

Technical Standards and Guidelines: *Resources for the Real World*

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Definitions

Guideline = a document designed to streamline particular processes through the use of a set routine.

Example: US Dept. of Health & Human Services *Dietary Guidelines for Americans*

Standard = a formal document that establishes uniform engineering or technical criteria, methods, processes and practices.

Example: VoiceXML

Guidelines

Guidelines for SIV

Benefits

- Get best practices in a single source
- Ensure high level of quality
- Make procedures more consistent
- Facilitate training and oversight
- Reduce risk
- Reduce time to develop protocols, procedures, and standards

Guidelines for SIV

Kinds

- Technical
- Privacy and societal
- Security
- Employment

Guidelines for SIV

Technical

- VoiceXML Forum* *Speaker Identification and Verification (SIV): Introduction and Best Practices VoiceXML Requirements*
- VoiceXML Forum* *Speaker Identification and Verification (SIV) Requirements for VoiceXML Applications*

* publications of the Forum's Speaker Biometrics Committee. Available from www.voicexml.org

Guidelines for SIV

Privacy & Societal

- NSTC *Privacy & Biometrics: Building a Conceptual Foundation*
(<http://www.biometrics.gov/docs/privacy.pdf>)
- ISO/IEC TR 24714-1:2008 Jurisdictional and societal considerations for commercial applications -- Part 1: General guidance
(www.iso.org ISO store)

Guidelines for SIV

Security

- OMB M-04-04 *E-Authentication Guidance for Federal Agencies*
(<http://www.whitehouse.gov/omb/memoranda/fy04/m04-04.pdf>)
- ANSI/INCITS M1 *Study Report on Biometrics in E-Authentication*
(<http://m1.incits.org/>)

Guidelines for SIV

Employment

*UK National Occupational Standards for
Human Identity and Biometrics*

(<http://www.ukstandards.org.uk/>)

Standards

Standards for SIV

Benefits

- Enhance interoperability
- Shorten learning curve
- Show maturity of industry
- Reduce vendor lock-in
- Encourage growth of integrators

Standards for SIV

Kinds

- API
- Data Interchange
- Process Control
- Security

Markowitz, J. 2009 Standards for Speaker Recognition. In Encyclopedia of Biometrics. Li, Stan Z. (Ed.) Berlin: Springer

Standards

API

- W3C - SIV module of VoiceXML 3.0
- ISO/IEC 19784-1 *BioAPI* (<http://www.iso.org>)
ISO store

Standards

Data Interchange

- INCITS 456 *Speaker Recognition Format for Raw Data Interchange (SIVR-1)* (Techstreet, <http://www.techstreet.com/incitsgate.tmpl> put “INCITS 456” into the search box. You want the newest draft)
- ISO 19794-13 *Biometric data interchange formats – Part 13: Voice data* (not publicly available)

Standards

Process Control

MRCP v2 (Chapters 11 & 12)

(<http://tools.ietf.org/html/draft-ietf-speechsc-mrcpv2-20>)

Standards

Security

ISO 19092-2008 Financial services —
Biometrics —Security framework
(www.iso.org ISO store)

Thank you

Contact

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