

APEX STANDARDS

Total Search for Communication Standards

Fact Sheet

Total Search

Apex Standards Database	SDO	Star Year	Description	Telecom	LAN/Networking	Cybersecurity	Codec	IoT
ASX3GPP	3GPP	1998	Mobile telecom standards (GSM, UMTS, LTE, 5G).	All WGs	SA2/CT1/RAN3	SA3	SA4	SA1/SA2 (NB-IoT, LTE-M)
ASXETSI	ETSI	1988	European telecom standards (radio, networks, satellite, smart grids).	ISG NFV; ISG MEC	ISG NFV; ISG MEC	TC CYBER	TC SC (Multimedia/Broadcast)	TC M2M
ASXOMA	OMA	2002	Open mobile industry standards for interoperable mobile services.	All WGs				OMA LwM2M
ASXOPRAN	O-RAN Alliance	2018	Open, interoperable RAN specifications for modular networks.	All WGs	WG4 (O-Fronthaul), WG5 (O-X-Haul), WG6 (O-Cloud), WG7 (HW)	WG10 (Security)		WG3 (Near-RT RIC for low-latency IoT)
ASXITU	ITU-T	1980	Global telecommunication standards and recommendations for ICT networks.	ITU-T G.98X (PON)	ITU-T X-series (network protocols)	ITU-T SG17 (security)	ITU-T SG16 (multimedia codecs)	ITU-T SG20 (IoT / smart cities)
ASXOneM2M	OneM2M	2012	IoT/M2M service layer specifications for interoperable systems.			OneM2M Security		OneM2M All WGs
ASXIEEE802	IEEE 802	1980	LAN and wireless networking standards (Ethernet, Wi-Fi, WPAN).	802.3	All WGs	802.1X; 802.11i		802.15.4 (Zigbee, Thread)
ASXWIFI	Wi-Fi Alliance	1999	Wi-Fi certification profiles and interoperability guidelines for IEEE 802.11 variants.		Wi-Fi (IEEE 802.11)	802.11i (WPA/WPA2)		Wi-Fi HaLow (802.11ah)
ASXBTSIG	Bluetooth SIG	1998	Bluetooth wireless standards (core, profiles, mesh).		Bluetooth (IEEE 802.15.1)			Bluetooth Low Energy (BLE)
ASXIETF	IETF	1986	Internet protocol standards (TCP/IP suite) via open, consensus-driven process.	SIP (session signaling), MEGACO (gateway)	MPLS (label switching), BGP (inter-AS routing), OSPF (link-state)	TLS (secure transport), DTLS (datagram TLS), IPsec (IP security)	AVTCORE (RTP framework), MMUSIC (session control)	6MAN (IPv6 over WPAN), ROLL (LLN routing), CORE (CoAP framework)
ASXW3C	W3C	1994	Web and Internet standards (HTML, CSS, XML, HTTP).		W3C (HTTP, CSS)	WAS/WebCrypto/WebAuthn	WebRTC/SVC/WebCodecs	WoT
ASXCVE	CVE / NVD	1999	Cybersecurity vulnerability identifiers and metadata.			CVE / NVD		
ASXCODEC	MPEG (ISO/IEC JTC 1/SC 29) JVET/JCT-VC ITU-T codec spec AOMedia	1998	Umbrella for codec bodies: MPEG (1988–), JCT-VC (2010→2020) → (2017–), JVET and AOMedia (2015–)				MPEG-1/2/4; AAC; AVC/H.264; HEVC/H.265; VVC/H.266; AV1	
ASXDVB	DVB, ARIB, ATSC	DVB 1993 /ARIB 1995 /ATSC 1982	Digital TV broadcasting standards (DVB, ARIB, ATSC).	DVB, DVB Native IP over 5G, ATSC			MPEG-2, H.264 (used in DVB)	

Apex Standards Total Search aggregates all major global communication standards related to ICT. When a standards body is fully relevant—such as 3GPP—the cell is marked “All WGs”; for partially mapped vertical domains, working groups are listed on an including-but-not-limited-to basis. In its third-phase pilot, Total Search is licensable to patent office examiners, offering sophisticated keyword querying; date filtering aligned to priority, application, or PCT dates; and page numbers and URLs for precise keyword location, identification, and verification; plus distinct searches separating contributions from officially published standards. The system delivers high clarity, search completeness, and efficiency—enabling users to cross-check standards. For example, users can determine whether an invention (e.g., “beamforming”) relates to 3GPP, IEEE 802.11, Bluetooth, or any IoT application—providing an authoritative overview and supporting effective prior-art identification.