

NIST

Global Standards Information



Conformity Assessment in the Information Technology Sector

Information Security and Privacy Advisory Board

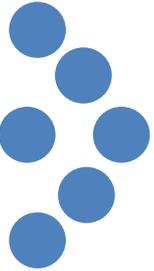
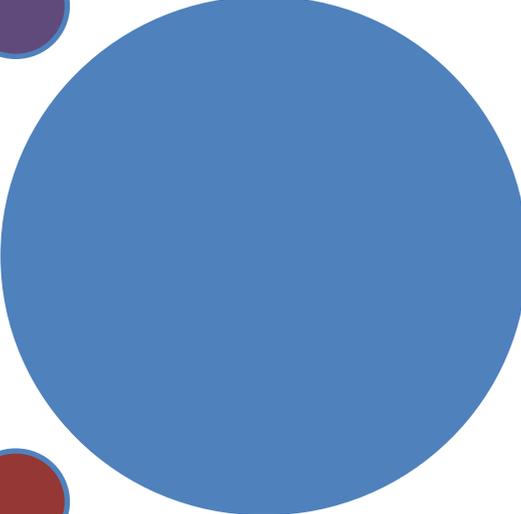
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Conformity Assessment

“demonstration that specified requirements relating to a product, process, system, person, or body are fulfilled”

- *ISO/IEC 17000*

Information
Technology



Conformity
Assessment



The Parties – who done it?

First Party – seller or manufacturer

Second Party – purchaser or user

Third Party – independent entity

Government

Types of Conformity Assessment

- Supplier's Declaration of Conformity (SDoC)
- Inspection
- Testing
- Certification
- Registration
- Accreditation
- ISO/IEC 17050 parts 1 and 2
- ISO/IEC 17020
- ISO/IEC 17025
- ISO/IEC Guide 65
- ISO/IEC 17021
- ISO/IEC 17011

Supplier's Declaration of Conformity (SDoC)

1st Party
2nd Party
3rd Party

Characteristics

- Used when low product risk
- Penalties for noncompliant products
- Effective recall system



Examples



- ISO/IEC 17050

1st Party
2nd Party
3rd Party

Certification

Characteristics

- Used when moderate – high product risk
- More expensive
- Surveillance

- *ISO/IEC GUIDE 65*

Examples



Accreditation

1st Party
2nd Party
3rd Party

Characteristics

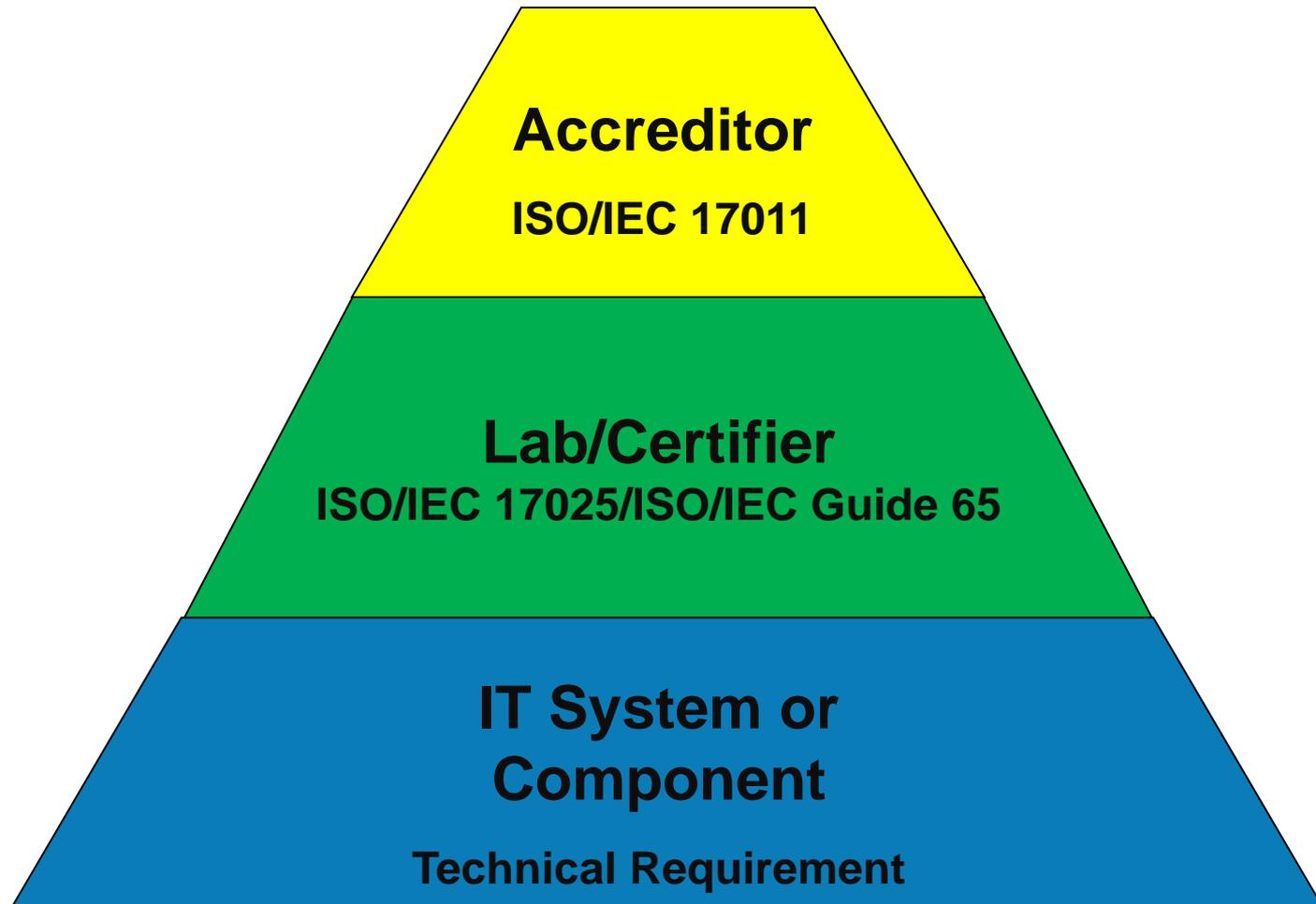
- Confidence in Competence

Examples



- *ISO/IEC 17011*

Conformity Assessment Hierarchy



IT System Attribute in Need of Confidence

- *Function – IPV 6, E Health Records...*
- *Interoperability – WiFi, E Health Records...*
- *Portability – Cloud Services...*
- *Security – SmartGrid, E Health Records, Cloud Services...*
- *Other Attributes?*

Research Needs to Support Confidence

- *Standards and Requirements*
- *Test Methods and Tools*
- *Conformity Assessment Approaches*

and an **Effective** Business Case

Thank You

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