Study Session 8 Wearable systems and equipment

Report of newly established TC 124
Wearable Electronic Devices and
Technologies

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Wearables activities in IEC – background to establishment of IEC TC 124

- 2014 Korea NC presented a proposal on smart wearable devices to SMB 151 meeting
- ahG 56 was established to review current activity in IEC in the area and list needs for further standardisation and coordination and reported to SMB meeting 153
- SMB 153/12 decision established SG 10 a Strategic Group with the following scope:
  - Terminology and agreed understanding of WSD, market needs, inventory of activities in IEC, inventory of activities outside IEC, priorities for work, coordination of activities within IEC
- SG 10 reported to SMB 157th meeting in October 2016, the SMB approved the report and circulated C/1988/DV Document for NC Vote: Proposal for a new technical committee on Wearable Electronic Devices and Technologies
- SMB 158 approved the establishment of TC 124 and assigned the secretariat to Korea with the chair from Japan NC

Wearables activities in IEC – scope of IEC TC 124

- Standardisation in the field of wearable electronic devices and technologies which include patchable materials and devices, implantable materials and devices, edible materials and devices, and electronic textile materials and devices.
- Excluded: Standardisation for specific items in the field of the following IEC TCs: TC 47, TC 62, TC 100, TC 108, TC 110, TC 119, SyC-AAL and relevant areas of JTC 1.
- Comments made during the ballot process are referred to the TC for resolution at its first meeting
- Currently there are 12 P-members and 7 O-members

Wearables activities in IEC – purpose and justification

- The world wide market trends have led to a growing convergence of technologies and the emergence of a new industry including patchable, implantable, edible materials as well as e-textiles in the form of wearable electronic devices and technologies.
- Areas for standardisation which have been identified include:
  – Terminology, interconnection (physical connectivity for the consumer and between rigid and flexible devices in the system), communications, between devices and the systems, equipment level reliability, physical durability and adaptability (flexibility and compatability of materials, display devices and semiconductor devices etc), operating environment, packaging, etc.
- The overall goal of the activity is to stabilise and accelerate industrialisation of wearable electronic devices and technologies.
- First meeting expected autumn 2017

Request to AGS

- Set up liaison with new TC 124 (TC 100 was member of former SG 10)

- TC 100 would like to nominate Mrs. Ulrike Haltrich as the liaison representative to the new TC 124