

# ETSI TS 124 430 V8.0.0 (2008-04)

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*Technical Specification*

**Digital cellular telecommunications system (Phase 2+);  
Universal Mobile Telecommunications System (UMTS);  
TISPAN;  
Presence Service Capability;  
Protocol Specification [3GPP TS 24.141 V7.0.0, modified and  
OMA-TS-Presence\_SIMPLE-V1\_0, modified]  
(3GPP TS 24.430 version 8.0.0 Release 8)**

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Reference

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Keywords

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## Foreword

This Technical Specification (TS) has been produced by ETSI 3rd Generation Partnership Project (3GPP).

The present document may refer to technical specifications or reports using their 3GPP identities, UMTS identities or GSM identities. These should be interpreted as being references to the corresponding ETSI deliverables.

The cross reference between GSM, UMTS, 3GPP and ETSI identities can be found under <http://webapp.etsi.org/key/queryform.asp>.

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## Foreword

This Technical Specification (TS) was been produced by ETSI Technical Committee Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN) and originally published as ETSI ES 283 030 [10]. It was transferred to the 3rd Generation Partnership Project (3GPP) in December 2007.

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

- x the first digit:
  - 1 presented to TSG for information;
  - 2 presented to TSG for approval;
  - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

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# 1 Scope

The present document provides the protocol details for the presence service within the IP Multimedia (IM) Core Network (CN) subsystem based on the Session Initiation Protocol (SIP) and SIP Events as defined in ES 283 003 [1].

Where possible the present document specifies the requirements for this protocol by reference to specifications produced by the IETF within the scope of SIP and SIP Events, either directly, or as modified by ES 283 003 [1].

The Presence XDMS and Resource List Server (RLS) specific data formats and XCAP application usages are within the scope of the present document. These are used within the context of the generic XDM capability described in TS 183 038 [2].

The present document is applicable to Application Servers (ASs) and User Equipment (UE) providing presence functionality.

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# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

Referenced documents which are not found to be publicly available in the expected location might be found at <http://docbox.etsi.org/Reference>.

- [1] ETSI ES 283 003: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); IP Multimedia Call Control Protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP) Stage 3 [3GPP TS 24.229 (Release 7), modified]".
- [2] ETSI TS 183 038: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); PSTN/ISDN Simulation Services; Extensible Markup Language (XML) Document Management; Protocol Specification (Endorsement of OMA-TS-XDM\_Core-V1\_0-20051103-C and OMA-TS-XDM\_Shared-V1\_0-20051006-C)".
- [3] 3GPP TS 24.141: "3rd Generation Partnership Project; Technical Specification Group Core Network; Presence service using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3 (Release 7)".
- [4] OMA-TS-Presence-SIMPLE-V1-0: "Presence SIMPLE specification".
- [5] ETSI TS 187 003: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); NGN Security; Security Architecture".
- [6] ETSI TS 182 008: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); Presence Service; Architecture and functional description (Endorsement of 3GPP TS 23.141 and OMA-AD-Presence-SIMPLE-V1-0)".
- [7] ETSI TS 182 006: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); IP Multimedia Subsystem (IMS); Stage 2 description (3GPP TS 23.228 v7.2.0, modified)".

- [8] ETSI TS 183 033: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); IP Multimedia; Diameter based protocol for the interfaces between the Call Session Control Function and the User Profile Server Function/Subscription Locator Function; Signalling flows and protocol details [3GPP TS 29.228 V6.8.0 and 3GPP TS 29.229 V6.6.0, modified]".
- [9] ETSI TR 180 000: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); NGN Terminology".
- [10] ETSI ES 283 030 V1.1.1: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); Presence Service Capability; Protocol Specification [3GPP TS 24.141 V7.0.0, modified and OMA-TS-Presence\_SIMPLE-V1\_0, modified]".

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## Endorsement notice

The present document, in conjunction with 3GPP TS 24.141 [3] and OMA-TS-Presence\_SIMPLE-V1\_0 [4] provides part of the specifications for the stage 3 of the presence service for NGNs.

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## Endorsement of OMA-TS-Presence\_SIMPLE-V1\_0

This clause provides an endorsement of OMA "Presence SIMPLE Specification", Candidate Version 1.0 - 22 Nov 2005, OMA-TS-presence\_SIMPLE-V1\_0-20051122-C [4].

The elements of OMA "Presence SIMPLE Specification", Candidate Version 1.0 - 22 Nov 2005, OMA-TS-presence\_SIMPLE-V1\_0-20051122-C [4] apply, with the following modifications.

References to 3GPP2 documents are not applicable in any of the clauses of the present document.

The references listed in table 1 are replaced by references applicable to NGN.

**Table 1: List of references to be replaced**

| Reference no. | OMA-TS-Presence_SIMPLE-V1_0                                                                                                          | Applicable reference in the present document                                                                                                                                       |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CONTENTIND    | Draft-ietf-sip-content-indirect-mech-05 "A Mechanism for Content Indirection in Session Initiation Protocol (SIP) Messages".         | This is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned.                                |
| EVENTLIST     | Draft-ietf-simple-event-list-06: "A Session Initiation Protocol (SIP) Event Notification Extension for Resource Lists".              | <i>This draft is now at v07 and is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned.</i> |
| FILTERFORMAT  | Draft-ietf-simple-filter-format-05: "An Extensible Markup Language (XML) Based Format for Event Notification Filtering".             | This is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned.                                |
| FILTER        | draft-ietf-simple-event-filter-funct-05: "Functional Description of Event Notification Filtering".                                   | This is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned.                                |
| PARNOT        | draft-ietf-simple-partial-notify-06: "Session Initiation Protocol (SIP) extension for Partial Notification of Presence Information". | This is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned.                                |
| PARFORMAT     | draft-ietf-simple-partial-pidf-format-05: "Presence Information Data format (PIDF) Extension for Partial Presence".                  | This is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned.                                |
| PIDFLO        | draft-ietf-geopriv-pidf-lo-03: "Presence-based GEOPRIV Location Object Format".                                                      | This is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned.                                |
| PRESDATAMODEL | draft-ietf-simple-presence-data-                                                                                                     | This is copied to the bibliography as an informational document                                                                                                                    |

| Reference no.      | OMA-TS-Presence_SIMPLE-V1_0                                                                                                                                         | Applicable reference in the present document                                                                                                                                |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                    | model-06: "A Data Model for Presence".                                                                                                                              | for the present document and will be removed once the RFC number has been assigned.                                                                                         |
| PRESRULES          | draft-ietf-simple-presence-rules-03: "Presence Authorization Rules".                                                                                                | This draft is now at v04 and is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned. |
| RPID               | draft-ietf-simple-rpid-09: "RPID: Rich Presence Extensions to the Presence Information Data Format (PIDF)".                                                         | This is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned.                         |
| XCAP_Diff          | draft-ietf-simple-xcap-diff-01: "An Extensible Markup Language (XML) Document Format for Indicating Changes in XML Configuration Access Protocol (XCAP) Resources". | This draft is now at v02 and is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned. |
| 3GPP TS 24.141 [3] | "Presence service using the IP Multimedia (IM) Core Network (CN) subsystem; Stage-3".                                                                               | The present document.                                                                                                                                                       |
| 3GPP TS 32.260     | "Charging Management; IP Multimedia Subsystem (IMS) Charging".                                                                                                      | Not required by the present document.                                                                                                                                       |
| 3GPP TS 33.141     | "Presence Service; Security".                                                                                                                                       | Not required for the present document refer to TS 187 003 [5].                                                                                                              |

Clause 1 does not apply.

Clause 5 does not apply with the exceptions of clauses 5.4.3, 5.4.5, 5.5.4 and 5.6 to 5.10.

Clause 6 does not apply.

Clause 7 does not apply.

Clause 8 does not apply and is outside the scope of the present document.

Clause 9 does not apply and is covered in ES 283 003 [1].

Clause 10 does not apply with the exception of clause 10.5.

NOTE 1: Care must be taken when using the willingness PIDF element as it is unclear as to the meaning of this for the various entities involved.

Presence service providers shall ensure that a single composition policy is presented for individual presentities (e.g. such that where a presentity is supported by multiple presence servers there is no change in the view seen by watchers).

NOTE 2: A specification of a suitable single composition policy is given in OMA-TS-Presence\_SIMPLE-V1\_0 [4] subclauses 5.4.3. IETF is in the process of developing guidelines for composition policies.

Clause 11 does not apply and is covered in ES 283 003 [1].

Appendix A does not apply.

Appendix B does not apply. Device management is outside the scope of the present document.

Appendix C does not apply. Continuous provisioning is outside the scope of the present document.

Appendix E does not apply. Filter criteria is outside the scope of the present document.



## Endorsement of 3GPP TS 24.141

This clause provides an endorsement of 3GPP TS 24.141 V7.0.0 [3] "Presence service using the IP Multimedia (IM) Core Network (CN) subsystem".

The elements of 3GPP TS 24.141 V7.0.0 (2005-12) [3] "Presence service using the IP Multimedia (IM) Core Network (CN) subsystem" apply, with the following modifications:

The references listed in table 2 are replaced by references applicable to NGN.

**Table 2: List of references to be replaced**

| Reference no. | Reference in 3GPP TS 24.141                                                                                                                                           | Applicable reference in the present document                                                                                                                                                                                                                                                                                                                                                            |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [3]           | 3GPP TS 23.141: "Presence service; Architecture and functional description; Stage 2".                                                                                 | TS 182 008 [6]: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); Presence Service; Architecture and functional description (Endorsement of 3GPP TS 23.141 and OMA-AD-Presence_SIMPLE-V1_0)".                                                                                                                                                         |
| [5]           | 3GPP TS 23.228: "IP Multimedia Subsystem (IMS); Stage 2".                                                                                                             | TS 182 006 [7]: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); IP Multimedia Subsystem (IMS); Stage 2 description (3GPP TS 23.228 v7.2.0, modified)".                                                                                                                                                                                              |
| [9]           | 3GPP TS 24.229: "Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3". | ES 283 003 [1]: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); Endorsement of "IP Multimedia Call Control Protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP) Stage 3 (Release 6)" for NGN Release 1".                                                                                                      |
| [10]          | 3GPP TS 29.228: "IP Multimedia (IM) Subsystem Cx and Dx Interfaces; Signalling flows and message contents".                                                           | TS 183 033 [8]: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); IP Multimedia: IP Multimedia Subsystem (IMS) Cx and Dx Interfaces; Signalling flows and message contents and IP Multimedia (IM) Subsystem Cx and Dx Interfaces; Cx and Dx interfaces based on the Diameter protocol [3GPP TS.29.228 V.6.8.0 and 3GPP TS.29.229 V.6.6.0, modified]". |
| [24]          | draft-ietf-simple-partial-notify-05 (May 2005): "Session Initiation Protocol (SIP) extension for Partial Notification of Presence Information".                       | This draft is at v06 and is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned.                                                                                                                                                                                                                                 |
| [25]          | draft-ietf-simple-prescaps-ext-04 (June 2005): "User Agent Capability Extension to Presence Information Data Format (PIDF)".                                          | This draft is at v05 and is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned.                                                                                                                                                                                                                                 |
| [26]          | draft-ietf-simple-rpid-08 (July 2005): "RPID: Rich Presence Extensions to the Presence Information Data Format (PIDF)".                                               | This draft is at v09 and is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned.                                                                                                                                                                                                                                 |
| [30]          | draft-ietf-simple-filter-format-05 (March 2005): "An Extensible Markup Language (XML) Based Format for Event Notification Filtering"                                  | This is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned.                                                                                                                                                                                                                                                     |
| [31]          | draft-ietf-simple-event-filter-funct-05 (March 2005): "Functional Description of Event Notification Filtering".                                                       | This is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned.                                                                                                                                                                                                                                                     |
| [32]          | draft-ietf-simple-cipid-06 (July 2005): "CIPID: Contact Information in Presence Information Data Format".                                                             | This is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned.                                                                                                                                                                                                                                                     |
| [37]          | draft-ietf-geopriv-pidf-lo-03 (September 2004): "A Presence-based GEOPRIV Location Object Format".                                                                    | This is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned.                                                                                                                                                                                                                                                     |

| Reference no. | Reference in 3GPP TS 24.141                                                                                                                                                      | Applicable reference in the present document                                                                                                                                    |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [38]          | draft-ietf-simple-pidf-format-02 (October 2004): "Presence Information Data Format (PIDF) Extension for Partial Presence".                                                       | This draft RFC is now at v04 and is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned. |
| [39]          | draft-ietf-simple-xcap- diff-01 (July 2005): "An Extensible Markup Language (XML) Document Format for Indicating Changes in XML Configuration Access Protocol (XCAP) Resources". | This draft is now at v02 and is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned      |
| [40]          | draft-ietf-sip-content-indirect-mech-05 (October 2004): "A Mechanism for Content Indirection in Session Initiation Protocol (SIP) Messages".                                     | This is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned.                             |
| [43]          | draft-ietf-sipping-config-framework-06 (February 2005): "A Framework for Session Initiation Protocol User Agent Profile Delivery".                                               | This draft is now at v07 and is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned.     |
| [44]          | draft-ietf-simple-presence-data-model-04 (August 2005): "A Data Model for Presence".                                                                                             | This is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned.                             |
| [45]          | draft-ietf-simple-partial-publish-03 (July 2005): "Publication of Partial Presence Information".                                                                                 | This is copied to the bibliography as an informational document for the present document and will be removed once the RFC number has been assigned.                             |

Clause 1 does not apply.

Clause 3.1: the definition of UE is replaced by the definition agreed in TR 180 000 [9].

Clause 6 does not apply. This will be covered in the TS 183 038 [2] and the presence specific part of the OMA above.

Clause A.8 does not apply.

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## Annex ZA (informative): Bibliography

draft-ietf-sip-content-indirect-mech-05: "A Mechanism for Content Indirection in Session Initiation Protocol (SIP) Messages".

draft-ietf-simple-event-list-07: "A Session Initiation Protocol (SIP) Event Notification Extension for Resource Lists".

draft-ietf-simple-filter-format-05: "An Extensible Markup Language (XML) Based Format for Event Notification Filtering".

draft-ietf-simple-event-filter-funct-05: "Functional Description of Event Notification Filtering".

draft-ietf-simple-partial-notify-06: "Session Initiation Protocol (SIP) extension for Partial Notification of Presence Information".

draft-ietf-simple-partial-pidf-format-05: "Presence Information Data format (PIDF) Extension for Partial Presence".

draft-ietf-geopriv-pidf-lo-03: "Presence-based GEOPRIV Location Object Format".

draft-ietf-simple-presence-data-model-06: "A Data Model for Presence".

draft-ietf-simple-presence-rules-04: "Presence Authorization Rules".

draft-ietf-simple-rpid-09: "RPID: Rich Presence Extensions to the Presence Information Data Format (PIDF)".

draft-ietf-simple-xcap-diff-02: "An Extensible Markup Language (XML) Document Format for Indicating Changes in XML Configuration Access Protocol (XCAP) Resources".

draft-ietf-simple-prescaps-ext-04 (June 2005): "User Agent Capability Extension to Presence Information Data Format (PIDF)".

draft-ietf-simple-cipid-06: "CIPID: Contact Information in Presence Information Data Format".

draft-ietf-sipping-config-framework-07: "A Framework for Session Initiation Protocol User Agent Profile Delivery".

draft-ietf-simple-partial-publish-03: "Publication of Partial Presence Information".

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## Annex ZZ (informative): Change history

| Change history |       |           |    |     |                                                                                      |       |       |
|----------------|-------|-----------|----|-----|--------------------------------------------------------------------------------------|-------|-------|
| Date           | TSG # | TSG Doc.  | CR | Rev | Subject/Comment                                                                      | Old   | New   |
| 2006-04        |       |           |    |     | Publication as <b>ETSI ES 283 030</b>                                                |       | 1.1.1 |
| 2007-12        |       |           |    |     | Conversion to <b>3GPP TS 24.430</b>                                                  |       | 1.1.2 |
| 2008-03        | CT-39 | CP-080085 |    |     | Version 1.1.2 approved in CP-080085 and version 7.0.0 created by MCC for publication | 1.1.2 | 7.0.0 |
| 2008-03        |       |           |    |     | Based on the decision in CT-39 version 8.0.0 created by MCC                          | 7.0.0 | 8.0.0 |

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## History

| <b>Document history</b> |            |             |
|-------------------------|------------|-------------|
| V8.0.0                  | April 2008 | Publication |
|                         |            |             |
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