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**PUBLICLY AVAILABLE SPECIFICATION PROCEDURE**

# Information technology — UPnP Device Architecture

## Part 25-1:
## Telephony device control protocol — Telephony architecture

*Technologies de l'information — Architecture de dispositif UPnP —*

*Partie 25-1*

ICS 35.200

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The ballot on the transposition of a PAS into an International Standard follows the JTC 1 PAS procedures contained in the JTC 1 Supplement, F.3.

Reflecting the importance of the PAS process, the JTC 1 secretariat shall also inform JTC 1 national bodies and Liaison Organisations, and those organisations authorized to be PAS submitters, of the initiation of any PAS ballot, the results of the ballot, and the identity of the JTC 1 subcommittee which will be responsible for any future work.

For ballot, JTC 1 National Bodies and the PAS Submitter shall receive both the PAS to be transposed and the accompanying Explanatory Report. During the ballot JTC 1 members may propose changes to the PAS. These can be resolved with the PAS Submitter after completion of the ballot.

The period for combined DIS voting shall be five months. In order to be accepted the DIS must be supported by 75 % of the votes cast (abstention is not counted as a vote) and by two-thirds of the P-members voting of JTC 1.

In the case of a failure of the ballot, JTC 1 shall make known to the Submitter the reasons which have led to the negative result. Based on this information, the Submitter may choose to re-submit a modified specification as a new PAS submission.

Once the Draft International Standard has been approved by JTC 1, it shall progress to the approval stage (FDIS).

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# Normative Terminology Changes

You ***must*** use the command `Old LoCase` from the Review group of the UPnP ribbon tab to locate and process lower case terms whose ISO/IEC meanings differ from their former UPnP meanings. Each such term is marked with a hidden bookmark, so there is no other easy way to identify them. (The former macro, `Review_OldLowerCase_Terms`, has been removed from the Word template `upnp4iecAdjunct.dotm`.)

Unlike upper case normative terms, lower case terms with new meanings cannot be mechanically corrected in the conversion for ISO/IEC. Each Working Committee needs to evaluate each of these terms in context to determine what changes to make.

**Marked terms fall into one of the four following categories:**

- **Non-normative in UPnP** (possibly with normative intent) → **normative in ISO/IEC**.
  Examples: "required", "shall", "recommended", "should", "may".
  - *Do not change*: Instances that actually had normative intent, but were not upper-cased.
  - *Change*: Instances that really were non-normative, to remain non-normative.
- **Non-normative in UPnP** (possibly with normative intent) → **statutory (legal or regulatory compliance) in ISO/IEC.**
  Example: "must".
  - *Do not change*: Instances that actually had statutory intent.
  - *Change*: Instances that actually had normative intent, but were not upper-cased.
    Example: "must" → "shall".
  - *Change*: Instances that really were non-normative, to remain non-statutory.
- **Non-normative in UPnP** (probably with normative intent) → **non-normative in ISO/IEC.**
  Examples: "mandatory", "prohibited", "optional".
  - *Change*: Instances that actually had normative intent, to be normative in ISO/IEC.

    Common replacements:
    "mandatory" → "required"  "… is mandatory" → "shall …"
    "prohibited" → "not allowed"
    "optional" → "allowed"
  - *Change*: Instances of "mandatory" and "prohibit(s | ed | ing | ion)" that really were non-normative, to remain non-normative. The *ISO/IEC Directives* use the word "prohibit" in the definition of normative terms, and the word "mandatory" even more broadly in the definition of both normative and statutory terms.
  - *No need to change*: Non-normative instances of "optional".
- **Non-normative in UPnP → normative in ISO/IEC.**
  Examples: "ought", "allow", "permissible", "permit", "accept".

  *Change*: All instances, to avoid becoming normative.

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More information about ISO/IEC normative (and more general "provisioning") terms may be found in the *ISO/IEC Directives, Part 2*, Annex H.

**Table 0 — Open issues for ISO/IEC conversion**

| Status [a] | Document Locations [b] | Description [c] | UPnP Notes |
|---|---|---|---|
| AU | 2 | Moved UDA 1.0 from informative to normative references. Since architecture document is normative, its references to UDA are also normative.<br><br>Removed RFC 2119 from references, since it no longer applies. Note that, had it been retained, it would have been a normative reference. | |
| AU | [1] | Added the bookmark named 'deviceRef' for UDA 1.0.<br><br>Removed the bookmark named 'igdRef' that had been associated with the UDCA entry. It was not referenced, and, presumably, was an inadvertent holdover from another document. | |
| AU | 3 | Note that the abbreviated terms have been included with the terms themselves. This is the proper presentation for ISO/IEC documents.<br><br>Some Telephony documents that were converted earlier have separated the abbreviations from their expansions. These should be corrected in those documents. | |
| AU | # | All document-internal cross-references to figures and sections (now clauses, subclauses and annexes) were hard-coded. All known occurrences were corrected. | |
| AU | Annex B | IPv6 and Naming Conventions refs are retained as informative, since they are not referenced in this document. | |
| G-U | # | **Hanging paragraphs, singleton subdivisions**<br><br>When a clause/subclause is subdivided into subclauses or an annex is subdivided into clauses, neither hanging paragraphs nor singleton subdivisions are allowed.<br><br>• A *hanging paragraph* is any text, table, figure or any other content between the parent numbered paragraph and the first child subdivision.<br><br>• A *singleton subdivision* is when there is only one subdivision at any level. There must be at least 2.<br><br>**Pending GSC action:** GSC will provide a command to detect both hanging paragraphs and singleton subdivisions.<br><br>**Pending UPnP action:** UPnP editors should correct all hanging paragraphs and singleton subdivisions as they encounter them, but the tool to identify them is coming. | |
| G-U | # | **Notes and Examples**<br><br>The *ISO/IEC Directives* require that Notes and Examples be set off by a distinctive font style and/or indentation. Notes and Examples are also not allowed to contain normative statements.<br><br>**Pending GSC action:** GSC will provide a command for the following UPnP use:<br><br>**Pending UPnP action:** UPnP editors will use new command to walk through the document, stopping at each Note and Example that does not use the IEC ¶ style "NOTE". Proper informative instances need to be restyled. Instances with normative content need to be reworded, or the normative content moved elsewhere. | |

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| Status [a] | Document Locations [b] | Description [c] | UPnP Notes |
|---|---|---|---|
| G-U | # | **Cross-reference form**<br>The *ISO/IEC Directives* require that all document cross-references to tables, figures, clauses, subclauses and subclauses be to the referent's (alpha)numeric designator, *not* to its title/caption/label.<br>**Pending GSC action:** GSC will provide a command for the following UPnP use:<br>**Pending UPnP action:** UPnP editors will use new command to walk through the document, stopping at each cross-reference that references the target's text instead of its alphanumeric designator, so that the editor can correct it. | |
| G | — | **Remove old styles**<br>This document still contains ¶ and character styles used before the ISO/IEC conversion. These style need to be removed.<br>**Pending GSC action:** GSC will provide a command that will automatically remove all of the old styles. | |
| G | — | **Use only approved styles**<br>Word 2007 and 2010 can be configured to disable use of all styles not in the approved style sets for UPnP and ISO/IEC documents.<br>**Pending GSC action:** GSC will provide a command to toggle the allowing and disallowing of unapproved styles. | |
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| Status [a] | Document Locations [b] | Description [c] | UPnP Notes |
|---|---|---|---|

[a] **Status key:**

- • Informational, requires no action by anyone.
- G An issue that awaits action by G Shults Consulting (GSC).
- G-U An issue that awaits action by GSC, and then requires follow-up action by UPnP.
- U An issue that requires action by UPnP.
- U? An issue that GSC considers closed, but UPnP might disagree. UPnP should review.
- AU An issue that was resolved during conversion by GSC, but that UPnP needs to understand to avoid problem recurrence
- ✓ Issue is closed.

[b] **Document Locations**:

- # Numerous instances, not specifically identified.
- — Document generic, not tied to specific locations.

[c] GSC: G Shults Consulting, ISO/IEC conversion contractor

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*TelephonyArchitecture:1*

For UPnP Version 1.0

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## 1 Scope

This document describes an architecture that allows UPnP Telephony devices, services and control points defined in the propoded DCP to be deployed in the home network environment and to enable management of incoming and outgoing telephony calls, messaging, presence information and phone features configuration through UPnP means from devices within the home.

In order to accommodate the above mentioned goals, the Telephony Architecture defines several UPnP devices and services that can be embedded to the devices defined for telephony. The architecture model describes interaction among the telephony devices, services and control points. The architecture also describes various deployment scenarios.

The architecture does not describe any interfaces to “service” gateways that will enable non-UPnP entities to interact with the UPnP devices, services and control points physically attached to the home network.

## 2 Normative references

[1] – UPnP Device Architecture, version 1.0.
Available at: http://www.upnp.org/specs/arch/UPnP-arch-DeviceArchitecture-v1.0-20080424.pdf.
Latest version available at: http://www.upnp.org/specs/arch/UPnP-arch-DeviceArchitecture-v1.0.pdf.

~~[RFC 2119] – S. Bradner, RFC 2119: Key words for use in RFCs to Indicate Requirement Levels, 1997.~~
~~Available at: http://www.faqs.org/rfcs/rfc2119.html.~~

## 3 Terms, definitions and abbreviated terms

For the purposes of this document, the terms and definitions given in [1] and the following apply.

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