

BELS WORKSHOP

EGNSS SOLUTIONS FOR SOUTH-EAST ASIA

May 22-24, 2018

HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY, HANOI | VIETNAM

Satellite Navigation Technology is part of our daily life, it is embedded in a great amount of systems and devices: from the air traffic monitoring to our smartphones, from agriculture to disaster mitigation. Until a few years ago satellite navigation was mainly GPS. However, the launch of **Galileo** Initial Services in December 2016 paved the way for new services and applications which are becoming available all over the world. These innovative services can foster the adoption of Galileo outside Europe, in particular in those countries which are not GNSS providers. If you are interested in satellite navigation, in its applications and in **discovering the new trends of this amazing technology** join us for the BELS workshop!

THE BELS WORKSHOP

- ▶ ...the NAVIS Centre in Vietnam offers training, hands-on and visits to South East Asian participants
- ▶ ...European GNSS companies present their activities
- ▶ ... local researchers introduce their GNSS experience
- ▶ ... European and Asian researchers provide an overview on GNSS, on the most promising applications, with a special focus on South East Asian needs and on the European satellite navigation system Galileo.

	22 nd May	23 rd May	24 th May	
PROGRAM	Training	Training	Workshop	
	Morning	Fundamentals on GNSS @ NAVIS	Exercises on GNSS Signal and Data Processing @ NAVIS	Session 1: E-GNSS solutions for South East Asia
		Lunch	Lunch	Lunch
	Afternoon	Overview on Precise Positioning @ NAVIS	Technical visit to CORS station, and RTK Demonstration on site @ NAVIS + DOSM-GIS	Session 2: Needs and use of GNSS in South East Asia
	Reception	Dinner	Gala Dinner	

Level 6 and 7, Ta Quang Buu Library Building

Hanoi University of Science and Technology – No. 1 Dai Co Viet Road, Hai Ba Trung district, Hanoi

REGISTER NOW

The Workshop will be held in English. The participation in the BELS Workshop is **free of charge**. The number of participants is limited. Early registration is recommended.

REGISTER HERE <https://goo.gl/forms/4xoMrJrhBhn3FKx43>



The NAVIS | The NAVIS Centre is based at the Hanoi University of Science and Technology (HUST) in Hanoi, Vietnam. Founded in 2010, the NAVIS is linked with the most important GNSS R&D centres in Europe and Australia. Its research activity is focused on software defined radio Multi-GNSS receivers, techniques for precise positioning, low-latitude ionospheric monitoring, GNSS applications for ITS, technology transfer, etc.

THE PROJECT | BELS involves companies, institutions, researchers from Europe and South East Asia (SEA) working in the field of Global Navigation Satellite Systems (GNSS). The project strengthens the collaboration between European and South East Asian institutions, facilitates the testing of European GNSS solutions in the South East Asian environment and fosters the mobility of students and researchers in the field of GNSS across the two regions.



BELS

Building European Links toward
South East Asia in the field of EGNSS

WWW.BELSPROJECT.EU

EGNSS SOLUTIONS FOR SOUTH-EAST ASIA

Room 702, Level 7, Ta Quang Buu Library Building

Hanoi University of Science and Technology – No. 1 Dai Co Viet, Hai Ba Trung district, Hanoi

AGENDA | MAY 24TH, 2018

- 08:30 – 09:00** Registration
- 09:00 – 09:15** Welcome Remarks
Prof. DINH Van Phong, Vice President of Hanoi University of Science and Technology
Ms. Axelle Nicaise, Head of Politics, Press & Information Section at the EU Delegation to Vietnam
- 09:15 – 09:25** Introduction – The BELS Project, *Gabriella POVERO, ISMB (Italy)*
- 09:25 – 09:40** European contribution to GNSS, *Baerbel Deisting, bavAIRia (Germany)*
- 09:40 – 09:55** The NAVIS: A Centre for the Development of Satellite Navigation in South East Asia, *Ta Hai Tung, NAVIS Center - HUST (Vietnam)*
- 09:55 – 10:10** Overview of the CORS Project of Vietnam, *Department of Survey, Mapping and GIS (Vietnam)*
- 10:10 – 10:25** GNSS / GPS Researches and Activities in ANGKASA, *Noordin Bin Ahmad, National Space Agency (ANGKASA - Malaysia)*
- 10:25 – 11:00** COFFEE BREAK & PHOTO SESSION
- 11:00 – 11:15** EGNSS companies in SEA, *Sabine Kling, bavAIRia (Germany)*
- 11:15 – 11:30** Improving the stochastic model for VRS network-based GNSS positioning, *Chalermchon Satirapod, Thanate Jongrujanan, Chulalongkorn University (Thailand)*
- 11:30 – 11:45** Traffy Waste – A case study of using GNSS for waste collection management in Phuket Smart City, *Wasan Pattara-atikom, National Electronics and Computer Technology Center (Thailand)*
- 11:45 – 12:00** Dual Frequency Multi Constellation GNSS for Civil Aviation, *Olivier Julien, Ecole Nationale de l'Aviation Civile (France)*
- 12:00 – 12:15** Air Navigation and GBAS opportunities at SEA, *Pere Durbà, INDRA (Spain)*
- 12:15 – 12:30** The EGNSS Solution for Aerial Survey, *Alain Suskind, Septentrio (Belgium)*
- 12:30 – 14:00** LUNCH
- 14:00 – 14:15** Protecting GNSS applications and services, *Mark Dumville, Nottingham Scientific Limited (United Kingdom)*
- 14:15 – 15:45** Needs and Use of GNSS in South East Asia
- Tum Yousos, and Lalin Heng, *Ministry of Posts and Telecommunications (Cambodia)*
 - Asnawi Husin, *National Institute of Aeronautics and Space (LAPAN - Indonesia)*
 - Silap Boutha, *Ministry of Science and Technology (Laos PDR)*
 - Noordin Bin Ahmad, *(ANGKASA - Malaysia)*
 - Aung Moe, *Survey Department (Myanmar)*
 - Charisma De la Cruz-Cayapan, *National Mapping and Resource Information Authority (The Philippines)*
 - Chalermchon Satirapod, *Department of Survey Engineering, Chulalongkorn University (Thailand)*
 - La The Vinh, *HUST (Vietnam)*
- 15:45 – 16:15** Panel discussion: Galileo add-ons for SEA. *Moderator: Gabriella Povero (ISMB), and TA Hai Tung (NAVIS)*
- 16:15 – 16:30** Wrap up and Conclusions, *Prof. Gustavo BELFORTE, Politecnico di Torino (Italy)*
- 18:30 – 20:30** Gala Dinner

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