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Open IT-standards

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Contents

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1   Background

The Swedish framework agreements for software and related services have a rule that a public authority that wishes to use the framework may only state mandatory requirements for a certain IT-standard if it meets the requirements of an open standard defined in the European Interoperability Framework, the EIF 1.0.

EIF 1.0 is available here:
http://ec.europa.eu/idabc/servlets/Docd552.pdf

Since only the definition of an open standard is of interest in this context, it is reproduced here:

1. The standard is adopted and will be maintained by a not-for-profit organisation, and its ongoing development occurs on the basis of an open decision-making procedure available to all interested parties (consensus or majority decision etc.).
2. The standard has been published and the standard specification document is available either freely or at a nominal charge. It must be permissible to all to copy, distribute and use it for no fee or at a nominal fee.
3. The intellectual property - i.e. patents possibly present - of (parts of) the standard is made irrevocably available on a royalty-free basis.
4. There are no constraints on the re-use of the standard.

Since open standards is a complex matter, the Swedish National Procurement Services (NPS) wanted to provide better support to the public authorities who are about to call off from these framework agreements. That was done by establishing collaboration with researchers in the research group Software Systems (SSRG) at the University of Skövde where researchers (Björn Lundell and Jonas Gamalielsson) were commissioned to undertake an analysis of whether an agreed set of IT-standards met the requirements of an open standard as defined in EIF 1.0. The agreed set of standards that were analysed in

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2015 were identified in a consultation between the NPS and the researchers. The starting point for the IT-standards to be analysed was the outcome of past analyses carried out in other countries, particularly the Netherlands and the United Kingdom, who also promotes the use of open standards.

2 About the contents

The list includes those IT-standards, based on the analysis of available and collected information on each standard, that may be determined to meet the requirements of an open standard (according to the EIF 1.0). Although the researchers conducted the analysis at the best of their ability, it cannot be ruled out that there may be circumstances regarding the condition of individual standards that are unknown or that has changed over time, which can lead to a revision of the contents of the list. For example, there may be patents that affect the conditions for using a specific standard that are unknown. Although many organisations that control patents that affect the conditions for using a specific standard have declared that they hold patents to the Standards Settings Organisation that develops and manages the respective standard (such as ISO and IETF), it is possible that there are additional patents that affect the conditions. Each standard included in this document has an indication of its status regarding Intellectual Property Rights (IPR). For these reasons, it is important to point out that the content of the list should be seen as a recommendation and not as any kind of guarantee that all standards on the list are truly open standards. Under no circumstances shall any of (1) the NPS or (2) the individual researchers or (3) the University of Skövde be held liable for any inaccuracies and a qualified patent attorney should always be consulted prior to implementing any standard which may potentially be covered by a patent, even if the list indicates that it is not.

The NPS and the University of Skövde themselves had no influence on the standards included in the list (in other words, neither organisation has made any official formal determination). It is only the researchers, based on the results of the analysis carried out within the research project, who decided whether a certain standard should be included (or not included) in the list of open standards based on the original list of standards that were analysed during 2015.

3 Further development

It should be emphasised that the list contains only the standards that the researchers, in 2015, assessed to meet the criteria for an open

standard. The list can at a later stage be revised and supplemented. The content of the list should only be seen as a recommendation and the researchers only included standards that, at the time of the analysis, were assessed to meet the criteria for an open standard and it is quite possible that someone else draws a different conclusion based on their own assessment. In such case, the researchers are very keen to be involved in the process and have access to the documentation that forms the basis for any different evaluation, both for inclusion of a standard (currently not on the list) and also to exclude a standard (currently on the list).

4 Analysed open standards assessed as fulfilling EIF 1.0

4.1 CSV (IETF)
Reference: CSV (RFC 4180)

Formal name: Common Format and MIME Type for Comma-Separated Values (CSV) Files

Version: October 2005

Number of pages: 8

Standards setting organisation: IETF (Internet Engineering Task Force), Network Working Group

Specification available through: http://tools.ietf.org/html/rfc4180

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software. There are several software implementations of the standard: http://en.wikipedia.org/wiki/CSV_application_support

4.2 DNS (IETF)
Reference: DNS (RFC 1034)

Formal name: DOMAIN NAMES - CONCEPTS AND FACILITIES

Version: November 1987

Number of pages: 55

Standards setting organisation: IETF (Internet Engineering Task Force), Network Working Group

Specification available through: http://tools.ietf.org/html/rfc1034

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software.

4.3 FTP (IETF)
Reference: FTP (RFC 959)

Formal name: FILE TRANSFER PROTOCOL

Version: October 1985

Number of pages: 53

Standards setting organisation: IETF (Internet Engineering Task Force), Network Working Group

Specification available through: http://tools.ietf.org/html/rfc959

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software. There are several software implementations of the standard:
http://en.wikipedia.org/wiki/List_of_FTP_server_software
http://en.wikipedia.org/wiki/Comparison_of_FTP_client_software

4.4 HTTP (IETF)
Reference: HTTP (RFC 2616)

Formal name: Hypertext Transfer Protocol -- HTTP/1.1

Version: June 1999

Number of pages: 114

Standards setting organisation: IETF (Internet Engineering Task Force), Network Working Group

Specification available through: http://tools.ietf.org/html/rfc2616

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software. There are several software implementations of the standard: http://en.wikipedia.org/wiki/Comparison_of_web_server_software

4.5   HTTPS (IETF)
Reference: HTTPS (RFC 2817)

Formal name: Upgrading to TLS Within HTTP/1.1

Version: May 2000

Number of pages: 13

Standards setting organisation: IETF (Internet Engineering Task Force), Network Working Group

Specification available through: http://tools.ietf.org/html/rfc2817

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software. There are several software implementations of the standard.

4.6   iCalendar (IETF)
Reference: iCalendar (RFC 5545)

Formal name: Internet Calendaring and Scheduling Core Object Specification (iCalendar)

Version: September 2009

Number of pages: 168

Standards setting organisation: IETF (Internet Engineering Task Force)

Specification available through: http://tools.ietf.org/html/rfc5545

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software. There are several software implementations of the standard: https://en.wikipedia.org/wiki/List_of_applications_with_iCalendar_suppo rt

4.7   IP (IETF)
Reference: IP (RFC 791)

Formal name: INTERNET PROTOCOL

Version: September 1981

Number of pages: 49

Standards setting organisation: IETF (Internet Engineering Task Force)

Specification available through: http://tools.ietf.org/html/rfc791

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software.

4.8   IPP (IETF)
Reference: IPP (RFC 2910)

Formal name: Internet Printing Protocol/1.1: Encoding and Transport

Version: September 2000

Number of pages: 46

Standards setting organisation: IETF (Internet Engineering Task Force), Network Working Group

Specification available through: http://tools.ietf.org/html/rfc2910

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Comment: When using this standard it's recommended to not include the non-mandatory reference in the technical specification for TLS 1.0 (IETF RFC 2246) since that reference in the standard (an option in IETF RFC 2910) is identified as having issues with regard to IPR.

About IPR and the reuse of this standard: Analysis of the available data has identified IPR-related obstacles for implementing one of the options in the standard, TLS 1.0 (IETF RFC 2246). To be able to implement IPP (RFC 2910) in either proprietary or open source software, it's advised to not implement the reference to IETF RFC 2246.

4.9   IPv4 (IETF)
Reference: IPv4 (RFC 791)

Formal name: INTERNET PROTOCOL version 4 (IPv4)

Version: September 1981

Number of pages: 49

Standards setting organisation: IETF (Internet Engineering Task Force)

Specification available through: http://tools.ietf.org/html/rfc791

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software.

4.10   IPv6 (IETF)
Reference: IPv6 (RFC 2460)

Formal name: Internet Protocol, Version 6 (IPv6): Specification

Version: December 1998

Number of pages: 39

Standards setting organisation: IETF (Internet Engineering Task Force), Network Working Group

Specification available through: http://tools.ietf.org/html/rfc2460

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software.

4.11 LDAP (IETF)

Reference: LDAP (RFC 4510)

Formal name: Lightweight Directory Access Protocol (LDAP): Technical Specification Road Map

Version: June 2006

Number of pages: 7

Standards setting organisation: IETF (Internet Engineering Task Force), Network Working Group

Specification available through: http://tools.ietf.org/html/rfc4510

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software. There are several software implementations of the standard: https://en.wikipedia.org/wiki/List_of_LDAP_software

4.12 MIME (IETF)

Reference: MIME (RFC 2045)

Formal name: Multipurpose Internet Mail Extensions (MIME) Part One: Format of Internet Message Bodies

Version: November 1996

Number of pages: 31

Standards setting organisation: IETF (Internet Engineering Task Force), Network Working Group

Specification available through: http://tools.ietf.org/html/rfc2045

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software.

4.13 NNTP (IETF)
Reference: NNTP (RFC 3977)

Formal name: Network News Transfer Protocol (NNTP)

Version: October 2006

Number of pages: 125

Standards setting organisation: IETF (Internet Engineering Task Force), Network Working Group

Specification available through: http://tools.ietf.org/html/rfc3977

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software.

4.14 NTP (IETF)
Reference: NTP (RFC 1305)

Formal name: Network Time Protocol (Version 3) Specification, Implementation and Analysis

Version: March 1992

Number of pages: 120

Standards setting organisation: IETF (Internet Engineering Task Force), Network Working Group

Specification available through: http://tools.ietf.org/html/rfc1305

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software. There are several software implementations of the standard:

https://en.wikipedia.org/wiki/Network_Time_Protocol#Software_impleme
ntations

4.15   POP3 (IETF)
Reference: POP3 (RFC 1939)

Formal name: Post Office Protocol - Version 3

Version: May 1996

Number of pages: 23

Standards setting organisation: IETF (Internet Engineering Task Force),
Network Working Group

Specification available through: http://tools.ietf.org/html/rfc1939

Comment: None

About IPR and the reuse of this standard: Analysis of the available data
has not identified any IPR-related obstacles for implementing the
standard in either proprietary or open source software.

4.16   SMTP (IETF)
Reference: SMTP (RFC 5321)

Formal name: Simple Mail Transfer Protocol

Version: October 2008

Number of pages: 95

Standards setting organisation: IETF (Internet Engineering Task Force),
Network Working Group

Specification available through: http://tools.ietf.org/html/rfc5321

Comment: None

About IPR and the reuse of this standard: Analysis of the available data
has not identified any IPR-related obstacles for implementing the
standard in either proprietary or open source software. There are several
software implementations of the standard:
https://en.wikipedia.org/wiki/List_of_mail_server_software#SMTP

4.17   SNMP (IETF)

Reference: SNMP (RFC 3411)

Formal name: An Architecture for Describing Simple Network Management Protocol (SNMP) Management Frameworks

Version: December 2002

Number of pages: 64

Standards setting organisation: IETF (Internet Engineering Task Force), Network Working Group

Specification available through: http://tools.ietf.org/html/rfc3411

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software.

4.18   TCP (IETF)
Reference: TCP (RFC 675)

Formal name: SPECIFICATION OF INTERNET TRANSMISSION CONTROL PROGRAM

Version: December 1974

Number of pages: 70

Standards setting organisation: IETF (Internet Engineering Task Force), Network Working Group

Specification available through: https://tools.ietf.org/html/rfc675

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software.

4.19   UDP (IETF)
Reference: UDP (RFC 768)

Formal name: User Datagram Protocol

Version: August 1980

Number of pages: 3

Standards setting organisation: IETF (Internet Engineering Task Force), Network Working Group

Specification available through: http://tools.ietf.org/html/rfc768

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software.

4.20 URI (IETF)
Reference: URI (RFC 2396)

Formal name: Uniform Resource Identifiers (URI): Generic Syntax

Version: August 1998

Number of pages: 40

Standards setting organisation: IETF (Internet Engineering Task Force), Network Working Group

Specification available through: http://tools.ietf.org/html/rfc2396

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software.

4.21 URL (IETF)
Reference: URL (RFC 2718)

Formal name: Guidelines for new URL Schemes

Version: November 1999

Number of pages: 10

Standards setting organisation: IETF (Internet Engineering Task Force), Network Working Group

Specification available through: http://tools.ietf.org/html/rfc2718

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software.

4.22 URN (IETF)
Reference: URN (RFC 2141)

Formal name: URN Syntax

Version: May 1997

Number of pages: 8

Standards setting organisation: IETF (Internet Engineering Task Force), Network Working Group

Specification available through: http://tools.ietf.org/html/rfc2141

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software.

4.23 UTF-8 (IETF)
Reference: UTF-8 (RFC 3629)

Formal name: UTF-8, a transformation format of ISO 10646

Version: November 2003

Number of pages: 14

Standards setting organisation: IETF (Internet Engineering Task Force), Network Working Group

Specification available through: http://tools.ietf.org/html/rfc3629

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software.

4.24 vCard (IETF)
Reference: vCard (RFC 6350)

Formal name: vCard Format Specification

Version: August 2011

Number of pages: 74

Standards setting organisation: IETF (Internet Engineering Task Force).

Specification available through: http://tools.ietf.org/html/rfc6350

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software.

4.25 ASN.1 (ISO)
Reference: ASN.1

Formal name: ISO/IEC 8824-1:2008: Information technology -- Abstract Syntax Notation One (ASN.1): Specification of basic notation

Version: Edition 4

Number of pages: 180

Standards setting organisation: ISO, TC/SC: ISO/IEC JTC 1/SC 6

Specification available through: http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=54012

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the

standard in either proprietary or open source software.

4.26 Country codes (ISO)
Reference: Country codes

Formal name: ISO 3166-1:2013: Codes for the representation of names of countries and their subdivisions -- Part 1: Country codes

Version: Edition 3 (Bilingual)

Number of pages: 72

Standards setting organisation: ISO, TC/SC: ISO/TC 46

Specification available through:
http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=63545

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software.

4.27 Currency codes (ISO)
Reference: Currency codes

Formal name: ISO 4217:2008: Codes for the representation of currencies and funds

Version: 7 (Bilingual)

Number of pages: 39

Standards setting organisation: ISO, TC/SC: ISO/TC 68/SC 7

Specification available through:
http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=46121

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software.

4.28 Dates and times (ISO)
Reference: Dates and times

Formal name: ISO 8601:2004 Data elements and interchange formats -- Information interchange -- Representation of dates and times

Version: Edition 3

Number of pages: 33

Standards setting organisation: ISO, TC/SC: ISO/TC 154

Specification available through:
http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=40874

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software. There are several software implementations of the standard:
http://microformats.org/wiki/iso-8601#ISO_8601_implementations_in_programming_libraries

4.29 PDF/A-1 (ISO)
Reference: PDF/A-1

Formal name: ISO 19005-1:2005 Document management -- Electronic document file format for long-term preservation -- Part 1: Use of PDF 1.4 (PDF/A-1)

Version: 1

Number of pages: 29

Standards setting organisation: ISO, TC/SC: ISO/TC 171/SC 2

Specification available through:
http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=38920

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software. There are several software implementations of the standard:
http://en.wikipedia.org/wiki/List_of_PDF_software

4.30 PNG (ISO)
Reference: PNG

Formal name: ISO/IEC 15948:2004 Information technology -- Computer graphics and image processing -- Portable Network Graphics (PNG): Functional specification

Version: 1

Number of pages: 80

Standards setting organisation: ISO, TC/SC: ISO/IEC JTC 1/SC 24

Specification available through:
http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=29581

Comment: PNG is also available through W3C:
http://www.w3.org/TR/2003/REC-PNG-20031110/

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software. According to W3C, no one has declared any patent for PNG:
http://www.w3.org/Graphics/PNG/Disclosures
"As of today, the International Standards Organisation (ISO), the PNG Development Group and the W3C are not aware of any royalty-bearing patents that are essential to implement the Portable Network Graphics specification."

There are several software implementations of the standard:
http://www.libpng.org/pub/png/pngapvw.html
http://en.wikipedia.org/wiki/Libpng

4.31 SQL (ISO)
Reference: SQL

Formal name: ISO/IEC 9075-1:2011: Information technology -- Database languages -- SQL -- Part 1: Framework (SQL/Framework)

Version: 4 (Monolingual)

Number of pages: 68

Standards setting organisation: ISO, TC/SC: ISO/IEC JTC 1/SC 32

Specification available through:
http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?
csnumber=53681

Comment: None

About IPR and the reuse of this standard: Analysis of the available data
has not identified any IPR-related obstacles for implementing the
standard in either proprietary or open source software.

4.32   OAI-PMH (OAI)
Reference: OAI-PMH

Formal name: The Open Archives Initiative Protocol for Metadata
Harvesting

Version: Protocol Version 2.0 of 2002-06-14, Document Version 2015-01-
08

Number of pages: Web

Standards setting organisation: Open Archives Initiative

Specification available through:
http://www.openarchives.org/OAI/openarchivesprotocol.html

Comment: None

About IPR and the reuse of this standard: Analysis of the available data
has not identified any IPR-related obstacles for implementing the
standard in either proprietary or open source software. There are several
software implementations of the standard:
https://en.wikipedia.org/wiki/Protocol_for_Metadata_Harvesting#Softwar
e

4.33   Genericode (OASIS)
Reference: Genericode

Formal name: Code List Representation (Genericode) Version 1.0

Version: Committee Specification 01, 28 December 2007

Number of pages: 85

Standards setting organisation: OASIS (Organization for the Advancement of Structured Information Standards), Code List Representation TC

Specification available through:
http://docs.oasis-open.org/codelist/cs-genericode-1.0/doc/oasis-code-list-representation-genericode.html
http://docs.oasis-open.org/codelist/cs-genericode-1.0/doc/oasis-code-list-representation-genericode.pdf

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software. According to OASIS no one has declared any patent for Genericode:
https://www.oasis-open.org/committees/codelist/ipr.php
"OASIS is not aware of any statements or declarations regarding IPR related to the work of this technical committee."

There are several software implementations of the standard:
https://wiki.oasis-open.org/codelist/Known_implementations_of_genericode

4.34   ODF 1.2 (OASIS)
Reference: ODF 1.2

Formal name: Open Document Format for Office Applications (OpenDocument) Version 1.2

Version: OASIS Standard, 29 September 2011

Number of pages: 102 (main), 864 (part 1), 234 (part 2), 35 (part 3)

Standards setting organisation: OASIS (Organization for the Advancement of Structured Information Standards), Open Document Format for Office Applications (OpenDocument) TC

Specification available through: http://docs.oasis-open.org/office/v1.2/OpenDocument-v1.2.pdf

Part 1: OpenDocument Schema:
http://docs.oasis-open.org/office/v1.2/OpenDocument-v1.2-part1.pdf

Part 2: Recalculated Formula (OpenFormula) Format:
http://docs.oasis-open.org/office/v1.2/OpenDocument-v1.2-part2.pdf

Part 3: Packages:
http://docs.oasis-open.org/office/v1.2/OpenDocument-v1.2-part3.pdf

https://lists.oasis-open.org/archives/tc-announce/201201/msg00001.html

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software. This standard uses the OASIS terms "RF on Limited Terms IPR Mode": https://www.oasis-open.org/committees/office/ipr.php

There are several software implementations of the standard:
http://en.wikipedia.org/wiki/OpenDocument_software
http://en.wikipedia.org/wiki/Comparison_of_OpenDocument_software

4.35   Unicode 6.2 (Unicode)
Reference: Unicode 6.2

Formal name: The Unicode Standard: Version 6.2 – Core Specification

Version: 26 September 2012

Number of pages: 690

Standards setting organisation: The Unicode Consortium

Specification available through:
http://www.unicode.org/versions/Unicode6.2.0/

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the

standard in either proprietary or open source software.

4.36   CSS (W3C)
Reference: CSS

Formal name: Cascading Style Sheets Level 2 Revision 1 (CSS 2.1) Specification

Version: W3C Recommendation, 7 June 2011, partly revised 17 December 2014

Number of pages: 487

Standards setting organisation: World Wide Web Consortium (W3C)

Specification available through:
http://www.w3.org/TR/2011/REC-CSS2-20110607/

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software.

4.37   HTML (W3C)
Reference: HTML

Formal name: HTML 4.01 Specification

Version: W3C Recommendation 24 December 1999

Number of pages: 389

Standards setting organisation: World Wide Web Consortium (W3C)

Specification available through:
http://www.w3.org/TR/1999/REC-html401-19991224/
http://www.w3.org/TR/html401/html40.pdf.gz

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software. There are several software implementations of the standard:

http://en.wikipedia.org/wiki/Comparison_of_HTML_editors

4.38   HTML5 (W3C)
Reference: HTML5

Formal name: HTML5: A vocabulary and associated APIs for HTML and XHTML

Version: W3C Recommendation 28 October 2014

Number of pages: 80

Standards setting organisation: World Wide Web Consortium (W3C), HTML Working Group, http://www.w3.org/html/wg/

Specification available through: http://www.w3.org/TR/2014/REC-html5-20141028/

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software. http://www.w3.org/2004/01/pp-impl/40318/status#current-disclosures

There are several software implementations of the standard: http://en.wikipedia.org/wiki/Comparison_of_HTML_editors

4.39   Organization ontology (W3C)
Reference: Organization ontology

Formal name: The Organization Ontology

Version: W3C Recommendation, 16 January 2014

Number of pages: Web

Standards setting organisation: World Wide Web Consortium (W3C)

Specification available through:
http://www.w3.org/TR/vocab-org/
http://www.w3.org/TR/2014/REC-vocab-org-20140116/

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software. There are several software implementations of the standard: http://www.w3.org/2011/gld/wiki/ORG_Implementations

4.40   RDF (W3C)
Reference: RDF

Formal name: Resource Description Framework (RDF): Concepts and Abstract Syntax

Version: W3C Recommendation 10 February 2004

Number of pages: Web

Standards setting organisation: World Wide Web Consortium (W3C), http://www.w3.org/2001/sw/RDFCore/

Specification available through:
http://www.w3.org/TR/rdf-concepts/
http://www.w3.org/TR/2004/REC-rdf-concepts-20040210/

Comment: None

About IPR and the reuse of this standard: Analysis of the available data has not identified any IPR-related obstacles for implementing the standard in either proprietary or open source software. There are several software implementations of the standard:
http://www.w3.org/2001/sw/RDFCore/20030331-advance.html
http://www.w3.org/2001/sw/wiki/Category:Tool

4.41   RDFa (W3C)
Reference: RDFa

Formal name: Resource Description Framework (RDF): Concepts and Abstract Syntax

Version: W3C Recommendation 25 February 2014

Number of pages: Web

Standards setting organisation: World Wide Web Consortium (W3C), RDFa Working Group, http://www.w3.org/2010/02/rdfa/

Specification available through:
http://www.w3.org/TR/rdf11-concepts/
http://www.w3.org/TR/2014/REC-rdf11-concepts-20140225/

Comment: None

About IPR and the reuse of this standard: Analysis of the available data
has not identified any IPR-related obstacles for implementing the
standard in either proprietary or open source software. There are several
software implementations of the standard:
http://www.w3.org/2001/sw/wiki/RDFa
http://en.wikipedia.org/wiki/RDFa

4.42   SVG (W3C)
Reference: SVG

Formal name: Scalable Vector Graphics (SVG) 1.1 (Second Edition)

Version: W3C Recommendation 16 August 2011

Number of pages: 826

Standards setting organisation: World Wide Web Consortium (W3C),
Scalable Vector Graphics (SVG) Working Group Charter,
http://www.w3.org/Graphics/SVG/2014/new-charter

Specification available through:
http://www.w3.org/TR/2011/REC-SVG11-20110816/

Comment: None

About IPR and the reuse of this standard: Analysis of the available data
has not identified any IPR-related obstacles for implementing the
standard in either proprietary or open source software. According to
W3C, neither the members of the SVG Working Group nor W3C is aware
of any patent that hinders implementation of SVG:
http://www.w3.org/Graphics/SVG/Disclosures
"As of today, the SVG Working Group participants and the W3C are not
aware of any royalty-bearing patents that are essential to implement the
deliverables of the SVG Working Group, which includes all versions of
the SVG specification and the SVG Mobile Profiles."

There are several software implementations of the standard:
http://www.w3.org/Graphics/SVG/WG/wiki/Implementations

4.43 WS-Policy (W3C)
Reference: WS-Policy

Formal name: Web Services Policy 1.5 - Framework

Version: W3C Recommendation, 4 September 2007

Number of pages: Web

Standards setting organisation: World Wide Web Consortium (W3C)

Specification available through:
http://www.w3.org/TR/ws-policy/
http://www.w3.org/TR/2007/REC-ws-policy-20070904/

Comment: None

About IPR and the reuse of this standard: Analysis of the available data
has not identified any IPR-related obstacles for implementing the
standard in either proprietary or open source software.

4.44 WSDL (W3C)
Reference: WSDL

Formal name: Web Services Description Language (WSDL) 1.1

Version: W3C Note, 15 March 2001

Number of pages: Web

Standards setting organisation: World Wide Web Consortium (W3C)

Specification available through:
http://www.w3.org/TR/wsdl
http://www.w3.org/TR/2001/NOTE-wsdl-20010315

Comment: None

About IPR and the reuse of this standard: Analysis of the available data
has not identified any IPR-related obstacles for implementing the
standard in either proprietary or open source software.

4.45 XML (W3C)
Reference: XML

Formal name: Extensible Markup Language (XML) 1.0 (Fifth Edition)

Version: W3C Recommendation 26 November 2008

Number of pages: Web

Standards setting organisation: World Wide Web Consortium (W3C),
XML Core Working Group
http://www.w3.org/XML/Core/

Specification available through:
http://www.w3.org/TR/2008/REC-xml-20081126/

Comment: None

About IPR and the reuse of this standard: Analysis of the available data
has not identified any IPR-related obstacles for implementing the
standard in either proprietary or open source software.

4.46   XSLT (W3C)
Reference: XSLT

Formal name: XSL Transformations (XSLT): Version 1.0

Version: W3C Recommendation 16 November 1999

Number of pages: Web

Standards setting organisation: World Wide Web Consortium (W3C),
XSLT Working Group,
http://www.w3.org/XML/2010/10/xsl-charter.html

Specification available through:
http://www.w3.org/TR/1999/REC-xslt-19991116

Comment: None

About IPR and the reuse of this standard: Analysis of the available data
has not identified any IPR-related obstacles for implementing the
standard in either proprietary or open source software.