

Inquiry for Liaison on Innovative Modulation and Coding Schemes

From: Kingston ZHANG
Convenor, ISO/IEC JTC 1/SC 6/AG 4 MCS Innovation
Kingston_zhang1999@126.com

To: 3GPP Liaison
3GPPliaison@etsi.org

CC: XU, Xiaodong
3GPP RAN WG 1 Chair
xuxiaodong@chinamobile.com

HARADA, Hiroki
3GPP RAN WG 1 vice Chair
hiroki.harada.sv@NTTdocomo.com

FALAHATI, Sorour
3GPP RAN WG 1 vice Chair
sorour.farahati@ericsson.com

Carolyn Taylor
3GPP RAN WG 1 Secretary
Carolyn.Taylor@etsi.org

Dear 3GPP Officers:

I am Kingston ZHANG the Convenor of ISO/IEC JTC 1/SC 6/AG 4 MCS (Modulation Coding Schemes) Innovation. I am writing to explore the possibility of establishing a liaison and collaboration mechanism with your organization.

ISO/IEC JTC 1/SC 6 which is a sub-committee specializing on telecommunication and exchange between systems. On 2022-07-01, SC 6 established an advisory group (SC 6/AG 4) with a mission to study the challenges of MCS schemes, to explore ways to continuously improve MCS efficiencies of communication and network systems, and to find new MCS technologies and propose standardization projects to SC 6. In the past three years, the group has been looking for innovative MCS technologies that has the capability to offer channel capacities over the limit (classical Shannon capacity limit and modulation efficiency limit). AG 4 has recommended innovative MCS technologies to SC 6 for standardization in the field of PLC and Wireless Dedicated Networks for Power Grid. In 2026, AG 4 will start evaluation on the possibility of applying the technology to Mobile Communication (6G).

I understand that 3GPP RAN1 has been looking for new waveforms and modulation schemes with a

transformative leap in capability, efficiency, and simplicity for 6G. In the ToR of AG4, there is a clause on liaison which lists 3GPP as a candidate. I am writing to initiate the contact so that our two organizations can share information on the search for innovative MCS technologies.

Please note, this is not a formal request for establishing liaison. It is an inquiry. If I get positive answers, I will report back to SC 6. For more information about SC 6, please visit ISO/IEC website at <https://www.iso.org/committee/45072.html>

Your consideration and advice will be appreciated.

Kingston ZHANG

Convenor of ISO/IEC JTC 1/SC 6/AG 4 on MCS (Modulation and Coding Scheme) Innovation

2025-11-28