

Entschuldigen Sie mich, I did not understand, parlez-vous IT Методы обеспечения защиты?

World Standards Day 2015
ILNAS
2015-10-14

Cédric Mauny, Vice-Chairman of Luxembourg National Committee
ISO/IEC JTC1 SC27 on IT Security techniques

Security Audits and Governance Services (SAGS) – a Telindus Security department

together
with

proximus

tango

Excuse me, I did not understand, do you speak IT Security Techniques?

World Standards Day 2015
ILNAS
2015-10-14

Cédric Mauny, Vice-Chairman of Luxembourg National Committee
ISO/IEC JTC1 SC27 on IT Security techniques

Security Audits and Governance Services (SAGS) – a Telindus Security department

together
with

proximus

tango

Agenda

Presentation of the *IT Security Techniques* within ISO

Overview of some SC27 International Standards

Focus on Cloud Computing
About Security & Privacy

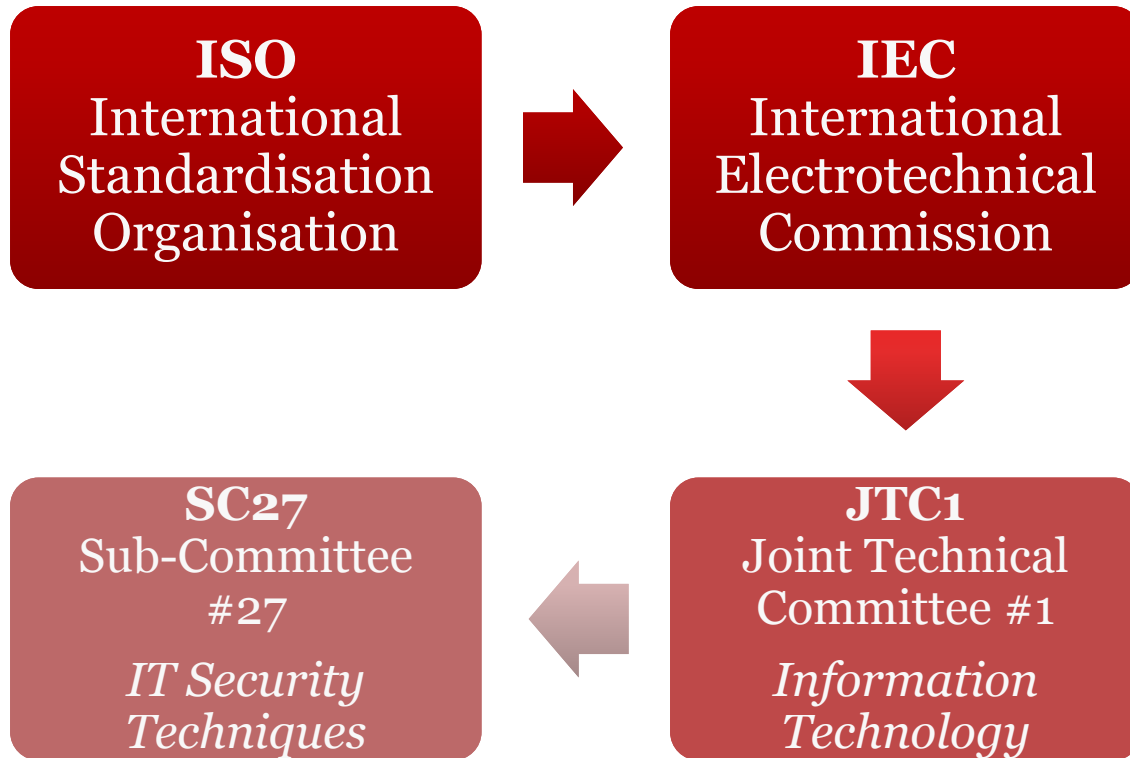
How to take part into the standardization work?

SC27 IT Security Techniques in *1 slide*

Presentation of the *IT Security Techniques* within ISO

Information security within ISO

From ISO to ISO/IEC JTC1 SC27



International
Organization for
Standardization

Organisation
internationale de
normalisation



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

Leadership of SC27 IT Security Techniques

- Internationally recognized centre of **information and IT security standards** expertise
- Serves the needs of all business sectors
 - Public and Private sectors
 - Including governments
- Covers the development of standards for the protection of information and ICT
 - Includes generic methods, techniques and guidelines
 - Addresses both **security and privacy aspects**



International
Organization for
Standardization

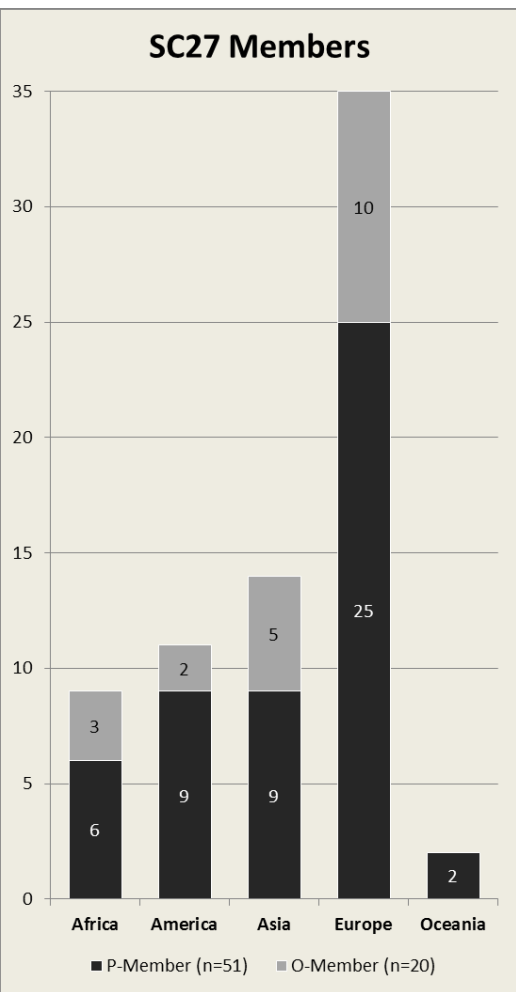
Organisation
internationale de
normalisation



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

Centre of information and IT security standards expertise

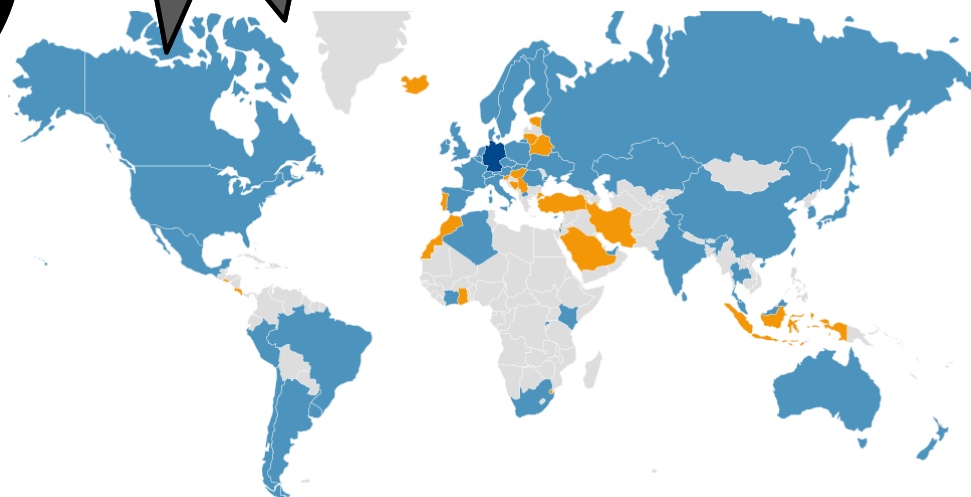
Generic methods, techniques and guidelines



51
P-Members

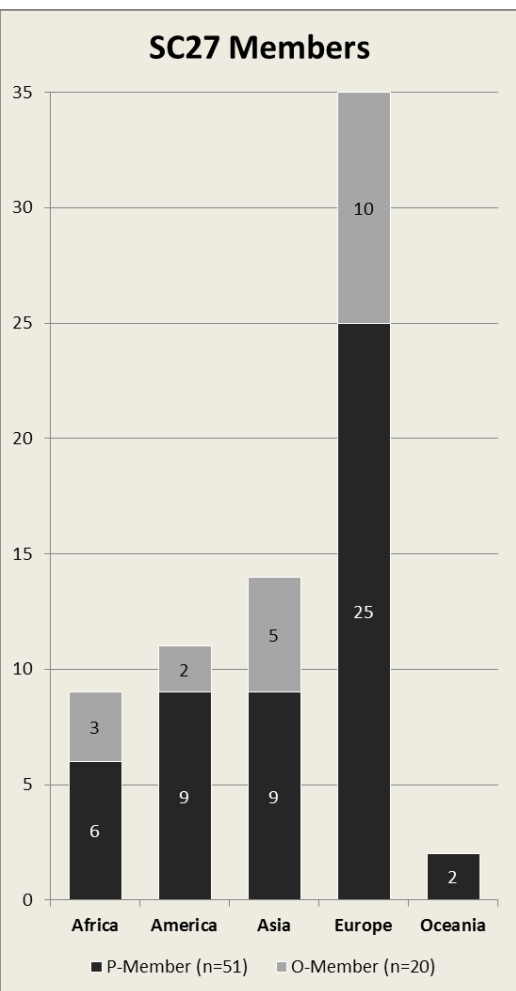
1 country
1 vote

20
O-Members



Centre of information and IT security standards expertise

Generic methods, techniques and guidelines



51
P-Members



20
O-Members



150 published standards
75 standards under development
108 withdrawn standards

SC27

SWG-M

WG1

WG2

WG3

WG4

WG5

SWG-T

Special
Working
Group on
Management

Information
security
management
systems

Cryptography
and security
mechanisms

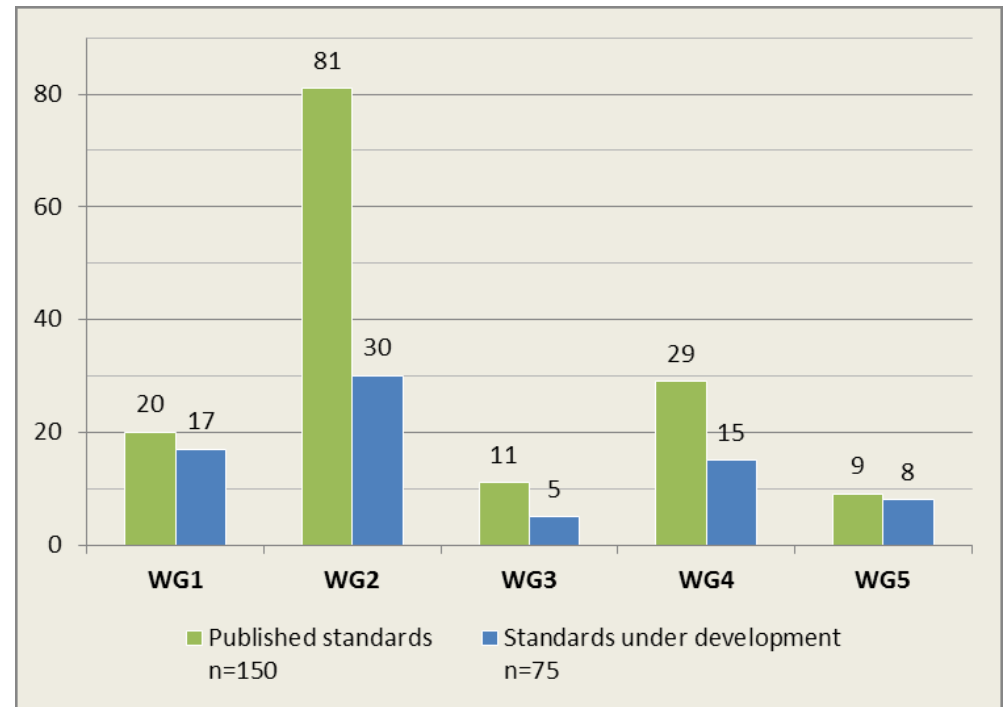
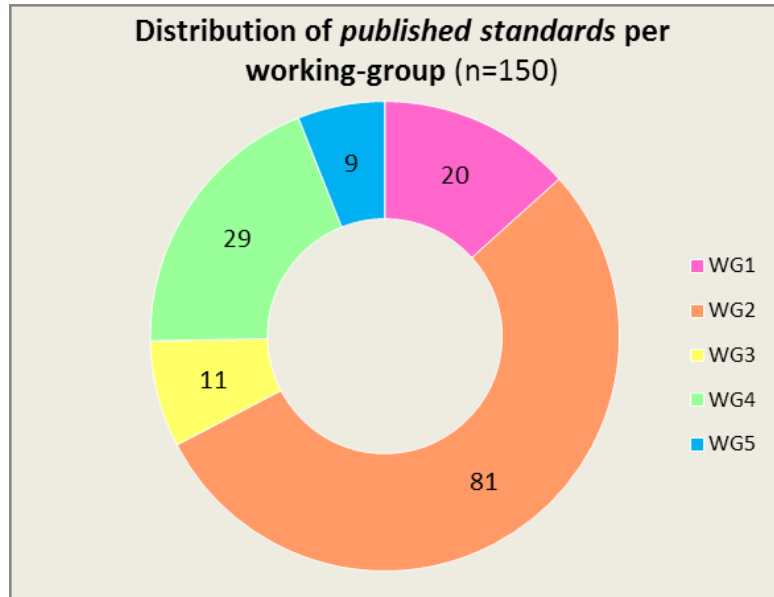
Security
evaluation,
testing and
specification

Security
controls and
services

Identity
management
and privacy
technologies

Transversal
Items

Current status of Published / Under development Standards



WG1 → ISMS

WG2 → Cryptography

WG3 → Security evaluation

WG4 → Controls and services

WG5 → Privacy technologies

Overview of some SC27 International Standards

SC27

SWG-M

WG1

WG2

WG3

WG4

WG5

SWG-T

Special
Working
Group on
Management

**Information
security
management
systems**

Cryptography
and security
mechanisms

Security
evaluation,
testing and
specification

Security
controls and
services

Identity
management
and privacy
technologies

Transversal
Items

Information Security Management Systems are everywhere!

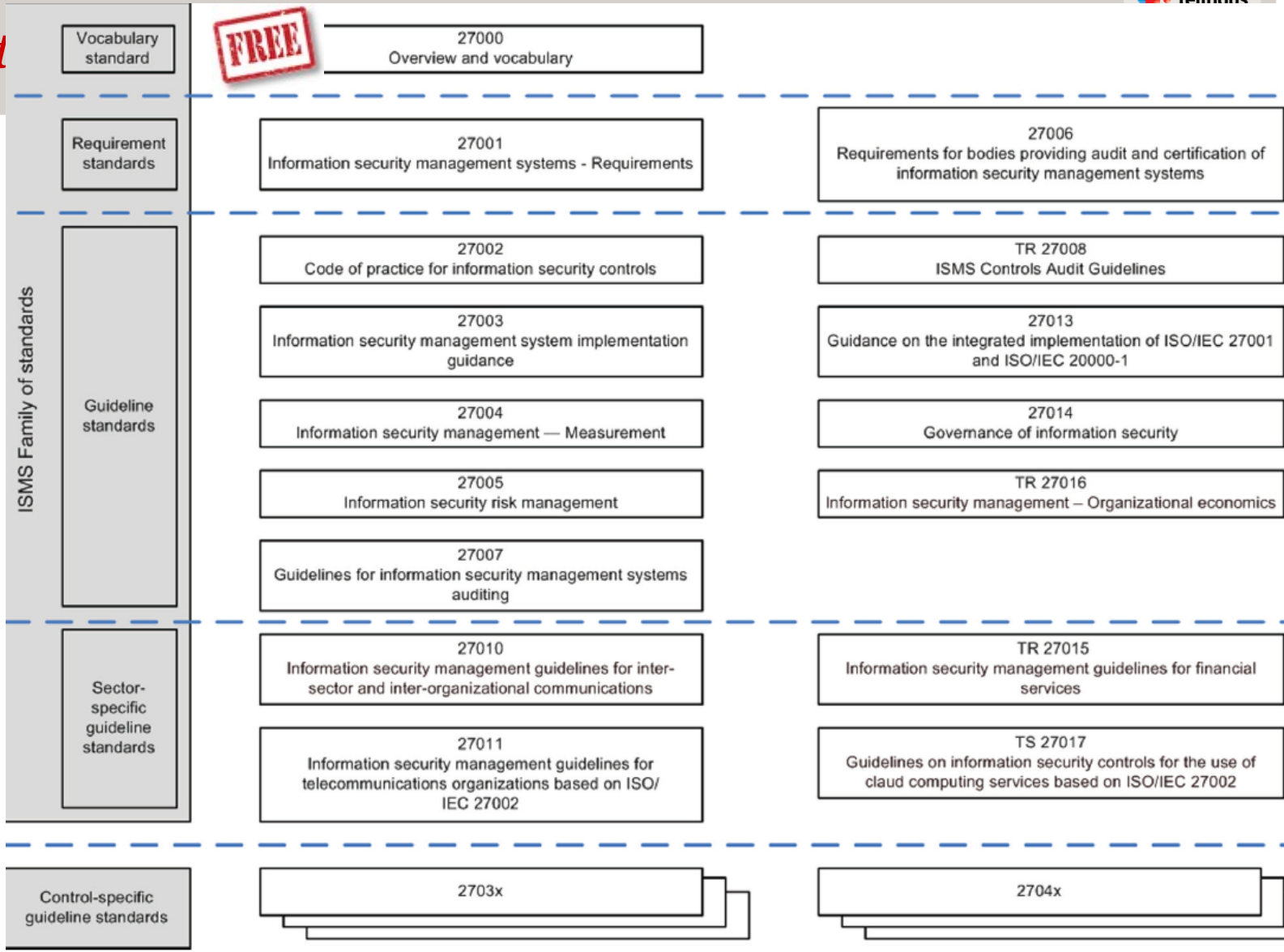
telindus

together with

proximus

tango





16 Standards

• <= 27009 :
Core-ISMS Standards

• >= 27010 :
Sector-Specific Standards

Not attributed

- 27012
- 27020

Figure 1 — ISMS Family of Standards Relationships

WG1

Other Standards

• Published

- 27013
 - Guidelines on the integrated implementation of ISO/IEC 27001 and ISO/IEC 20000-1
 - 2012 + under revision at FDIS
- 27018
 - Code of practice for protection of Personally Identifiable Information (PII) in public clouds acting as PII processors
 - 2014
 - see WG5
- 27019
 - Information security management guidelines based on ISO/IEC 27002 for process control systems specific to the energy utility industry
 - 2013

• Under development

- 27009
 - Sector-specific application of ISO/IEC 27001 – Requirements
 - 2nd CD
- 27017
 - Guidelines on Information security controls for the use of cloud computing services based on ISO/IEC 27002
 - FDIS
- 27021
 - Competence Requirements for information security Management Professionals
 - NP
- Cloud Adapted Risk Management Framework
 - SP
- Information Security Library
 - SP



APPROVED



SC27

SWG-M

WG1

WG2

WG3

WG4

WG5

SWG-T

Special
Working
Group on
Management

Information
security
management
systems

Cryptography
and security
mechanisms

Security
evaluation,
testing and
specification

Security
controls and
services

Identity
management
and privacy
technologies

Transversal
Items

- Cryptographic techniques and mechanisms
 - confidentiality
 - entity authentication
 - non-repudiation
 - key management
 - data integrity such as
 - message authentication
 - hash-functions
 - digital signatures
- The most prolific working-group
 - 81 published standards (54% of all SC27)
 - 30 standards under development (40% of all SC27)

- *Very technical working-group*
 - Example of Standard 11770-3 : *Key management – Part 3: Mechanisms using asymmetric techniques*

Key token construction (A1) Entity *A* randomly and secretly generates r_A in H , computes $F(r_A, g)$, constructs the key token $KT_{A1} = F(r_A, g)$, and sends it to entity *B*.

Key construction (B1) Entity *B* randomly and secretly generates r_B in H , computes $F(r_B, g)$, and constructs the key token $KT_{B1} = F(r_B, g)$.

Entity *B* computes the shared secret key as

$$K_{AB} = ((r_B + \pi(KT_{B1})h_B) \cdot l)(j \cdot (KT_{A1} + \pi(KT_{A1})p_A)).$$

Entity *B* then computes the key $K = \text{kdf}(K_{AB})$. Entity *B* further constructs $\text{MAC}_K(2 || KT_{A1} || KT_{B1})$,

where 0x02 is the message number, and sends KT_{B1} and $\text{MAC}_K(2 || KT_{A1} || KT_{B1})$ to entity *A*.

Key construction (A2) Entity *A* computes the shared secret key as

$$K_{AB} = ((r_A + \pi(KT_{A1})h_A) \cdot l)(j \cdot (KT_{B1} + \pi(KT_{B1})p_B)).$$

Entity *A* computes the key $K = \text{kdf}(K_{AB})$. Entity *A* computes $\text{MAC}_K(2 || KT_{A1} || KT_{B1})$ and verifies what was sent by entity *B*. Entity *A* then computes $\text{MAC}_K(3 || KT_{A1} || KT_{B1})$,

where 0x03 is the message number, and sends it to entity *B*.

Verification (B2) Entity *B* computes $\text{MAC}_K(3 || KT_{A1} || KT_{B1})$ and verifies entity *A*.

- Message authentication codes (MACs) [9797]
- Hash-functions [10118]
- Key management [11770]
- Non-repudiation [13888]
- Cryptographic techniques based on elliptic curves [15946]
- Time-stamping services [18014]
- Random bit generation [18031]
- Prime number generation [18032]
- Encryption algorithms [18033]
- Time-stamping services [18014]
- Secret sharing [19592]
- Authenticated encryption [19772]
- Anonymous digital signatures [20008]
- Anonymous entity authentication [20009]
- Signcryption [29150]
- Lightweight cryptography [29192]
- ...



SC27

SWG-M

WG1

WG2

WG3

WG4

WG5

SWG-T

Special
Working
Group on
Management

Information
security
management
systems

Cryptography
and security
mechanisms

Security
evaluation,
testing and
specification

Security
controls and
services

Identity
management
and privacy
technologies

Transversal
Items

- Security engineering and standards for IT security **specification**, **evaluation**, **testing** and **certification** of IT systems, components, and products
- Consider computer networks, distributed systems, associated application services, biometrics, ...

WG3

Security Evaluation, Testing and Specification

- Evaluation criteria for IT security [15408] *a.k.a. Common Criteria*
 - Part 1: Introduction and general model
 - Part 2: Security functional components
 - Part 3: Security assurance components
- A framework for IT security assurance [15443]
- Guide for the production of Protection Profiles and Security Targets [15446]
- Guidance for developing security and privacy functional requirements based on ISO/IEC 15408 [19608]
- Methodology for IT security evaluation [18045]
- Security evaluation of biometrics [19792]
- Refining software vulnerability analysis under 15408 and 18045 [20004]
- Systems Security Engineering -- Capability Maturity Model® (SSE-CMM®) [21827]
- Test requirements for cryptographic modules [24759]
- Verification of cryptographic protocols [29128]
- Vulnerability Disclosure [29147]
- Physical security attacks, mitigation techniques and security requirements [30104]
- Vulnerability handling processes [30111]
- ...



SC27

SWG-M

WG1

WG2

WG3

WG4

WG5

SWG-T

Special
Working
Group on
Management

Information
security
management
systems

Cryptography
and security
mechanisms

Security
evaluation,
testing and
specification

**Security
controls and
services**

Identity
management
and privacy
technologies

Transversal
Items

- **Standards and guidelines** addressing services and applications **supporting the implementation of control objectives and controls as defined in ISO/IEC 27001**
- **Different domains**
 - **System and system life cycle security**
 - Acquisition, Development, Supply, Storage, Processing, Communication, ...
 - **Security incidents**
 - Detection, Investigation, Management, Recovery
- **Several series of standards... ;)**
 - e.g. **6 series** of standards represent total of **28 documents!**

27033 Network Security

Part 1: Overview
and concepts

(2009 / 2015)

Part 2:
Guidelines for
the design and
implementation
of network
security

(2012)

Part 3: Reference
networking
scenarios --
Threats, design
techniques and
control issues

(2010)

Part 4: Securing
communications
between
networks using
security
gateways

(2014)

Part 5: Securing
communications
across networks
using Virtual
Private Network
(VPNs)

(2013)

Part 6: Securing
wireless IP
network access

(DIS)

27034

Application security

**Part 1:
Overview
and
concepts**

(2011- Technical
Corrigenda in
2014)

**Part 2:
Organization
normative
framework**

(2015)

**Part 3:
Application
security
management
process**

(CD)

**Part 4:
Application
security
validation**

(CD)

**Part 5:
Protocols and
application
security
controls data
structure**

(CD)

**Part 6:
Security
guidance
for specific
applications**

(DIS)

**Part 7:
Application
security
assurance
prediction**

(CD)

**Part 5-1:
Protocols and
application
security
controls data
structure --
XML schemas**

(PDTS)

27035

Information security incident management

(2011)

Part 1: Principles
of incident
management

(DIS)

Part 2:
Guidelines to
plan and prepare
for incident
response

(DIS)

Part 3:
Guidelines for
CSIRT
operations

(PDTS)

27036

Information security for supplier relationships

FREE

Part 1:
Overview and
concepts

(2014)

Part 2:
Requirements

(2014)

Part 3: Guidelines
for information
and
communication
technology supply
chain security

(2013)

Part 4:
Guidelines
for security of
Cloud
services

(CD)

27050

Electronic discovery

(under development)

Part 1: Overview
and concepts

(1st CD)

Part 2: Guidance
for governance
and management
of electronic
discovery

(2nd WD)

Part 3: Code of
Practice for
electronic
discovery

(2nd WD)

Part 4: ICT
readiness for
electronic
discovery

(2nd WD)

14516

Guidelines for the use and management of Trust Service Providers

(revision of ISO/IEC TR 14516:2002)

Part 1: Overview and
concepts

(1st WD)

Part 2: Guidelines on
information security
of PKI Trust Service
Providers

(1st WD)

Part 3: Guidelines on
provision of services
by PKI Trust Service
Providers

(1st WD)

WG4

Security controls and services

- Series of standards on Guidelines for the use and management of Trust Service Providers [14516]
 - (revision of ISO/IEC TR 14516:2002)
- Security information objects for access control [15816]
 - 2002
- Specification of TTP services to support the application of digital signatures [15945]
 - 2002
- Selection, deployment and operations of intrusion detection systems [18043]
 - 2006
 - Currently under revision as ISO/IEC 27039
- Guidelines for ICT readiness for business continuity [27031]
 - 2011
- Guidelines for cybersecurity [27032]
 - 2012
- Series of standards on Network Security [27033]
- Series of standards on Application Security [27034]
- Series of standards on Information Security Incident Management [27035]
- Series of standards on Information security for supplier relationships [27036]
- Series of standards on Electronic Discovery [27050]
- Guidelines for the identification, collection, acquisition and preservation of digital evidence [27037]
 - 2012
- Specification for digital redaction [27038]
 - 2014
- Selection, deployment and operation of intrusion detection and prevention systems (IDPS) [27039]
 - 2015
- Storage security [27040]
 - 2015
- Guidance on assuring suitability and adequacy of incident investigative methods [27041]
 - 2015
- Guidelines for the analysis and interpretation of digital evidence [27042]
 - 2015
- Incident investigation principles and processes [27043]
 - 2015
- Best practice on the provision and use of time-stamping services [29149]
 - 2012



WG4

Security controls and services

 telindus

together with

 proximus

 tango

- 27044
 - Guidelines for security information and event management (SIEM)
 - 4th WD



SC27

SWG-M

WG1

WG2

WG3

WG4

WG5

SWG-T

Special
Working
Group on
Management

Information
security
management
systems

Cryptography
and security
mechanisms

Security
evaluation,
testing and
specification

Security
controls and
services

Identity
management
and privacy
technologies

Transversal
Items

- Development and maintenance of standards and guidelines addressing security aspects of
 - Identity management
 - Biometrics
 - Privacy / protection of personal data
- Collaboration with each other Working Groups in SC 27

- Authentication context for biometrics [24761]
 - 2009
 - Cor.1 2013
- Biometric information protection [24745]
 - 2011
- A framework for identity management [24760]
 - FREE** Part 1: Terminology and concepts
 - 2011
 - Part 2: Reference architecture and requirements
 - 2015
- Privacy framework [29100]
 - 2011
- Entity authentication assurance framework [29115]
 - 2013
- Privacy capability assessment model [29190]
 - 2015
- Requirements for partially anonymous, partially unlinkable authentication [29191]
 - 2012
- Code of practice for PII protection in public clouds acting as PII processors [27018]
 - 2014
- FREE** Privacy references list [SD2]
 - Standards privacy assessment [SD4]



Focus on Cloud Computing

About Security & Privacy

Focus on Cloud Computing

About Security & Privacy

ISO/IEC 27017 (FDIS)

*Code of practice for
information security controls
based on ISO/IEC 27002 for
cloud services*

ISO/IEC 27018 (2014)

*Code of practice for protection
of Personally Identifiable
Information (PII) in public
clouds acting as PII
processors*

Focus on Cloud Computing

About Security & Privacy

ISO/IEC 27017 (FDIS)

*Code of practice for
information security controls
based on ISO/IEC 27002 for
cloud services*

ISO/IEC 27018 (2014)

*Code of practice for protection
of Personally Identifiable
Information (PII) in public
clouds acting as PII
processors*

ISO/IEC 27017 (FDIS)

Code of practice for information security controls based on ISO/IEC 27002 for cloud services

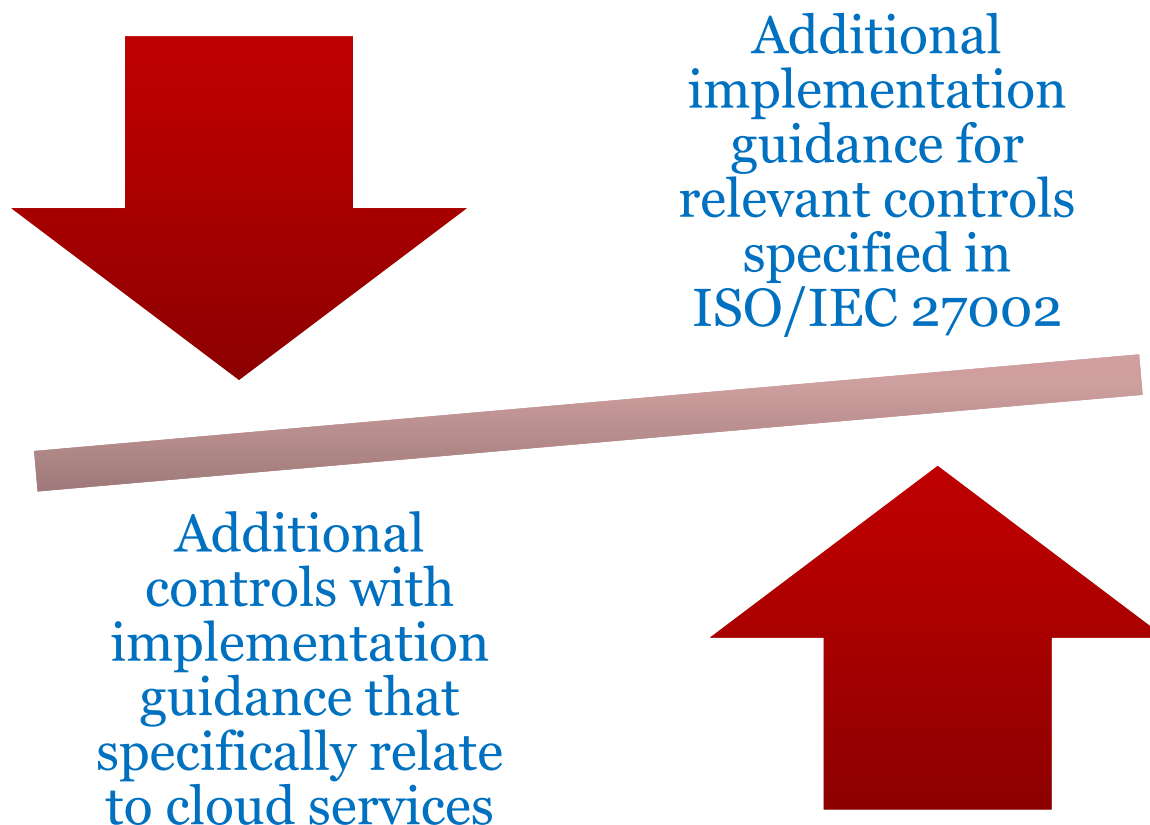
telindus

together with

proximus

tangoli

- Guidelines for information security controls applicable to the provision and use of cloud services



ISO/IEC 27017 (FDIS)

Code of practice for information security controls based on ISO/IEC 27002 for cloud services

telindus

together with

proximus

tangoli

- Provides controls and implementation guidance for both cloud service providers and cloud service customers



Cloud service
customer

Cloud service
provider



ISO/IEC 27017 (FDIS)

Table of contents

- **Enhancement of ISO/IEC 27002 clauses**

39 enhanced controls

5. Information security policies (1)
6. Organization of information security (2)
7. Human resource security (1)
8. Asset management (2)
9. Access control (7)
10. Cryptography (2)
11. Physical and environmental security (1)
12. Operations security (8)
13. Communications security (1)
14. System acquisition, development and maintenance (2)
15. Supplier relationships (3)
16. Information security incident management (2)
17. Information security aspects of business continuity management (2)
18. Compliance (5)

- **New clauses**

- **Annex A Cloud Service Extended Control Set (normative)**

7 additional controls distributed over 6 additional clauses

- CLD.6.3 Relationship between cloud service customer and cloud service provider
 - CLD.8.1 Responsibility for assets
 - CLD.9.5 Access control of cloud service customer's data in shared virtual environment
 - CLD.12.1 Operational procedures and responsibilities
 - CLD.12.4 Logging and monitoring
 - CLD.13.1 Network security management
- **Annex B References on information security risk related to cloud computing (informative)**



7.2.2 Information security awareness, education and training

Control 7.2.2 and the associated implementation guidance and other information specified in ISO/IEC 27002 apply. The following sector-specific guidance also applies.

Implementation guidance for cloud services

Cloud service customer	Cloud service provider
<p>The cloud service customer should add the following items to awareness, education and training programmes for cloud service business managers, cloud service administrators, cloud service integrators and cloud service users, including relevant employees and contractors:</p> <ul style="list-style-type: none">— standards and procedures for the use of cloud services;— information security risks relating to cloud services and how those risks are managed;— system and network environment risks with the use of cloud services;— applicable legal and regulatory considerations. <p>Information security awareness, education and</p>	<p>The cloud service provider should provide awareness, education and training for employees and contractors concerning the appropriate handling of a cloud service customer data and cloud service derived data, which can contain information confidential to a cloud service customer or be subject to specific limitations, including regulatory restrictions, on access and use by the cloud service provider.</p>



CLD.8.1 Responsibility for assets

The objective specified in clause 8.1 of ISO/IEC 27002 applies.

CLD.8.1.5 Removal of cloud service customer assets

Control

Assets of the cloud service customer, which are on the cloud service provider's premises, should be returned in a timely manner upon termination of the agreement for the use of a cloud service.

Implementation guidance for cloud services

Cloud service customer	Cloud service provider
<p>The cloud service customer should obtain a documented description of the termination of service process, which covers return and removal of cloud service customer assets followed by deletion of all copies of those assets from the cloud service provider's systems.</p> <p>The description should list all the assets and document the schedule for the termination of service, which should occur in a timely manner.</p>	<p>The cloud service provider should provide information about the arrangements for the return and removal of any cloud service customer's assets upon termination of the agreement for the use of a cloud service.</p> <p>The asset return and removal arrangements should be documented in the agreement and should be performed in a timely manner. The arrangements should specify the assets to be returned and removed.</p>

Focus on Cloud Computing

About Security & Privacy

ISO/IEC 27017 (FDIS)

*Code of practice for
information security controls
based on ISO/IEC 27002 for
cloud services*

ISO/IEC 27018 (2014)

*Code of practice for protection
of Personally Identifiable
Information (PII) in public
clouds acting as PII
processors*

ISO/IEC 27018 (2014)

Code of practice for protection of Personally Identifiable Information (PII) in public clouds acting as PII processors

telindus

together with

proximus

tango

- Based on ISO/IEC 27002
- For implementing measures to protect **Personally Identifiable Information (PII)**
 - in accordance with the privacy principles in ISO/IEC 29100 for the public cloud computing environment



ISO/IEC 27018 (2014)

Table of contents

- **Enhancement of ISO/IEC 27002 clauses**

15 enhanced controls

5. Information security policies (1)
6. Organization of information security (1)
7. Human resource security (1)
8. Asset management (0)
9. Access control (3)
10. Cryptography (0)
11. Physical and environmental security (1)
12. Operations security (4)
13. Communications security (1)
14. System acquisition, development and maintenance (0)
15. Supplier relationships (0)
16. Information security incident management (2)
17. Information security aspects of business continuity management (0)
18. Compliance (1)

- **New clauses**

- **Annex A Public cloud PII processor extended control set for PII protection (normative)**

22 additional controls distributed over 11 privacy principles coming from ISO/IEC 29100

1. Consent and choice
2. Purpose legitimacy and specification
3. Collection limitation
4. Data minimization
5. Use, retention and disclosure limitation
6. Accuracy and quality
7. Openness, transparency and notice
8. Individual participation and access
9. Accountability
10. Information security
11. Privacy compliance



7.2.2 Information security awareness, education and training

Control 7.2.2 and the associated implementation guidance and other information specified in ISO/IEC 27002 apply. The following application-specific guidance also applies.

Public cloud PII protection implementation guidance

Measures should be put in place to make relevant staff aware of the possible consequences on the cloud PII processor (for example, legal consequences, loss of business and brand or reputational damage), on the staff member (for example disciplinary consequences) and on the PII principal (for example physical, material and emotional consequences) of breaching privacy or security rules and procedures, especially those addressing the handling of PII.

Other information for public cloud PII protection

In some jurisdictions, the cloud PII processor may be subject to legal sanctions, including substantial fines directly from the local PII protection authority. In other jurisdictions the use of International Standards such as this in setting up the contract between the cloud PII processor and the cloud service customer should establish a basis for contractual sanctions for a breach of security rules and procedures.



ISO/IEC 27018 ⁽²⁰¹⁴⁾

Focus on “public cloud PII processor extended control set for PII protection”

telindus

together with

proximus

tangoll

A.11 Privacy compliance

A.11.1 Geographical location of PII

Control

The cloud PII processor should specify and document the countries in which PII might possibly be stored.

Public cloud PII protection implementation guidance

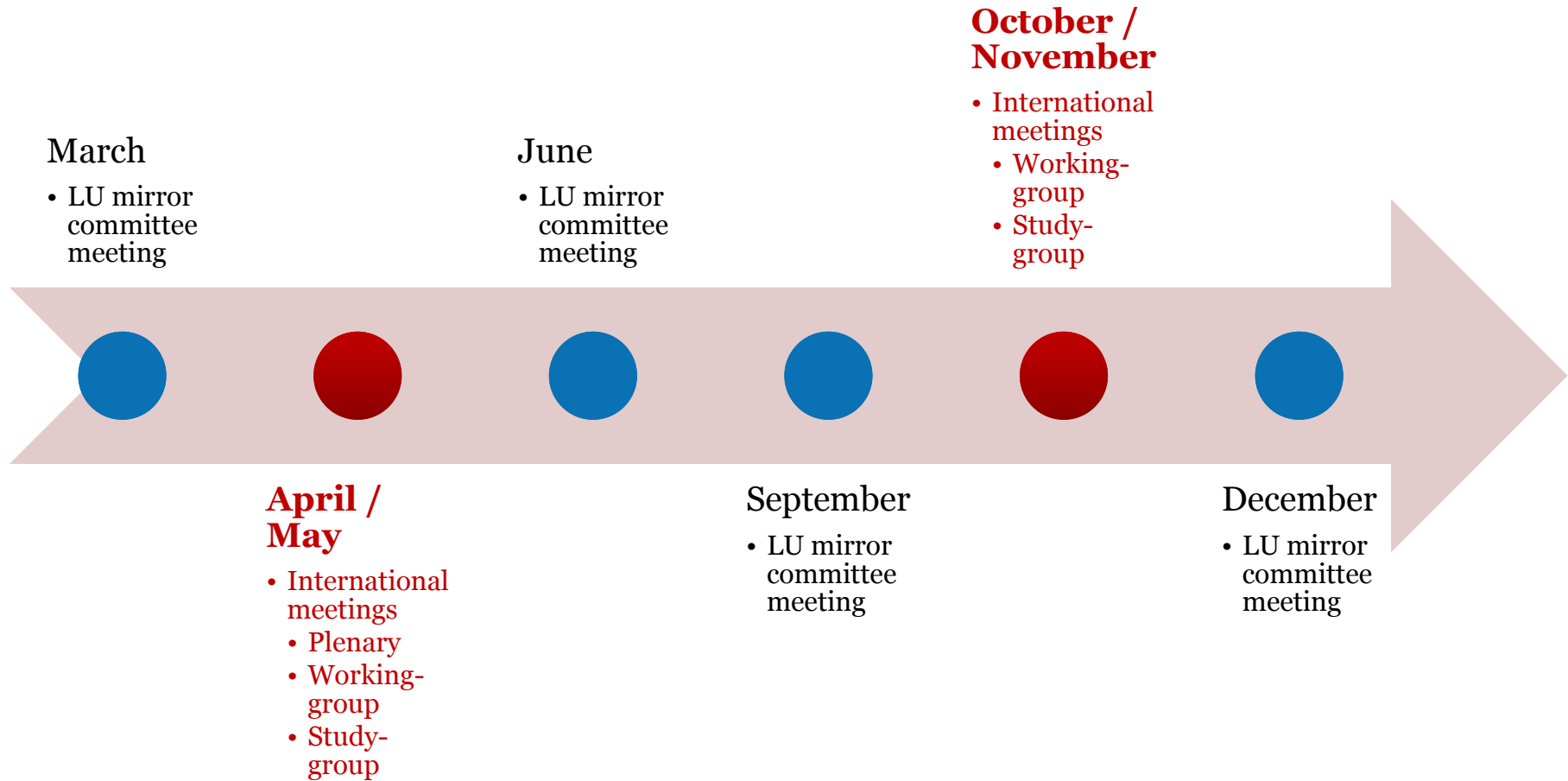
The identities of the countries where PII might possibly be stored should be made available to cloud service customers. The identities of the countries arising from the use of sub-contracted PII processing should be included. Where specific contractual agreements apply to the international transfer of data, such as Model Contract Clauses or Binding Corporate Rules, the agreements and the countries or circumstances in which such agreements apply should also be identified. The cloud PII processor should inform the cloud service customer in a timely fashion of any intended changes in this regard so that the cloud service customer has the ability to object to such changes or to terminate the contract.



APPROVED

How to take part into the standardization work?

2 international meetings per year 3+ LU mirror committee meetings

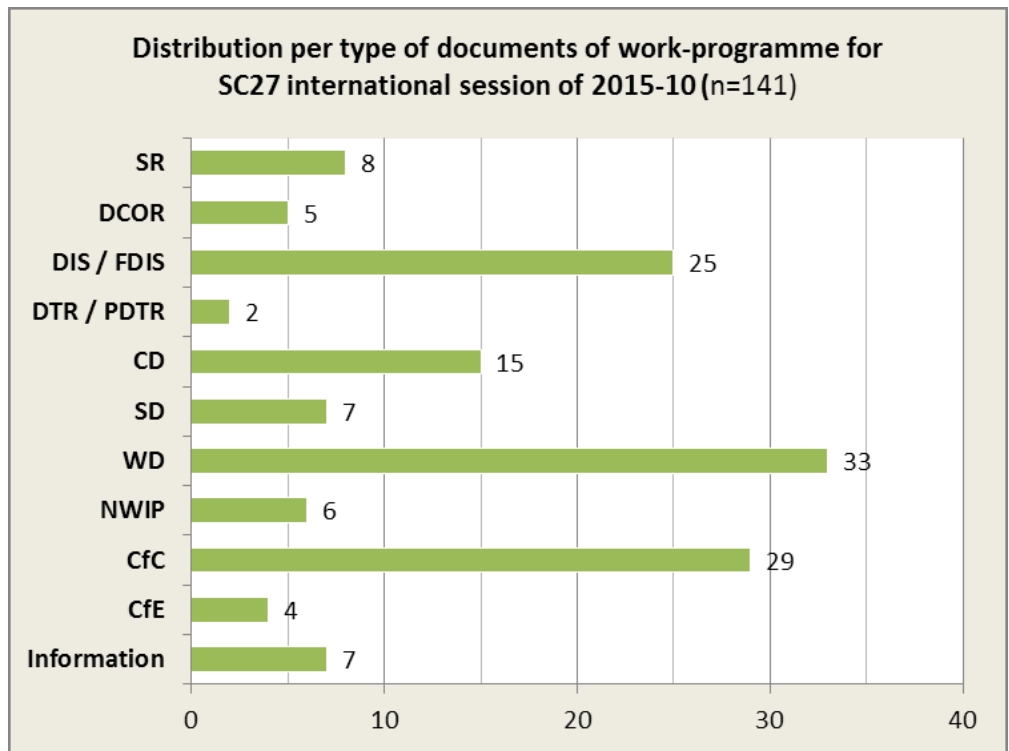
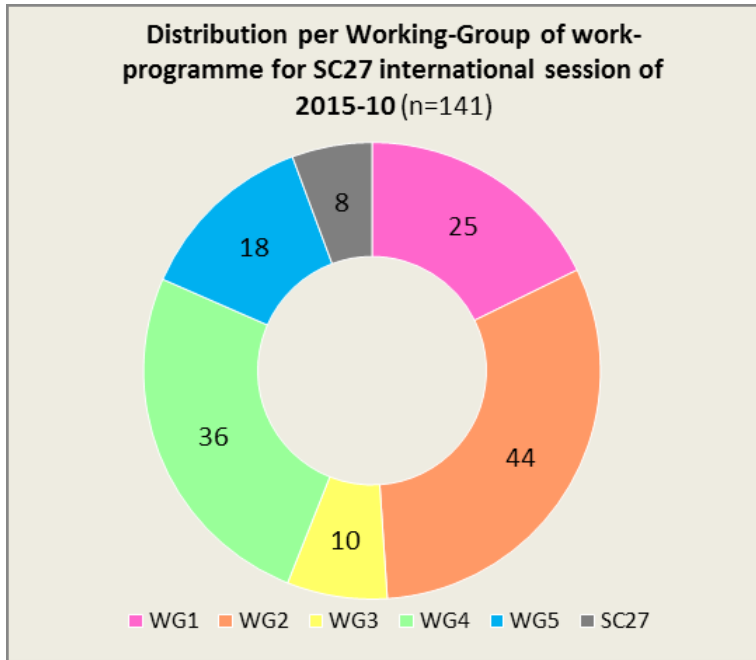


2 international meetings per year

All around the world since 1990



Next meeting will take place in जयपुर (Jaipur, India) 2015, October 26th > 30th



- WG1 → ISMS
- WG2 → Cryptography
- WG3 → Security evaluation
- WG4 → Controls and services
- WG5 → Privacy technologies

How to participate at LU-level / international-level?
Ask our today's host!

telindus

together with

proximus

tango



WE WANT YOU!

How to participate at LU-level / international-level?
Ask our today's host!

telindus

together with

proximus

tango



WE WANT YOU!

SC27 IT Security Techniques *in 1 slide*

ISO/IEC JTC1/SC27

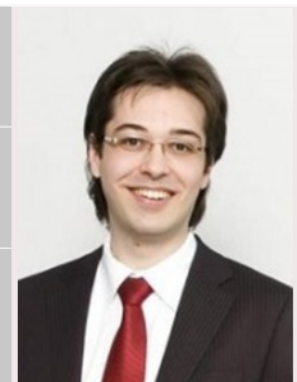
TITLE	IT Security techniques	DATE OF CREATION	1990
SECRETARIAT	Deutsches Institut für Normung (DIN)	P-MEMBERS O-MEMBERS	51 20
SECRETARY	Mrs Krystyna Passia	PUBLISHED STANDARDS	150
CHAIRPERSON	Mr Walter Fumy (Germany) (2013-11 → 2016-11)	STANDARDS UNDER DEVELOPMENT	75
SCOPE	<p>The development of standards for the protection of information and ICT. This includes generic methods, techniques and guidelines to address both security and privacy aspects, such as:</p> <ul style="list-style-type: none"> ✓ Management of information and ICT security / ISMS ✓ Cryptographic and other security mechanisms ✓ Security aspects of identity management, biometrics and privacy ✓ Conformance assessment, accreditation and auditing requirements in the area of information security and security evaluation criteria and methodology 		
MAIN STANDARDS	<p>ISO/IEC 27001:2013 - Information security management systems – Requirements ISO/IEC 27002:2013 - Code of practice for information security controls ISO/IEC 29192 series - Lightweight cryptography ISO/IEC 15408 series - Evaluation criteria for IT security (a.k.a the "Common Criteria")</p>		

NATIONAL STUDY COMMITTEE

MEMBERSHIP	P-Member
DATE OF CREATION	August 2002
NATIONAL EXPERTS	26

NATIONAL VICE-CHAIRPERSON

Cédric MAUNY
Telindus Luxembourg
Head of Technical Unit <i>Security Audits and Governance Services (SAGS)</i> Risk Manager



Want to take a look on some ISO/IEC JTC1 SC27 documents and standards ?

- Usually ISO Standards are not **FREE** but...

- <http://www.din.de/en/meta/jtc1sc27/downloads>

- SD6 *Glossary of IT Security terminology*
- SD7 *Catalogue of SC 27 Projects and Standards*
- SD11 *Overview of SC 27 Work*
- SD12 *Assessment of cryptographic algorithms and key lengths*
- WG5 SD2 *Part 1: Privacy References List*
- WG 5 SD4 *Standard Privacy Assessment (SPA)*

- <http://standards.iso.org/ittf/PubliclyAvailableStandards/>

- ISO/IEC 27000 about *ISMS Overview and Vocabulary*
 - EN + FR + RU
 - ISO/IEC 27036-1 about *Information security for supplier relationships, Part 1: Overview and concepts*
 - ISO/IEC 24760-1 about *A framework for identity management, Part 1: Terminology and concepts*
 - ISO/IEC 29100 about *Privacy framework*
- + Many others (600+) in various domains
- *Please read the ISO Copyright for the freely available standards*



One more thing...

SC 27 has received the Lawrence D. Eicher Leadership Award 2015 for its standardization work

- LDE awards is going to the ISO technical committees (TC) or subcommittees (SC) who have **shown great leadership, use innovative approaches and promote the involvement of developing countries**



Walter FUMY
Chairperson of SC27

Dr. Zhang Xiaogang
President of ISO

Krytyna PASSIA
Secretary



Thank you for your attention

Questions & Answers

together with

proximus

tango))

Contact information

Cédric MAUNY

cedric.mauny@telindus.lu

(+352) 621.200.707

