

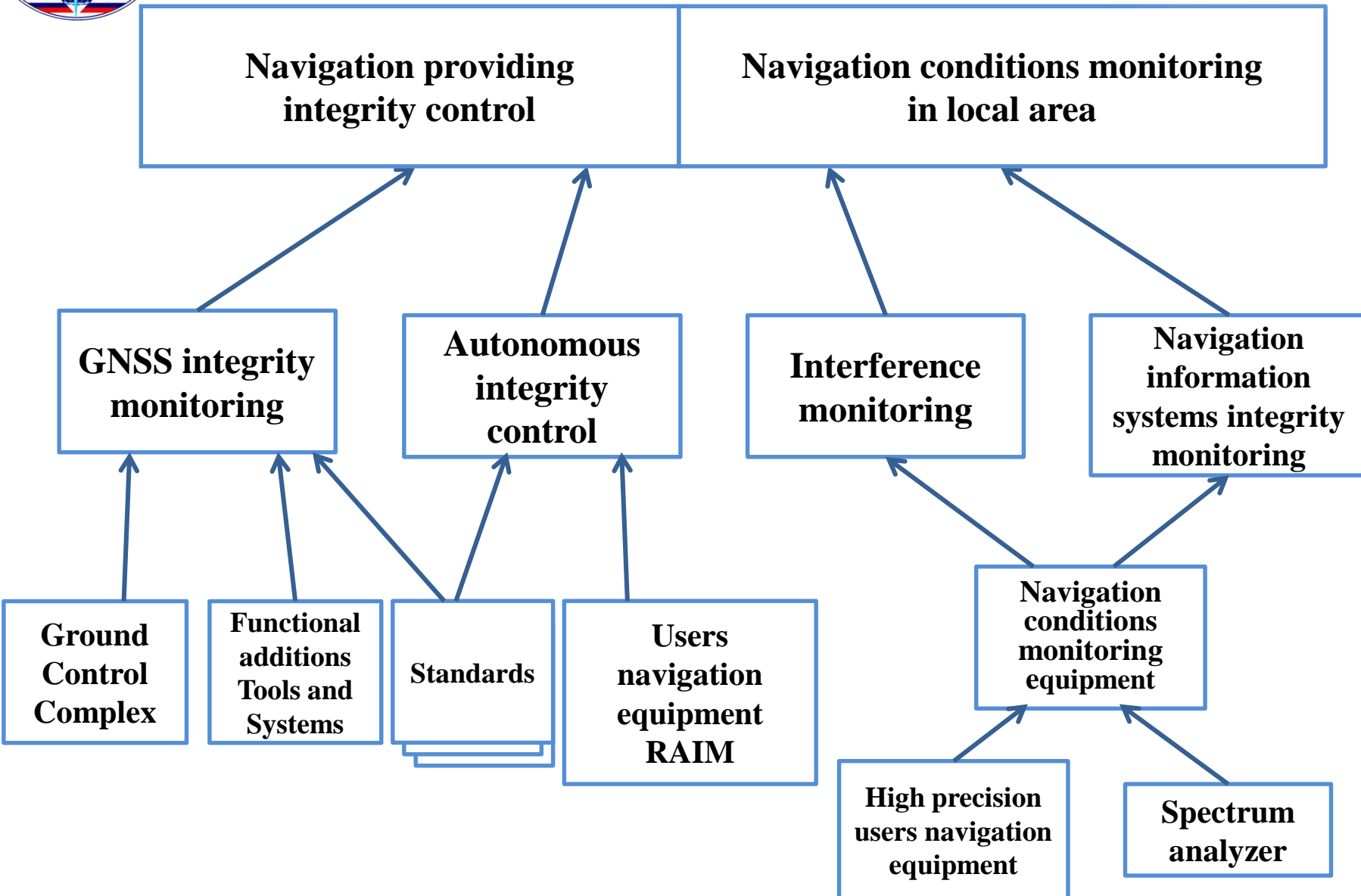


**International Committee on GNSS (ICG)  
Working Group S**

**IDM Subgroup**

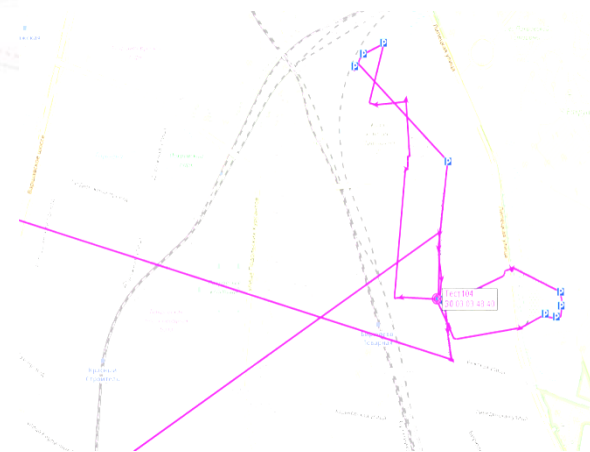
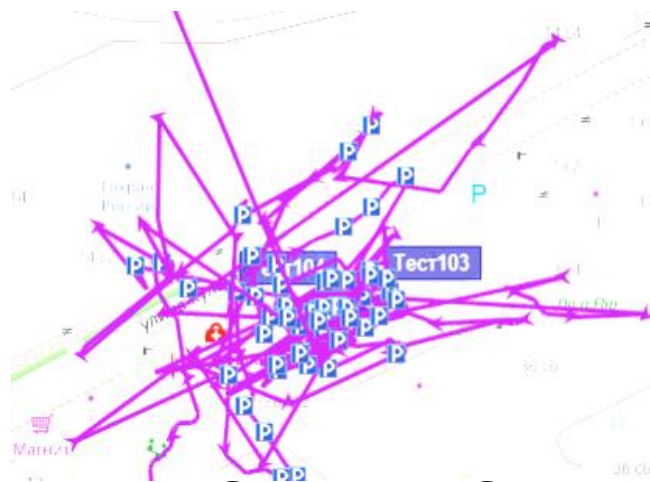
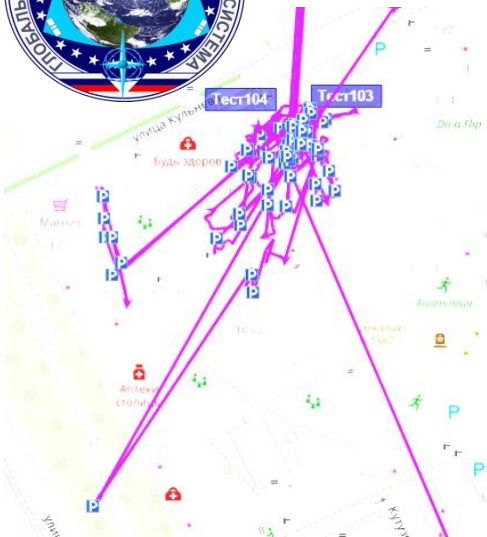
**Actual issues of navigation conditions  
monitoring**

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Sergey SILIN  
NAVIS Inc.*



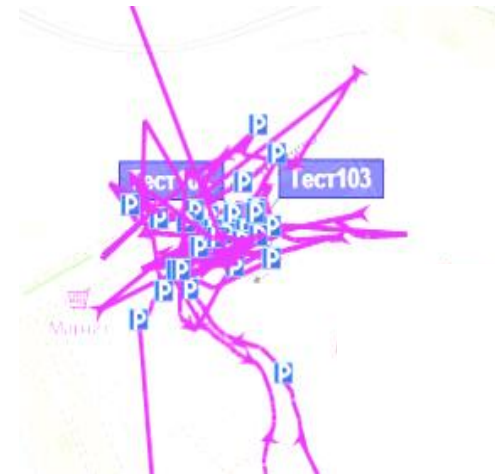
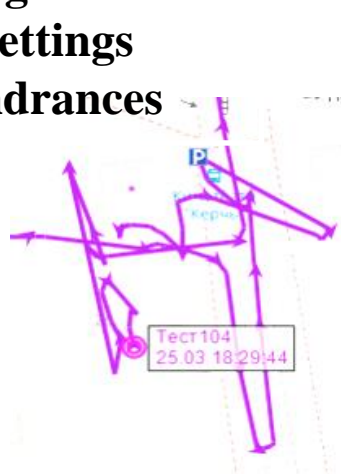
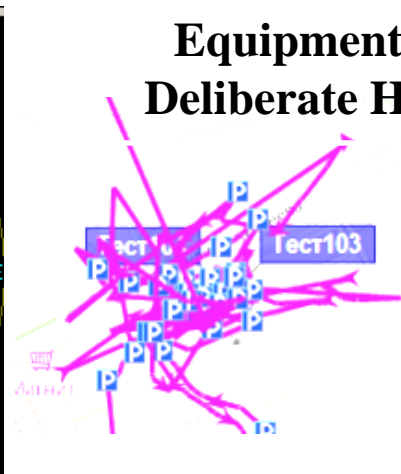
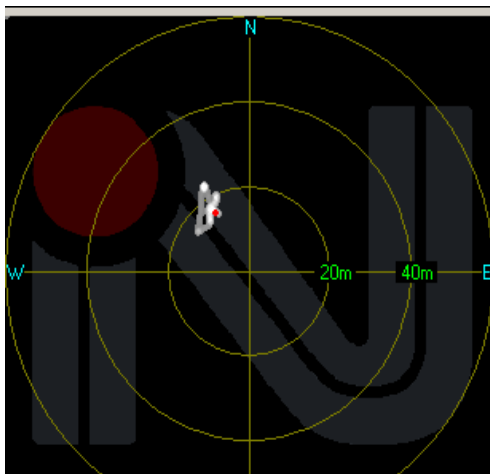


# Test Results



?

- Multipath
- Inadvertent Hindrances
- Satellite Navigation
- Equipment Problems
- Satellite Navigation
- Equipment Settings
- Deliberate Hindrances





# Navigation conditions monitoring problems

- Influences and events classification
- Criteria for assessment and identification of influences and events
- Techniques for assessment and identification of influences and events

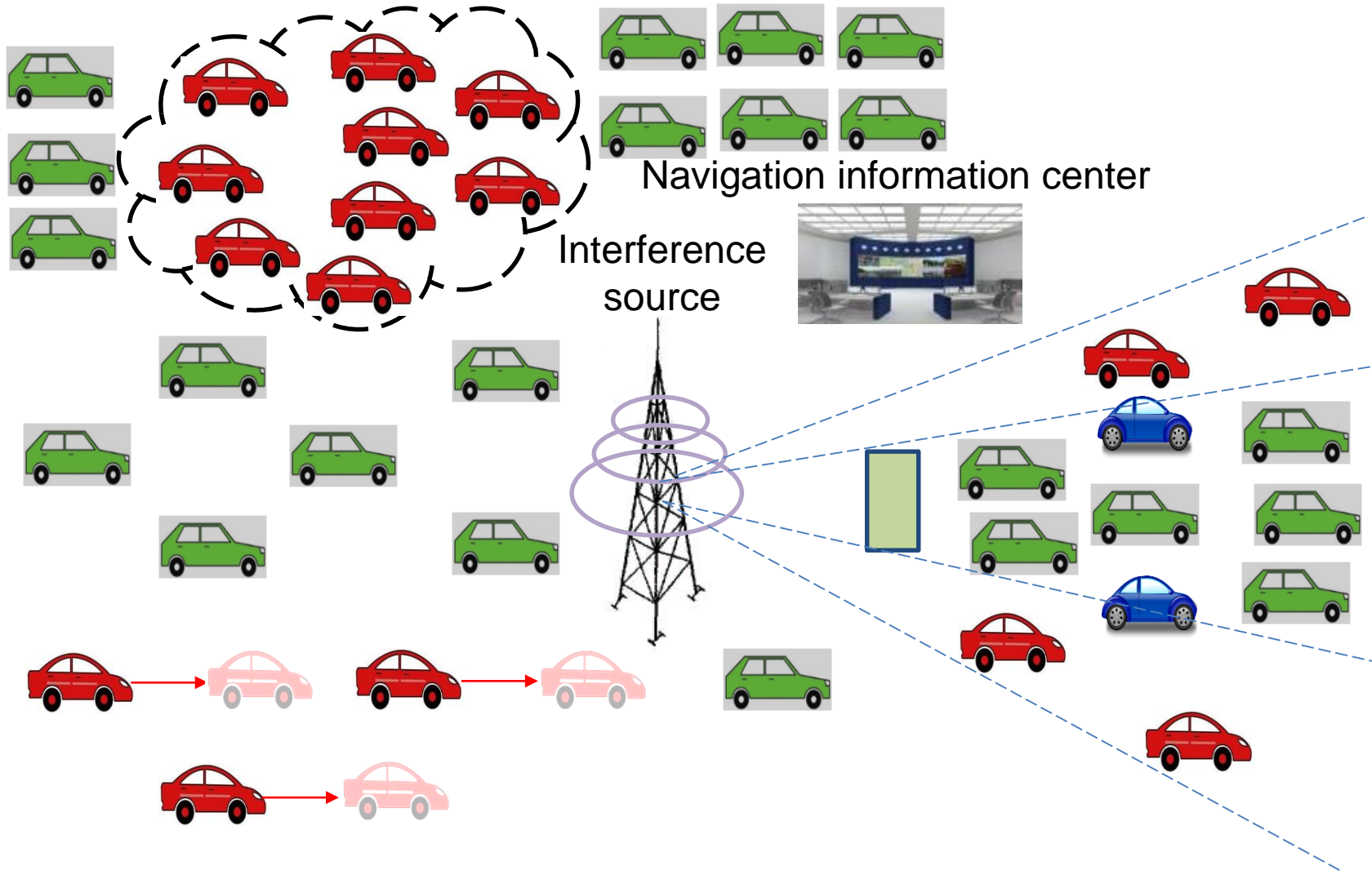


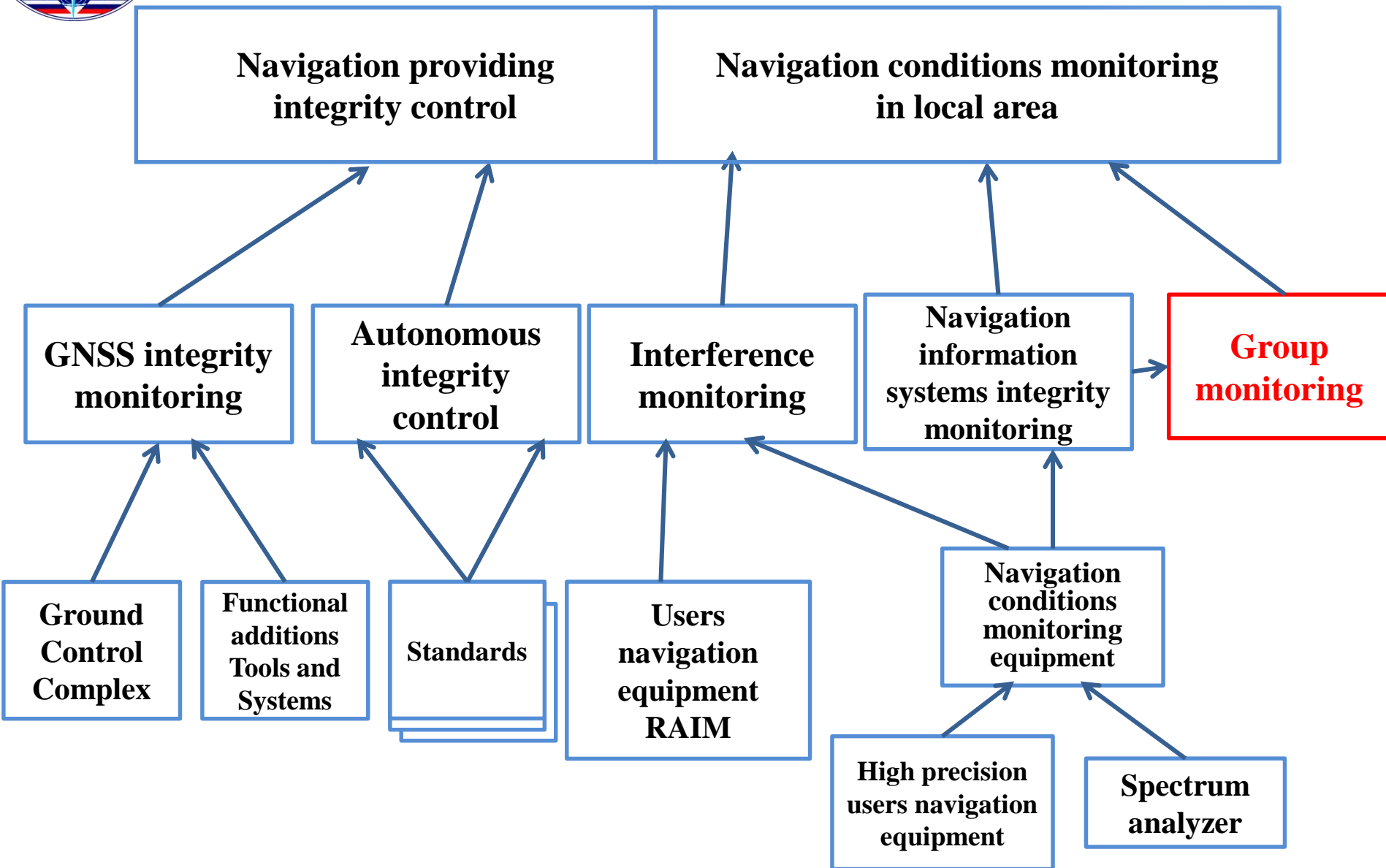
# Prerequisites

1. Navigation conditions monitoring relevance.
2. Existence of tools and systems for group monitoring:
  - navigation information systems;
  - equipment for navigation conditions monitoring;
  - base stations networks;
  - GBAS, SBAS, WAAS, EGNOS, SDCM, etc...
  - IGS



# Navigation conditions monitoring in navigation information systems









## Conclusion

Conditions navigation monitoring is a relevant task.

It is offered to use the navigation and information systems for conditions navigation monitoring in responsible zones.

Researches of questions of methodical ensuring monitoring of navigation and information systems are planned in actions for development of GLONASS system.

The first results of researches were discussed on the working group S meeting of International Committee on GNSS in 2018, on International GLONASS/GNSS Forum in Moscow in 2019 and on the some Russian scientific conferences.

Offers on the organization of the international project are prepared.





Thank you for attention!