

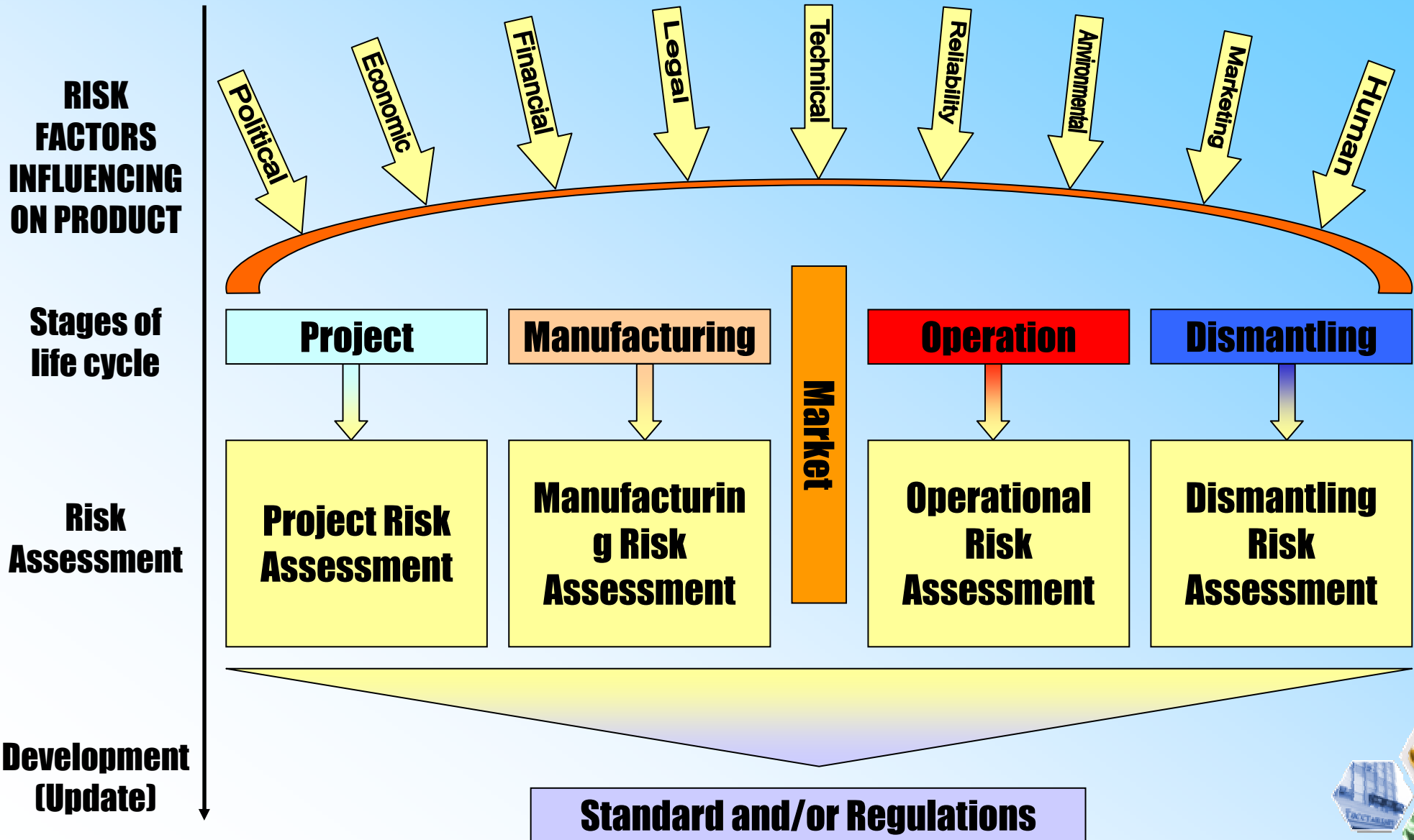
INTERNATIONAL CONFERENCE ON RISK ASSESSMENT AND MANAGEMENT

Standards for management of technical risks and their applications

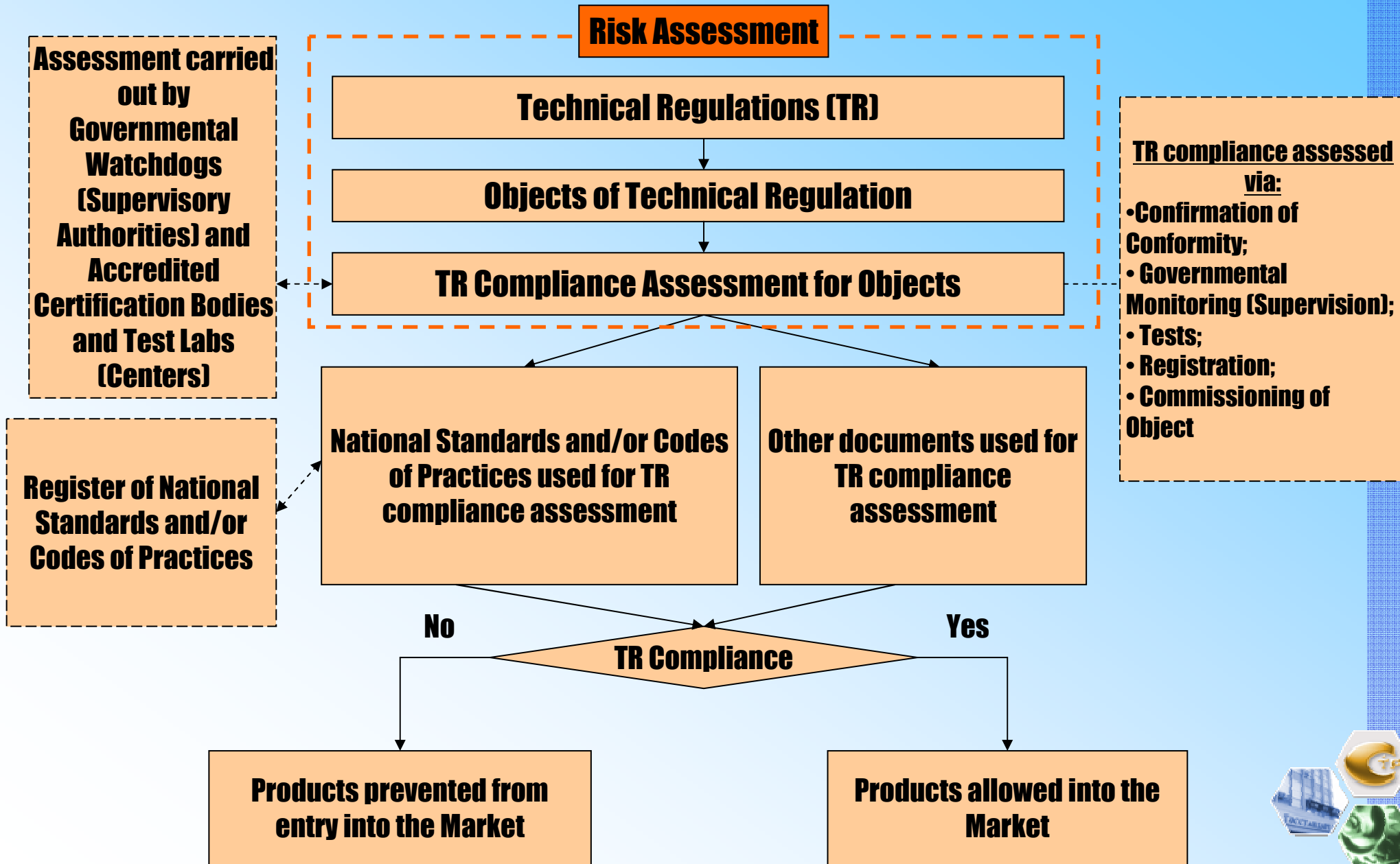
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Geneva, 2009

STANDARDS AND RISK ASSESSMENT



MODEL OF TECHNICAL REGULATION



SETTING OF SAFETY REQUIREMENTS

Carrying out Risk Assessment

Identifying Frequency of Hazard Exposures and Gravity of Effects

Safety Requirements Identification in standards (ISO/IEC Guidelines 51, GOSTR R 51898)

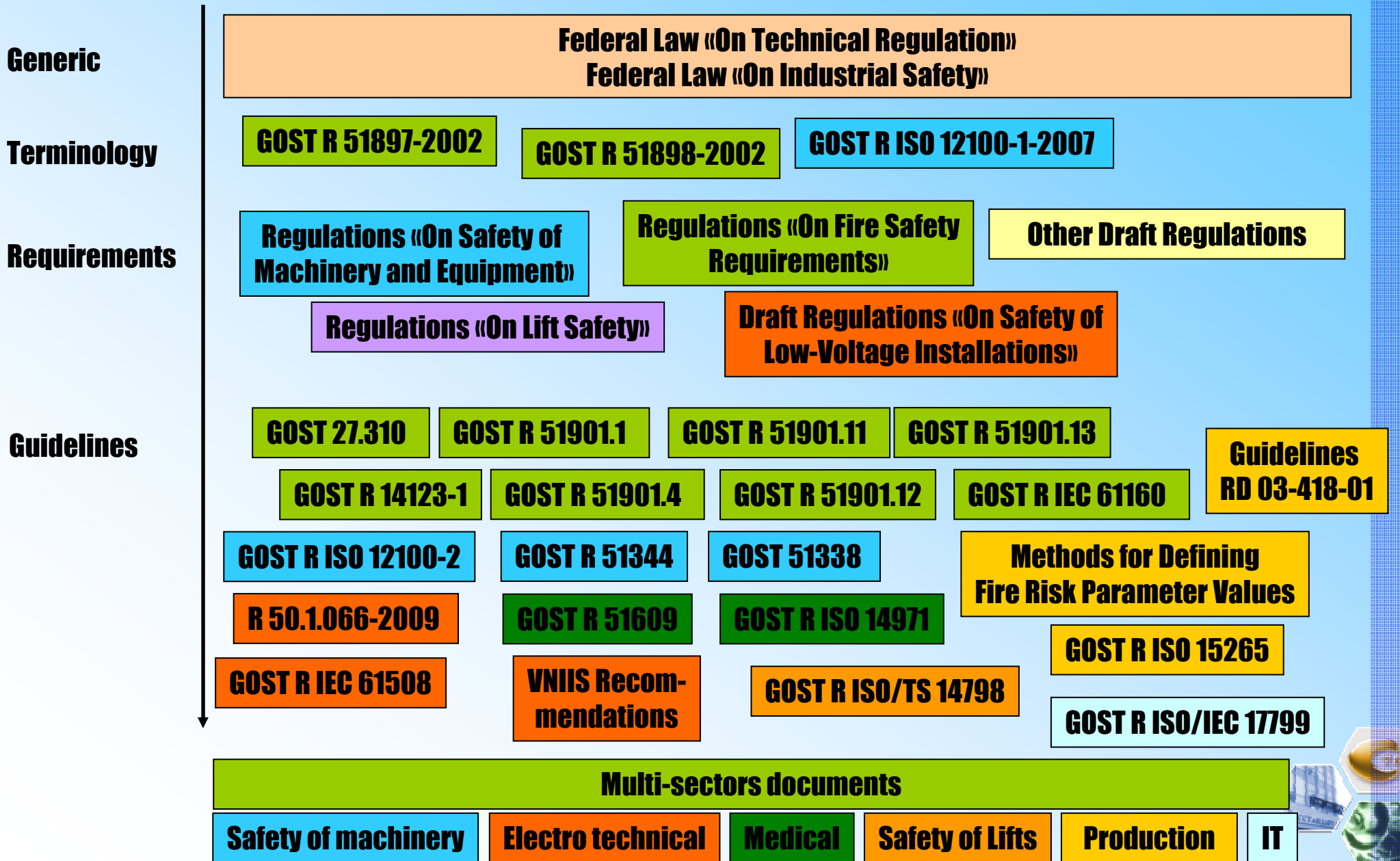
**Application of international and national standards in the development of TR safety requirements;
The national standards may indicate TR requirements.**

Identification of Safety Requirements and Compliance Assessment Forms in the TR

Harmonization of Technical Regulations and Standards



CLASSIFIER OF RISK ASSESSMENT DOCUMENTS



RISK ASSESSMENT DOCUMENTS

A majority of Risk Assessment Documents are developed on the basis of international standards

Harmonized National Standards provide:

- **a consistent and clear-cut basis highlighting technologies and best practices in relevant areas including, inter alia, terminology, classifications, assessment methods, risk values, and best management practices;**
- **cutting-edge knowledge formalized by the area-specific prominent experts and based on international consensus resulting from a balance of interests representing technologic, economic and public interests in a vast majority of countries.**



RISK ASSESSMENT DOCUMENTS

As the national standards and other documents in risk assessment are adopted, agreement has been reached on several issues, namely:

- **Terminology used;**
- **Practical Application of Risk Management (incl. risk assessment);**
- **Organizational Structure of Risk Management;**
- **Risk Management Objective;**
- **Hazardous Exposure Frequency;**
- **Gravity of Effects;**
- **Risk Profiles**



RISK ASSESSMENT DOCUMENTS FOR TR APPLICATION

TR «On Safety of Low-Voltage Installations»	TR «On Fire Safety Requirements»
<p>R 50.1.066-2009 «Assessment of Harm Infliction Risk from Low-Voltage equipment»</p> <p><i>The recommendations are used to grade low-voltage installations by harm infliction risk.</i></p> <p><i>The recommendations define methods to assess harm infliction from low-voltage installations and classify it into one of risk groups.</i></p>	<p>Methods for Defining Fire Risk Parameter Values in Industrial Facilities (Ministry of Emergency bylaw dated 10/07/2009)</p> <p><i>The methods specify common requirements to define and calculate fire risk parameter values (requirements to fire risk evaluation, defining of fire exposure frequency, assessment of fire hazard effects , etc.)</i></p>



EXAMPLES OF RISK ASSESSMENT REQUIREMENTS IN TECHNICAL REGULATIONS

TR «On Safety of Machinery and Equipment»	TR «On Fire Safety Requirements»	TR «On Lift Safety»
<ul style="list-style-type: none"> •For the identified types of hazard, risk is assessed by calculation, experiment, expert appraisal or examination of operation of similar machinery and/or equipment. The risk assessment methods may be specified by the technical regulations for relevant types of machinery and equipment, by national standards and codes of practices; •The tolerable risk for the machinery and/or equipment is computed and established at the design stage; •The manufacturer assesses the risk for the machinery and/or equipment prior to its release in the Russian Federation and after repair has been carried out, its value may not be higher than tolerable. 	<ul style="list-style-type: none"> •Fire risk assessments are part of the Fire or Industrial Safety Declaration; •Individual fire risk in buildings may not be higher than 10^{-6} /year; •Individual fire risk resulting from hazardous effects of fire at an industrial site for people in a near-by residential area may not be higher than 10^{-8}/year; •Social fire risk resulting from hazardous effects of fire at an industrial site for people in a near-by residential area may not be higher than 10^{-7}/year. 	<ul style="list-style-type: none"> •To make sure the lift is safe, facilities should be available to alleviate the risk of maintenance personnel falling over from the operational platform and/or cabin roof; •To meet safety requirements of the regulations whilst technical solutions, other than those specified by the regulations or national standards and/or codes of practices, are implemented, those technical solutions are risk-assessed, with the submitted calculations, drawings, results of the tests due to be verified.



Register Form

(Annex B, Rules PR 50.1.025-2007)

**Register
of National Standards and (or) Codes of Practices,
the voluntary application of which ensures the compliance with the Technical Regulations**

Technical Regulations

Number, Designation and Description of National Standard or Code of Practices	Confirmed Requirements of National Standard or Code of Practices
1	2
<i>1 Description of Homogenous Object of Technical Regulation (Russian Classifier of Products code under General Russian Classifier 005-93 XX XX00)</i>	
1. GOST R ...	Section ...; article. ...
2. GOST R ...	Standard in whole
3 Code of Practices ...	Code of Practices in whole
4.
<i>2 Description of Homogenous Object of Technical Regulation (Russian Classifier of Products code under General Russian Classifier 005-93 XX XX00)</i>	
1. GOST R ...	Standard in whole
2.

Thank for attention!

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