

Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); NGN based IPTV mapping or interconnect between IPTV systems

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[ETSI TR 182 030 V3.1.1 \(2011-05\)](https://standards.iteh.ai/catalog/standards/etsi/8b2dbcf8-34bb-4421-a75c-83b2f73cf31d/etsi-tr-182-030-v3-1-1-2011-05)

<https://standards.iteh.ai/catalog/standards/etsi/8b2dbcf8-34bb-4421-a75c-83b2f73cf31d/etsi-tr-182-030-v3-1-1-2011-05>



Reference

DTR/TISPAN-02079-NGN-R3

Keywords

architecture, IMS, interconnection, interworking,
IP, TV

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88


 (https://standards.iteh.ai)
 Document Preview

Important notice

Individual copies of the present document can be downloaded from:

<http://www.etsi.org>

The present document may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the PDF version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status. Information on the current status of this and other ETSI documents is available at

<http://portal.etsi.org/tb/status/status.asp>

If you find errors in the present document, please send your comment to one of the following services:

http://portal.etsi.org/chaicor/ETSI_support.asp

Copyright Notification

No part may be reproduced except as authorized by written permission.
The copyright and the foregoing restriction extend to reproduction in all media.
Some material contained herein is the copyright of, or has been supplied by ITU-T and the Open IPTV Forum.

© European Telecommunications Standards Institute 2011.
All rights reserved.

DECTTM, **PLUGTESTS**TM, **UMTS**TM, **TIPHON**TM, the TIPHON logo and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members.

3GPPTM is a Trade Mark of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

LTETM is a Trade Mark of ETSI currently being registered for the benefit of its Members and of the 3GPP Organizational Partners.

GSM® and the GSM logo are Trade Marks registered and owned by the GSM Association.

Contents

Intellectual Property Rights	4
Foreword.....	4
1 Scope	5
2 References	5
2.1 Normative references	5
2.2 Informative references.....	5
3 Definitions and abbreviations.....	7
3.1 Definitions.....	7
3.2 Abbreviations	7
4 TISPAN NGN IPTV architectures - comparing of functionalities and services	8
5 Mapping and interworking with other IPTV systems	11
5.1 NGN Integrated IPTV	11
5.1.1 NGN non-IMS based IPTV in ITU-T	11
5.1.2 NGN non-IMS based IPTV in ATIS	12
5.2 IMS based IPTV	12
5.2.1 IMS based IPTV in ITU-T	13
5.2.2 IMS based IPTV in ATIS	14
5.2.3 IMS based PSS and MBMS User Service in 3GPP	14
5.2.3.1 Mapping between TISPAN entities and 3GPP IMS based PSS and MBMS	15
5.2.3.2 Mapping between 3GPP IMS based PSS and MBMS and TISPAN IMS based IPTV architecture	16
5.2.3.3 Mapping to TISPAN reference points	17
5.2.4 IMS based IPTV in OIPF	17
5.2.4.1 Mapping between TISPAN entities and OIPF IMS based IPTV	17
5.2.4.2 Mapping to TISPAN reference points.....	19
6 Selected TISPAN IPTV services to mobile UE over existing mobile access networks.....	19
6.1 3GPP mobile access network	19
6.2 DVB-H access network	20
7 TISPAN IPTV Interconnection models and support for mobility.....	21
7.1 Use cases	21
7.1.1 Remote pure data access to IPTV provider.....	21
7.1.2 Interconnect to home IPTV provider	21
7.1.3 Visited - home network roaming between IPTV providers -served only from home network	21
7.1.4 Visited - home network roaming between IPTV providers -served from home and/or visited network	22
7.1.5 Visited - home network roaming between IPTV providers -served only from visited network	22
7.2 IPTV interconnection mechanisms for mobility support.....	22
7.3 IMS based IPTV Interconnection model and related signalling flow.....	22
7.3.1 Interconnection model using IMS roaming to home IMS IPTV	23
7.3.2 Signalling flows	23
7.3.2.1 UE start-up procedures.....	24
7.3.2.2 CoD procedures.....	25
7.4 NGN integrated IPTV Interconnection model and related signalling flow	26
7.5 Support for hybrid services and related examples of signalling flow	26
7.5.1 Support for hybrid services with NGN integrated IPTV.....	27
7.5.2 Support for hybrid services with IMS based IPTV	28
History	30

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: *"Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards"*, which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<http://webapp.etsi.org/IPR/home.asp>).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Foreword

This Technical Report (TR) has been produced by ETSI Technical Committee Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN).

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[ETSI TR 182 030 V3.1.1 \(2011-05\)](#)

<https://standards.iteh.ai/catalog/standards/etsi/8b2dbcf8-34bb-4421-a75c-83b2f73cf31d/etsi-tr-182-030-v3-1-1-2011-05>

1 Scope

The present document analyses existing NGN-based IPTV functional architectures (IMS based IPTV, NGN integrated IPTV) and its features.

The scope of the present document includes:

- comparison of architectural aspects between TISPAN NGN based IPTV and 3GPP MBMS/PSS (IMS based or non-IMS based MBMS/PSS) with aim to consider possible mappings of functionalities or feasibility of scenarios for interworking;
- consider IPTV work within other SDOs/Fora with relation to TISPAN NGN based IPTV architecture (e.g. relation with ITU-T IMS/non-IMS based IPTV);
- consider the impacts for providing selected TISPAN IPTV services to mobile UE over existing mobile access networks;
- consider the impacts to support IPTV interconnection models from TISPAN stage 2 specification.

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the reference document (including any amendments) applies.

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

NOTE: While any hyperlinks included in this clause were valid at the time of publication ETSI cannot guarantee their long term validity.

2.1 Normative references

The following referenced documents are necessary for the application of the present document.

Not applicable.

2.2 Informative references

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] ETSI TS 182 027: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); IPTV Architecture; IPTV functions supported by the IMS subsystem".
- [i.2] ETSI TS 182 028: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); NGN integrated IPTV subsystem Architecture".
- [i.3] ITU-T Recommendation Y.1910 (2008): "IPTV functional architecture".
- [i.4] ETSI TS 126 237: "Universal Mobile Telecommunications System (UMTS); LTE; IMS based PSS and MBMS User Service; Protocols (3GPP TS 26.237 version 8.0.0 Release 8)".
- [i.5] ETSI TS 123 506: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); TISPAN; IP Multimedia Subsystem (IMS); Stage 2 description [3GPP TS 23.228 Release 7, modified] (3GPP TS 23.506 version 8.1.0 Release 8)".