



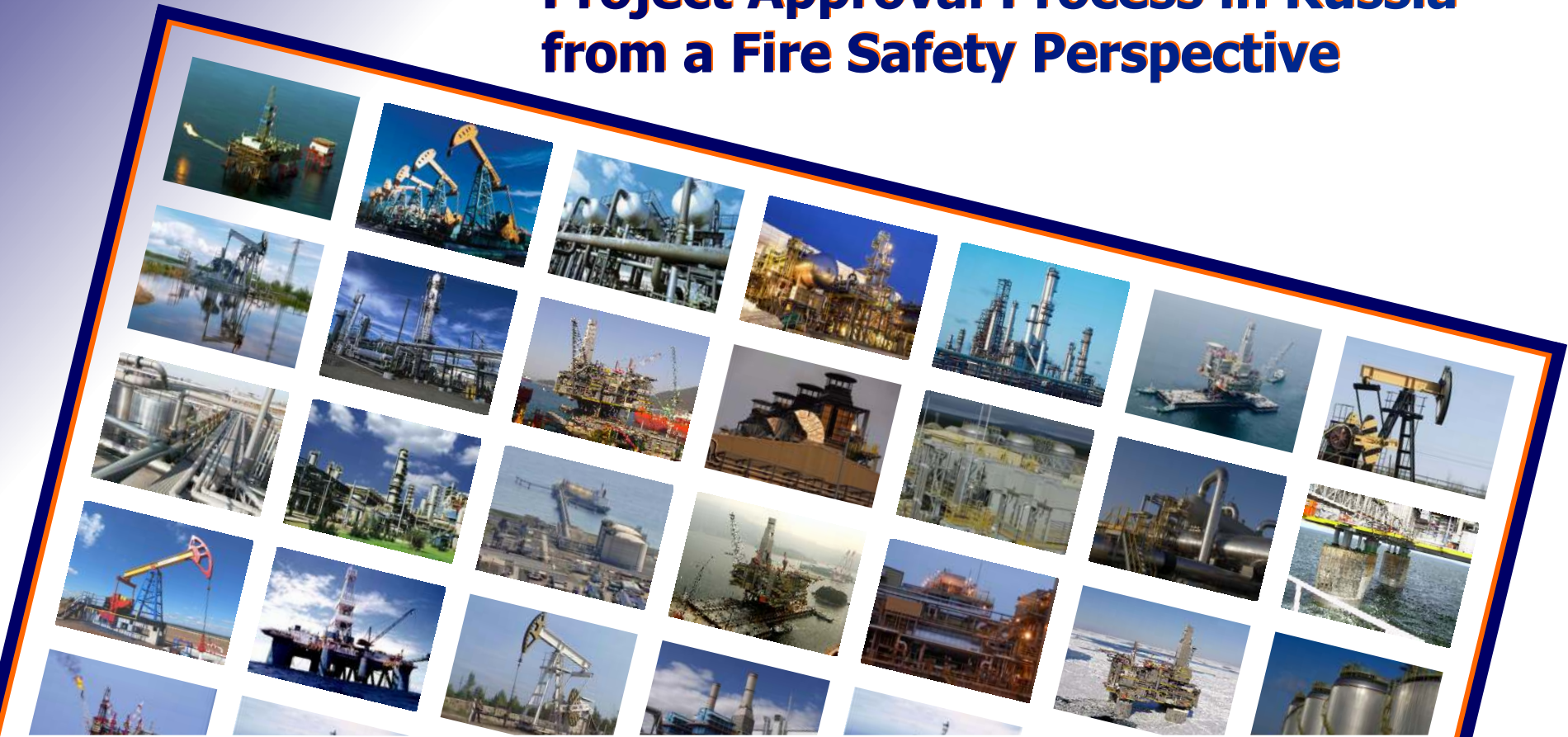
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International Fire Center

Fire and emergency risk management

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Clearing the Minefield: Project Approval Process in Russia from a Fire Safety Perspective





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Fire safety requirements



Design

- PSTS
Project Specific
Technical Specification
- FSM
Fire Safety Measures
- FRA
Fire Risk Assessment
- CATEGORIZATION



Equipment

- VERIFICATION OF
CONFORMANCE



Operation

- DECLARATION
- FIREFIGHTING
PLAN
- SPECIAL FIRE
SAFETY RULES



Design requirements

Design documentation:

Decree №87 dated 2008 February 16th
Government of the Russian Federation

- 1) Explanatory note
- 2) Plot plan
- 3) Architectural decisions
- 4) Constructional decisions
- 5) Engineering systems
- 6) Organization of construction process
- 7) Organization of demolition process
- 8) Environmental protection measures
- 9) Fire Safety Measures**
- 10) Measures for people with disabilities
- 11) Construction costs estimate
- 12) ... other books (if necessary)

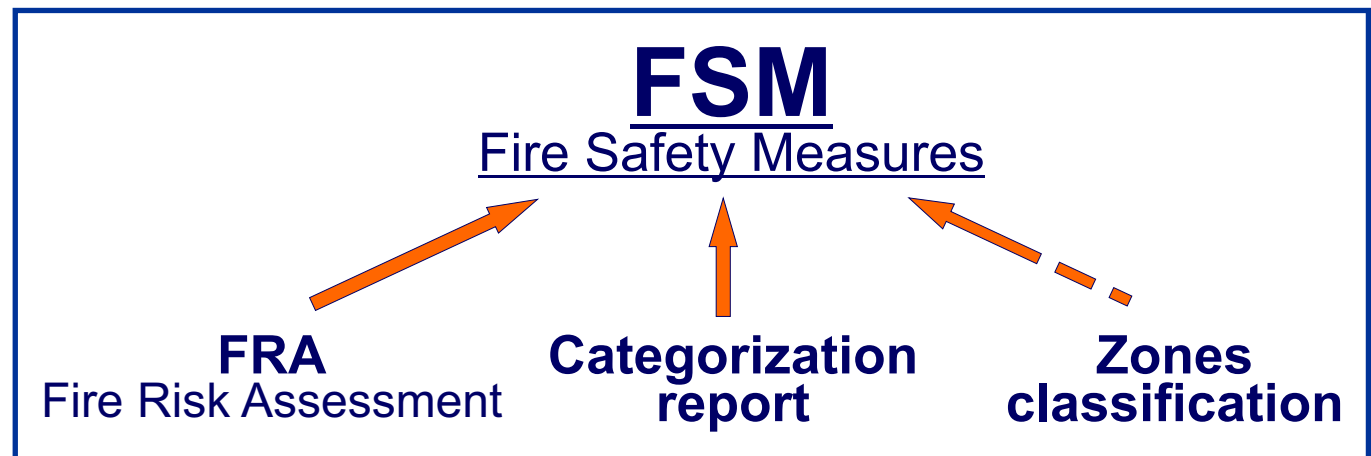


Design requirements

Federal Law №123
dated 2008 July 22

Codes, Standards
(normative documents)

FS PSTS
Project Specific
Technical Specification
(if applicable)





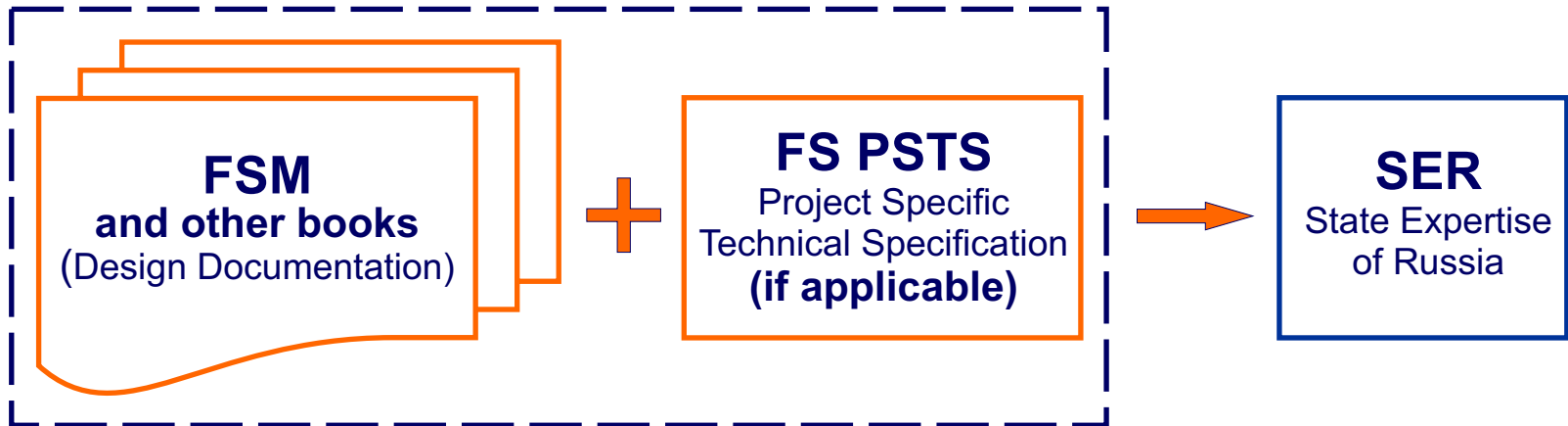
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Design Documentation Approval Process

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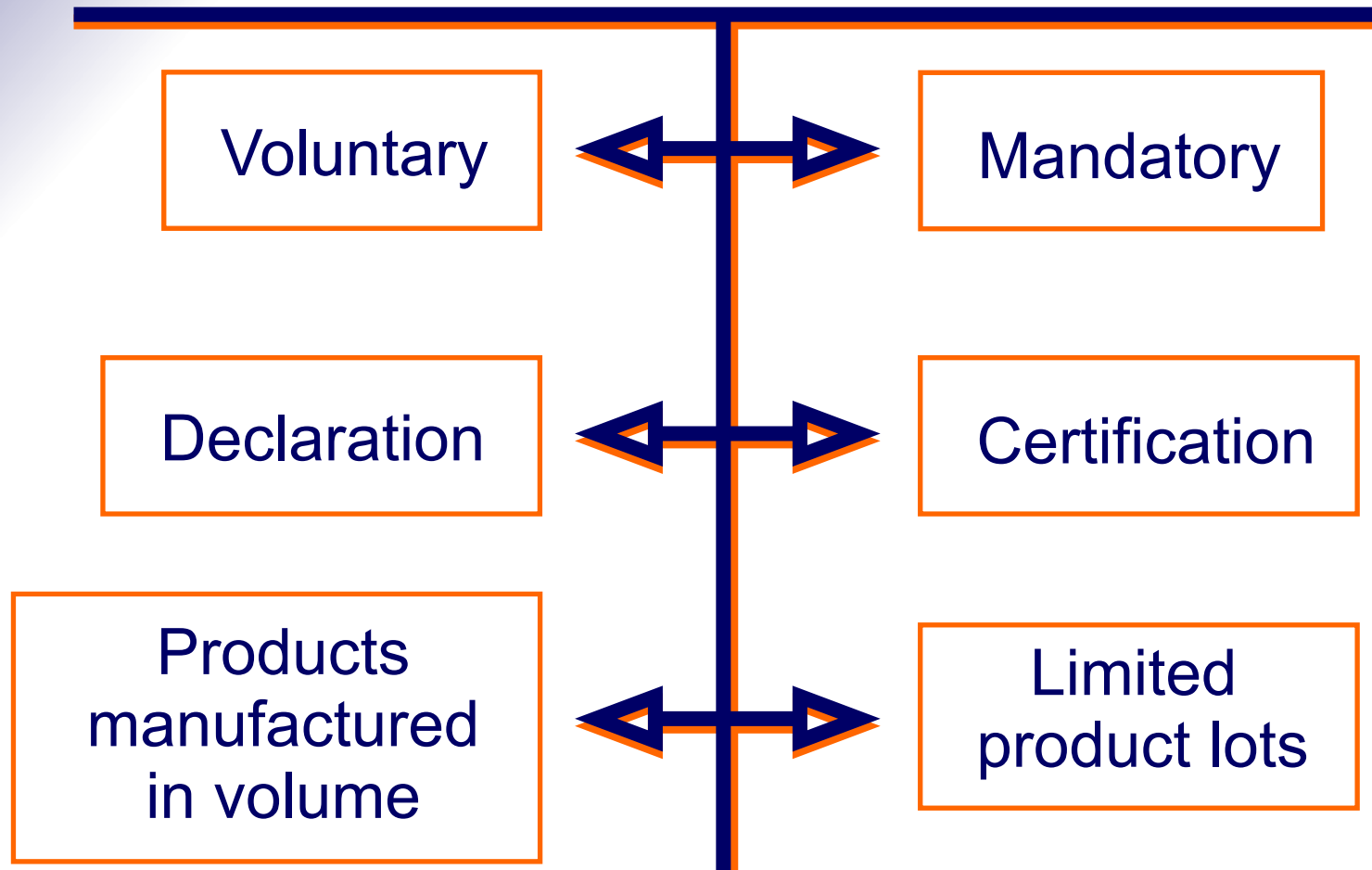


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Cornformance verification of equipment, structures and materials





List of equipment types subject to mandatory Verification of Conformance

Product categories subject to conformance verification under Article 146, Federal Law 123-FZ

1. Portable and wheeled fire extinguishers
2. Fire nozzles, foam generators and foam blenders
3. Personal protective equipment for personnel in case of fire
4. Devices for rescuing personnel in case of fire and mobile firefighting equipment
5. Equipment and products for rescuing personnel in case of fire
6. Additional gear for firefighters
7. Powder-based fire-extinguishing compounds, fire-extinguishing foaming agents and gaseous fire-extinguishing compounds
8. Elements of automatic fire extinguishing systems
9. Protective devices for electrical circuits
10. Construction finishing materials for personnel evacuation routes



List of equipment types subject to mandatory Verification of Conformance

Product categories subject to conformance verification under Article 146, Federal Law 123-FZ

11. Finishes for rolling stock
12. Fire retardants
13. Fire-resistant structural members,
(including their infill inside fire barriers, cable penetrations, cable boxes, channels and conduits made of polymer materials for cabling, sealed cable inlets)
14. Smoke ventilation system utilities
15. Elevator shaft doors
16. Fire-proof and explosion-proof electrical equipment, including electric cables
17. Elements of automatic fire extinguishing units



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Procedures for mandatory Verification of Conformance

Verification of conformance for products
manufactured in volume

Evidence used to verify conformance with technical regulations	Verification procedures						
	declaration			certification			
	1d	2d	3d	2c	3c	4c	5c
Internal	+	+	+				
Testing of a standard specimen at an accredited laboratory		+	+	+	+	+	+
Quality system certification			+				+
Production operations analysis				+		+	
Surveillance audit					+		+



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Procedures for mandatory Verification of Conformance

Verification of conformance for limited product lots

Evidence used to verify conformance with technical regulations	Verification procedures		
	declaration	certification	
	5d	6c	7c
Internal	+		
Testing of a representative sample of specimens from a production lot at an accredited laboratory	+	+	
Testing of product units at an accredited laboratory			+



Operations

Fire safety requirements to begin Facility Operations:

- Fire Fighting Plan approved by MChS (Ministry of Emergency Situations and Civil Defense)
- Specific Fire Safety Rules approved by MChS (if applicable)
- Fire Safety Declaration registered by MChS



Optional activities

Optional activities:

- Systems commissioning

- Fire safety audit:
 - Documentation review
 - Facility inspection
 - Risks assessment



Questions and Discussion



Main projects of IFC

Offshore ice-resistant fixed platform "Prirazlomnay"

FRA
Fire Risk Assessment

Offshore ice-resistant fixed platform of "Arkutun-Dagi" field

FRA
Fire Risk Assessment

PSTS
Project Specific
Technical Specification

FSM
Fire Safety Measures

Onshore processing facilities "Chaivo" (Sakhalin 1)

FRA
Fire Risk Assessment

PSTS
Project Specific
Technical Specification

Drilling rig of "Odoptu" field (Sakhalin 1)

PSTS
Project Specific
Technical Specification

FSM
Fire Safety Measures



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Main projects of IFC

Equipment and materials
of ice-resistant fixed platforms
“LUN-A” and “PA-B”
(Sakhalin 2)

**Certification
and testing**

Fire dampers
“Wozair Limited”

**Certification
and testing**

Airport of Sochi

FRA
Fire Risk Assessment

Pipeline - Elastopipe TM
for fire fighting systems

**Certification
and testing**