

GNSS. asia

Industrial cooperation across continents

Rainer Horn, GNSS.asia Coordinator

Multi-GNSS Asia Conference 2015, Brunei Darussalam



European
Global Navigation
Satellite Systems
Agency

HORIZON 2020

The GNSS.asia team

EUROPE



Rainer Horn
Global Coordinator
STP



Lukas Lanneau
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Daniel Ludwig Consultant

Daniel Ludwig
Asia Expert
DLC

ASIA



EU-Japan Centre
for Industrial Cooperation
日欧産業協カセンター

Yoko Kadoya
GNSS.asia Japan
EU-JP Centre



Hyemi Hwang
GNSS.asia Korea
ECCK



Davof Xu
GNSS.asia China
EUCCC



Pascal Viaud
GNSS.asia Taiwan
ECCT



Varadarajan Krish
GNSS.asia India
IIRA

GNSS.asia collaboration network in Asia-Oceania



INDUSTRY

Stakeholder Network



EU Industry

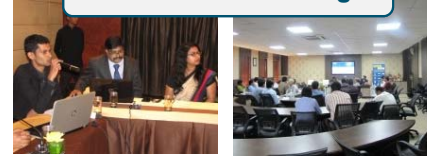


Asia-Pacific Industry



EVENTS

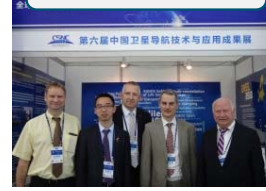
Round Table Meetings



Industry Seminars



GNSS Events



Workshops

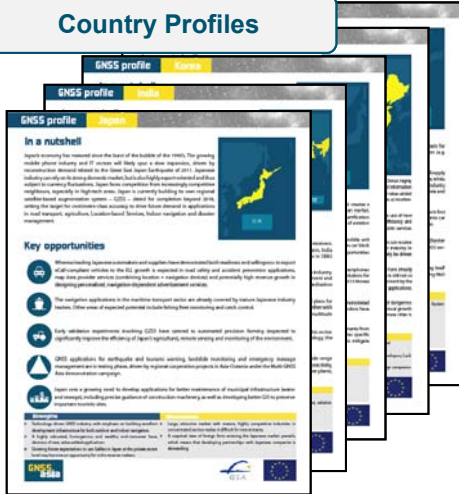


Delegation Support



GNSS.asia

Country Profiles



Newsletters



Multilingual Website

Market Opportunities



Company Database

Company	公司名	GNSS Market	GNSS product/Services	Website	Short Description
KVIC	耀輝科技	Road	GPS Devices	http://www.kvic.com.tw	KVIC is a company for Solar Energy technologies. In recent year, it has developed its technology in Telematics, GPS navigation and fleet management in Road applications.
LIDAR Technology	達意科技	LBS	navigation services	http://www.lidar.com.tw/	LIDAR was founded in 2010, a spin-off R&D research team of ITRI. The company focus on applications in Earth observations, Geo-information and LBS.
Leadtek	達泰科技	Road/LBS	GPS Devices	www.leadtek.com/sg	Leadtek is a company for the integration of computer and communications technologies with its sights set on combining multimedia videophony, and GPS in a single product. It also extends to the market for broadband network devices.
Locovys Technology	大原科技	Road/LBS	GNSS/GPS modules and solutions	http://www.locovys.com/	A leading company in the GPS/GNSS market in Taiwan

Component Manufacturers

System Integrators

Service Providers

Supply Chain Analysis

COMMUNICATION

ANALYSIS

Dissemination & marketing support

- **Speaking slots** at GNSS.asia workshop and seminars
- **Demonstration and exhibition opportunities**
- **Virtual presentations** through videoconference
- Dissemination of **promotion material** at international events



International cooperation industry support

- Provide access to **GNSS market information and trends**
- Support companies in identifying **business opportunities**
- **Experienced local teams** with in-depth market knowledge
- Access to broad industry and institutional **stakeholder network**



Networking & matchmaking support

- **In-depth dialogue** with industry partners
- Guided **company visits** and presentation opportunities
- Stakeholder **introductions** and **matchmaking sessions**
- High-level EU-Asia **industry delegation visits**



European companies engaged in GNSS.asia activities

INDUSTRY



And Asian companies have been very active, too

INDUSTRY

India



China



Taiwan



Korea



Japan



Many GNSS.asia actors are interested in Multi-GNSS activities



INDUSTRY



Multi-GNSS chipsets, MEMs, Sensor Fusion, and Telematics. Galileo Pilot User



Precise navigation and positioning solutions, network of over 80 GNSS reference stations, Galileo CS partner



High Precision Multi-GNSS Receivers, Aviation Receivers



Sensors: MEMS, triaxial geomagnetic, barometric pressure, acceleration etc.



GNSS Development suite, real Time GNSS generators and software receivers



Multi-GNSS chipsets, mobile communications Galileo Pilot User



Maritime GNSS Galileo Pilot User



Hardware/software development for GNSS receivers



Multi-GNSS Chipsets for Internet of Things

GNSS.asia has mapped the downstream sectors and the relevant GNSS stakeholder environment

- **GNSS supply chain analysis**
 - Extensive analysis of the various downstream sectors (e.g. LBS, road, rail, etc.)
 - Analysis of local capabilities along the GNSS supply chain
- **Analysis of GNSS market prospects, trends and challenges**
 - Presentation on latest GNSS technology drivers and hottest trends
 - Identification of (multi-)GNSS opportunities across Asia-Pacific
- **Database with EU and Asia-Pacific GNSS players and stakeholders**
 - Information on GNSS markets, GNSS product/service, supply chain role, short description, etc.
 - Information about EU companies' product portfolios and cooperation interests

Communicating opportunities for industrial cooperation

GNSS profile
Taiwan

GNSS profile
China


GNSS profile
Korea

GNSS profile
India






GNSS profile
Japan

In a nutshell

Japan's economy has matured since the burst of the bubble of the 1990's. The growing mobile phone industry and IT sectors will likely spur a slow expansion, driven by reconstruction demand related to the Great East Japan Earthquake of 2011. Japanese industry can rely on its strong domestic market, but is also highly export-oriented and thus subject to currency fluctuations. Japan faces competition from increasingly competitive neighbours, especially in high-tech areas. Japan is currently building its own regional satellite-based augmentation system – QZSS – slated for completion beyond 2018, setting the target for centimetre-class accuracy to drive future demand in applications in road transport, agriculture, Location-based Services, Indoor navigation and disaster management.



Key opportunities




- 
Whereas leading Japanese automakers and suppliers have demonstrated both readiness and willingness to export eCall-compliant vehicles to the EU, growth is expected in road safety and accident prevention applications, map data provider services (combining location + navigation devices) and potentially high revenue growth in designing personalised, navigation-dependent advertisement services.
- 
The navigation applications in the maritime transport sector are already covered by mature Japanese industry leaders. Other areas of expected potential include fishing fleet monitoring and catch control.
- 
Early validation experiments involving QZSS have catered to automated precision farming (expected to significantly improve the efficiency of Japan's agriculture), remote sensing and monitoring of the environment.
- 
GNSS applications for earthquake and tsunami warning, landslide monitoring and emergency message management are in testing phase, driven by regional cooperation projects in Asia-Oceania under the Multi-GNSS Asia demonstration campaign.
- 
Japan sees a growing need to develop applications for better maintenance of municipal infrastructure (water and sewage), including precise guidance of construction machinery, as well as developing better GIS to preserve important touristic sites.

Strengths

- ▶ Technology-driven GNSS industry, with emphasis on building excellent development infrastructure for both outdoor and indoor navigation.
- ▶ A highly educated, homogenous and wealthy end-consumer base, desirous of new, value-added applications
- ▶ Growing future expectations to use Galileo in Japan at the private sector level may become an opportunity for niche receiver makers.

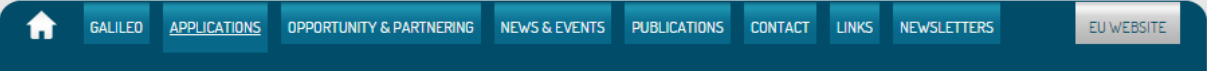
Weaknesses

- ▶ Large, attractive market with mature, highly competitive industries in concentrated sectors makes it difficult for new entrants.
- ▶ A sceptical view of foreign firms entering the Japanese market prevails, which means that developing partnerships with Japanese companies is demanding.



- EU
- IN
- CN
- TW
- KR
- JP



The project

Facilitating EU-Asia cooperation on satellite navigation applications

The GNSS.asia project, financed under the EU 7th Framework Programme for Research & Technological Development, has the objective to develop and implement **GNSS industrial cooperation activities** between the European Union and China, India, Japan, Republic of Korea & Taiwan focusing on the downstream sector (applications and receivers).

[Read more](#)

INDIA	CHINA	TAIWAN	REPUBLIC OF KOREA
भारत गणराज्य	中国	台灣	대한민국

View this email in your browser

GNSS.asia newsletter
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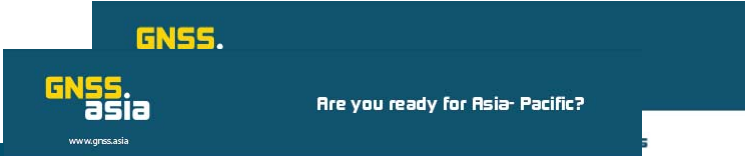
GNSS.asia
Industrial cooperation across continents
www.gnss.asia

In a nutshell

Latest highlights

- EGNSS Opportunities
- News on EGNSS
- News from Asia
- European Global Satellite Navigation activities

GNSS.asia Latest highlights
Cross-continental cooperation in GNSS continues



GNSS.asia - Industrial GNSS cooperation across continents
As several Global Navigation Satellite Systems (GNSS) are emerging and multi-GNSS applications are rapidly gaining importance, international collaboration in the GNSS scene has become vital. GNSS.asia, financed under the EU Horizon 2020 Framework Programme for Research and Innovation, provides a comprehensive range of hands-on support services to GNSS industry enterprises in Europe, assisting them to develop commercial activities in Asia-Pacific and establish concrete industry collaboration with local companies.

- Project objectives**
- Perform a **detailed mapping of GNSS collaboration** opportunities across continents
 - Support **concrete industrial collaboration** between EU and Asia-Pacific companies
 - Promote European GNSS differentiators in upcoming **multi-GNSS solutions**
 - Raise awareness on **European GNSS applications and their benefits** in the Asia-Pacific region

The GNSS.asia consortium
The GNSS.asia consortium brings together key European and Asian organisations, which have long-standing experiences in fostering EU-Asian industrial cooperation and a proven track record in GNSS activities. In order to maximize the project's impact, the consortium works in close collaboration with key industry associations, research organisations and industry players.

- GNSS Opportunities in Asia**
- In the last years, GNSS.asia has successfully been helping numerous industrial players through:
- Assisting European GNSS companies in entering **Asian markets**
 - **Bringing together** European and Asian key GNSS players
 - Facilitating the **breakthrough of Galileo** inside and outside Europe
 - Providing **transparency** on Asian markets and local GNSS industry

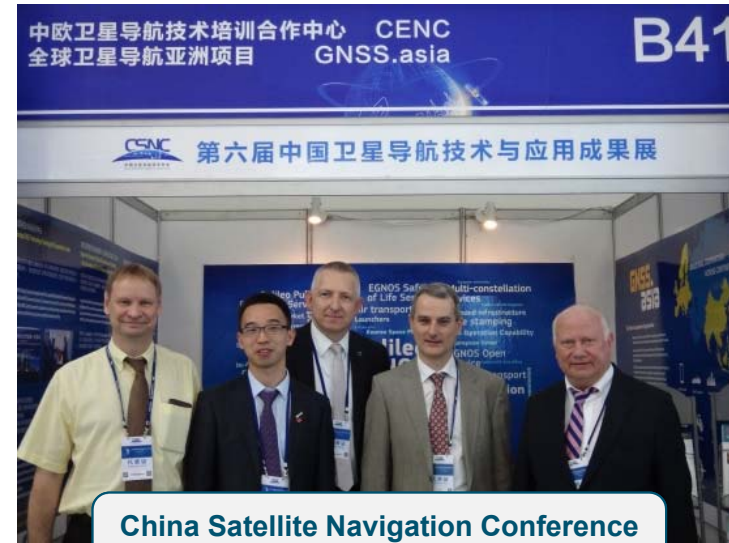
Expanding the GNSS.asia Horizon
In addition to building upon its achievements in India, China, Taiwan, Korea and Japan, GNSS.asia now expands its project efforts towards **South-East Asia** and **Australia**. Feedback from our partners and detailed market analyses show that several countries in this region offer a significant untapped potential for GNSS applications and industrial cooperation. To investigate market opportunities in this region, GNSS.asia will be collaborating closely with carefully selected local partners and stakeholders.

Presence at major GNSS conferences

EVENTS
2015



COMPUTEX
Taipei, Taiwan



China Satellite Navigation Conference
Xi'an, China



UK Space Conference
Liverpool, UK



SATEX 2015
Tokyo, Japan

EU-Asia industry delegation visits

EVENTS
2015



EU Mission for Growth
Taipei, Taiwan



GLAC delegation visit
Europe



Thematic events & round tables

EVENTS
2015



GNSS.asia Australia Workshop
Surfer's Paradise, Australia



eCall Industry Briefing
Seoul, Korea



Round Table Meetings
Kolkata & Bhubaneswar, India



PNT Workshop
Seoul, Korea



GNSS.asia Seminars – CN/JP/IN

EVENTS
2015



GNSS.asia Japan Seminar
Tokyo, Japan



GNSS.asia China Seminar
Beijing, China



GNSS.asia India Seminar
Kolkata, India



GNSS.asia Seminars – KR/TW

EVENTS
2015



GNSS.asia Taiwan Seminar
Taipei, Taiwan



GNSS.asia Korea Seminar
Jeju, Korea



GNSS.ASIA CHALLENGE



- **New Regional Prize** within the ESNC framework
- Open to innovative GNSS ideas for the **Asia-Pacific Region**
- Organised by **GNSS.asia**, in cooperation with **Multi-GNSS Asia (MGA)**
- Secure your part of the **GNSS.asia Challenge prize pool**:



Personalised business coaching
from globally renowned GNSS experts



A **travel grant** to attend the
Award Ceremony at the Multi-GNSS
Asia GNSS meeting in Brunei



A **presentation opportunity** during
the GNSS.asia Industry Seminar



The opportunity to **meet GNSS
industry partners and potential
investors** from Europe and Asia

WWW.GNSS.ASIA/CHALLENGE

GNSS.asia

Industrial cooperation
across continents

EU Events 2016

2016 Seminars in
IN, CN, TW, KR, JP

GNSS.asia Workshops
in South East Asia


Industry Seminar
MGA Conference 2015

www.gnss.asia

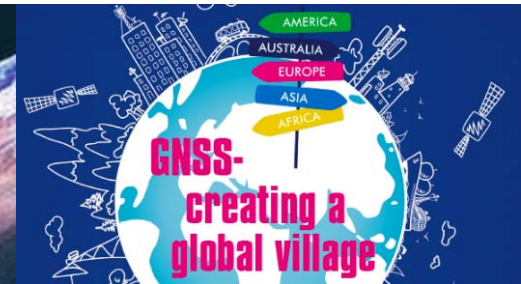


Upcoming events with GNSS.asia present

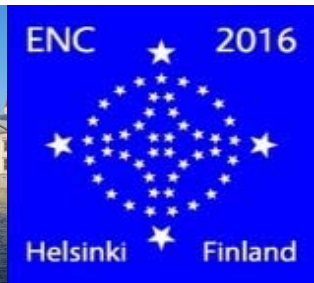
1-3 March, 2016
Munich (DE)

MUNICH SATELLITE NAVIGATION SUMMIT

March 01-03, 2016 : Residenz München : Munich



30 May – 3 June, 2016
The Hague (NL)



28-30 June, 2016
Toulouse (FR)



October, 2016
Berlin (DE) - TBD



GNSS.asia events in 2016

Preliminary selection

Continued cooperation with **proven event formats and partners** + **expand towards selected new events/partners**, e.g.:

- **COMPUTEX Taipei** – 1-4 June, 2016 (TW)
- **China Satellite Navigation Conference** – May, 2016 (CN)
- **ITS Shenzhen Expo** – 17 June, 2016 (CN)
- **SPAC Forum** – July, 2016 (JP)
- **GLAC Conference & Exhibition** – Sep., 2016 (CN)
- **Satellite Positioning Technology Exhibition** – Oct., 2016 (JP)
- **ITS World Congress 2016** – Oct., 2016 (AU)
- **KGS Conference** – Nov, 2016 (KR)
- **Multi-GNSS Asia (MGA) Conference** – Nov/Dec., 2016 (SEA-TBD)



中国卫星导航定位协会



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European
Global Navigation
Satellite Systems
Agency

HORIZON 2020