

# **United Nations/Latvia Workshop on the Applications of Global Navigation Satellite Systems**

**Riga, Latvia, 14 - 18 May 2012**

## **TARGETED PROFESSIONAL EDUCATION CAN IMPROVE THE ROLE OF GNSS AS A COMPONENT OF NATIONAL INFRASTRUCTURE**

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Targeted professional education can improve the role of GNSS as  
a component of national infrastructure

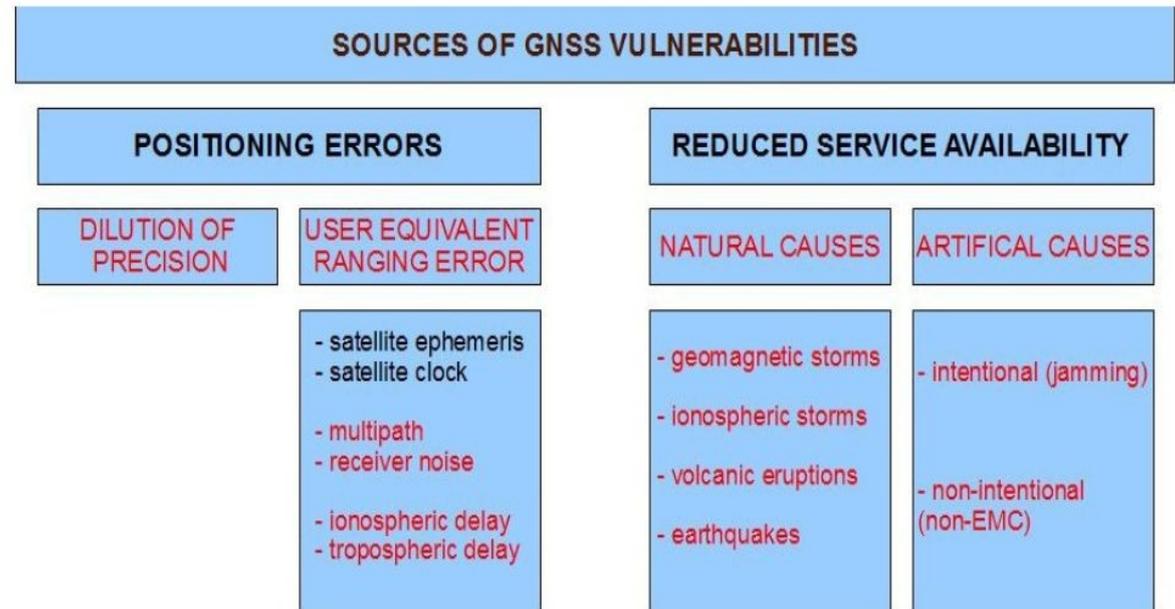
- Content of presentation
  - Introduction
  - National infrastructure
  - Knowledge transfer
  - GNSS as a component of national infrastructure
  - A GNSS knowledge transfer scheme and GNSS education
  - Discussion
  - Conclusion

# Targeted professional education can improve the role of GNSS as a component of national infrastructure

- Introduction

- Despite all the efforts, GNSS is prone to a number of risk and vulnerabilities

- Responsibilities for quality of PNT services are not clearly defined

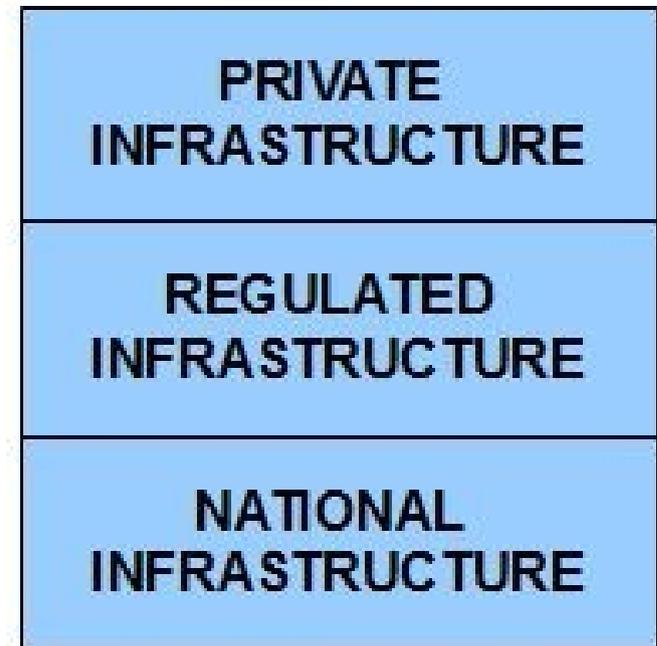


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- National infrastructure

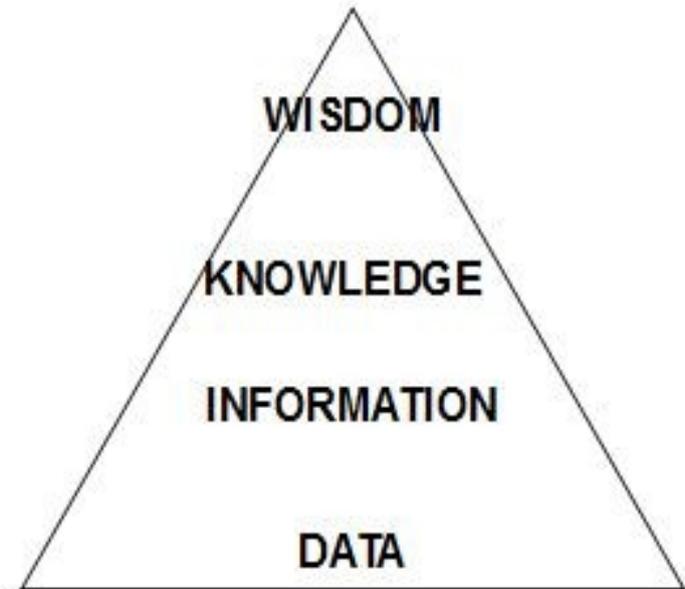
- Growing number of technological and socio-economic systems rely upon GNSS
- Sustained PNT service provision is essential for economic growth, safety and security



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- Knowledge transfer
  - GNSS usually hidden within the complex technological and socio-economic systems
  - User awareness of GNSS in the foundation of complex systems essential



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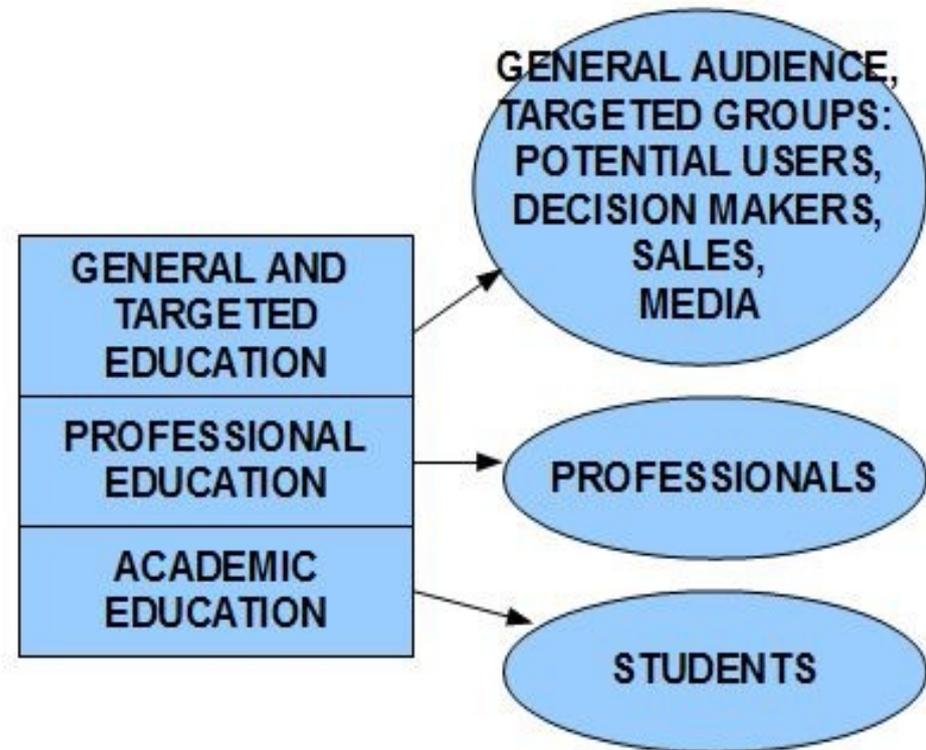
- GNSS as a component of national infrastructure
  - Economic growth
  - Safety-critical applications
  - Security
  - Navigation
  - Financial transactions
  - Accident management
  - Mission critical applications



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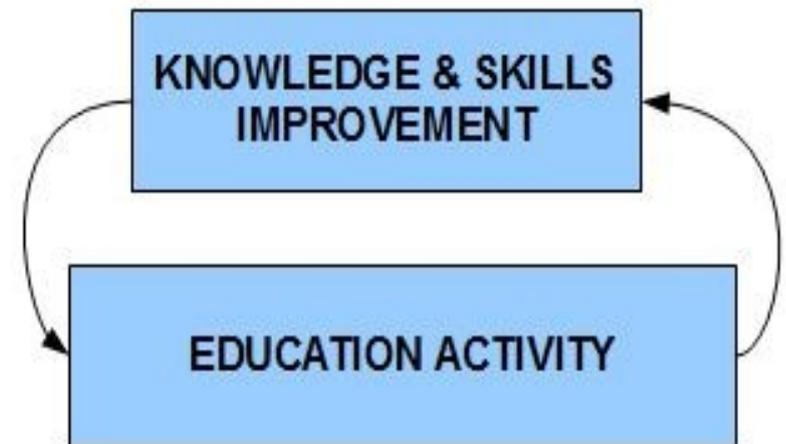
- A GNSS knowledge transfer scheme and GNSS education
  - Core system operated and managed by GNSS operators
  - Responsibility for QoS lies on service providers and application designers
  - Education on GNSS is essential for all stakeholders of business environment



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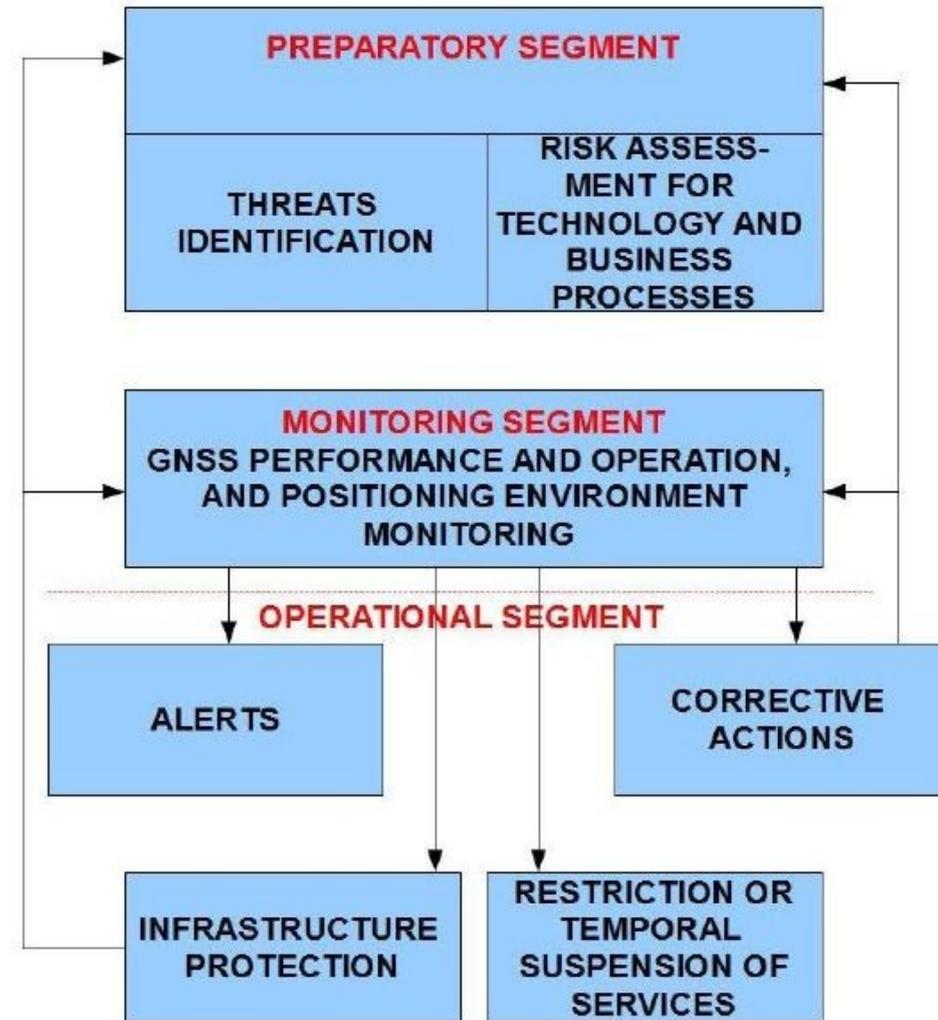
- A GNSS knowledge transfer scheme and GNSS education
  - GNSS education as a control process with feedback
  - Education process and programme to be tailored according to requirements of the users (recipients of the education) and the market



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- Discussion
  - GNSS should become more resilient to vulnerabilities and risks
  - GNSS resilience scheme requires educated acting parties (stakeholder in business environment)



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- Conclusion

- Growing importance of GNSS in numerous technological and socio-economic systems makes GNSS a part of national infrastructure
- Development, operation and utilisation of such systems requires education of all stakeholders of the business environment
- Tailored GNSS education process and programmes are required in order to assure deployment of the GNSS resilience scheme

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**THANK YOU FOR YOUR ATTENTION!**

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