

25th
ANNIVERSARY



EU-Japan Centre
for Industrial Cooperation
日欧産業協力センター

GNSS. asia

Potential for EU-Japan Industrial Cooperation in GNSS Applications

Fabrizio Mura, Tokyo, 4 March 2013

「宇宙インフラの利活用」用材をどう育成するか」国際セミナー



Pilot Activities to foster EU-JP GNSS industrial cooperation (2013)

Industrial internships in GNSS for European and Japanese engineering students (VULCANUS)

ヴルカヌス企業インターンシッププログラム

EU: 1 Japanese student will start in CEIT (GNSS in railway industry)

Japan: Profiles of 9 European candidates looking for internships in Japan

GNSS Industrial Partnership Service – to develop EU-JP business and R&D partnerships

産業連携サービス - EUと日本企業、R&D機関がパートナーシップを特定し発展

EU: 5 Industrial profiles interested in developing partnerships with Japan

Japan: call for interest to develop cooperation with the EU

Innovation Competition in Japan with the European Satellite Navigation Competition 2013

Reward innovative ideas for GNSS applications in Japan (starts 1 April 2013)

Industrial internships in GNSS for European and Japanese engineering students (VULCANUS) in 2013

通信工学、ソフトウェア開発、コンピューターサイエンス専攻学生プロフィール(5名)

学生1: Jan Skach (Czech Republic)

志望動機書: [http://documents.eu-japan.eu/vulcanus_japan/39-MrSKACH-motivation letter GNSS.pdf](http://documents.eu-japan.eu/vulcanus_japan/39-MrSKACH-motivation%20letter%20GNSS.pdf)

応募用紙: http://documents.eu-japan.eu/vulcanus_japan/39_SKACH.pdf

学生2: Thomas Kuhnel (Germany)

志望動機書: [http://documents.eu-japan.eu/vulcanus_japan/65-MrKühnel-motivation letter GNSS.pdf](http://documents.eu-japan.eu/vulcanus_japan/65-MrKühnel-motivation%20letter%20GNSS.pdf)

応募用紙: http://documents.eu-japan.eu/vulcanus_japan/65_KUHNEL.pdf

学生3: Jerome Olivier (France)

志望動機書: [http://documents.eu-japan.eu/vulcanus_japan/226-MrOLIVIER-motivation letter GNSS.pdf](http://documents.eu-japan.eu/vulcanus_japan/226-MrOLIVIER-motivation%20letter%20GNSS.pdf)

応募用紙: http://documents.eu-japan.eu/vulcanus_japan/226_OLIVIER.pdf

学生4: Agathe Schmider (France)

志望動機書: [http://documents.eu-japan.eu/vulcanus_japan/235-MsSCHMIDER-motivation letter GNSS.pdf](http://documents.eu-japan.eu/vulcanus_japan/235-MsSCHMIDER-motivation%20letter%20GNSS.pdf)

応募用紙: http://documents.eu-japan.eu/vulcanus_japan/235_SCHIMDER.pdf

学生5: Remi Benoit (France)

志望動機書: [http://documents.eu-japan.eu/vulcanus_japan/241-MrBENOIT-motivation letter GNSS.pdf](http://documents.eu-japan.eu/vulcanus_japan/241-MrBENOIT-motivation%20letter%20GNSS.pdf)

応募用紙: http://documents.eu-japan.eu/vulcanus_japan/241_BENOIT.pdf

Industrial internships in GNSS for European and Japanese engineering students (VULCANUS)

宇宙工学、航空工学専攻学生プロフィール(4名)

学生6: Oriol Gasquez Garcia (Spain)

志望動機書: http://documents.eu-japan.eu/vulcanus_japan/87-MrGASQUEZ_GARCIA-motivatino_letter_GNSS.pdf

応募用紙: http://documents.eu-japan.eu/vulcanus_japan/87_GASQUEZ_GARCIA.pdf

学生7: Daniel Pastor Moreno (Spain)

志望動機書: http://documents.eu-japan.eu/vulcanus_japan/122-MrPASTOR-motivation_letter_GNSS.pdf

応募用紙: http://documents.eu-japan.eu/vulcanus_japan/122_PASTOR_MORENO.pdf

学生8: Tiemen Van Wees (the Netherlands)

志望動機書: http://documents.eu-japan.eu/vulcanus_japan/409-MrVanWees-motivation_letter_GNSS.pdf

応募用紙: http://documents.eu-japan.eu/vulcanus_japan/409_VAN_WEES.pdf

学生9: Monica Sousa (Portugal)

志望動機書: http://documents.eu-japan.eu/vulcanus_japan/515-MsCOSTA-motivation_letter_gnss.pdf

応募用紙: http://documents.eu-japan.eu/vulcanus_japan/515_COSTA_MARINHO_SOUSA.pdf

“Vulcanus” Engineering Internships

Vulcanus in Japan 2011-2012 Map of internships

We welcome Japanese GNSS companies interested in receiving European engineering interns for the period:

September 2013- August 2014

VULCANUS IN JAPAN
2011-2012

	1 - Mr Przemyslaw SYKTUS - PL AGH NTT CS Laboratory Souraku gun, Kyoto		3 - Mr Jakub KOSEK - PL AGH NTT CS Laboratory Atsugi shi, Kanagawa
	2 - Ms Ecaterina CERVENCA-LATES - RO Politehnica University of Timisoara NTT CS Laboratory Souraku gun, Kyoto		4 - Ms Tatjana ENDRJUKATE - LV Transport and Telecommunication Institute NTT CS Laboratory Atsugi shi, Kanagawa
	5 - Mr Andrea TINO - IT University of Catania NTT CS Laboratory Souraku gun, Kyoto		6 - Mr Richard BECKER - DE University of Rostock FujiSoft Incorporated Tokyo
	19 - Mr Louis UDEH - GB UNIV NOTTINGHAM Mitsubishi Chemical Corporation Yokkaichi shi, Mie		7 - Mr Gediminas DAUDERIS - LT Vilnius University NTT Basic Research Atsugi shi, Kanagawa
	26 - Ms Jana HONOVA - CZ Brno University of Technology Mitsubishi Chemical Kurasiki shi, Okayama		8 - Ms Maria ANAGNOSTI - GR University of Gent NTT Basic Research Atsugi shi, Kanagawa
	9 - Mr Roger MOLTO PALLARES - ES Chemical Institute of Sarria (IQS) NTT Basic Research Atsugi shi, Kanagawa		10 - Ms Sanna Maria RAUHAMAKI - FI University of Jyväskylä NTT Basic Research Atsugi shi, Kanagawa
	11 - Mr Maciej Mateusz KRUK - PL AGH FujiSoft Kawasaki shi, Kanagawa		12 - Mr Diederik Jan VREEKEN - NL Delft University of Technology Hitachi Research Lab. Hitachinaka shi, Ibaraki
	20 - Ms Nicola TYLER - DE Ludwig-Maximilians-Universität Mitsubishi Chemical Corporation Kitakyushu shi, Fukuoka		13 - Mr Dominik HAYWARD - GB Durham University Hitachi Research Lab. Hitachinaka shi, Ibaraki
	25 - Mr James MATTHEWS - GB University of Birmingham Hitachi Kasado Kudamatsu shi, Yamaguchi		14 - Ms Sylwia KORCZYNSKA - PL Wroclaw University of Technology Hitachi Central Research Lab. Kokubunji shi, Tokyo
	27 - Mr Daniel Enrique ROJAS - DE Karlsruhe Institute of Technology Hitachi Kasado Kudamatsu shi, Yamaguchi		15 - Mr Erwin-Lorant KARALYOS - RO Technical University Cluj-Napoca Hitachi Central Research Lab. Kokubunji shi, Tokyo
	23 - Mr Valerio VALLI - IT University of Bologna Hitachi Works Hitachi shi, Ibaraki		16 - Ms Raluca BORA - RO Technical University Cluj Napoca Schlumberger Sagamihara shi, Kanagawa
	24 - Ms Adelina DEHELEAN - RO Politehnica Timisoara IBM Japan Yamato shi, Kanagawa		17 - Mr José Enrique SERRANO COMES - ES Polytechnic University of Valencia TUV Rheinland Japan Yokohama shi, Kanagawa
	25 - Mr Danilo BONFINI - IT University of Trieste FUJITSU Kawasaki shi, Kanagawa		18 - Mr Lukasz ZABIEROWSKI - PL AGH TUV Rheinland Japan Yokohama shi, Kanagawa
	29 - Mr Kristijonas BŪDELIS - LT Kaunas University of Technology YASUI ARCH Tokyo		30 - MS Athina KONTI - GR City University London Schlumberger Sagamihara shi, Kanagawa
	21 - Ms Krisztina SZIRTES - HU Budapest University of Technology AIST Tsukuba shi, Ibaraki		
	22 - Mr Valiko KARUSION - EE Tallinn University of Technology NTT Data Corporation Tokyo		

“Vulcanus” Engineering Internships

Vulcanus in Japan Company internship for young engineers:

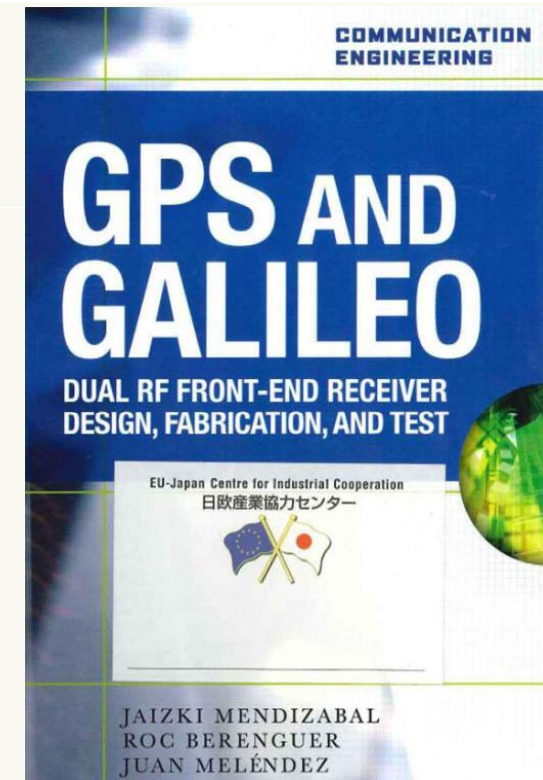
Japanese language and culture course (4-month) and company internship (8-month) in Japan for European students in science & engineering fields (the same programme exists for Japanese students in the EU).

Vulcanus in Japan

2011-2012



30 participants started
Vulcanus in September 2011



GNSS Industrial Partnership Service – to develop EU-JP business and R&D partnerships

Example of industrial partnership request:

Title: New vehicle tracking solution

Summary: A small German company offers a vehicle tracking solution based on a smart box (GNSS/GPRS) that can be configured individually and can be integrated into existing technical surroundings. It is robust and compact and provides locations of vehicles, cargo and passengers in real time. Benefits include increased transparency and more efficient work processes. Partners from logistics, facility management and other services are sought for commercial agreements with technical assistance. (TECHNOLOGY OFFER, ref.:13 DE 0855 3RMD)

Detailed information: http://www.enterprise-europe-network.ec.europa.eu/matching/complerec.cfm?BBS_ID=175765&COMPANY=801370

All current offers available at:

[http://japan.gnss.asia/Industrial Partnership Opportunities](http://japan.gnss.asia/Industrial_Partnership_Opportunities)

Satellite Navigation Competition in Japan in 2013 - merits

Encourage Japanese students, researchers and firms to submit new ideas, for future applications which promote the utilization of GNSS and QZSS

Promote the commercialization of the most successful ideas in Japan

Increase the development of GNSS applications in Japan and Asia

All ideas including “GNSS applications for disaster prevention, monitoring, mitigation and management”

Official kick-off: 1 April 2013



EUROPEAN
SATELLITE NAVIGATION
COMPETITION 2013

Information for Participants

SUBMIT YOUR IDEA
1 APRIL - 30 JUNE 2013
WWW.GALILEO-MASTERS.EU

partner regions 2012

- FINLAND
- ESTONIA
- IRELAND
- UK
- ØRESUND
- LITHUANIA
- HESSIE
- PRAGUE
- POLAND
- BADEN-WÜRTTEMBERG
- BAVARIA
- PORTUGAL
- SWITZERLAND
- AUSTRIA
- AQUITAINE
- LOMBARDY
- CROATIA
- NORTH AMERICA
- GIPUZKOA
- NICE-SOPHIA ANTIPOLIS
- CATALONIA
- BULGARIA
- ARAB MENA
- BRAZIL



10th
Anniversary

in cooperation with



prize awarding partner



under the patronage of



organised by



sponsoring partners



innovative IT partner



The Organiser



Anwendungszentrum GmbH Oberpfaffenhofen (AZO)

- Organiser of the European Satellite Navigation Competition
- Drives innovation & incubation in the commercial use of space technologies & infrastructures

Space4Business in Europe

- Scouts for the best business ideas via innovation competitions for satellite navigation and earth monitoring applications
- Supports formations of space related companies in the ESA BIC Bavaria



business
incubation
centre

Bavaria
managed by AZO

Mission



- Enhancing public awareness of the manifold application potential of Global Navigation Satellite Systems (GNSS)
- Promoting the use of the technology for new application fields
 - Supporting entrepreneurs and start-up companies
- Cross-regional match-making between industry, research and politics to foster the realisation of the awarded ideas
 - Strengthening international collaboration with particular regard to the development of applications and services made possible by the future European satellite navigation system Galileo

ESNC Global Network



as of 2012

ESNC Partners 2013



in cooperation with



under the patronage of



prize awarding partner



special prize partners



Partner Regions 2012



EUROPEAN
SATELLITE NAVIGATION
COMPETITION 2013



Key facts



Since 2004 the ESNC is an exceptional source of innovation with ...

- more than 6,000 participants
- almost 2,000 submitted ideas
- 171 awarded winners
- more than 60 partners worldwide

Timeline



EUROPEAN
SATELLITE NAVIGATION
COMPETITION 2013



How to participate



EUROPEAN
SATELLITE NAVIGATION
COMPETITION 2013

10th
Anniversary

SUBMIT YOUR IDEA

1 APRIL – 30 JUNE 2013

WWW.GALILEO-MASTERS.EU



in cooperation with



prize awarding partner



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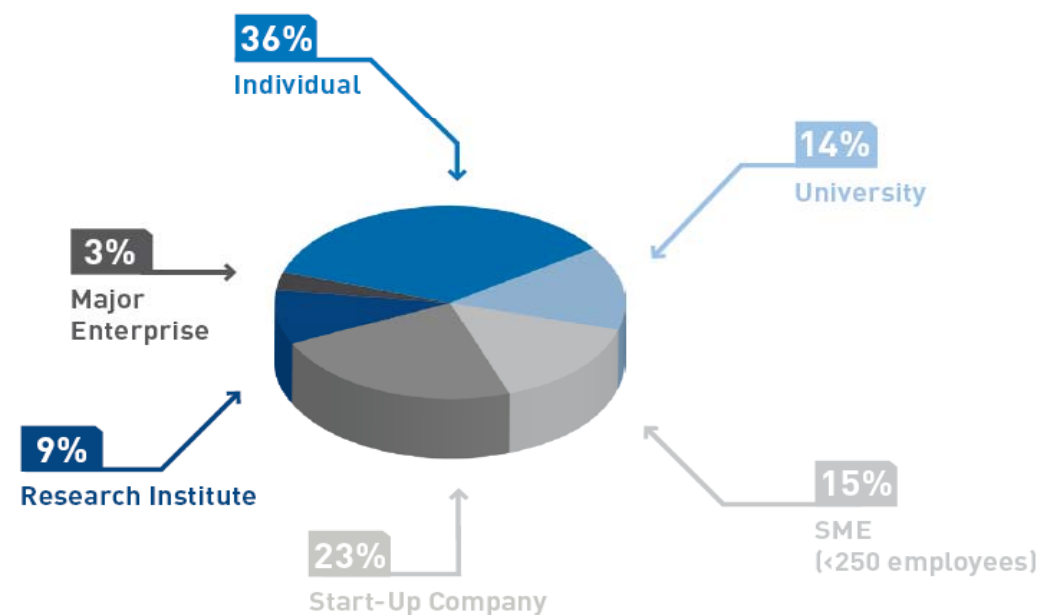
organised by





The ESNC is oriented towards

- Start-up companies
- Small and medium sized companies
- Developers in large companies
- Research associates and other university staff
- Students
- Private researchers



Fields of Application



EUROPEAN
SATELLITE NAVIGATION
COMPETITION 2013

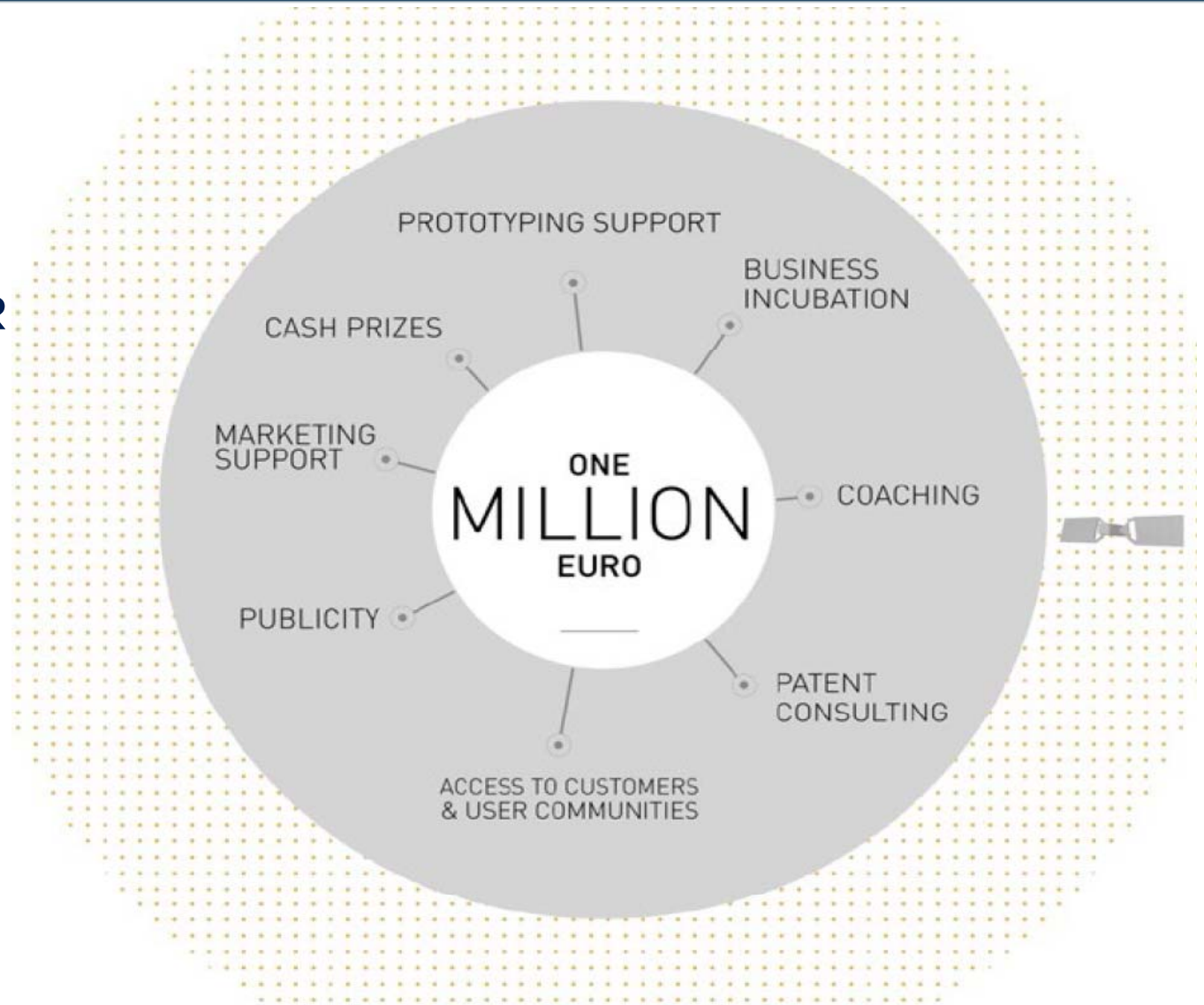
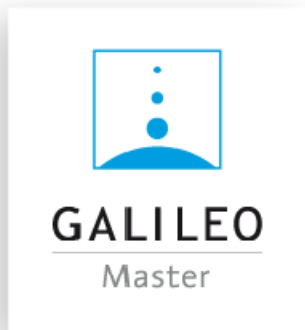
NAVIGATION
PUBLIC & SOCIAL SERVICES
eHEALTH INDUSTRY APPLICATIONS
ENERGY HIGH PRECISION AUGMENTED REALITY
GAMING
SPORTS & TRACKING MOBILE LBS SOCIAL NETWORKING
LOGISTICS SMART MOVING
SAFETY & SECURITY
AEROSPACE



Prizes 2013

Prize Pool

Become the
GALILEO MASTER
get EUR 20,000





Application Examples

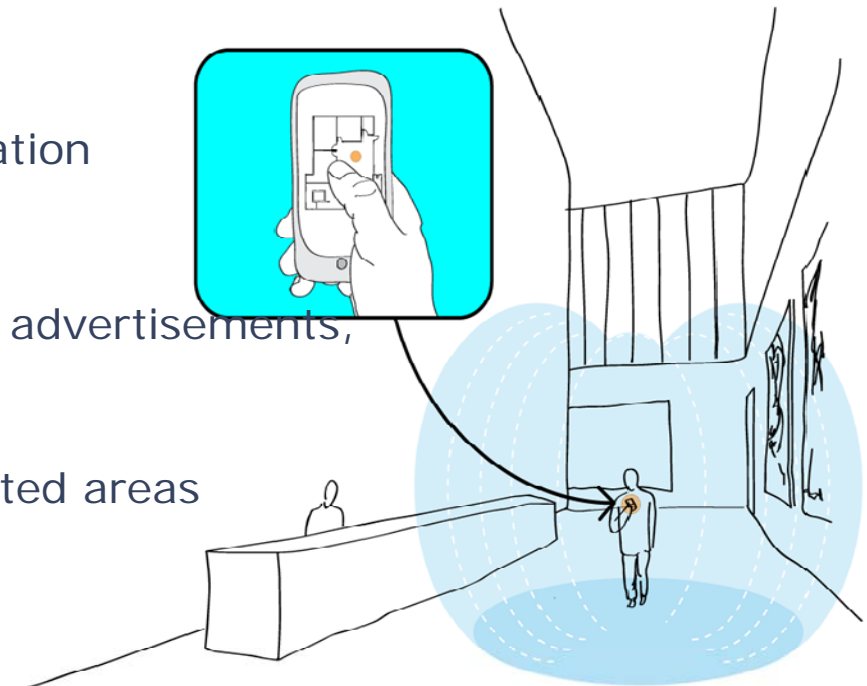


Seamless Indoor Navigation

Overall Winner :: GALILEO Master 2012



- Accurate indoor navigation with a smartphone
- Ultra Low Frequency Magnetic Field Communication
- Works with the phone's three-axis hall sensor
- Indoor navigation, access control, personalized advertisements, museum guidance
- GNSS support for tunnels and densely constructed areas
- Ranges from millimetres to several meters, very low-cost infrastructure





The Travel Time Platform – Time is More Valuable than Distance

Regional Winner 2012 :: United Kingdom



iGEOLISE
MINUTES MEAN MORE THAN MILES

- Delivers locations based on travel time
- First to market, initial customers secured
- Launched in the UK
- Successful trials in nine other countries
- Uses real-time and historic GNSS data
- Adds the value of GNSS data to location-based information



© iGeolise 2012

Awards Ceremony 2012 | Munich



GINA - Geographical Information Assistant

Regional Winner: : Czech Republic 2012



- a technology that facilitates faster and better decision making in the field by real-time exchange of information through the map
- functionality on mobile devices
- Borderless tracking
- Situation mapping
- Tactical communication
- Task and goal management
- Automated reporting



State Reception 2012 | Munich



Space 4 Your Business

Mr Andreas Dippelhofer

Project Management

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82205 Gilching / Germany

www.galileo-masters.eu

GNSS.Asia Japan - Project Objectives

1. Define a **strategy** for the industrial cooperation between EU and Japan on GNSS downstream sector (applications and receivers)
2. Ensure the **valorisation** of the Galileo Programme with an emphasis on the “exportable” products mainly the Users Segment: receivers and applications
3. Recommend and start the development of **industrial cooperation** between EU and Japan

GNSS.Asia Japan - Project team

Fabrizio Mura



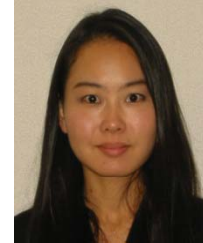
Toshiyasu Ichioka



Kiyoshi Yajima



Yoko Kadoya



Fabrizio Mura, DGM, EU-Japan Centre, project coordinator for J-BILAT, team leader for GNSS.Asia.

Toshiyasu Ichioka, PM for J-BILAT as well as GNSS.asia, promoting EU-Japan cooperation in STI.

Yoko Kadoya, PC for J-BILAT and GNSS.Asia dissemination actions in Japan.

Kiyoshi Yajima, Japan expert, previously worked in Pioneer Co., now works in Lighthouse Technology and Consulting Co., whose main objective is to contribute to the world by making use of GNSS.

About the EU-Japan Centre for Industrial Cooperation

日欧産業協力センターについて

1. Policy analysis

Seminars & workshops: support to dialogue
EU-Japan Business Round Table

2. Services to Business

Training programmes for EU and JP firms
Enterprise Europe Network
Information service (business inquiries)

3. EU-Japan cooperation in Innovation & R&D
R&D (FP7) J-BILAT
Cluster helpdesk and missions

- help EU firms become familiar with the Japanese market and industry trends;

- facilitate contacts and help initiate business through network + meetings (*) (multi-sectoral);

- assess expectations from Japanese customers about EU products / services (*) ;

- help EU firms (resp. Jp firms) search for partners in Japan (resp. partners in Japan) (*) ;

(*) Relevance to GNSS



Getting started - services offered by the Centre

From the EU - information inquiry helpdesk about the Japanese market:

Enterprise Europe Network can start anytime, free of charge (<http://www.een-japan.eu>)

From the EU - search for potential partners in Japan:

Enterprise Europe Network can start anytime, free of charge (<http://www.een-japan.eu>)

From the EU – information helpdesk about cooperative horizon2020 R&D partnerships+ funding with Japan

J-BILAT info helpdesk can start anytime, free of charge (<http://www.j-bilat.eu/>)

From the EU and from Japan - train a Japanese engineer for 8 months

Vulcanus in Europe / Japan internship programme

1/year, follow recruitment calendar 6000 Euro/ 800k JPY support from host companies

<http://www.eu-japan.eu/global/vulcanus.html>

From Japan - assess market potential, and Japan-specific gaps, B-to-B meetings

H RTP Business training programmes

1/year, 4 week immersion in Japan (next round: May 2013) – subsidy for SMEs

From Japan - assess market potential, and Japan-specific gaps, B-to-B meetings

B-to-B meeting mission in ICT: 5 days, scheduled for 2013 around a major exhibition in Japan

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THANK YOU

.. any questions?

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Contact us at
gnssasia@eu-japan.gr.jp