International workshop for industrial safety regulators of BRICS Countries "Effective Industrial Safety Regulation as an Element of Stability of National Economy"

"Development of international regulatory framework in the field of monitoring of facilities with detected hazards on the basis of ISO/TC 292 "Safety and Resilience"

Oleg Volkov, Chief designer of monitoring systems in Unified State System for Prevention and Mitigation of Emergencies, Expert of international committee on standardization ISO/TC 292 "Safety and Resilience"

Moscow, November 11-12, 2015



ISO/TC 292 "Security and resilience"





ISO/TC 292 "Security and resilience"

Subcommittees/Working Groups

ISO/TC 292/DCCG Developing Countries Contact Group

ISO/TC 292/WG 1 Terminology

ISO/TC 292/AHG 1 Communication group (harmonization of standards)

ISO/TC 292/WG 2 Continuity and resilience (of security processes, as well as territories, companies, groups of persons under impact of hazardous processes)

ISO/TC 292/WG 3 Emergency management

ISO/TC 292/WG 4 Fraud countermeasures and controls

ISO/TC 292/WG 5 Public and community resilience

ISO/TC 292/WG 6 Security (in the context of development of standards for security technology)



ISO/TC 292 "Security and resilience"

TC has developed and approved 24 security standards.

The standards are valid and binding when TC member counties interact in the subject area.

Inside the TC member countries and observers, standards may become binding if so decided by national standardization committees.

Requirements of the national standard in the subject area cannot be lower than those of the international standard.

So far, Russia has broadly applied ISO standard in the area of management and quality of enterprises and organizations.

Twenty new standards are under development, the existing ones are harmonized on a regular basis.



History of making of the standard "Security. Monitoring of Facilities with Identified Hazards" (MFWIH)

- 2012 idea of the ISO international standard
- 2013 involvement in TC 223 task group at Delft, the Netherlands.

Development and presentation of main theses and ideas of the new standard to international standardization experts of TC 223 "Security".



History of making of the standard (cont'd)

2014

- January TC 223 session in South Africa.
 New work programme, discussion with experts.
- June TK 223 session in Switzerland.
- November approval of new programme.

Appointment of task group experts for drafting the standard.



History of making of the standard (cont'd)

2015

- March TC 223 session in Morioka, Japan. Discussion of the text. Comments from the experts.
- August webinar with TC 292 (former TC 223) Task Group 3 participants to discuss the text and comments.
- November TC 292 session in Indonesia. Updating the standard text and structure.

Development of the standard's terminology.



General information about the standard

- Regulates actions to prevent man-made emergencies;
- Determines principles of planning, development, introduction, control and improvement of monitoring emergencies in facilities with identified hazards of initiation of such emergencies as a preventive measure.



General information about the standard (cont'd)

The standard defines the process and requirements to set of measures aimed at arrangement of monitoring of the facilities with identified hazards in terms of:

- prediction of hazards (risks) of initiation of man-made emergencies in facilities;
- determination of critical indicators of progression of predicted hazards;
- arrangement of monitoring and surveillance of hazard progression processes to critical status transforming to emergency;
- arrangement of response to obtained monitoring data;
- planning of monitoring;
- audit, support and improvement of monitoring.



General information about the standard (cont'd)

This standard determines main principles of monitoring of processes of emergency hazard progression:

- timely information;
- reliable information;
- resilience against unauthorized impact on the data receipt process by operating staff of monitored facilities;
- continuity of data acquisition and transfer in real time;
- accessibility of monitoring data for processing and further decision making on the basis of information received;
- adaptivity to latest IT.



Area of application of the standard

The standard is to be applied by:

- 1. Organizations such as:
- governmental competent bodies for prevention of emergencies,
- owners, designers and installers when planning, constructing and reconstructing immovable facilities with identified hazards leading to emergency;
- operating organizations;
- insurance companies;
- executive bodies when planning measures on informing the public.
- 2. When arranging new construction or reconstruction of facilities, as well as at any stages of facility operation as decides by its owner when the level of facility security should be improved.
- 3. When planning measures to prevent abnormal situations, mitigate emergencies in the facilities with identified hazards and adjacent territories.
- 4. The standard sets general requirements to ensuring monitoring processes.



Thank you for your attention!