



Geneva, 1/09/2026

Ref: **TSB AAP-43**

AAP/SO

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To:

- Administrations of Member States of the Union;
- The State of Palestine (Res. 99 (Rev. Dubai, 2018));
- ITU-T Sector Members;
- ITU-T Associates;
- ITU Academia

Copy to:

- The Chairs and Vice-Chairs of Study Groups;
- The Director of the Telecommunication Development Bureau;
- The Director of the Radiocommunication Bureau

Subject: **Situation concerning Recommendations under the Alternative Approval Process (AAP)**

Dear Sir/Madam,

The Alternative Approval Process (AAP) defined in Recommendation ITU-T A.8 applies to Recommendations that do not have policy or regulatory implications and which, therefore, do not require formal consultation of Member States (see ITU Convention 246B).

Annex 1 lists those texts whose status has changed compared with previous TSB AAP Announcements.

Any member wishing to submit a comment relative to a Recommendation under AAP is encouraged to use the on-line AAP comment submission form available on the page of the Recommendation via <https://www.itu.int/t/aap/aap-recs> (see **Annex 2**). Alternatively, comments may be submitted by completing the form in Annex 3 and sending it to the secretariat of the concerned study group.

Please note that comments that simply support adoption of the text in question are not encouraged.

Yours faithfully,

Seizo Onoe

Director of the Telecommunication Standardization Bureau

Annexes: 3

Result of AAP-43:

Total Recommendations under AAP: 103

Total Recommendations Approved: 73

Status codes used in the AAP announcements:

LC = Last Call

LJ = Last Call Judgment (includes comment resolution)

AR = Additional Review

AJ = Additional Review Judgment (includes comment resolution)

SG = For Study Group approval

A = Approved

AT = Approved with typographic corrections

AC = Approved after Additional Review of Comments

NA = Not approved

TAP = Moved to TAP (ITU-T A.8 / § 5.2)

ITU-T website entry page:

<https://www.itu.int/ITU-T>

Alternative approval process (AAP) welcome page:

<https://www.itu.int/t/aap/about-aap>

ITU-T AAP Recommendation website:

<https://www.itu.int/t/aap/aap-recs>

Study Group web pages and contacts:

SG2	https://www.itu.int/go/tsg2	tsbsg2@itu.int
SG3	https://www.itu.int/go/tsg3	tsbsg3@itu.int
SG5	https://www.itu.int/go/tsg5	tsbsg5@itu.int
SG11	https://www.itu.int/go/tsg11	tsbsg11@itu.int
SG12	https://www.itu.int/go/tsg12	tsbsg12@itu.int
SG13	https://www.itu.int/go/tsg13	tsbsg13@itu.int
SG15	https://www.itu.int/go/tsg15	tsbsg15@itu.int
SG17	https://www.itu.int/go/tsg17	tsbsg17@itu.int
SG20	https://www.itu.int/go/tsg20	tsbsg20@itu.int
SG21	https://www.itu.int/go/tsg21	tsbsg21@itu.int

Situation concerning Study Group 5 Recommendations under AAP

Rec #Title		Last Call (LC)			Additional Review (AR)			Status
		Start / End	LC Result	LJ Result	Start / End	AR Result	AJ Result	
L.1493 (L.ICT VPP)	Framework and methodology for assessing ICT-based virtual power plants to climate change mitigation (Summary)	2026-07-01 2026-07-28	LJ	AR	2026-09-01 2026-09-21			AR

Situation concerning Study Group 11 Recommendations under AAP

Rec #	Title	Last Call (LC)			Additional Review (AR)			Status
		Start / End	LC Result	LJ Result	Start / End	AR Result	AJ Result	
Q.3067 (Q.Reg Frame RRDN)	Requirements and framework for network-based rapid response to disaster caused by natural hazards (Summary)	2026-09-01 2026-09-28						LC
Q.3068 (Q.S-NICE-SA)	Signalling architecture of S-NICE (Software-defined network intelligence capability enhancement) (Summary)	2026-09-01 2026-09-28						LC
Q.3069 (Q.IBN-SA)	Signalling architecture of Intent-Based Network for network evolution (Summary)	2026-09-01 2026-09-28						LC
Q.3725 (Q.BNG-IBN)	Signalling requirements for virtualized Broadband Network Gateway in Intent-Based Network (Summary)	2026-09-01 2026-09-28						LC
Q.3726 (Q.SARO)	Signalling requirements for acceleration resources orchestration in multi-access edge computing (Summary)	2026-09-01 2026-09-28						LC
Q.3743 (Q.SCC)	Signalling requirements and data models of cooperative controller (Summary)	2026-09-01 2026-09-28						LC
Q.4079 (Q.MPCO)	Monitoring parameters for protocol and resource of software defined networking and network functions virtualization-based central office service (Summary)	2026-09-01 2026-09-28						LC
Q.4107 (Q.HP2P-fvcp)	Hybrid peer-to-peer (P2P) communications: Control protocol for feature-based video services (Summary)	2026-09-01 2026-09-28						LC
Q.4166 (Q.QKDNi KM)	Protocols for interfaces between key managers for quantum key distribution network interworking (Summary)	2026-09-01 2026-09-28						LC
Q.4167 (Q.QKDN GC)	General control protocols for interfaces on quantum key distribution network controller for quantum key distribution networks (Summary)	2026-09-01 2026-09-28						LC
Q.4168 (Q.QKDN Mk)	Protocols for interfaces on quantum key distribution network manager for quantum key distribution networks (Summary)	2026-09-01 2026-09-28						LC
Q.4169 (Q.QKDN Cq)	Protocols for Cq interfaces for quantum key distribution networks (Summary)	2026-09-01 2026-09-28						LC
Q.4181 (Q.PMEE)	Protocol for managing energy efficiency with AI-assisted analysis in IMT-2020 networks and beyond (Summary)	2026-09-01 2026-09-28						LC
Q.5039 (Q.CCONS)	Signalling requirements and protocol for confidential computing orchestration of network slices in IMT-2020 networks and beyond (Summary)	2026-09-01 2026-09-28						LC

Rec #	Title	Last Call (LC)			Additional Review (AR)			Status
		Start / End	LC Result	LJ Result	Start / End	AR Result	AJ Result	
Q.5040 (Q.SDTN)	Signalling and protocol for Digital Twin Network supported for IMT-2020 network and beyond (Summary)	2026-09-01 2026-09-28						LC
Q.5041 (Q.PDS)	Protocols for data streaming service in IMT-2020 network and beyond (Summary)	2026-09-01 2026-09-28						LC
X.609.11 (X.mp2p-srdtf)	Managed peer-to-peer (P2P) communications: Signalling requirements for digital twin federation (Summary)	2026-09-01 2026-09-28						LC

Situation concerning Study Group 12 Recommendations under AAP

Rec #Title		Last Call (LC)			Additional Review (AR)			Status
		Start / End	LC Result	LJ Result	Start / End	AR Result	AJ Result	
J.344.1 (j.noref)	No-Reference Perceptual Objective Video Quality Assessment Models for Assessing Coding Artifacts in Full High Definition Video (Summary)	2026-07-01 2026-07-28	LJ	AR	2026-09-01 2026-09-21			AR
J.344.2 (j.noref)	No-Reference Perceptual Objective Video Quality Assessment Model for Assessing Coding Artifacts and Camera Impairments in Full High Definition Video (Summary)	2026-07-01 2026-07-28	LJ	AR	2026-09-01 2026-09-21			AR

Situation concerning Study Group 15 Recommendations under AAP

Rec #	Title	Last Call (LC)			Additional Review (AR)			Status
		Start / End	LC Result	LJ Result	Start / End	AR Result	AJ Result	
G.672	Characteristics of multi-degree reconfigurable optical add/drop multiplexers (Summary)	2026-08-01 2026-08-28	A					A
G.697	Optical monitoring for dense wavelength division multiplexing systems (Summary)	2026-08-01 2026-08-28	A					A
G.709.1	Flexible OTN common elements (Summary)	2026-08-01 2026-08-28	LJ					LJ
G.709.3 Amd.1	Flexible OTN B100G long-reach interfaces- Amendment 1 (Summary)	2026-08-01 2026-08-28	A					A
G.709.5 Amd.2	Flexible OTN short-reach interfaces - Amendment 2 (Summary)	2026-08-01 2026-08-28	LJ					LJ
G.709.6	Flexible OTN B400G and B1T long reach interfaces (Summary)	2026-08-01 2026-08-28	LJ					LJ
G.709.7 (G.709.mfi)	Flexible OTN module to framer interfaces (Summary)	2026-08-01 2026-08-28	LJ					LJ
G.806	Characteristics of transport equipment - Description methodology and generic functionality (Summary)	2026-08-01 2026-08-28	LJ					LJ
G.807 Amd. 1	Generic functional architecture of the optical media layer - Amendment 1 (Summary)	2026-08-01 2026-08-28	LJ					LJ
G.811.1 Amd.1	Timing characteristics of enhanced primary reference clocks - Amendment 1 (Summary)	2026-08-01 2026-08-28	A					A
G.812	Timing requirements of clocks suitable for use as node clocks in synchronization networks (Summary)	2026-08-01 2026-08-28	A					A
G.988 (2022) Amd.3	ONU management and control interface (OMCI) specification - Amendment 3 (Summary)	2026-08-01 2026-08-28	LJ					LJ
G.7702 Amd.2	Architecture for SDN control of transport networks - Amendment 2 (Summary)	2026-08-01 2026-08-28	A					A
G.7713 Amd.1	Distributed call and connection management (DCM) - Amendment 1 (Summary)	2026-08-01 2026-08-28	A					A

Rec #	Title	Last Call (LC)			Additional Review (AR)			Status
		Start / End	LC Result	LJ Result	Start / End	AR Result	AJ Result	
G.7721 Amd.1	Management requirement and information model for synchronization-Amendment 1 (Summary)	2026-08-01 2026-08-28	A					A
G.8011	Ethernet service characteristics (Summary)	2026-08-01 2026-08-28	A					A
G.8020.3	Ethernet (Summary)	2026-08-01 2026-08-28	A					A
G.8032/Y.1344 (2020) Cor.2	Ethernet ring protection switching - Corrigendum 2 (Summary)	2026-08-01 2026-08-28	A					A
G.8260	Definitions and terminology for synchronization in packet networks (Summary)	2026-08-01 2026-08-28	A					A
G.8262.1 Amd.1	Timing characteristics of enhanced synchronous equipment clock - Amendment 1 (Summary)	2026-08-01 2026-08-28	A					A
G.8272 Amd.1	Timing characteristics of primary reference time clocks - Amendment 1 (Summary)	2026-08-01 2026-08-28	A					A
G.8272.1 (2024) Amd.2	Timing characteristics of enhanced primary reference time clocks - Amendment 2 (Summary)	2026-08-01 2026-08-28	A					A
G.8272.2 Amd.2	Timing characteristics of coherent network primary reference time clocks - Amendment 2 (Summary)	2026-08-01 2026-08-28	A					A
G.8275 Amd.1	Common aspects of PTP profiles for phase/time synchronization - Amendment 1 (Summary)	2026-08-01 2026-08-28	A					A
G.8275.1 Amd.1	Precision time protocol telecom profile for phase/time synchronization with full timing support from the network - Amendment 1 (Summary)	2026-08-01 2026-08-28	A					A
G.8275.2 Amd.1	Precision time protocol telecom profile for phase/time synchronization with partial timing support from the network - Amendment 1 (Summary)	2026-08-01 2026-08-28	A					A
G.8312	Interfaces for metro transport networks (Summary)	2026-08-01 2026-08-28	A					A
G.9903 Amd.3	Narrowband orthogonal frequency division multiplexing power line communication and radio frequency transceivers for G3-PLC and G3-Hybrid networks - Amendment 3 (Summary)	2026-08-01 2026-08-28	A					A
G.9903 Cor.2	Narrowband orthogonal frequency division multiplexing power line communication and radio frequency transceivers for G3-PLC and G3-Hybrid networks - Corrigendum 2 (Summary)	2026-08-01 2026-08-28	A					A

Rec #	Title	Last Call (LC)			Additional Review (AR)			Status
		Start / End	LC Result	LJ Result	Start / End	AR Result	AJ Result	
G.9946 (G.Xfin-DLL)	High speed fibre-based in-premises transceivers - 10G data link layer (Summary)	2026-08-01 2026-08-28	LJ					LJ
L.105 Cor.1	Optical fibre cables for drop applications - Corrigendum 1 (Summary)	2026-08-01 2026-08-28	A					A
L.108	Optical fibre cable elements for microduct blowing-installation application (Summary)	2026-08-01 2026-08-28	A					A
L.361	ID tag requirements for network infrastructures management (Summary)	2026-08-01 2026-08-28	A					A

Situation concerning Study Group 17 Recommendations under AAP

Rec #	Title	Last Call (LC)			Additional Review (AR)			Status
		Start / End	LC Result	LJ Result	Start / End	AR Result	AJ Result	
X.1287 (X.ias)	Functional requirements for the integrated authentication service of telecommunication operators (Summary)	2026-08-01 2026-08-28	A					A
X.1378 (X.idse)	Evaluation methodology for in-vehicle intrusion detection systems (Summary)	2026-08-01 2026-08-28	A					A
X.1419 (X.dlt-share)	Security requirements for data application software based on DLT to achieve statistics (Summary)	2026-08-01 2026-08-28	LJ					LJ
X.1632 (X.ckrp)	Framework of cryptographic key resource pool for multi-tenant cloud computing (Summary)	2026-08-01 2026-08-28	A					A

Situation concerning Study Group 21 Recommendations under AAP

Rec #	Title	Last Call (LC)			Additional Review (AR)			Status
		Start / End	LC Result	LJ Result	Start / End	AR Result	AJ Result	
F.740.16 (H.CAR-FA)	Functional requirements and detailed framework for cloud-based augmented reality systems (Summary)	2026-08-01 2026-08-28	A					A
F.740.17 (H.CVR-OP)	Functional requirements for enhanced optimized processing of cloud virtual reality systems (Summary)	2026-08-01 2026-08-28	A					A
F.740.18 (F.HIM)	Requirements of holographic interactive multimedia service based on core cloud and edge cloud (Summary)	2026-08-01 2026-08-28	A					A
F.740.19 (F.ARMSOR)	Technical requirements of object recognition for digital representation of cultural relics/artworks using augmented reality (Summary)	2026-08-01 2026-08-28	A					A
F.740.20 (F.MRCH)	Metadata for recording spatial and temporal information of outdoor cultural heritage based on universal scene description format (Summary)	2026-08-01 2026-08-28	A					A
F.740.21 (F.LVR-CHS)	Requirements and reference framework for large-scale virtual reality system of cultural heritage sites (Summary)	2026-08-01 2026-08-28	A					A
F.743.40 (F.SIVIS)	Requirements and framework of substation intelligent visual inspection system (Summary)	2026-08-01 2026-08-28	A					A
F.743.41 (F.ADSLMV)	Requirements and framework for anomaly detection service leveraging machine vision in photovoltaic farms (Summary)	2026-08-01 2026-08-28	A					A
F.746.24 (H.AI-MPS)	Technical requirements and architecture on artificial intelligence-based media processing service (Summary)	2026-08-01 2026-08-28	A					A
F.746.26 (H.ILMTS-arch)	Functional architecture of interactive low-latency multimedia transmission system (Summary)	2026-08-01 2026-08-28	A					A
F.746.28 (F.FW-AGQA)	Framework for content verification of AI-based online games (Summary)	2026-08-01 2026-08-28	A					A
F.747.18 (F.MVBIS)	Requirements and Framework for Machine-Vision-Based Inspection Services in Underground Cable Channels (Summary)	2026-08-01 2026-08-28	A					A
F.748.82 (F.FRTVM)	Framework for the robustness training of visual model based on deep learning (Summary)	2026-08-01 2026-08-28	A					A
F.748.84 (F.FML-TS-ARC)	Functional architecture of federated machine learning based service in decentralized environments (Summary)	2026-08-01 2026-08-28	A					A

Rec #	Title	Last Call (LC)			Additional Review (AR)			Status
		Start / End	LC Result	LJ Result	Start / End	AR Result	AJ Result	
F.748.85 (H.FDM-AC-V)	Assessment criteria for foundation models - Vision (Summary)	2026-08-01 2026-08-28	A					A
F.748.86 (F.AI-RMCDP)	Requirements of multimedia composite data pre-processing (Summary)	2026-08-01 2026-08-28	A					A
F.748.87 (F.AI-RSRsreqs)	Requirements for real-time super-resolution service based on artificial intelligence (Summary)	2026-08-01 2026-08-28	A					A
F.748.88 (F.DCOR-reqs)	Requirements for construction of ontology knowledge base for household service robots (Summary)	2026-08-01 2026-08-28	A					A
F.748.89 (F.DCHE-Regs)	Requirements for construction of ontology knowledge base of home environment for robot interaction (Summary)	2026-08-01 2026-08-28	A					A
F.748.90 (F.TAKEA)	Framework and technical requirements for knowledge engineering applications based on foundation models (Summary)	2026-08-01 2026-08-28	A					A
F.748.91 (F.LLMO)	Requirements and evaluation metrics for large language model operators (Summary)	2026-08-01 2026-08-28	A					A
F.748.93 (F.AAI)	Framework and Requirements for AI Agent Interoperability (Summary)	2026-08-01 2026-08-28	A					A
F.749.22 (F.SDV-Reqts)	Functional requirements for software-defined vehicle service based on vehicle gateway platforms (Summary)	2026-08-01 2026-08-28	A					A
F.749.23 (F.CAV-RMBEVL)	Requirements and methods for bird's-eye view sensor fusion data labelling in connected and automated vehicles (Summary)	2026-08-01 2026-08-28	A					A
F.749.24 (F.CV-AIVVA)	Framework and Requirements for AI-enabled Vehicle Voice Assistant (Summary)	2026-08-01 2026-08-28	A					A
F.749.25 (F.CV-DDDS)	Framework, requirements and evaluation methods for driver distraction detection system (Summary)	2026-08-01 2026-08-28	A					A
F.749.26 (F.VGP-PARK)	Requirements for automated parking service based on vehicle gateway platform (Summary)	2026-08-01 2026-08-28	A					A
F.751.29 (H.DLT-DMESB)	Framework for distributed ledger technology-based data management of energy storage battery system (Summary)	2026-08-01 2026-08-28	A					A
F.751.32 (F.DLT-DAT)	Framework and requirements for tracking of digital assets based on distributed ledger technology (Summary)	2026-08-01 2026-08-28	A					A

Rec #	Title	Last Call (LC)			Additional Review (AR)			Status
		Start / End	LC Result	LJ Result	Start / End	AR Result	AJ Result	
F.751.33 (F.DLT-DMPSSC)	Framework of distributed ledger technology-based data management for software supply chain (Summary)	2026-08-01 2026-08-28	A					A
F.751.34 (H.DLT-MMPA)	Maturity model of permissioned distributed ledger technology applications (Summary)	2026-08-01 2026-08-28	A					A
F.751.36 (F.DLT-DMPTS)	Framework and requirement for DLT-based data management of product traceability services (Summary)	2026-08-01 2026-08-28	A					A
F.780.6 (V3)	Requirements for colorimetry for telemedicine systems using ultra-high definition imaging (Summary)	2026-08-01 2026-08-28	A					A
F.793.1 (F.ACC-MV-SD)	Requirements of accessible products and services in the metaverse- Part I System design perspective (Summary)	2026-08-01 2026-08-28	A					A
F.793.2 (F.ACC-MV-UP)	Requirements of accessible products and services in the metaverse - Part II User perspective (Summary)	2026-08-01 2026-08-28	A					A
H.430.10 (H.ILE-3DIT)	Functional requirements and frameworks for 3D model-based immersive telepresence services (Summary)	2026-08-01 2026-08-28	A					A
H.430.11 (H.ILE-AR)	Requirements and framework of augmented reality for immersive live experience (ILE) services (Summary)	2026-08-01 2026-08-28	A					A
H.626.9 (H.VSDTAS-Arch)	Architecture and metadata of digital twin model assembling and interaction services for video surveillance systems (Summary)	2026-08-01 2026-08-28	A					A
H.644.9 (H.CDN-MECptI)	Mobile/multi-access content delivery network: Protocols (Summary)	2026-08-01 2026-08-28	A					A
H.770.2 (H.MV-HIA)	High-level interoperability architecture for cross-platform metaverse (Summary)	2026-08-01 2026-08-28	A					A
J.1040 (Amd1)	Digital rights management for video and audio content distribution - Requirements (Summary)	2026-08-01 2026-08-28	A					A
J.1045 (J.ADCP-REQ)	Requirements of advanced digital content protection system for digital multimedia interface (Summary)	2026-08-01 2026-08-28	A					A
J.1115 (Rev.)	Functional requirements for IP-based smart digital audio services (Summary)	2026-08-01 2026-08-28	A					A
J.1116 (J.DAS-SPEC)	Specifications for IP-based Smart Digital Audio Service : AI manager and Signalling (Summary)	2026-08-01 2026-08-28	A					A

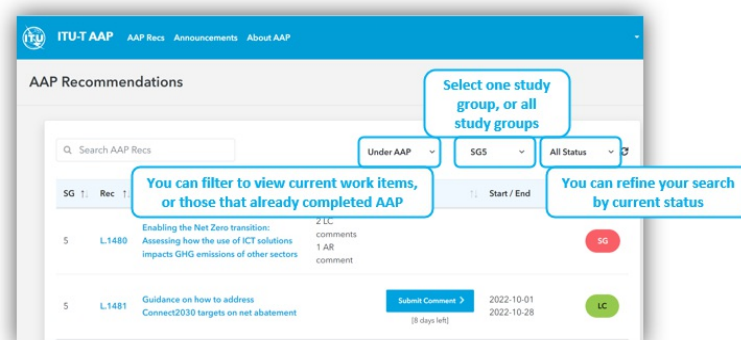
Rec # Title		Last Call (LC)			Additional Review (AR)			Status
		Start / End	LC Result	LJ Result	Start / End	AR Result	AJ Result	
J.1293 (J.STB-DONGLE)	Technical requirements and measurement methods for 4K UHD pluggable mini set-top boxes (Summary)	2026-08-01 2026-08-28	A					A
T.261 (H.BWC)	Biomedical and general waveform signal coding (Summary)	2026-09-01 2026-09-28						LC

(To TSB AAP-43)

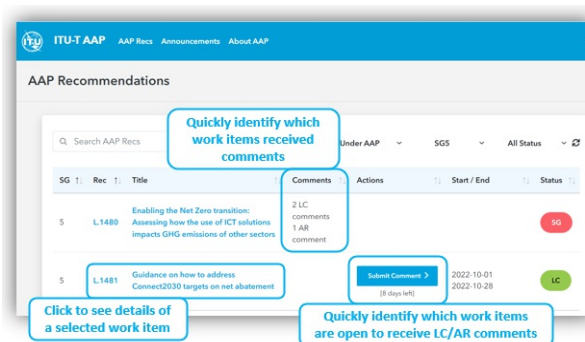
Using the on-line comment submission form

Comment submission

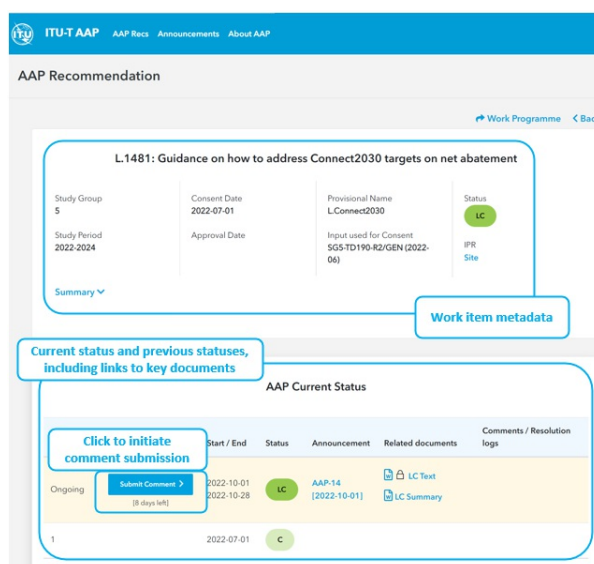
1. Go to AAP site <https://www.itu.int/t/aap/aap-recs> and select an AAP Recommendation:



- 2) Select your Recommendation



- 3) Click the "Submit Comment" button



4) Complete the on-line form and click on "Submit"

The screenshot shows a web form titled "Draft Recommendation L1481" for "Study Group 5 - Last Call Additional Review". The deadline is "2022-10-28 (23:59 hours Geneva time)" and the comment period deadline is "8d 12h 50m". The form is divided into sections: "About you" with a callout "Contact details are automatically filled in"; "AAP Focal point" with a callout "To update the AAP focal point details, please contact tsbaap@itu.int"; "Submit your comment" with radio buttons for "Level of support for Approval" (We support approval... or We do not support approval...); a "Comment" text area with the prompt "Please provide your comment(s), if any."; and "Attachment" with radio buttons for "File attached" or "None". A blue "Submit" button is at the bottom.

Draft Recommendation L1481
Study Group 5 - Last Call Additional Review
Deadline: 2022-10-28 (23:59 hours Geneva time)
Comment period deadline: 8d 12h 50m

About you

Your details

Contact details are automatically filled in

AAP Focal point

To update the AAP focal point details, please contact tsbaap@itu.int

Submit your comment

Level of support for Approval

☐ We support approval of this text on the condition that it be modified per the revisions given below and/or in the attachment.

☐ We do not support approval of this text. Reasons are given below and/or in the attachment

Comment

Please provide your comment(s), if any.

Attachment

☐ File attached

☐ None. Comments are given in the 'Comment' field, no attachment needed.

Submit

5) You will receive an email notification with details of your submission

(To TSB AAP-43)

Recommendations under LC/AR - Comment submission form*(Separate form for each Recommendation being commented upon)***ITU-T AAP comment submission form****Study Group:****Announcement number:****Recommendation
number:****Date consented:****Recommendation under:** ☐ Last call (LC)☐ Additional Review (AR)**Sender name:**
(if different from AAP
Contact Person)**Sender email address:****Administration/Company:****Country:****Name of AAP Contact
Person:****Email of AAP Contact
Person:****Comments:**
(Level of support for
Approval)☐ We support approval of this text on the condition that it be modified per the revisions given☐ We do not support approval of this text. Reasons are given below and/or in the attachment.**Comments:****No attachment:** Comments are given in the 'Comment' field, no attachment needed.To be returned to: email: tsbsg...@itu.int
[or fax +41 22 730 5853]

Comments or revised text should be sent as an attachment in one of the following formats: .docx, .doc, .pdf, .xlsx, zip, rar, txt.

Revision marks must be shown relative to the text posted by TSB.