SG 12 Structure and Questions

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WP 1 /12 – Telephonometry, terminals and Subjective assessment

Co Acting Chairs C. Quinquis, G. Le cucq

- **Q.3/12** – Speech transmission characteristics of speech terminals … Mr Shi Denian
- **Q.4/12** – Hands-Free communications in vehicles Mr H.W. Gierlich
- **Q.5/12** – Telephonometrics methodologies for handsets and headset terminals Mr L. Madec
- **Q.6/12** – Analysis methods using complex measurement signals…. Mr H.W. Gierlich
- **Q.7/12** – Methods, tools and test plans for the subjective assessment… Mr P. Usai and Mrs C. Quinquis

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Evolution Plans for WP1/12 Study Period 2008-2012

- All questions of SG12/WP1 shall be impacted by new activities, such as Superwideband (50Hz-14000Hz), Fullband (20Hz-22000Hz) for speech, audio and mixed content (advertisement, ring back tones, music on hold and even film trailers).
- The extension of Recommendations under the scope of SG12/WP1 should take also into account the multichannel transmission and 3D sounds.
- 2 aspects :
  - **Methodology aspects**
  - **Technological aspects**

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Methodology aspects

- Bandwidth extension and binaural perception implies to reconsider several fundamental aspects on which recommendations are settled.
  - Loudness
  - Binaural modelling
  - Acoustical interfaces and consequences on artificial mouth, ears and signals.
  - Testing methodologies
- The challenge is to develop new methodologies that could cover from Narrow Band to Fullband but shall also ensure the compatibility with existing recommendations of P. Series
- Measurement signals such as **artificial voices** need to be adapted
- Concerning subjective quality assessment, some existing ITU-R methodologies might be adapted. Development of new methodology may also be needed at least for 3D sounds. Extension from speech to mixed content and music implies to introduce new measurement dimensions such as for example sound clarity, localization of sounds, etc…

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Technological aspects

- As a consequence of the evolution of the codecs and transmission (all IP, NGN, mobile), **terminals characteristics** (P.3xx series) should be reviewed to fit with new bandwidth values and multichannel aspects, this implies an update of the measurement tools, eg
  - HATS (Head and Torso Simulator) together with Artificial Ears and Mouth (P.58, P.57, and P.51) will have to be adapted.
  - Calibration and test signals have to be developed as well as calibration methods. For example, it may be useful to have proper values for listening level in testing house to have the same loudness when listening to monaural content or diotic content.