



ROSATOM

Presentation

ROSATOM STATE CORPORATION FOR NUCLEAR ENERGY

APCS certification

Company: RASU JSC

Moscow

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European Union. General Requirements.

Compliance assessment. Certification / Declaring.

APCS compliance assessment. General approach.

Criteria for selecting a body for conformity assessment.



International Electrotechnical Commission – IEC



International Organization for Standardization, ISO



IEEE

(Institute of Electrical and Electronics Engineers)



National standardization bodies:

Hungary - MSZT; Finland - SFS, Germany – DIN,
France - AFNOR, etc.



Nuclear Safety Standards

IEC 61226:2010

IEC 61513:2013

IEC 60987:2015

IEC 60880:2009

IEC 62138:2009

IEC 62340:2010

IEC/IEEE 60780-323:2016

IEC 61500:2011

IEC 61508:2010

IEC 62556:2014

IEC 61227:2008

IEC 61225:2005

IEC 60709:2004

General industrial directives of the European Parliament

2014/30/EU –
Electromagnetic compatibility

2014/35/EU –
Low voltage equipment

2014/32/EU – Instrumentation

2014/34/EU (ATEX) –
Explosion-Proof Equipment



Hierarchy of requirements as exemplified by the PAKS II Project



European Union. General Requirements.

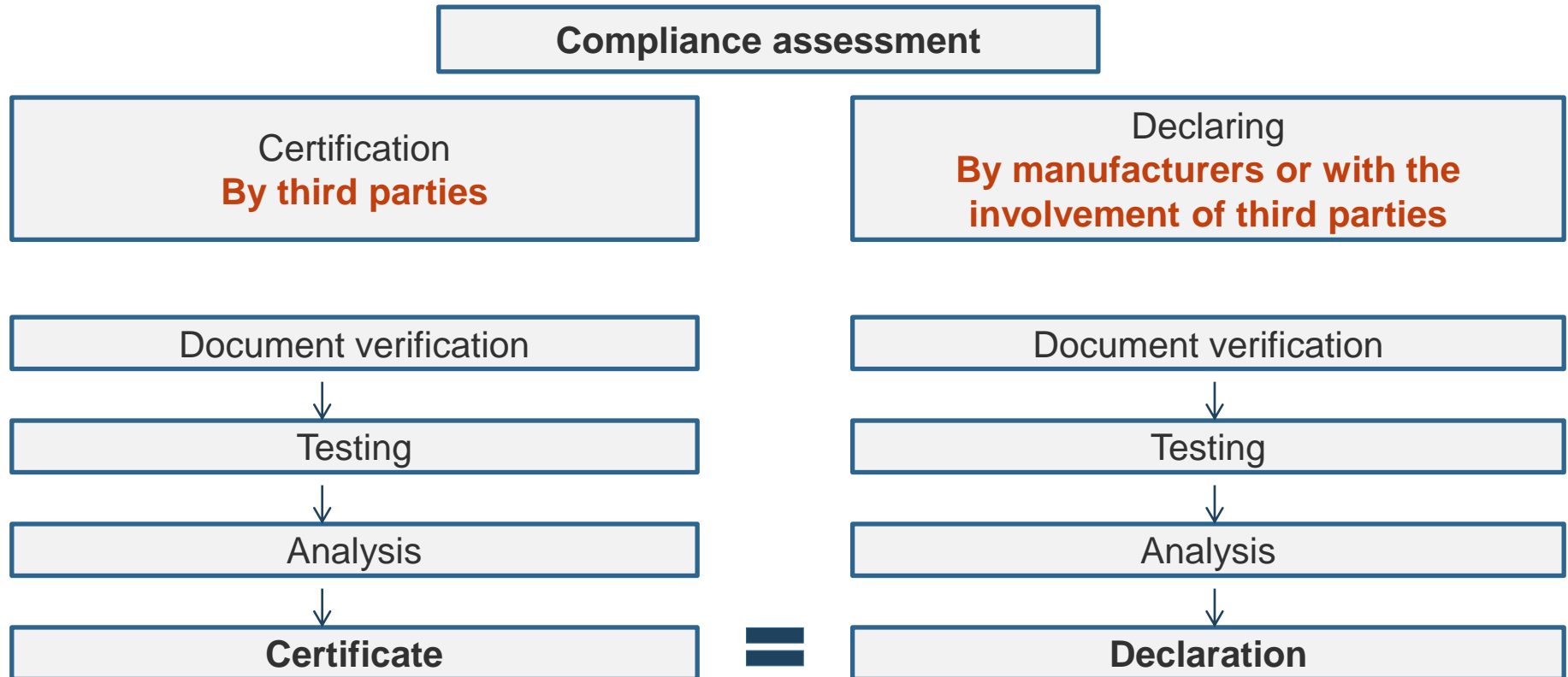
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Conformity assessment concept

Conformity assessment is the process of confirming that the requirements established for the product, process, service, system, person or body have been met.





Manufacturing	Designing
Module A In-house production control	
Module C The conformity of products to the sample tested	Module B Testing product samples according to the rules of the European Union with third parties involved
Module D Availability of a quality assurance system	
Module E Availability of a quality assurance system and product inspection	
Module F Third-party product testing	
Module G Third-party product testing	
Module H Availability of an engineering, production, testing, and control assurance system	

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Conformity assessment stages

Stage 1 Assessing the conformity of the assessment scheme and the list of standards to the EU Directives.

Stage 2 Bringing the engineering documentation in line with the requirements of the European Union.

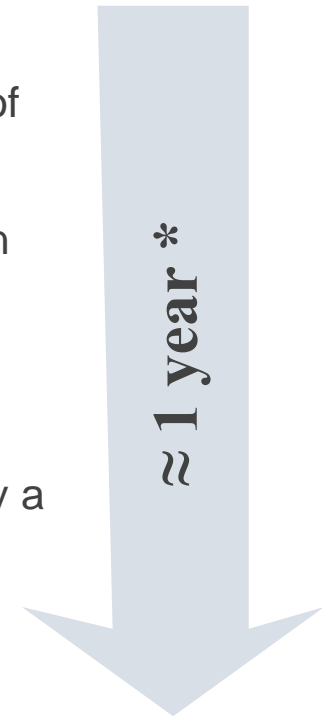
Stage 3 Conducting tests by the manufacturer and/or using the resources of an accredited laboratory (if applicable).

Stage 4 Checking the documentation by a notified certification body.

Stage 5 Conducting audit of production and the quality management system by a notified certification body (if applicable).

Stage 6 Assessing conformity of products in the form of certification and declaring.

Stage 7 Conducting supervisory audit (once per 1 to 3 years) - confirmation of conformity of products to the declared standards (if applicable).



* Provided there is a complete set of documentation for the supplied equipment by the beginning of certification and selection at Phase 3 of a laboratory already accredited in the EU

European Union. General nuclear safety requirements.

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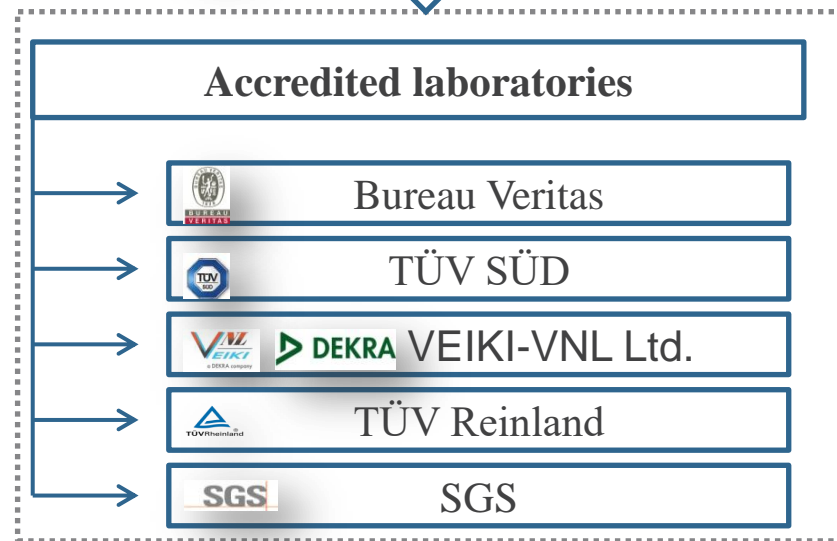
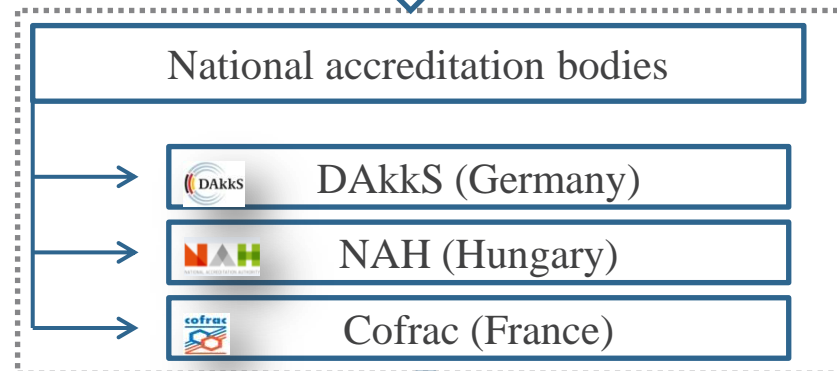
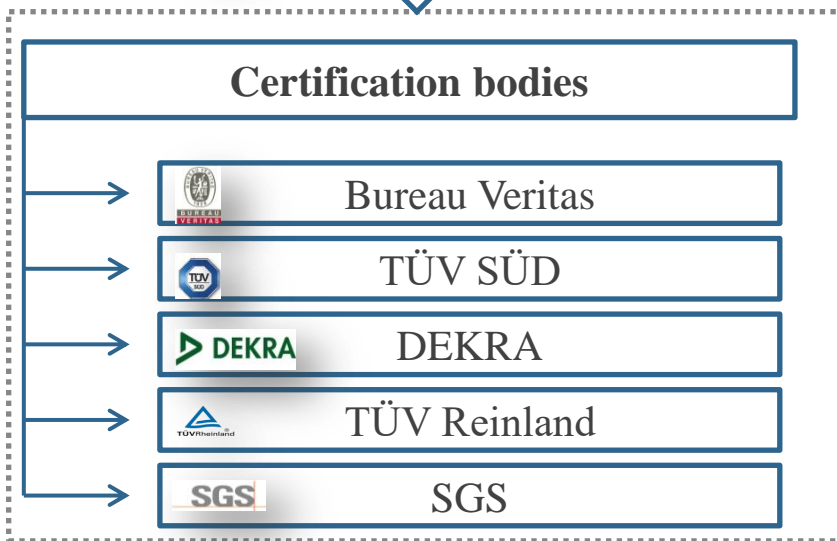
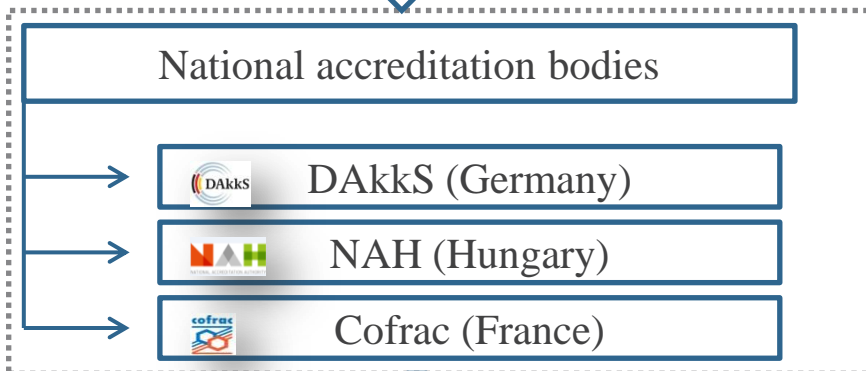
Criteria for selecting a body for conformity assessment.

An independent conformity assessment body authorized to carry out conformity assessment shall be accredited in accordance with **ISO/IEC 17065** for this type of product

An independent inspection body authorized to carry out inspection check-up shall be accredited in accordance with **ISO/IEC 17020** for this type of product

An independent testing laboratory authorized to conduct product tests shall comply with the requirements of **ISO/IEC 17025** for this type of product

Certification bodies and testing laboratories accredited in the European Union





Thank you for your time!