



국립전파연구원  
National Radio Research Agency

**National Radio Research Agency**  
Ministry of Science, ICT, and Future Planning

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18 August 2016

**Mr Chaesub Lee**

Director of the Telecommunication  
Standardization Bureau  
International Telecommunication Union  
Place des Nations CH-1211 Geneva 20  
Switzerland  
(tsbdir@itu.int)

Your Reference: Circular 204 (9 March 2016)

**Subject : Candidate for the post of Chairmen(SG 16 and SG 17)**

Dear Mr Chaesub Lee

I would like to express my sincere gratitude and respect your dedication on the Telecommunication sector. On behalf of Korea(Rep of), I would like to inform you that the Republic of Korea would like to nominate following candidates for the posts of ITU-T Study Group 16 and SG 17 Chairmen.

Please refer to the attachment to this letter(Annex 1)

Sincerely yours,

YOO Dae-Seon  
Administrator,  
National Radio Research Agency  
Ministry of Science, ICT and Future Planning  
Republic of Korea



국립전파연구원  
National Radio Research Agency

# Annex 1

## Korean nominations for the post of Chairmen(SG16 and SG 17)

<b>Title of ITU-T Body</b>	<b>Chairmen</b>	<b>Proposed Action</b>
ITU-T SG16 (Multimedia)	Prof. Seong-Ho Jeong	New Candidate
ITU-T SG17 (Security)	Prof. Heung Youl YOUM	New Candidate

# Candidate for ITU-T SG16 Chairman

## Biographical Profile

Name : Prof. Seong-Ho Jeong  
Affiliation Name : Hankuk University of Foreign Studies  
Affiliation Address : 107, Imun-ro, Dongdaemun-gu, Seoul, Republic of Korea  
Mobile / E-mail : +82-10-3257-3100 / shjeong@hufs.ac.kr

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### PERSONAL

Family Name : Jeong  
First Name : Seong-Ho  
Nationality : Korea (Republic of)  
Marital status : Married  
Languages : Korean (mother tongue) and English



### STUDIES

1996.03~2000.12: Ph.D., School of Electrical and Computer Engineering, Georgia Institute of Technology (Georgia Tech), Atlanta, USA  
1988.03~1990.02: M.S., Department of Electronics Engineering, Hanyang University, Seoul, Korea  
1984.03~1988.02: B.S., Department of Electronics Engineering, Hanyang University, Seoul, Korea (Ranked 1<sup>st</sup>)

### MAJOR ACTIVITIES & ACHIEVEMENTS

2001.09~Present: Full Professor, Chair, Dept. of Information and Communications Engineering, Hankuk University of Foreign Studies, Korea  
2005.01~Present: Chair, OSIA (Open Standards and Internet Association) QoS TG

2005.01~Present: Chair, Korea ITU-T SG16 Committee

2011.01~Present: Executive Director, Korean Institute of Communications and Information Sciences

2013.03~2015.02: Vice-President, Korean Institute of Information Scientists and Engineers

2014.01~Present: Vice-President, OSIA (Open Standards and Internet Association)

2014.01~Present: Chair, Organizing Committee of International Conferences including BigComp2014, ICOIN2017 Sponsored by IEEE and IEICE

2014.03~Present: Vice-Chair, TTA PG425 (VLC Convergence Communication)

2015.09~Present: Vice-Dean, College of Engineering, Hankuk University of Foreign Studies, Korea

2016.01~Present: Executive Director, Korea ITS (Intelligent Transport Systems) Institute

2016.03~Present: President, Information Communication Society, Korean Institute of Information Scientists and Engineers

2016.03~Present: Executive Director, Korean Institute of Information Scientists and Engineers

1990.02~2001.08: Senior Researcher, Electronics & Telecommunications Research Institute (ETRI), Korea

1998.06~1998.12: Researcher, Bell Communications Research, USA

2006.01~2007.12: Vice-Chair, TTA PG206 (Signaling Protocols and Mechanisms)

2006.09~2007.02: Invited Researcher, Electronics & Telecommunications Research Institute (ETRI), Korea

2007.09~2008.08: Visiting Professor, University of California, Irvine, USA

2010.01~2010.12: Chair, Communications Networks Technical Committee, Korean Institute of Communications and Information Sciences

2011.01~2015.10: Chair, Technical Program Committee of International Conferences including ICUFN2011, ICOIN2012, ICTC2013, ICTC2014, BigComp 2014, ICTC2015 Sponsored by IEEE and IEICE

2013.01~2014.12: Advisory Committee Member, Electronics & Telecommunications Research Institute (ETRI), Korea

2005.02~2008.11: Member of Korea ITU-T SG11 Committee

2007.01~Present: Member of Korea ITU Steering Committee

- 2008.02~Present: Member of Korea Preparatory Group for WTSA (WTSA-08/12/16)
- 2009.10~Present: Member of Korea IPTV Standardization Group
- 2011.03~Present: Member of ISCoK for Joint Collaboration of ITU-T and ISO/IEC JTC1

## INTERNATIONAL STANDARDIZATION RELATED EXPERIENCE

- 2009.01~Present: Vice-Chairman, ITU-T SG16 (Multimedia)
- 2013.01~Present: Chairman, ITU-T SG16 WP2 (Multimedia Services and Accessibility)
- 2004.01~Present: Korean Head of Delegation of ITU-T SG16
- 2009.01~2012.12: Chairman, ITU-T SG16 WP2 (Applications and Systems)
- 2003.01~2004.12: Rapporteur, ITU-T SG16 Q.F (Quality of Service (QoS) and End-to-End Performance in Multimedia Systems)
- 2007.01~2008.12: Rapporteur, ITU-T SG16 Q.4 (Advanced multimedia communication service features on top of the ITU-T defined multimedia system platforms)
- 2005.01~2008.12: Rapporteur, ITU-T SG16 Q.24 (Quality of Service and End-to-end Performance in Multimedia Systems)
- 2009.01~2012.12: Rapporteur, ITU-T SG16 Q.4 (Advanced functions for H.300-series systems and beyond)
- 2014.01~2016.06: Rapporteur, ITU-T SG16 Q.27 (Vehicle gateway platform for telecommunication/ITS services/applications)
- 2013.01~2013.10: Chair, ITU Workshop on Making Media Accessible to all: the options and the economics
- 2002.01~2004.12: ITU-T SG16 Editor for H.360 (An architecture for end-to-end QoS control and signalling)
- 2004.01~2006.12: ITU-T SG16 Editor for H.361 (End-to-end quality of service (QoS) and service priority signalling in H.323 systems)
- 2008.01~2010.12: ITU-T SG16 Editor for H.362 (A framework for adaptive end-to-end QoS control based on variable bit-rate codecs in wireless networks)
- 2009.01~2011.12: ITU-T SG16 Editor for HSTP-AMSR (AMS (Advanced Multimedia Systems) Requirements)
- 2009.01~2010.12: ITU-T SG16 Editor for H.350 Implementor's Guide
- 2009.01~2012.12: ITU-T SG13 Editor for Y.QMF (QoE Management Framework)

2008.01~2011.12: IETF NSIS WG Editor for RFC5980 (NSIS Protocol Operation in Mobile Environments)

2013.01~Present: ITU-T SG16 Editor for F.CCNMMS (Requirements and architecture for CCN-based mobile multimedia services)

2013.01~Present: ITU-T SG16 Editor for H.EMQ (A cooperative architecture for enhanced multimedia QoS/QoE)

2014.07~Present: Member, ITU-T CITS (Collaboration on ITS)

2016.02~Present: Korean Delegate of ITU-T TSAG

## SUMMARY

Prof. Seong-Ho Jeong received his Ph.D. degree in Electrical and Computer Engineering from Georgia Institute of Technology (Georgia Tech), Atlanta, USA. From 1990 to 2001, he worked for Electronics and Telecommunications Research Institute (ETRI) in Korea as Senior Researcher to develop and standardize broadband communications and networking technologies.

He joined Georgia Tech Communications Systems Center for research on broadband and IP core technologies, voice over IP, quality of service, communications systems, multi-protocol label switching from 1997 to 2000. He was also with Bell Communications Research in USA to work on voice over IP and wireless ATM in 1998.

He has been actively participating in ITU-T Study Group 16 for developing standards on multimedia systems and applications. He has been serving as Vice-Chairman of ITU-T SG16 since 2009 and Chairman of ITU-T SG16 WP2 (Multimedia Services and Accessibility) since 2013. From 2009 to 2012, he also served as Chairman of ITU-T SG16 WP2 (Applications and Systems). He served as Rapporteur of ITU-T SG16 Q.F (Quality of Service (QoS) and End-to-End Performance in Multimedia Systems) from 2003 to 2004 and Rapporteur of ITU-T SG16 Q.24 (Quality of Service and End-to-end Performance in Multimedia Systems) from 2005 to 2008 and contributed to produce key Recommendations on application-level QoS mechanisms for multimedia systems and services. From 2007 to 2008, he served as Rapporteur of ITU-T SG16 Q.4 (Advanced multimedia communication service features on top of the ITU-T defined

multimedia system platforms). He also served as Rapporteur of ITU-T SG16 Q.4 (Advanced functions for H.300-series systems and beyond) from 2009 to 2012 and Rapporteur of ITU-T SG16 Q.27 (Vehicle gateway platform for telecommunication/ITS services/applications) from 2014 to 2016. In addition, he has been serving as Editor of various Recommendations on QoS/QoE, multimedia systems, mobile multimedia services in ITU-T SG16 and ITU-T SG13 since 2002.

From 2003 to 2011, he actively participated in Internet Engineering Task Force (IETF). In particular, he was a major contributor to standardization on QoS signalling in the mobile environment within IETF NSIS (Next Steps in Signalling) Working Group. He also contributed to 3GPP SA (Service & Systems Aspects) in 2011. Since 1990, he has been involved in standardization at TTA (Telecommunications Technology Association) where he served as Vice-Chair of TTA PG206 (Signaling) Standards Group in 2006 and 2007, and he is currently serving as Vice-Chair of TTA PG425 (VLC Convergence Communication) Standards Group. He also participated in standardization on mobile systems and IPTV in various TTA Standards Project Groups. He is Vice-President of OSIA (Open Standards and Internet Association) in Korea and serving as Chair of OSIA QoS Task Group.

From 2007 to 2008, he was with University of California, Irvine, USA, as Visiting Professor to work on multimedia transmission over wireless/mobile networks, in particular, multimedia traffic quality enhancement in wireless networks and mobile IPTV.

He was Vice-President of Korean Institute of Information Scientists and Engineers from 2013 to 2015. He is currently Executive Director of Korean Institute of Communications and Information Sciences, Korean Institute of Information Scientists and Engineers, and Korea ITS Institute. He served as Technical Program Committee Chair of various International Conferences including ICUFN2011, ICOIN2012, ICTC2013, ICTC2014, ICTC2015, and Organizing Committee Chair of BigComp2014 sponsored by IEEE and IEICE. He is now serving as General Chair of ICOIN2017. He was also Technical Program Committee Member of ITU Kaleidoscope event from 2010 to 2011.

He is currently Full Professor and Chair of Department of Information and

Communications Engineering at Hankuk University of Foreign Studies and has been working on various industry projects as Principal Investigator in the areas of multimedia communications, wireless/mobile networks, advanced multimedia systems, QoS/QoE, 5G/future networks, cross-layer design, networked robots, signalling, CCN/CDN, D2D communications, mobile multimedia applications & services. He has many journal/conference publications, patents, and standards contributions in the areas of multimedia systems, technologies, and services.



# Candidate for ITU-T SG17 Chairman

## Biographical profile

Name : Heung Youl YOUM

Affiliation Name : Soonchunhyang University, Korea (Republic of)

Affiliation Address : 22, Soonchunhyang-ro, Shinchang-myeon, Asan-si, Chuncheongnam-do,  
336-745, Republic of KOREA

Mobile / E-mail : +82-10-3764-6380 / hyyoum@sch.ac.kr

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### PERSONAL

Family name : YOUM

First name : Heung Youl

Date of birth : 10 February 1959

Nationality : Korea (Republic of)

Marital status : Married

Languages: English and Korean (mother tongue)

Study Group: ITU-T SG 17 on Security



### STUDIES

1983.09 - 1990.02 Ph.D., Department of Electronics Engineering, Hanyang Graduate University, Korea

1981.09 - 1983.02 M.S., Department of Electronics Engineering, Hanyang Graduate University, Korea

1977.03 - 1981.02 B.E., Department of Electronics Engineering, Hanyang University, Korea

### MAJOR ACTIVITIES & ACHIEVEMENTS

1990.09 – Present Professor, Department of Information Security Engineering, Soonchunhyang University, Korea

2014.12 – Present Director, SCH Cybersecurity Research Center, Soonchunhyang University, Korea

2009.01 – Present	Chairman, Korea Mirror Group of ITU-T SG 17 (HoD for SG17 Korean delegation)
2007.04 – Present	Chairman, ISMS/PIMS Certification Committee in Korea
2016.05 – Present	Chairman, Privacy & Security Enhancement Forum (PSEF)
2013.08 – Present	Member, Self-Performance Evaluation Committee of Ministry of Science, ICT, and Future Planning (MSIP)
2008.08 – 2016.06	Member, Self-Performance Evaluation Committee of Korea Communications Commission (KCC)
2015.05 – Present	Member, Korea Standard Committee, Ministry of Trade, Industry and Energy (MoTIE)
2015.08 – Present	Member, Self-Performance Evaluation Committee of Ministry of Trade, Industry and Energy (MoTIE)
2015.03 – Present	Chairman, Committee on Information Security, PyeongChang Organizing Committee for the 2018 Olympic & Paralympic Winter Games
2012.06 – 2015.04	Chairman, Korea Information Security Standardization Forum (KISSF)
2011.01 – 2011.12	President, Korea Institute of Information Security and Cryptology (KIISC), Academic association)
2011.01 – Present	General Co-chair, Asia Joint Conference on Information Security (Asia JCIS)
2011.01 – 2011.12	General Chair, WISA2011 (International Workshop on Information Security Applications) and ICISC2011 (International Conference on Information Security and Cryptology)
2012.01 – 2012.12	General Chair, ACM Symposium on Information, Computer and Communications Security (ASIACCS2012)
2006.10 – 2009.02	Project manager, (Former) Ministry of Information Communications and/or the Institute for Information Technology Advancement
1982.12 – 1990.09	Senior Member of Technical Staff, ETRI (Electronics and Telecommunications Research Institute)

## **INTERNATIONAL STANDARDIZATION-RELATED EXPERIENCE**

2008.10 – present	Vice-chairman, ITU-T SG 17 (Security)
2013.01 – present	Chairman, ITU-T SG 17 Working party 3 (Identity management and cloud computing security)
2016.03 – present	Acting Chairman, ITU-T SG 17 Working party 2 (Network and information security)
2013.03 – present	SG17 liaison officer for ISO/IEC JTC 1/SC 27/WG 5 and WG 4
2012.04 – present	Chairman/vice-chairman, CJK ICT Standards Meeting, Working Group on Information Security
2016.03 – present	SG17 Liaison officer to ITU-T TSAG RG-SS
2015.09, 2016.03	Chairman, Special joint session of all Questions for WTSA-16 preparation

2011.09, 2012.03	Chairman, Special joint session of all Questions for WTSA-12 preparation
2009.01 – 2012.12	Chairman, ITU-T SG 17 Working party 2 (Application Security)
2005.01 – 2008.12	Rapporteur, ITU-T SG 17 Question 9 (Secure application service)
2003.09 – 2004.12	Associate Rapporteur, ITU-T SG 17 Question 10
2005.01 – present	Editor or co-editor, approved Recommendation or agreed Supplements/International Standard, ITU-T X.1034, X.1111, X.1121, X.1122, X.1151, X.1158, X.1191, X.1193, X.1196, X.1197, X.1208, X.1210, X.1211, X.1311, X Suppl. 8 to ITU-T X.1205, X Suppl. 9 to ITU-T X.1205, X Suppl. 10 to ITU-T X.1205, X Suppl. 24 to ITU-T X.1120-X.1139 series, ISO/IEC 27033-4
2011.09 – present	Editor or co-editor, draft ITU-T Recommendations or Supplements under development, ITU-T X.gpim, X.sup-gpim, X.sbb, X.gcspi, X.ilotsec-2, X.msec-9, X.1254rev, X.te

## **BOOK PUBLICATION**

2008.03	Computer networking and the internet. -- 5th ed., FRED HALSALL (translated into Korean)
2003. 02	IP Sec: securing VPN's, CARLTON R.DAVIS, (translated into Korean)
2005.11	Security in computing, PFLEEGER, (translated into Korean)
1999.09	Electronic Commerce Security

## **SUMMARY**

Dr. Heung Youl Youm is a candidate for chairman of ITU-T Study Group 17, Security. As outlined below, he has proven leadership (management) skills, depth of technical knowledge of security, and successful connectivity to other important organizations. His experience and accomplishments in SG17 since 2003 at both the technical and management levels are impressive.

He began participating in ITU-T SG 17 in 2003 and has actively contributed to the work of SG17 as a core member of security experts for 13 years. He was an associate Rapporteur of SG 17 Question 10/17 “Security requirements, models and guidelines for communication systems and services” from 2003 to 2004. For the Study Period (2005 – 2008), he served as a Rapporteur of Question 9/17 “Secure Applications Service”.

He has been a Vice Chairman of ITU-T Study Group 17 since 2009. He was Chairman of Working Party 2 (Application Security) of SG17 for the Study Period (2009–2012) and is Chairman of Working Party 3 (Identity management and cloud computing security) of SG17 for this Study Period (2013–2016). Recently, he was appointed as a SG17 Liaison officer to ITU-T TSAG RG-SS in March 2016. Due to his strong leadership and technical contributions, SG 17 has successfully published many excellent security Recommendations of X-series.

He has attended every regular SG17 meeting in person without exceptions since he joined SG17 in 2003 and submitted many technical and management-relevant Contributions to every SG17 meeting. Especially, he has submitted more than 10 Contributions or at least 10 TDs to each SG17 meeting every year since 2009.

He has often chaired special sessions for resolving pending issues in SG17, for example, for task allocation in the cloud computing security work between SG 13 and SG 17 in this Study Period.

He demonstrated his leadership by chairing the special joint sessions of all SG17 Questions for WTSA-16 preparation (2015– 2016) and WTSA-12 preparation (2011–2012), respectively, resulting in successful SG17's restructuring and visions for the next Study Periods.

He has participated in TSAG meetings and submitted Contributions related to the work of SG17. He participated in WTSA-08 and WTSA-12 and submitted a Contribution on revision of WTSA Resolution 50 (Cybersecurity) to WTSA-12, which is directly relevant to the work of SG17. He participated in ITU plenipotentiary meeting and supported revision of ITU PP-130, which took place in Busan, Korea in 2014.

He is a SG17 liaison representative to ISO/IEC JTC1/SC27 (IT Security techniques), the most important collaborative partner of SG17, since 2010 and especially to SC 27/WG 4 (Security controls and services) and WG 5 (Identity management and privacy technologies).

He has been a Project Editor or Co-editor for 18 approved ITU-T Recommendations or agreed Supplements in the area of IPTV security, home network security, authentication protocol, USN security, mobile security, and cybersecurity:

- X.1034: Guidelines on extensible authentication protocol based authentication and key management in a data communication network, 2011
- X.1111: Framework of security technologies for home network, 2007
- X.1121: Framework of security technologies for mobile end-to-end data communications, 2004
- X.1122: Guideline for implementing secure mobile systems based on PKI, 2004
- X.1151: Guideline on secure password-based authentication protocol with key exchange, 2007.
- X.1158: Multi-factor authentication mechanisms using a mobile device, 2014
- X.1191: Functional requirements and architecture for IPTV security aspects, 2009
- X.1193: Key management framework for secure internet protocol television (IPTV) services, 2011
- X.1196: Framework for the downloadable service and content protection system in the mobile Internet Protocol television environment, 2012
- X.1197: Guidelines on criteria for selecting cryptographic algorithms for IPTV service and content protection, 2012
- X.1208: A cybersecurity indicator of risk to enhance confidence and security in the use of telecommunication/information and communication technologies, 2014
- X.1210: Overview of source-based security troubleshooting mechanisms for Internet protocol-based networks, 2014
- X.1211: Techniques for preventing web-based attacks, 2014
- X.1311: Information technology – Security framework for ubiquitous sensor networks, 2011
- X Suppl. 8: ITU-T X.1205 – Supplement on best practices against botnet threats, 2010
- X Suppl. 9: ITU-T X.1205 – Supplement on guidelines for reducing malware in ICT networks, 2011
- X Suppl. 10: ITU-T X.1205 – Supplement on usability of network traceback, 2014
- X Suppl. 24: ITU-T X.1120-X.1139 series – Supplement on a secure application distribution framework for communication devices, 2014

He is currently the Project Editor for 9 draft ITU-T Recommendations or Supplements under development in the area of PII protection, IoT security, and authentication framework:

- X.tigsc, Technical implementation guidelines for ITU-T X.805

- X.gpim | ISO/IEC DIS 29151, Information technology - Security techniques - Code of practice for Personally Identifiable Information protection
- X.sup-gpim, ITU-T X.gpim - Supplement on Code of practice for personally identifiable information protection based on ITU-T X.gpim for telecommunications organizations
- X.gcspi, ITU-T X.1242 - Supplement on Guidelines on countermeasures against short message service (SMS) phishing and smishing attack
- X.iotsec-2, Security framework for Internet of Things
- X.msec-9, Functional security requirements and architecture for mobile phone anti-theft measures
- X.te, Trust elevation protocol
- X.1254Rev, Entity authentication assurance framework
- X.sbb, Security capability requirements for countering smartphone-based botnets

He has actively participated in work for ISO/IEC JTC 1/SC 27 since 2009. He served as an Editor for the published International Standard, *ISO/IEC 27033.4:2014, Information technology -- Security techniques -- Network security -- Part 4: Securing communications between networks using security gateways*. He is an editor of two International Standards under development: ITU-T X.gpim | ISO/IEC DIS 29151, *Information technology -- Security techniques -- Code of practice for personally identifiable information protection* and ISO/IEC DIS 29134, *Information technology -- Security techniques -- Privacy impact assessment – Guidelines*.

He has been a Chairman or vice chairman of the Working Group of information security for the CJK ICT standards meeting since April 2012.

He has been the Chairman of the Korea Mirror Group of the ITU-T Study Group 17 since 2009 and is a Chairman of the Privacy & Security Forum which was newly established on May 2016.

He joined ETRI (Electronics and Telecommunications Research Institute) in 1982. He had been a senior member of technical staff working on development of high speed transmission systems until 1990.

From 1990, he has worked as a professor for the Department of Information Security Engineering of the Soonchunhyang University, Korea. He is currently the Director of SCH cybersecurity research centre in Soonchunhyang University.

Regarding his research and academic achievements, he wrote and co-edited more than 5 books in the area of information security including “Computer networking and the internet (2008)”, “An Introduction to Information Security (2005)”, “Security in computing (2005)”, “IPSec securing VPNs(2003)” and “Electronic Commerce Security (1999)” published in Korean, and also published more than 150 papers including 12 SCIE or IEEE EI ones. He was the President of the Korea Institute of Information Security and Cryptology (KIISC) in 2011. He has been a general co-chairman for Asia Joint Conference on Information Security (Asia JCIS) since 2011 and was a general chair for ACM Symposium on Information, Computer and Communications Security (ASIACCS2012) in 2012.

He had worked as a Project Manager of Information Security for the former Ministry of Information and Communication (MIC) and/or the Institute for Information Technology Advancement (IITA) from October 2006 to February 2009.

He is active in many (advisory or self-performance evaluation) committees in the area of Information Security and privacy for the Korea Communications Commission (KCC) since 2008, the Ministry of Science, ICT and Future Planning (MSIP) since 2013, and the Ministry of Trade, Industry and Energy (MoTIE) since 2015. He is Chairman for the ISMS/PIMS certification committee in Korea since 2007 and chairman for the committee on information security in the PyeongChang Organizing Committee for the 2018 Olympic & Paralympic Winter Games.

He received a Bachelor degree in 1981, a Master degree in 1983, and a Ph.D. degree in 1990, all in Electronics Engineering from Hanyang University, Korea.

He received achievement awards from the Korean President in October 2014, KCC (Korea Communications Commission) in December 2009 and December 2015, Ministry of Science, ICT and future planning in December 2015, and Korea Institute of Information security and Cryptology in December 2015.