



International Committee on
Global Navigation Satellite Systems

ICG WORKING GROUP S
Systems, Signals, and Services
ICG-13 Meeting
Xi'an, China
06-08 November 2018

IDM Task Force

Draft document

***Assessment of electromagnetic and
interference environment at the point of location
of measurement in GNSS frequency bands***

Dr. Stanislav Kizima, ITU-expert

Dmitriy ARONOV, Geysler-Telecom, Ltd

The new name of the document

«Assessment of electromagnetic environment in the GNSS frequency bands»

The purpose *of the document is to present a methodology of assessment of electromagnetic and interference environment at the point of location of measurement in GNSS frequency bands*

The methodology *can be used for spectrum protecting and interests of evaluation of propagation and reception conditions of GNSS signals*

The document was developed taking into account:

- ✓ *Peculiarity satellite navigation systems*
- ✓ *Peculiarity frequency band of GNSS*
- ✓ *Sensitivity of satellite navigation systems to the levels of electromagnetic noise and interference*

Direction of the methodology

- *Providing the solution of problems of monitoring of parameters of propagation medium and reception of GNSS signals*
- *Operational analysis of the situation at the place of assessment*
- *The actual detection of high levels of electromagnetic background noise and interference of propagation and reception of GNSS signals*

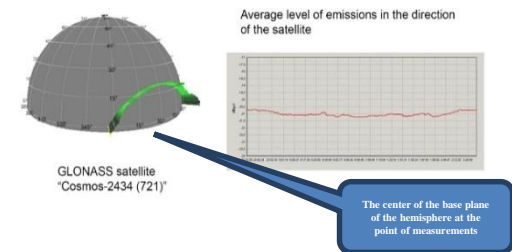
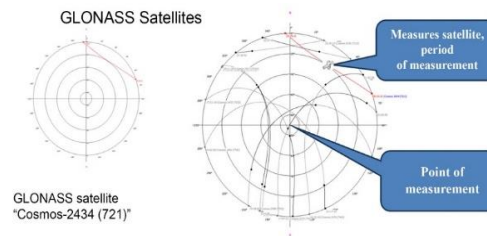
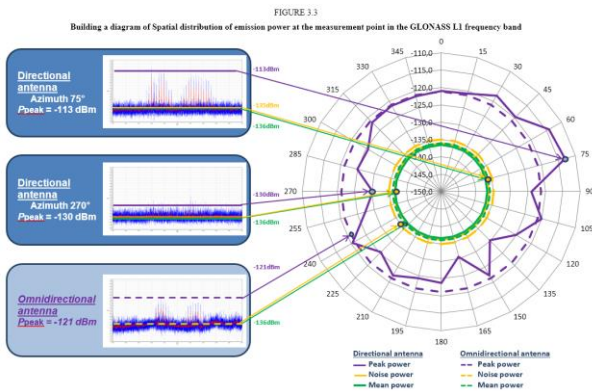
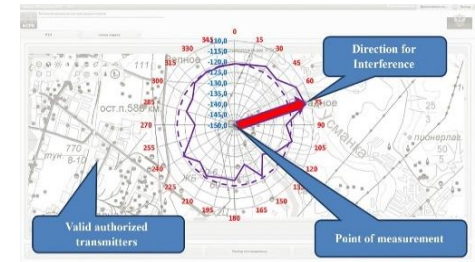
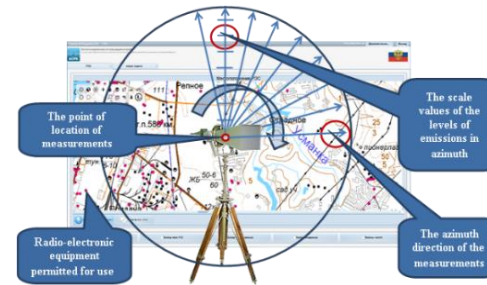
The main sections of the document:

Introduction

1. General description of the methodology
2. Requirements to radiomonitoring equipment
3. Practical example of measurements and assessments of electromagnetic environment

Conclusion

Reference documents



The first version of the draft document:

- Was presented at the meeting IDM Task Force
10 May 2017 – ICG, IDM Task Force, Baska, Croatia - Presentation
- Was sent for consideration to the participants IDM Task Force
31 May 2017 - ICG, Sending first versions to participants IDM Force
- Was sent for consideration to the participants ITU WP 1C
*7 July 2017 - ITU, Working Party 1C «Spectrum monitoring»,
Presentation of the project (first version) document*
- Was refined according to received comments and suggestions
*July - November 2017 - receive of comments and modification of the
project document*

The second version of the draft document:

- Was sent for consideration to the participants IDM Task Force
16 Nov 2017 - ICG, Sending second versions to participants IDM Force
- Report on the status of consideration of the draft document
4 Dec 2017 – ICG-12, IDM Task Force, Kyoto, Japan

Consideration of the draft document in ITU :

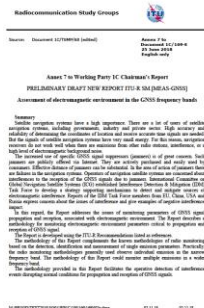
- The draft document was adopted by ITU for consideration and agreement

*July 2017 - ITU, Working Party 1C «Spectrum monitoring»,
Presentation of the draft document (first version).
The correspondence group was establish to prepare the
document*

- Development and presentation of the second version of the document

*June 2018 - ITU, Working Party 1C «Spectrum monitoring»,
Consideration of the second version of the document.
The decision to continue the work of the KG.*

*June 2018 - Revision of the document. Preparation and
publication of the third version of the document on the
electronic resource ITU*



Current status of the draft document :

- *The third version of the document is published on the ITU electronic resource - <https://www.itu.int/md/R15-WP1C-C-0169/en>*
- *Work on the draft document is ongoing*
- *Comments and suggestions on the draft document are accepted by e-mail 5314368@mail.ru*
- *A fourth version of the draft document is being prepared for publication at the end of the year*
- *It is possible to obtain a decision on approval of the draft document in ITU in 2019*

Draft document

«Assessment of electromagnetic environment
in the GNSS frequency bands»

Is propose:

- ✓ **to continue work on the draft document**
- ✓ **at the next meeting IDM Task Force to consider the results of the work on the draft document**



International Committee on
Global Navigation Satellite Systems

Thank you for your attention