

Work and Projects in ISO/IEC JTC 1/SC 27/WG 5 “Identity Management & Privacy technologies”

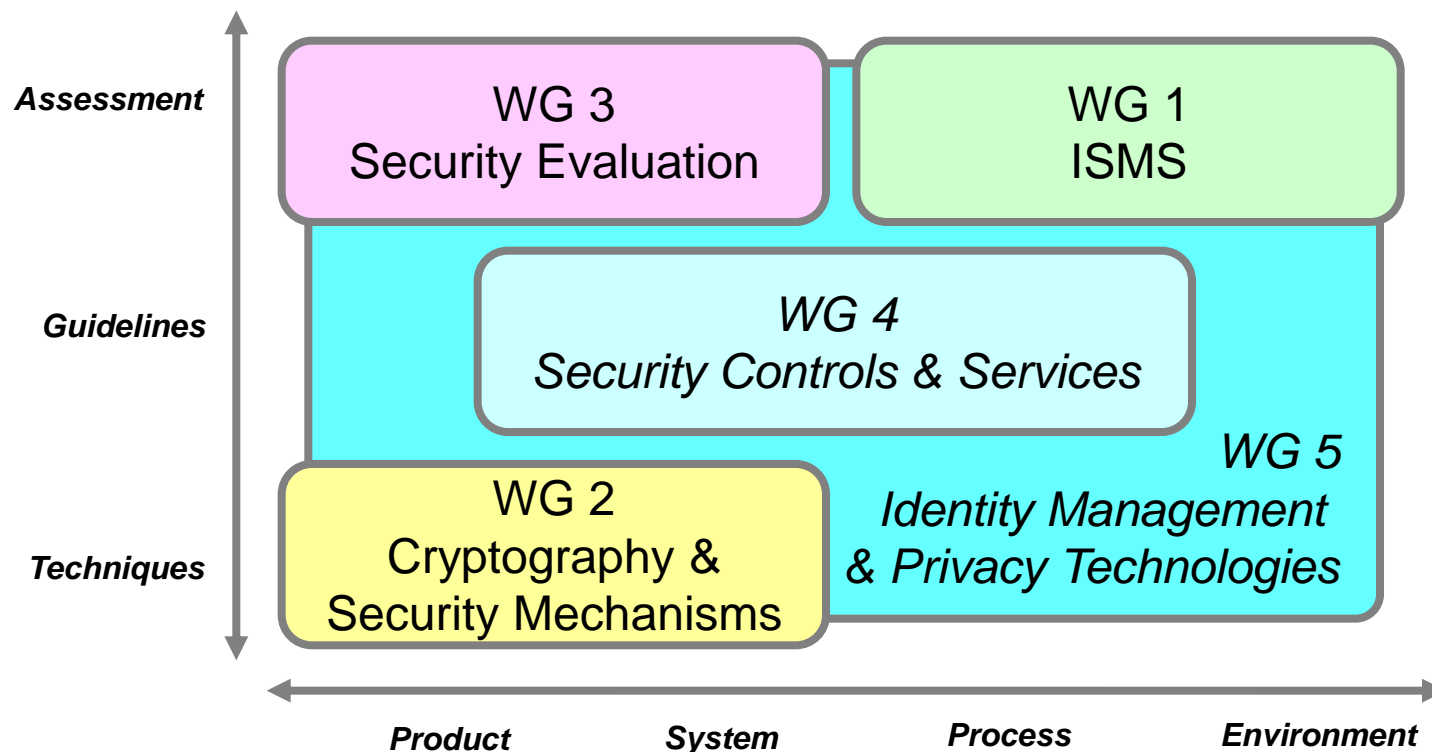
ETSI – ISO/IEC JTC 1/SC 27 Security Workshop
ETSI Sophia Antipolis
2013-04-26

Convener WG 5
[kai.rannenberga@m-chair.net]
Deutsche Telekom Chair for
“Mobile Business & Multilateral Security”
Goethe University Frankfurt, Germany



WGs within ISO/IEC JTC 1/SC 27 – IT Security Techniques

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies





WG 5 Identity Management & Privacy Technologies History

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

October 2003

JTC 1 Plenary established

- JTC 1 Study Group on Privacy Technologies (SGPT)
- for one year period of time (until October 2004) to identify standardization needs

October 2004

JTC 1 Plenary resolved to

- disband SGPT
- assign to SC 27 further activities in the Privacy Technologies area such as
 - a further inventory
 - a report back to the November 2006 JTC 1 Plenary



WG 5 Identity Management & Privacy Technologies History

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

SC 27 activities (in response to JTC 1's request from October 2004)

- **October 2004**
 - Study Period on Identity Management established
- **May 2005**
 - Study Period on Privacy established
 - New Work Item Proposal: **A framework for identity management (ISO/IEC 24760)**
- **May 2006**
 - New **Working Group 5 on Identity Management and Privacy Technologies** established
 - Two new Work Item Proposals
 - **A privacy framework (ISO/IEC 29100)**
 - **A privacy reference architecture (ISO/IEC 29101)**



WG 5 Identity Management & Privacy Technologies

Scope

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

- Development and maintenance of standards and guidelines addressing security aspects of
 - Identity management
 - Biometrics and
 - Privacy



WG 5 Identity Management & Privacy Technologies

Programme of Work

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

Frameworks & Architectures

- A Framework for Identity Management (ISO/IEC 24760, IS, CD, WD)
- Privacy Framework (ISO/IEC 29100, IS)
- Privacy Architecture Framework (ISO/IEC 29101, FDIS)
- Entity Authentication Assurance Framework (ISO/IEC 29115, IS)
- A Framework for Access Management (ISO/IEC 29146, CD)
- Telebiometric authentication framework using biometric hardware security module (ITU-T X.1085 | ISO/IEC 17922, WD) (formerly X.bhsm)

Protection Concepts

- Biometric information protection (ISO/IEC 24745, IS)
- Requirements for partially anonymous, partially unlinkable authentication (ISO/IEC 29191, IS)

Guidance on Context and Assessment

- Authentication Context for Biometrics (ISO/IEC 24761, IS)
- Privacy Capability Assessment Model (ISO/IEC 29190, CD)
- Code of practice for data protection controls for public cloud computing services (ISO/IEC 27018, CD) -> Code of practice for PII protection in public clouds acting as PII processors
- Identity Proofing (ISO/IEC 29003, WD)
- Privacy impact assessment – methodology (ISO/IEC 29134, WD)
- Code of practice for the protection of personally identifiable information (ISO/IEC 29151, WD)

Identity Management (IdM)

An early approach

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

- „Fear not, for I have redeemed you;
I have called you by name: you are mine.“
[Isaiah 43:1]
- „Μη φοβου· διοτι εγω σε ελυτρωσα,
σε εκαλεσα με το ονομα σου· εμου εισαι“
[Ησαιαν 43:1]
- „No temas, porque yo te he redimido,
te he llamado por tu nombre; mío eres tú.“
[Isaías 43¹]
- „Fürchte dich nicht, denn ich habe dich erlöst;
ich habe dich bei deinem Namen gerufen; du bist mein!“
[Jesaja 43,1]





Identity Management (IdM)

2 sides of a medal with enormous economic potential

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

- **Organisations** aim to sort out
 - User Accounts in different IT systems
 - Authentication
 - Rights management
 - Access control
- **Unified identities** help to
 - ease administration
 - manage customer relations
- **Identity management systems**
 - ease single-sign-on by unify accounts
 - solve the problems of multiple passwords

- **People** live their life
 - in different roles (professional, private, volunteer)
 - using different identities (pseudonyms): email accounts, SIM cards, eBay trade names, chat names, 2ndLife names, ...)
- **Differentiated identities** help to
 - protect
 - privacy, especially anonymity
 - personal security/safety
 - enable reputation building at the same time
- **Identity management systems**
 - support users using role based identities
 - help to present the “right” identity in the right context



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Frameworks & Architectures

- A Framework for Identity Management (ISO/IEC 24760)
 - Part 1: Terminology and concepts (IS)
 - Part 2: Reference framework and requirements (CD)
 - Part 3: Practice (WD)
- Privacy Framework (ISO/IEC 29100, IS)
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WG 5 Identity Management & Privacy Technologies

Programme of Work

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

Protection Concepts

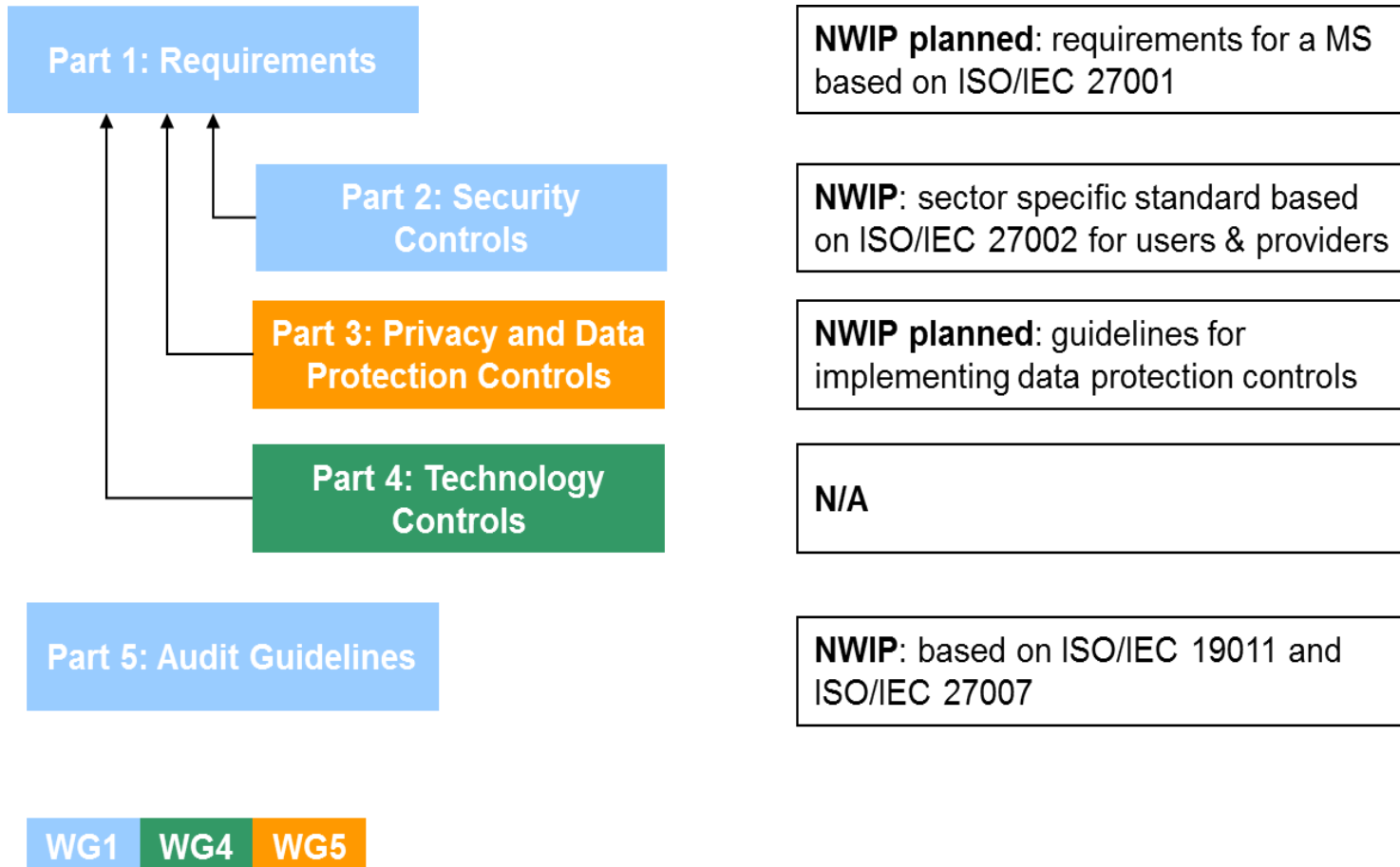
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ISO/IEC 27018 „Code of practice for PII protection in public clouds acting as PII processors”

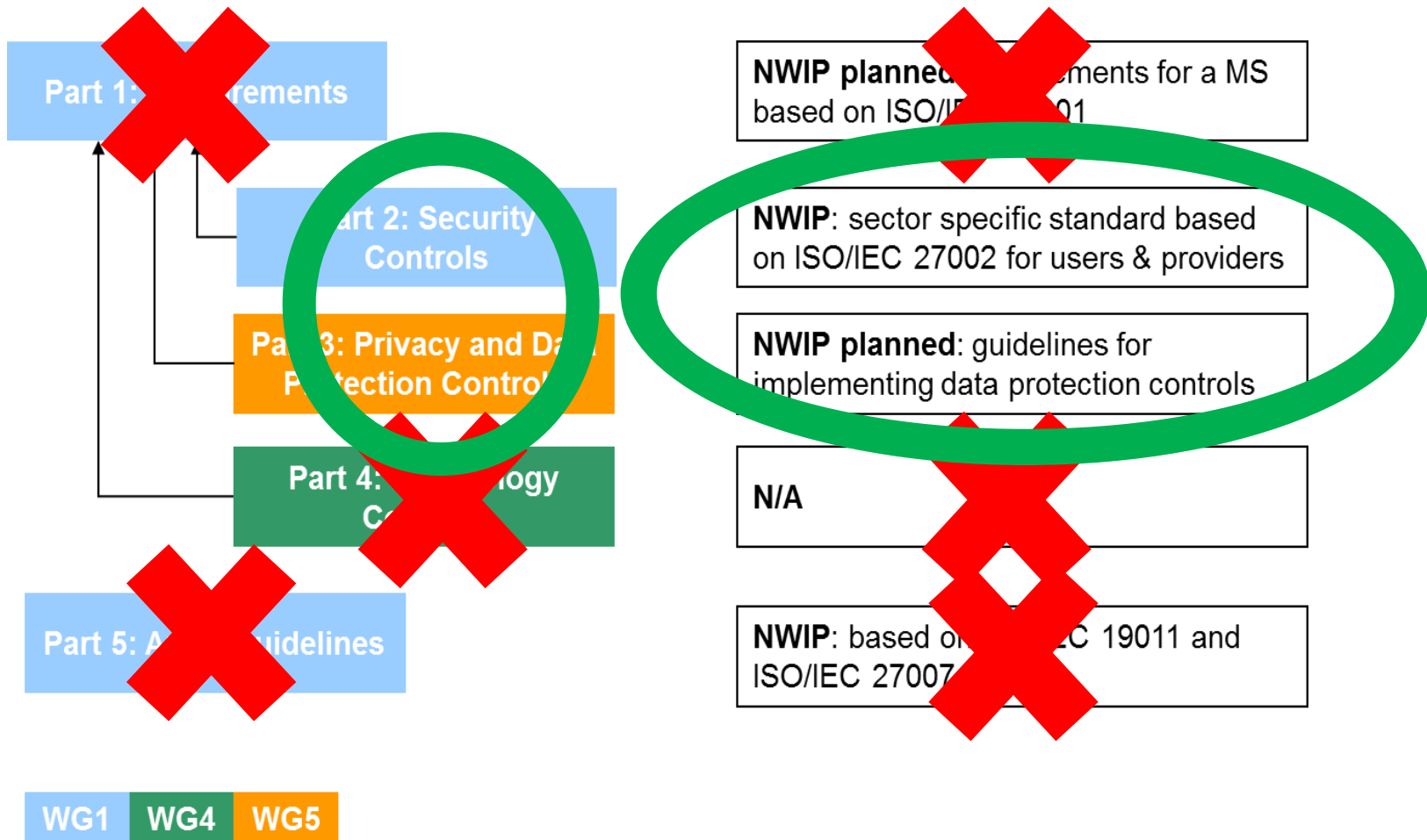
ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies



[Figure thanks to Armin Wappenschmidt (Secunet)]

ISO/IEC 27018 „Code of practice for PII protection in public clouds acting as PII processors”

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies



[Figure thanks to Armin Wappenschmidt (Secunet)]



WG 5 Identity Management & Privacy Technologies Programme of Work

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

Study Periods

- Privacy Impact Assessment
- Security evaluation of anti-spoofing techniques for biometrics (together with WG 3)
- Privacy seal programs (together with WG 3)
- Documentation of data deletion principles for personally identifiable information in organisations



WG 5 Identity Management & Privacy Technologies Programme of Work

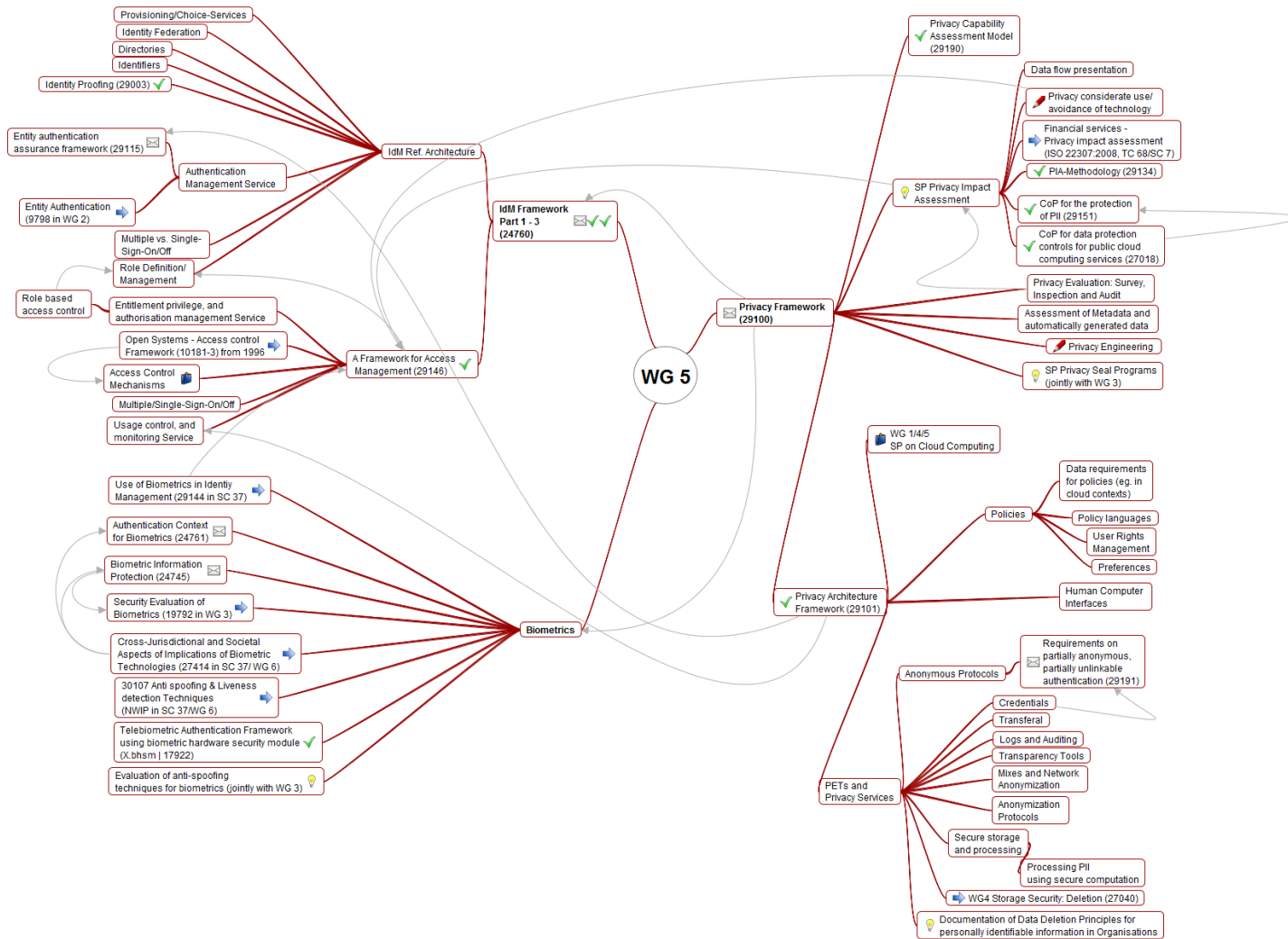
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Standing Documents

- WG 5 Roadmap
(WG 5 SD1)
- Privacy Documents References List
(WG 5 SD2) (public)
- Harmonized Vocabulary Effort
(WG 5 SD3)
- Standards Privacy Assessment (SPA)
(WG 5 SD4)

WG 5 Identity Management & Privacy Technologies Roadmap

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

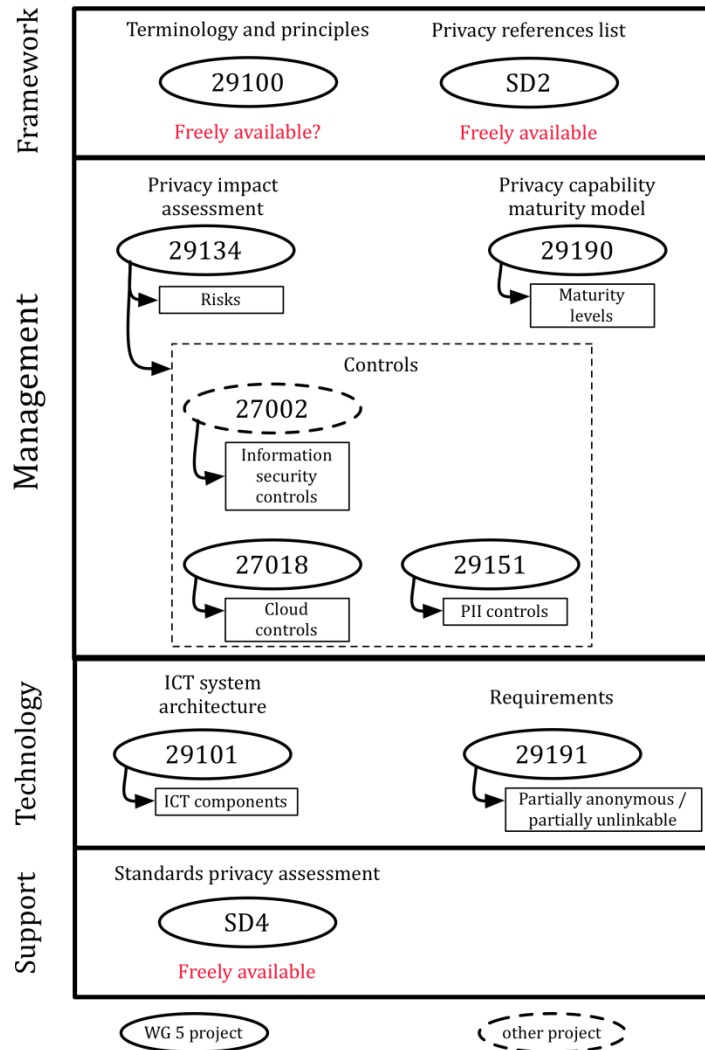




WG 5 Identity Management & Privacy Technologies

Privacy/PII standards in SC 27/WG 5 and elsewhere

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies





WG 5 Identity Management & Privacy Technologies Liaisons and collaboration

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

- With organizations and committees dealing with specific requirements and guidelines for services and applications, e.g.:
 - ISO/IEC JTC 1
 - ISO
 - ETSI
 - ITU-T
 - Further organisations with specific application needs and/or expertise



WG 5 Identity Management & Privacy Technologies Example Liaisons and collaboration – within ISO and IEC

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

- JTC 1/SC 17/WG 4
 - Integrated circuit card with contacts
- JTC 1/SC 37
 - Biometrics
- JTC 1/SC 38
 - Distributed application platforms and services (DAPS)
- ISO TC 215/WG 4
 - Health Informatics Security



WG 5 Identity Management & Privacy Technologies Liaisons and collaboration – with ITU-T

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

- ITU-T SG 13
 - Future networks including mobile and NGN
- ITU-T SG 17
 - Security
- ITU-T JCA Cloud
 - Cloud Computing Privacy Aspects



WG 5 Identity Management & Privacy Technologies

Liaisons and collaboration

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

- ABC4Trust
- Article 29 Working Party of Data Protection Authorities in the European Union
- Cloud Security Alliance (CSA)
- ENISA (European Network and Information Security Agency)
- EUDCA (European Data Centre Association)
- FIDIS (Future of Identity in the Information Society)
- Kantara Initiative (succeeding Liberty Alliance)
- PICOS (Privacy in Community Services)
- PrimeLife
- The International Conference of Data Protection and Privacy Commissioners



WG 5 Identity Management & Privacy Technologies Recent/Next Meetings

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

- 2013-04-22 – 2013-04-26 ETSI Sophia Antipolis (F): WG 5 Meeting
- 2013-04-29 – 2013-04-30 ETSI Sophia Antipolis (F): SC 27 Plenary

- 2013-10-21 – 2013-10-25 Songdo (Korea): WG 5 Meeting

- 2014-04-07 – 2013-04-11 Hong Kong: WG 5 Meeting
- 2014-04-14 – 2014-04-15 Hong Kong: SC 27 Plenary



WG 5 Identity Management & Privacy Technologies

Further Reading

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies

- www.jtc1sc27.din.de/en
 - SD6 Glossary of IT Security Terminology
 - SD7 Catalogue of SC 27 Standards & Projects
 - WG 5/SD2 Privacy Documents References List
- www.iso.org/obp/ui
 - ISO Online Browsing Platform (OBP)

Kai.Rannenberg@m-chair.net



WG 5 Identity Management & Privacy Technologies Further Collaboration with ETSI

ISO/IEC JTC 1/SC 27/WG 5 Identity Management & Privacy Technologies



Looking forward to further collaboration
between ETSI and WG 5