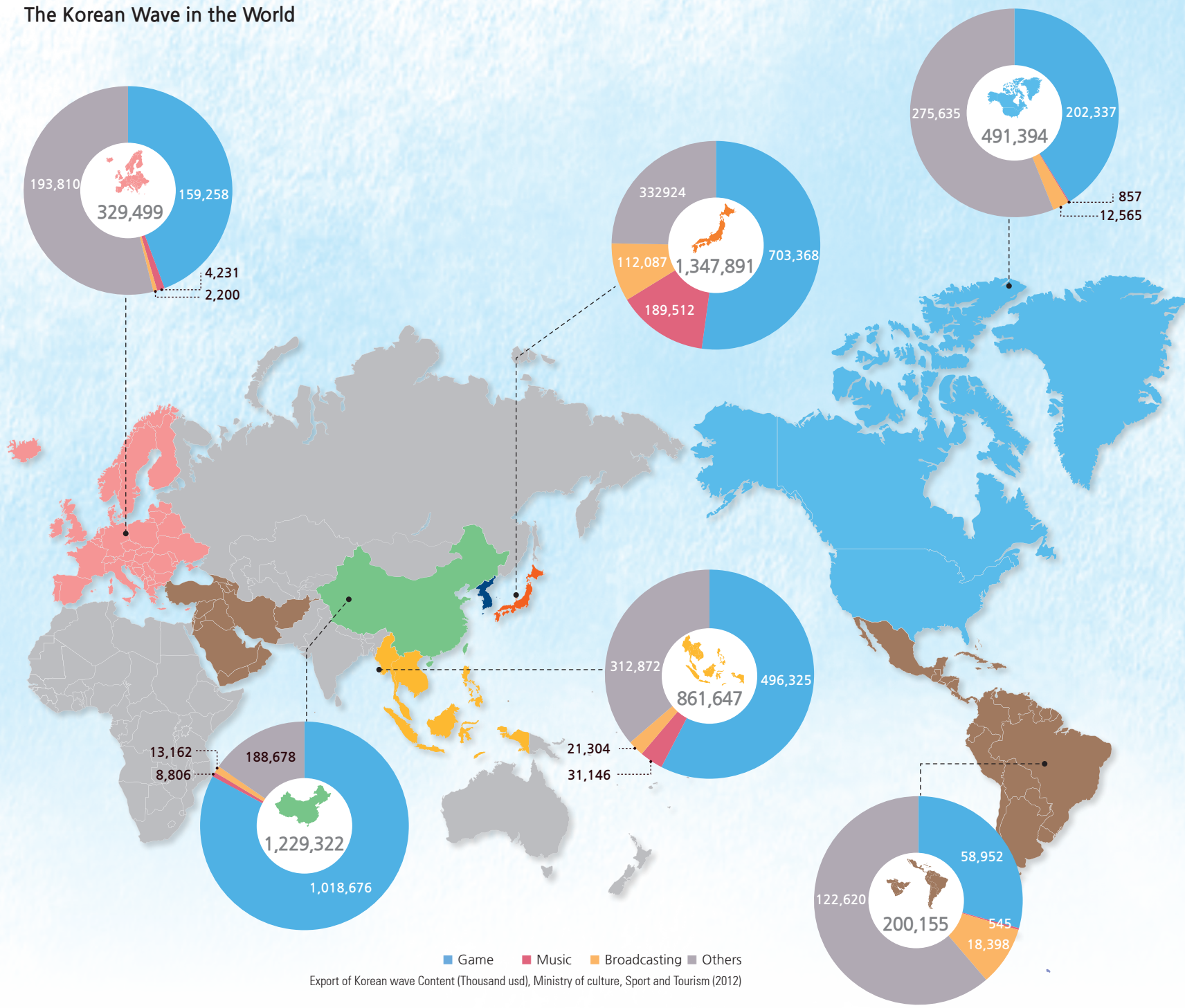
Export of Korean Wave



Note: Advertisement is excluded.

Ministry of Culture, Sport and Tourism (MCST) (2005-2012)

The Korean Wave in the World



Export of Korean wave Content (Thousand usd), Ministry of culture, Sport and Tourism (2012)

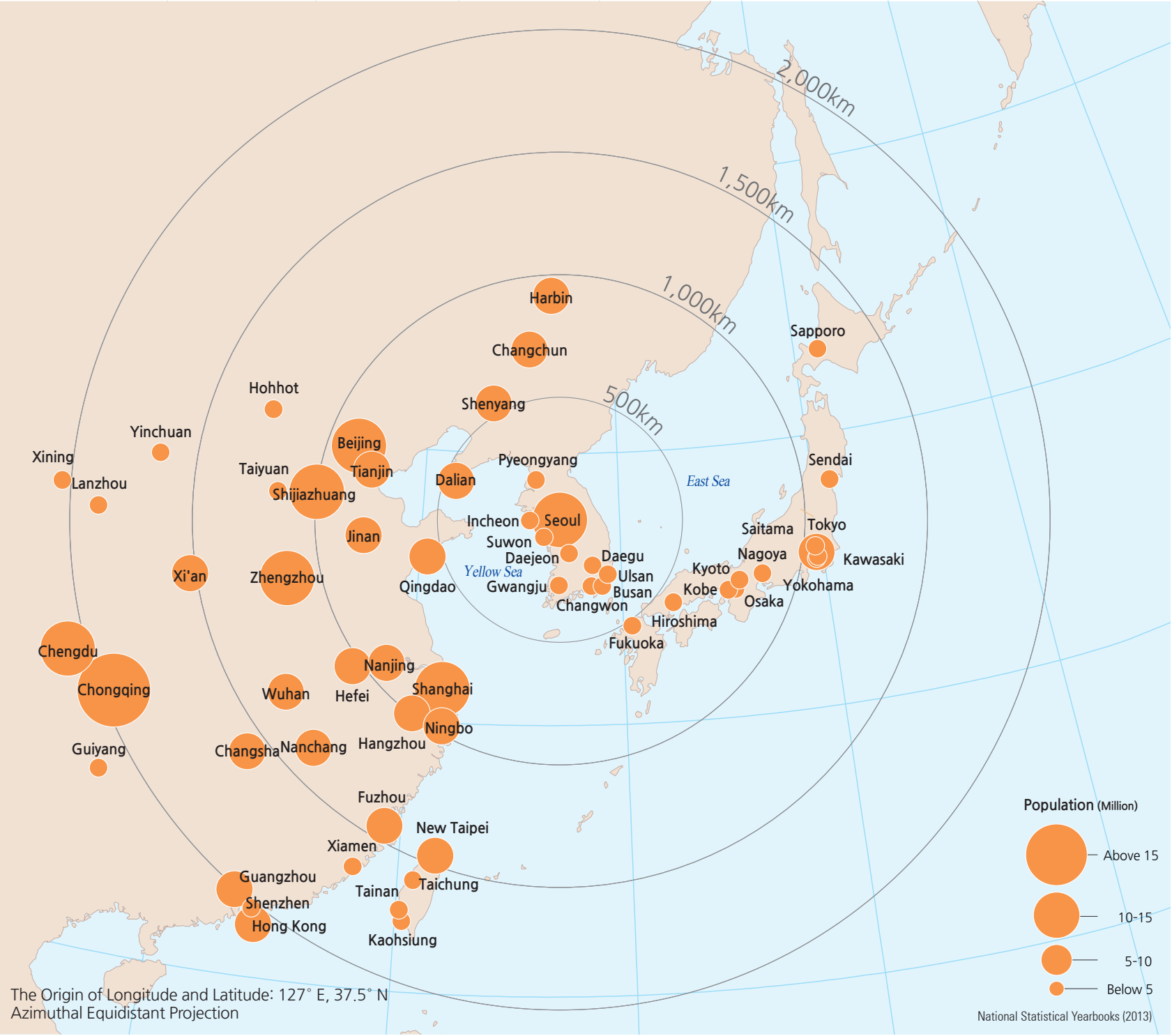


Psy's "Gangnam Style," an example of K-pop music and dance

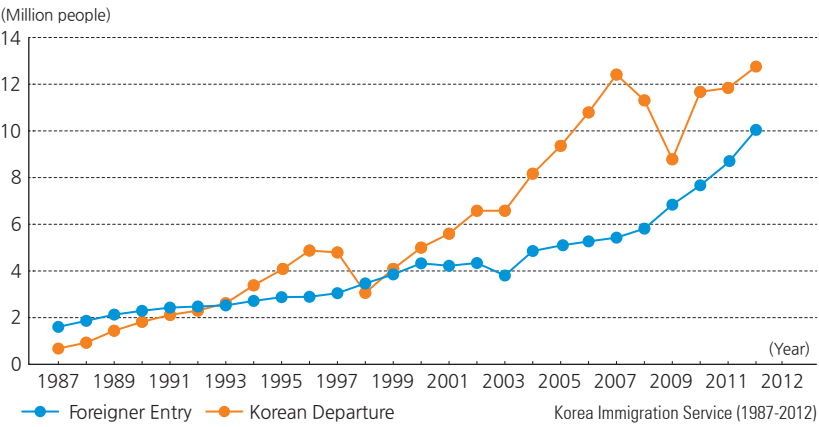


Regional and Global Transport Networks

Cities with more than One Million Population around Seoul



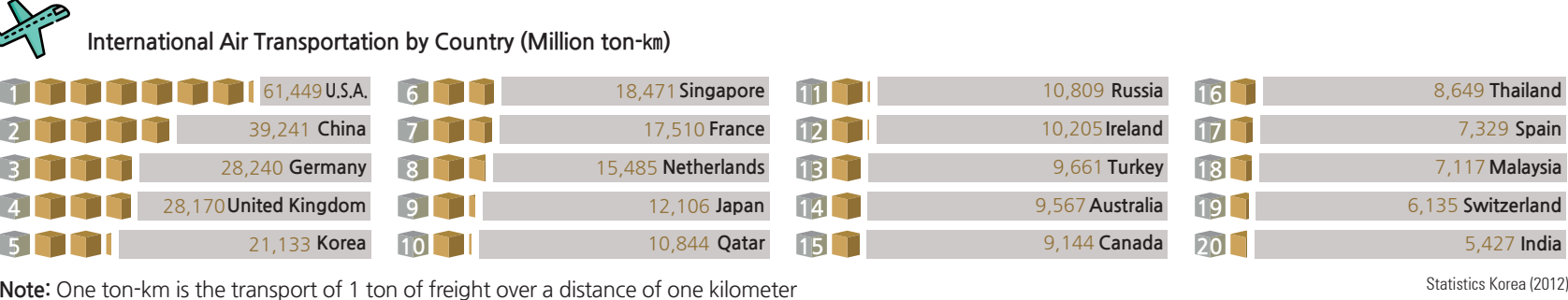
Korean Departure and Foreigner Entry



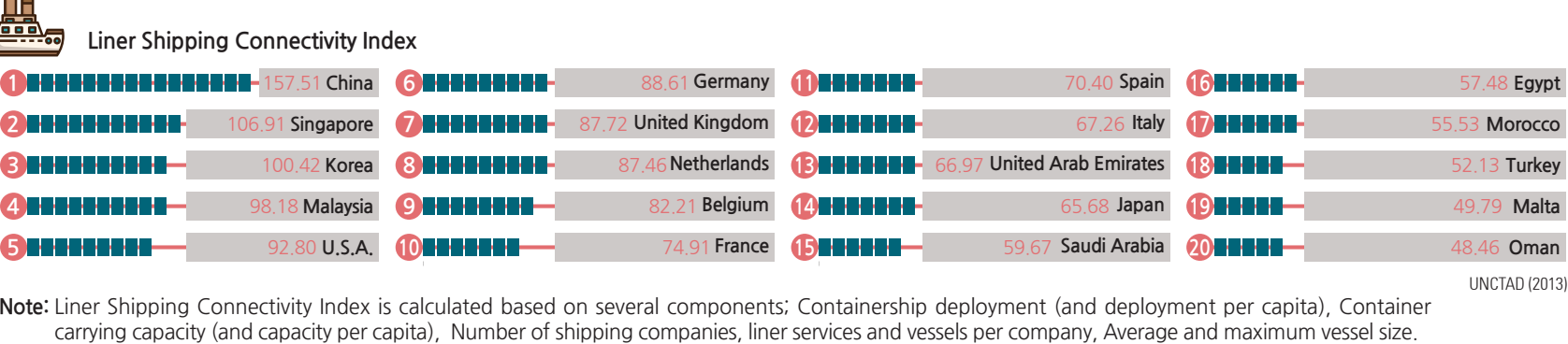
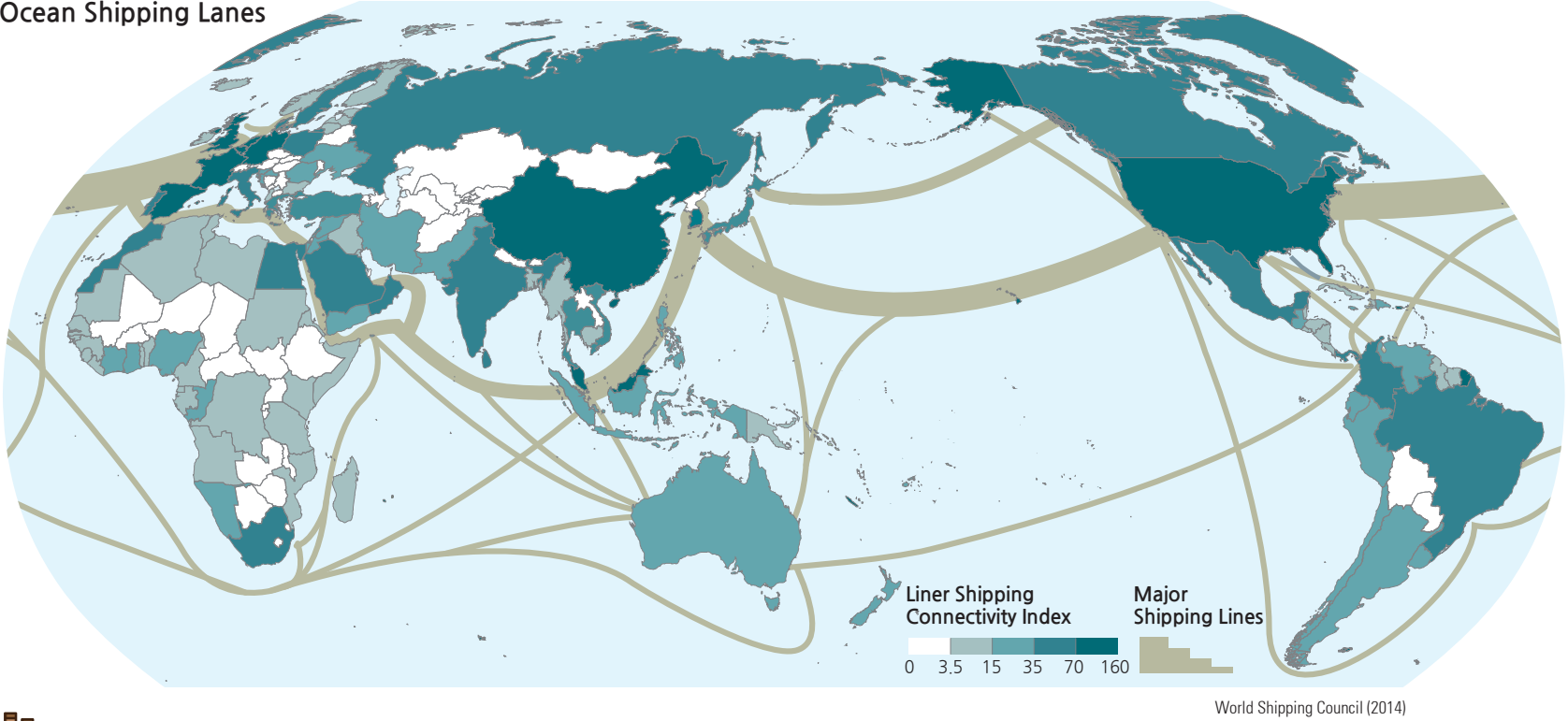
Korea is well-connected both regionally and globally through a variety of transportation systems. Within 2,000 km of Seoul there are more than 40 metropolitan cities that have a population of one million or more. Rapidly growing coastal cities of China and Japan are easily accessible by sea or air. Beijing and Tokyo are each about two hours from Seoul by plane.

Korea's Incheon International Airport serves as a transit hub for many flights between East Asia and the Americas. The Asia-Pacific region accounts for 30% of global air traffic. Korea ranks ninth in international passenger transportation and second in freight transportation. Ship traffic is especially high near Korea. The port at Busan ranks fifth in global shipping in terms of container transport.

Airlines Network



Ocean Shipping Lanes



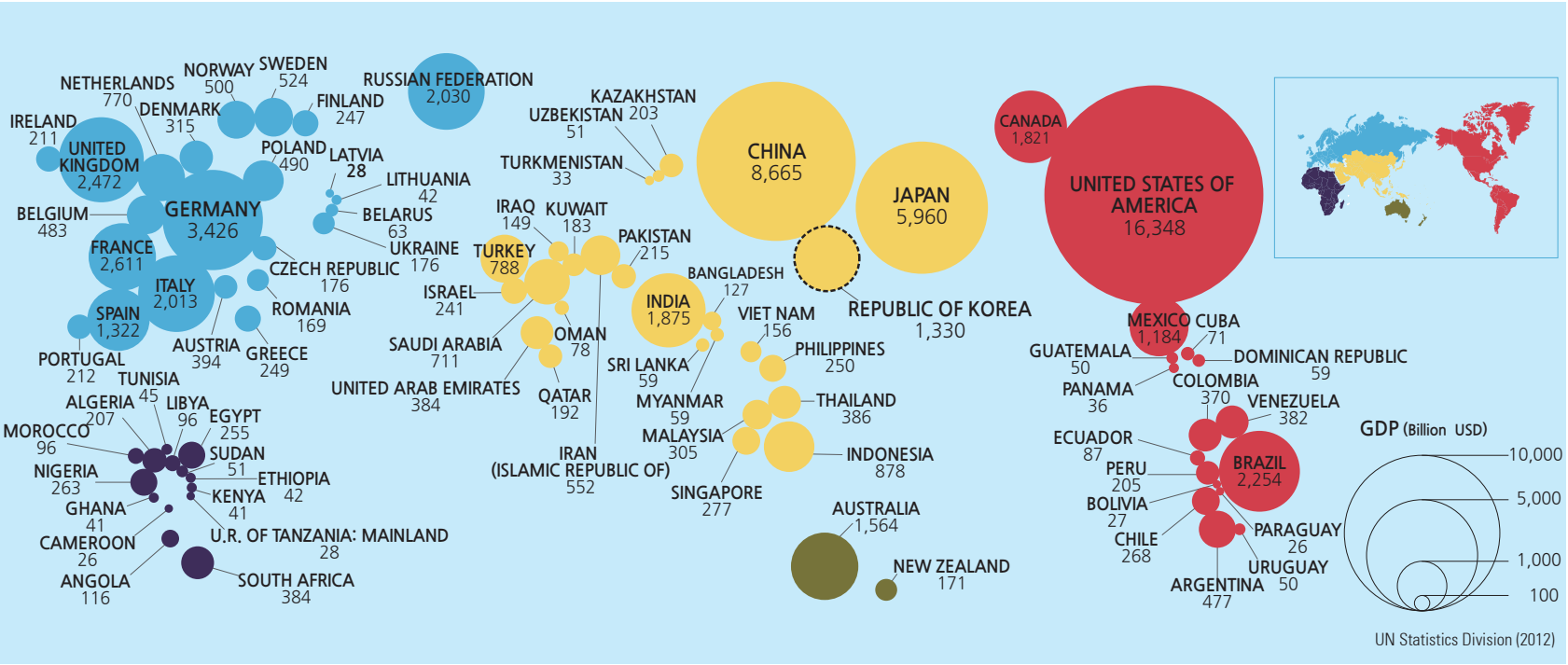


Economy and Trade

Korea’s economy has grown steadily in recent decades to become among the world’s largest. Economic productivity can be measured as Gross Domestic Product (GDP), the value of all goods and services produced by a country in one year. In 2012 South Korea’s

GDP was over 1.3 trillion USD. The map below shows each country’s GDP by the area of the circle. The combined GDP of Korea, China, and Japan is similar to the GDP of the United States and to the GDP of Europe.

Gross Domestic Product by Countries (2012)



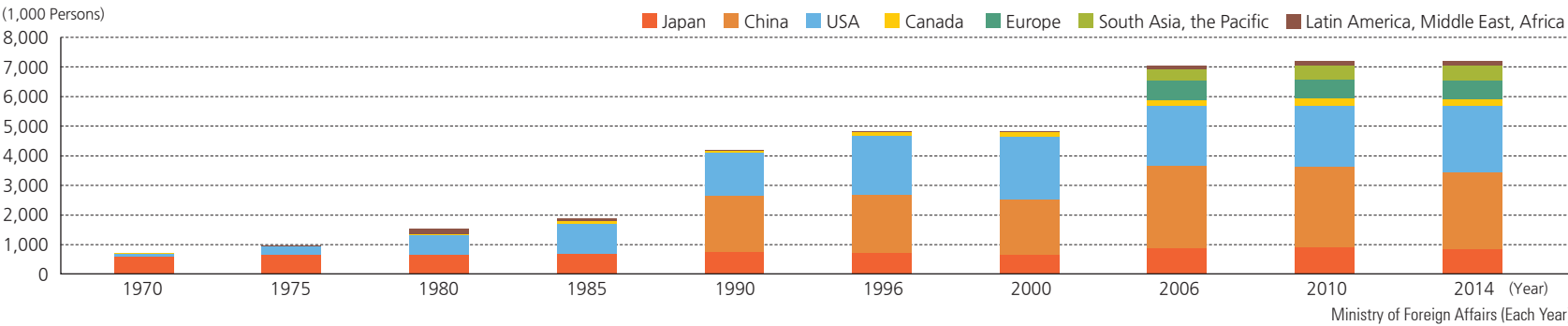


Koreans Abroad and as Hosts to the World

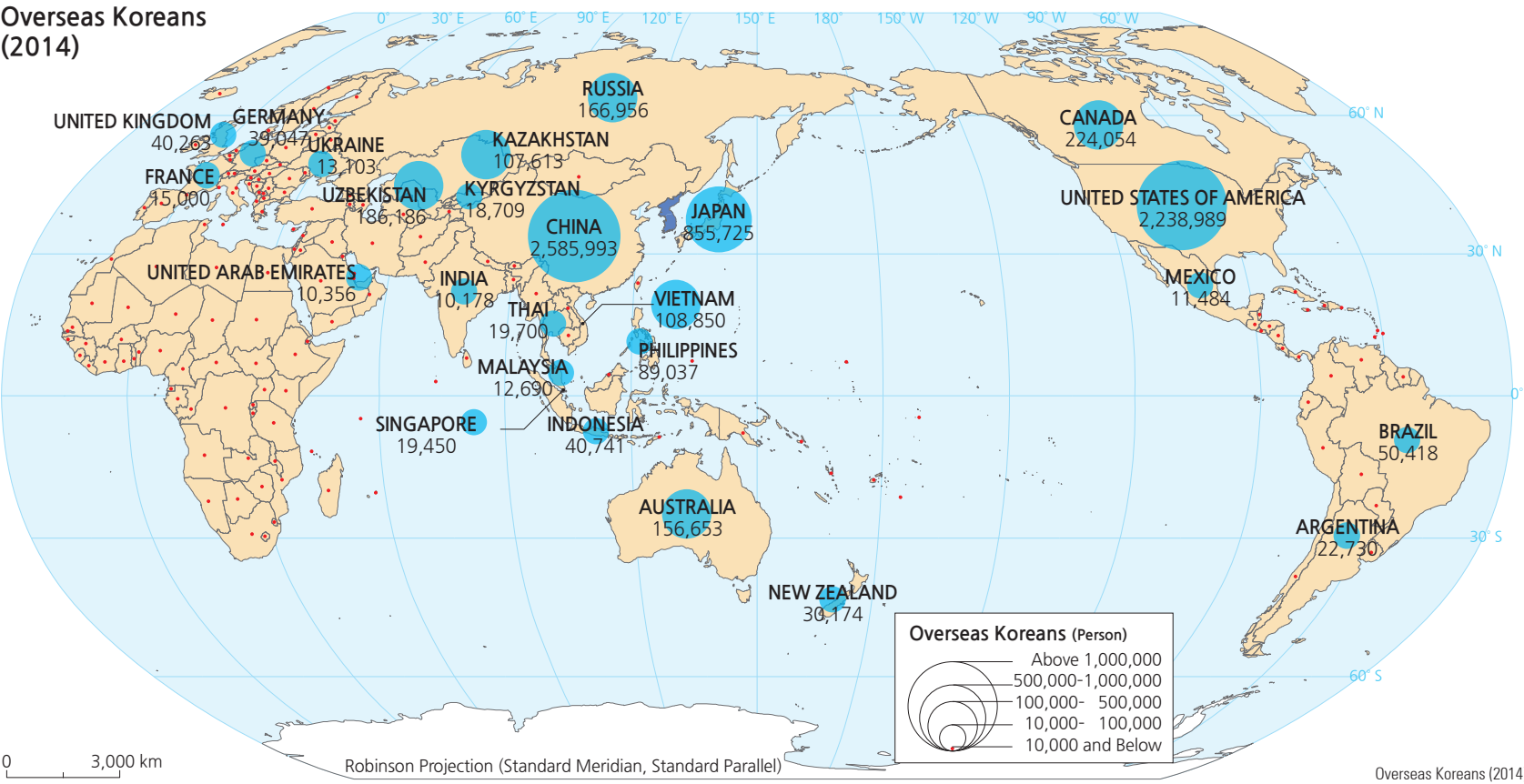
Since the 1960s many Koreans have emigrated, leaving Korea to live abroad. As of 2014 over 7 million Koreans live in other countries, primarily in China, the United States, Japan, and Russia. Initially Koreans mainly relocated to the US, but now they are choosing a variety of countries including Canada, Australia, and New Zealand.

The number of foreign immigrants who live in Korea more than doubled from about 270,000 in 2006 to 700,000 in 2014. As the map at right shows, most of these immigrants live in Seoul and Gyeonggi-do. They come mainly from China and the US. In addition to an increasing number of permanent residents from abroad, there has also been a sharp increase in the number of foreign tourists visiting Korea.

Koreans Living Overseas by Country and Year

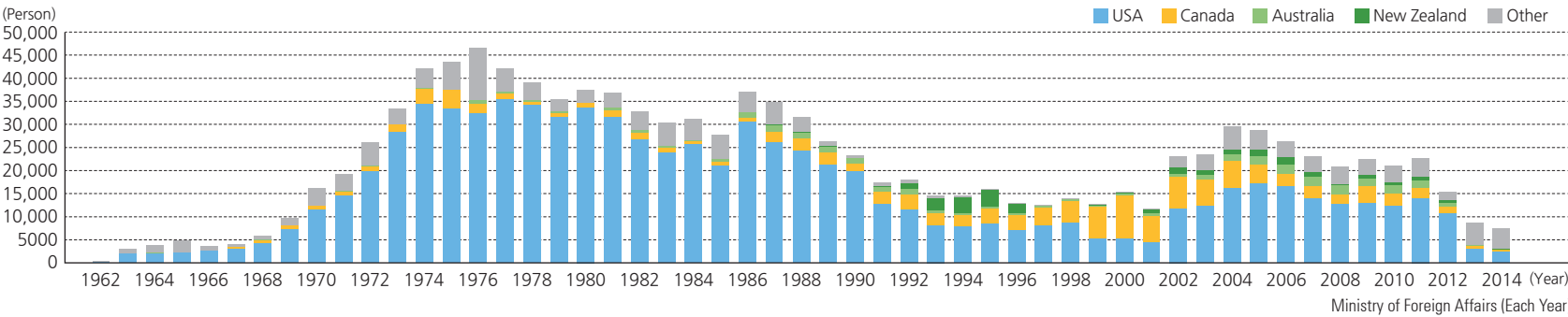


Overseas Koreans (2014)

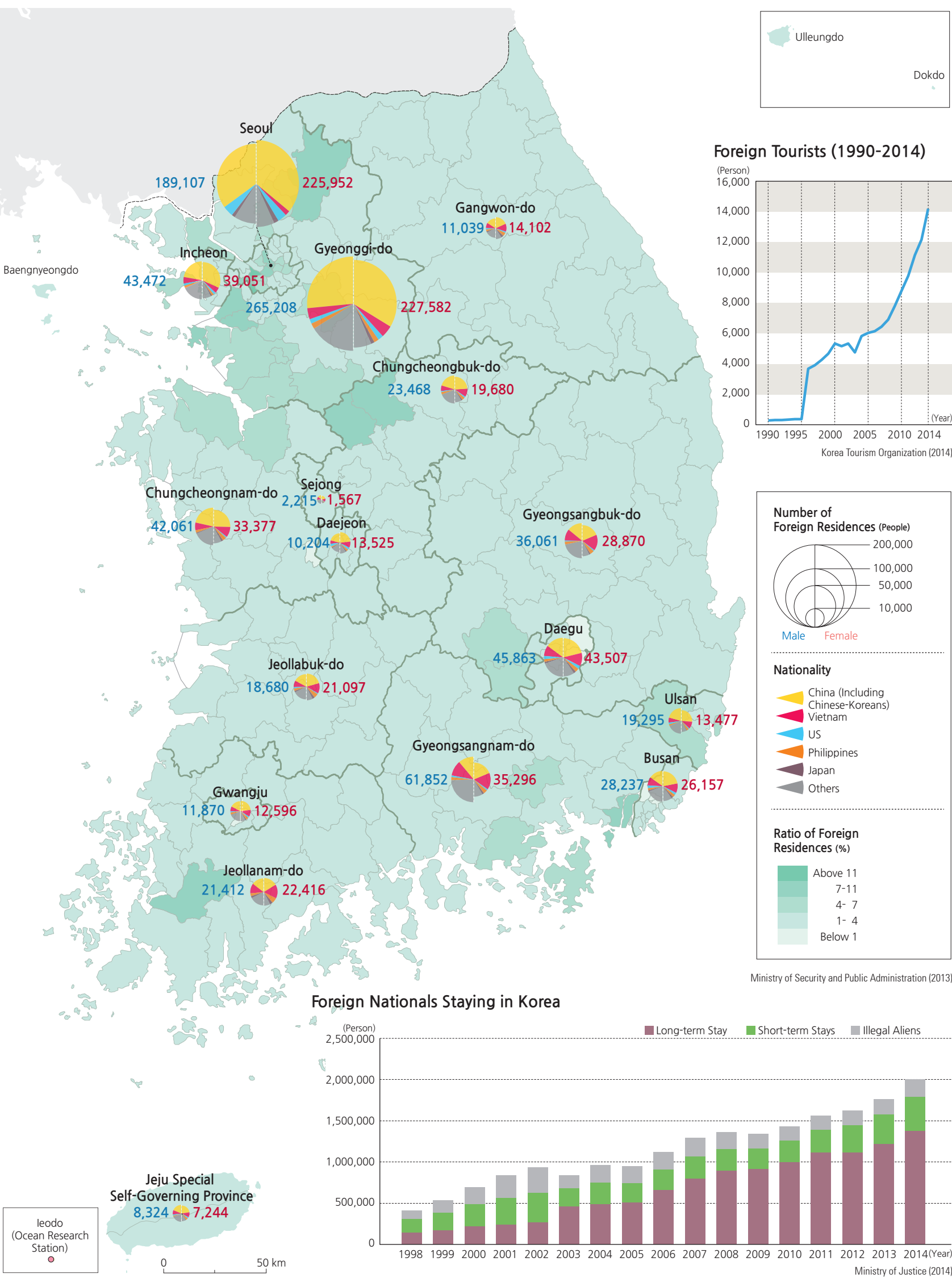


* Overseas Koreans
1) Korean nationality Korean: The Korean who holds permanent residency in a foreign country or who lives in a foreign country with an intention to live permanently.
2) Foreign nationality Koreans: A foreign nationality person who once had the Korean nationality (or the child of such person). The details are defined by the executive order of President.

Number of Korean Emigrants by Year



Distribution of Foreign Residences





International Cooperation

Search and Rescue

Korea cooperates with other countries in delivering humanitarian aid in response to natural disasters, conflicts, and other catastrophes. The Korea 119 Search and Rescue Team (KOSAR) and the Korea Disaster Relief Team (KDRT) have helped provide emergency services around the world as shown on the map below.



Activity of KDRT (Haiti Earthquake)

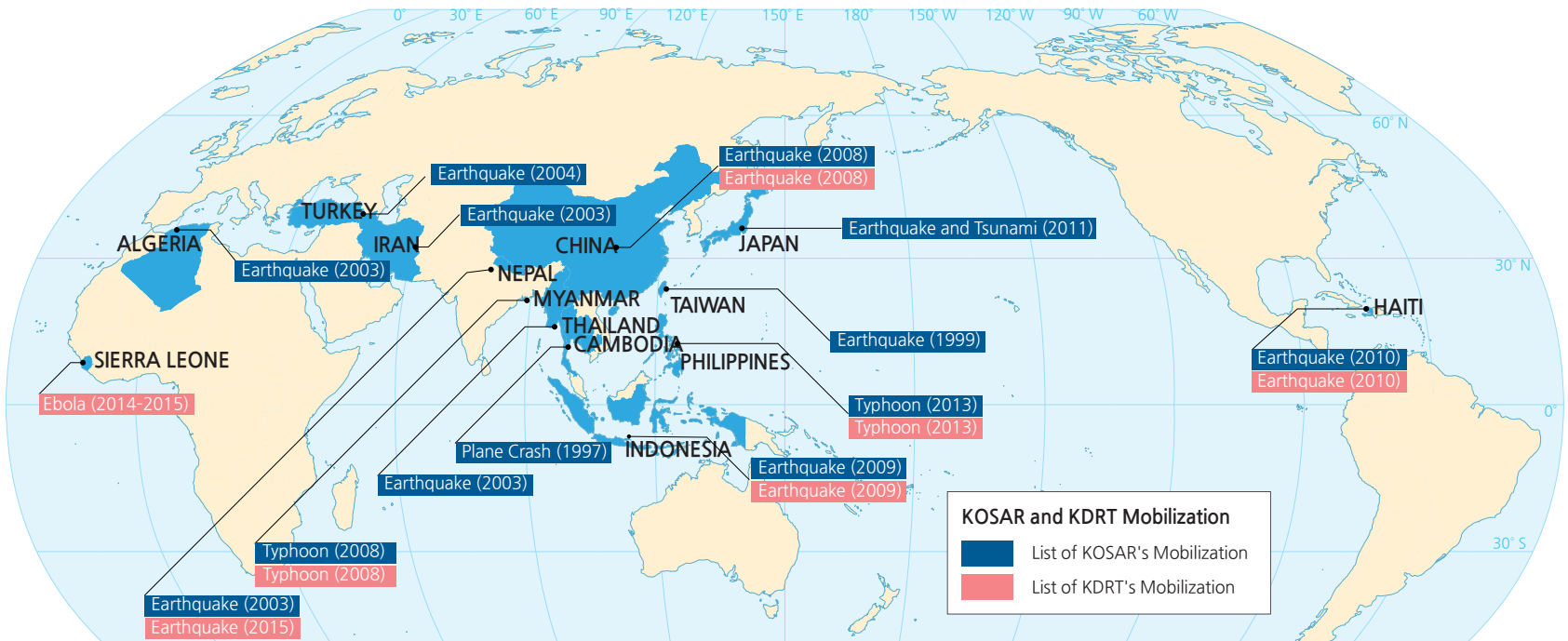
Combating Desertification

Because of its own successful reforestation efforts, Korea serves as a leader in the global movement to combat desertification. Korea is involved in many international organizations that support sustainable land management, reforestation projects, and research in agricultural and environmental sciences.



Activity of KOSAR (Tohoku Earthquake, Japan)

Mobilization of Korea's 119 Search and Rescue Team (KOSAR) and Korea's Disaster Relief Team (KDRT)



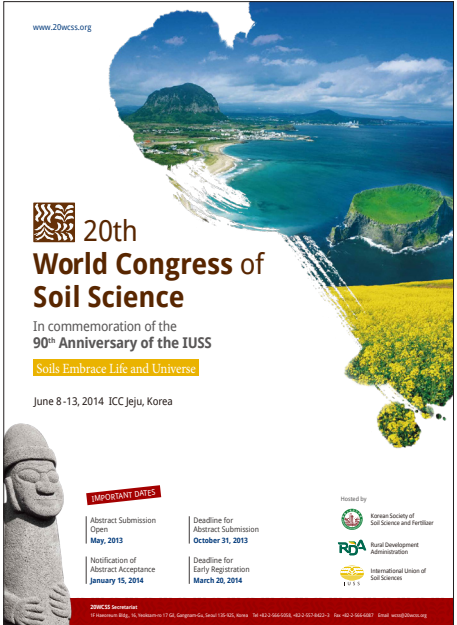
Activity of KDRT (Typhoons in the Philippines)



Activity of KDRT (Nepal Earthquake)



The UN Convention to Combat Desertification was held in Korea in 2011.



In 2014 Korea hosted the 20th World Congress of Soil Science.

International Cooperation on Agriculture



Kubuqi Desert, China, 2007: Before afforestation



Kubuqi Desert, China, 2011: After afforestation efforts were carried out by the Korea Forest Service and other groups

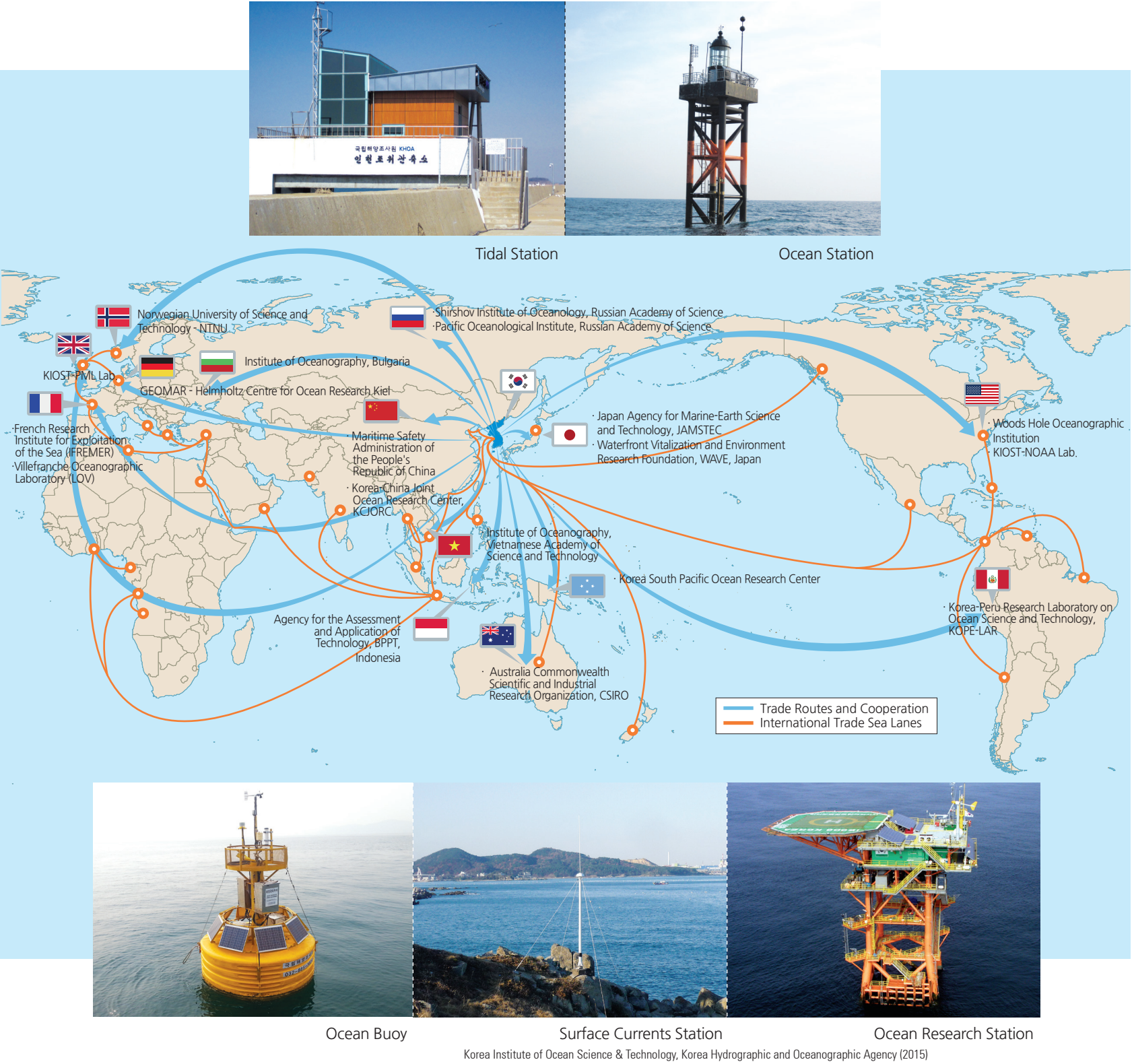


Oceanic and Atmospheric Research: Global Partnerships

Many environmental problems related to the ocean and atmosphere—such as climate change, sea level rise, and marine plastic debris—are complex and global in nature and therefore require international cooperation between many countries. Korea has been active both at home and abroad in the scientific study of oceanic and atmospheric phenomena. The Korea Ocean Observing Network (KOON) is designed to manage and monitor ocean conditions within Korea’s sovereign marine areas. It consists of tidal

stations, buoys, current stations, and an ocean research platform. The data generated by KOON sites are used to help monitor environmental changes and to plan for disaster mitigation. Korea partners with many overseas laboratories and institutes that research marine environments. These organizations, shown on the map below, develop initiatives related to fisheries monitoring, sustainable planning, and marine ecosystem preservation.

Trade Routes and Cooperation



International Cooperation on Climate



Infrastructure Support Program for Developing Countries

- The Establishment of East Africa Region Climate Center (East Africa Climate Prediction Application Center, 2009-2012)
- The Construction of Vietnam Typhoon Analysis and Forecast System (2010-2012)
- The Construction of Sri Lanka Satellite Data Reception System (2010-2012)
- The Modernization of Vietnam Meteorological Disaster Monitoring System (2014-2016)
- The Establishment of Myanmar Meteorological Advancement Master Plan (2015-2016)

Educational Training Program for Developing Countries

- Africa Disaster Management Ability Cultivation Course (2009-2012)
- Korea-China Asian Dust Joint Observation Network Operator Education (2010-)
- Weather Radar Operation and Data Utility Course (2012-)

Memorandum of Understanding (MOU) Signing

- As of August 2016, MOU signed with 17 countries and five international agencies.
- Numerical Forecasting, Experts Exchange, Education Enhancement, Earthquake, Asian Dust, Satellite, and so forth.

Numerical Forecasting Data Support

- The Atmospheric Pressure 500 hPa geopotential height field, 200 hPa isotach, and so forth. Forecast Weather Chart
- 30 Countries/358 Cities Prediction Data for Air Temperature, Wind, and Precipitation

Overseas Dispatch

- Switzerland WMO Asia Southwestern Pacific Region Office
- King Sejong Station, Antarctica
- Qatar Meteorological Administration
- Meteorological Advisor Dispatch: Kenya, Mongolia, Vietnam, Malaysia, Senegal, Uzbekistan, Rwanda



A rocket launch at Naro

Korea is a world leader in the science of climate change, working closely with many international organizations including the World Meteorological Organization (WMO). The Korea Meteorological Administration (KMA) has been an executive council member of the WMO since 2007. KMA helps with education initiatives, coordination of scientific projects, and international collaborations. Some of Korea’s activities related to atmospheric science are indicated on the map below.

Monitoring of the ocean and atmosphere is enhanced through the use of satellites. Korean satellite capabilities have made great progress since the 1990s. Many satellites have been launched to help with scientific endeavors. A space center was constructed on Naro in 2009. A satellite was successfully launched in 2013. An air launch vehicle that can carry a heavier satellite is planned for launch in 2020.



Polar Research and Expeditions



Korean Research Icebreaker Araon

Conducting scientific research expeditions into oceanic and polar areas well beyond its borders represents an important step in Korea’s contribution to the global scientific community. Korea, with its advanced technological capabilities, has a strong commitment to research contributions that deal with such global issues as climate change and the degradation of the global environment. Its continued operation of research stations worldwide is a testament to this

commitment. In 2002, Korea established the Dasan Arctic Research Station on Spitsbergen, an Island in the Svalbard Archipelago (a group of islands). The station, which was set up to explore the Arctic environment and resources, performs multiple roles as an observation base for a variety of research projects.

Dasan Arctic Research Station



Dasan Arctic Research Station in Ny-Alesund Village



Dasan Arctic Research Station

King Sejong Antarctic Research Station



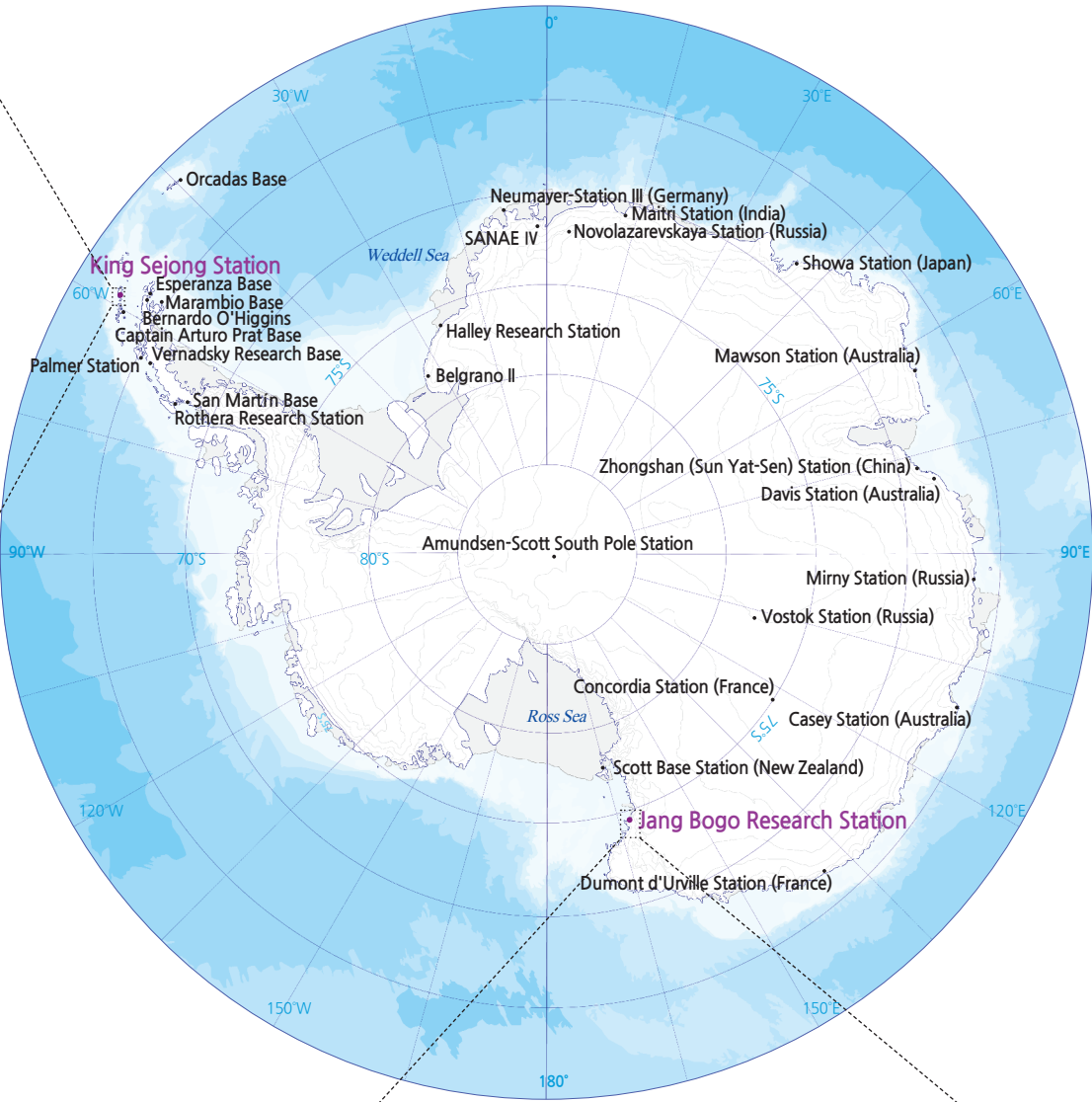
King Sejong Antarctic Research Station



Jang Bogo Antarctic Research Station

Korea operates two research stations in Antarctica: the King Sejong Station and Jang Bogo Station. The research agenda at King Sejong Station primarily focuses on climate change and polar environments such as atmospheric conditions in the Antarctic region, its geologic features, waters, and organisms. With the construction of the Jang Bogo Station in 2014 Korea has extended the scope of research to include such additional fields as paleoclimatology and paleoenvironments along with expeditions for meteorites.

Antarctic Research Stations



Jang Bogo Antarctic Research Station

