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|  | INTERNATIONAL TELECOMMUNICATION UNION  **TELECOMMUNICATION STANDARDIZATION SECTOR**  STUDY PERIOD 2017-2020 | | | | TD 151 Rev2 (GEN/12) |
| **STUDY GROUP 12** |
| **Original: English** |
| **Question(s):** | | | 13/12 | | Geneva, 10-19 January 2017 |
| **TD** | | | | | |
| **Source:** | | | Co-Rapporteurs Q13/12 | | |
| **Title:** | | | New ITU-T Recommendation in the work programme: G.QoE-VR | | |
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This document brings the A.1 Justification Form for the creation of the new work item G.QoE-VR:  
"QoE for Virtual Reality”.

A.1 justification for proposed draft new Recommendation G.QoE-VR

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| **Question:** | 13/12 | **Proposed new ITU-T Recommendation** | Geneva, 10 – 19 January 2017 | |
| **Reference and title:** | ITU-T G.QoE-VR "QoE for Virtual Reality" | | | |
| **Base text:** | N/A | | **Timing:** | 2018 |
| **Editor(s):** | Rachel Huang, Rachel.huang@huawei.com  Pei Zhang, [zhangp7@chinaunicom.cn](mailto:zhangp7@chinaunicom.cn) | | **Approval process:** | AAP |
| **Scope** (defines the intent or object of the Recommendation and the aspects covered, thereby indicating the limits of its applicability): | | | | |
| This work item will provide several Recommendations regarding QoE factors, QoE/QoS requirements, subjective test methodology, and objective quality estimation model for virtual reality (VR) services.  It is expected to take a five-step approach as follows:   1. Identify VR services and key technologies used in them. 2. Identify key quality factors that affect QoE. 3. Define quality metrics to describe the goodness/poorness of QoE. 4. Develop methodologies to measure the metrics, subjectively and objectively. 5. Provide guidance on quality requirements to obtain good QoE. | | | | |
| **Summary** (provides a brief overview of the purpose and contents of the Recommendation, thus permitting readers to judge its usefulness for their work): | | | | |
| Virtual reality (VR) services generate realistic images, sounds and other sensations that replicate a real environment, and simulates a user's physical presence in this environment, by enabling the user to interact with this space and any objects depicted therein using specialized display screens or projectors and other devices. In order to understand whether QoE or user-perceived performance of the VR service is good or not, benchmarking is critical, which aims to measure user-perceived performance or QoE in that environment. However, before we are able to benchmark the QoE, it’s important to address the requirements and basic factors for assessing the VR quality, and provide guidance for the future industry when people want to further study the QoE models for VR services. | | | | |
| **Relations to ITU-T Recommendations or to other standards** (approved or under development): | | | | |
| N/A | | | | |
| **Liaisons with other study groups or with other standards bodies:** | | | | |
| ITU-T SG16, VQEG, MPEG, 3GPP SA4 | | | | |
| **Supporting members that are committing to contributing actively to the work item:** | | | | |
| Huawei Technologies, China Unicom, Ericsson | | | | |

End of template