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|  | | | Geneva, 16 July 2015 | |
| Ref: | **TSB Circular 166**  COM 15/HO | | - To Administrations of Member States of the Union;  - To ITU-T Sector Members;  - To ITU-T SG15 Associates;  - To ITU Academia | |
| Tel: | +41 22 730 6356 | |
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| E-mail: | [tsbsg15@itu.int](mailto:tsbsg15@itu.int) | | **Copy:**  - To the Chairman and Vice-Chairmen of  Study Group 15;  - To the Director of the Telecommunication Development Bureau;  - To the Director of the Radiocommunication Bureau | |
| Subject: | **Approval of revised Recommendations ITU-T G.9960, ITU-T G.9961 and ITU-T G.9963** | | | |

Dear Sir/Madam,

1 Further to TSB Announcement AAP-57 of 16 May 2015 and pursuant to § 6.2 of Recommendation A.8 (Johannesburg, 2008), I hereby inform you that Study Group 15 **approved** the texts of draft revised Recommendations ITU-T G.9960, ITU-T G.9961 and ITU-T G.9963 during its Plenary session held on 3 July 2015. Summaries of these three Recommendations are in Annex 1.

2 The titles of the revised ITU-T Recommendations that were approved are:

**ITU-T G.9960**: “Unified high-speed wire-line based home networking transceivers - System architecture and physical layer specification”

**ITU-T G.9961**: “Unified high-speed wire-line based home networking transceivers - Data link layer specification”

**ITU-T G.9963**: “Unified high-speed wire-line based home networking transceivers - Multiple input/multiple output specification”

3 Available patent information can be accessed on‑line via the ITU‑T website.

4 The texts of the pre-published Recommendations will soon be available on the ITU‑T website.

5 The texts of these Recommendations will be published by ITU as soon as possible.

Yours faithfully,

Chaesub Lee  
Director of the Telecommunication  
Standardization Bureau

**Annex:** **1**

ANNEX 1  
(to TSB Circular 166)

**Summaries of revised Recommendations ITU-T G.9960, ITU-T G.9961 and ITU-T G.9963**

**Summary of revised Recommendation ITU-T G.9960 (2015)**

Recommendation ITU-T G.9960 belongs to the family of ITU-T G.996x Recommendations. Recommendation ITU-T G.9960 specifies the system architecture and physical (PHY) layer for wireline-based home networking transceivers capable of operating over premises wiring including inside telephone wiring, coaxial cable, and power-line wiring. It complements the data link layer (DLL) specification in Recommendation ITU-T G.9961, and the power spectral density (PSD) specification in Recommendation ITU-T G.9964.

**Summary of revised Recommendation ITU-T G.9961 (2015)**

Recommendation ITU-T G.9961 belongs to the family of ITU-T G.996x Recommendations. Recommendation ITU-T G.9961 specifies the data link layer (DLL) for wire-line based home networking transceivers capable of operating over premises wiring including inside telephone wiring, coaxial cable, and power-line wiring. It complements the system architecture and physical (PHY) layer specification in Recommendation ITU-T G.9960, and the power spectral density (PSD) specification in Recommendation ITU-T G.9964.

**Summary of revised Recommendation ITU-T G.9963 (2015)**

Recommendation ITU-T G.9963 belongs to the family of ITU-T G.996x Recommendations. Recommendation ITU-T G.9963 specifies the additions and modifications to Recommendations ITU‑T G.9960 and ITU-T G.9961 that are needed for a multiple input multiple output (MIMO) home networking transceiver capable of operating over premises power-line wiring. MIMO transceivers are able to transmit and receive over three power-line conductors (phase, neutral, and ground). This Recommendation also specifies the means by which transceivers that comply with ITU-T G.9960, ITU‑T G.9961 and ITU-T G.9963 interoperate when used on the same wires.

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