



SMB/5883/R

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2016-05-13

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

### STANDARDIZATION MANAGEMENT BOARD

#### SUBJECT

**SMB meeting 156, agenda item 8.3, Geneva**

Report of SG 10, Wearable Smart Devices (WSD), following its meeting held on 2016-03-10/11 in Raleigh, North Carolina, USA

#### BACKGROUND

SG 10 held its meeting on March 10 and 11, 2016 in Raleigh, North Carolina, USA; its next face to face meeting is scheduled for June 23 and 24, 2016 in Tokyo, Japan.

The report is in two parts:

**Part A** – Recommendations submitted to the SMB for formal approval: **None**

**Part B** – Other items of interest

SMB members' attention is drawn to the information given under item(s) **B.1 to B.5**.

**Annex 1** – SG 10 membership list

**Annex 2** – SG 10 members attending the meeting

#### ACTION

The Standardization Management Board is invited to note Part B of the attached report.

**PART A: recommendations for approval**

There are no recommendations for formal approval.

**PART B: Other items of interest**

**B.1 SG 10 membership**

SG 10 reviewed SMB Decision 155/9 and had taken into account the remarks of the SMB Chair and secretariat about membership. There were three SG 10 members having sent replacement to the meeting in Raleigh.

**B.2 Basic terminology on WSD**

SG 10 discussed in details the related terminologies for Wearable Smart Devices (WSD) and agreed at the meeting on the following basic terminology:

wearable smart devices	electronic devices and components intended to be located near, on or in an organism that have intelligent functionality and/or may be a part of an intelligent system via connectivity
near-body electronics	electronic devices and components intended to be located near an organism where it does not contact the external surface of the organism directly
on-body electronics	electronic devices and components intended to be located on an organism where it contacts the external surface of the organism directly
in body electronics	electronic devices and components intended to be located internal to an organism
electronic textile	fabrics or textile-based electronic devices and components*

Note 1 a device or component can be near-body or on-body electronics depending on the usage and the contact situation.

Note 2 a term “electronic textile” is defined for a reference to be commonly used in general.

Note 3 definition of “electronic textile” may be updated later.

**B.3 Matrix on WSD standardization items and TC/SC activities**

Based on the inventories collected from SG 10 members on WSD related standards, work programme, and future activities from IEC TC/SCs which are currently active in the WSD field, the Co-Convenors prepared a matrix for discussion at the meeting.

It was agreed that the matrix reviewed at the meeting in Raleigh be the basis for consideration to find gaps and priority.

From the populated matrix, SG 10 agreed that electronic textile related items are not addressed by any TC in IEC and recognized as gaps. It was also agreed that there are some items across the overall WSD areas are not yet addressed by the existing TCs.

As there are still missing data in the matrix, SG 10 Co-Convenors and secretary will update the matrix based on the additional inputs from SG 10 members and distribute it to the members before the next meeting in June.

#### **B.4 Proposal for a new TC**

SG 10 Co-Convenors will prepare a proposal of new TC based on the updated matrix by the next meeting in June.

Several titles were recommended at the meeting as:

- Wearable smart devices
- Electronic textile or Textile electronics
- Wearable smart devices and technologies
- Wearable electronic devices and technologies
- Wearable electronic technologies
- Wearable electronic connected devices
- Wearable electronic devices
- Electronic wearable devices and textile technologies
- Electronic textile and wearable technologies

SG 10 agreed to the following items as high priority standardization work:

- Terminology
- Safety
- Reliability
- Performance evaluation

#### **B.5 Next meeting**

SG 10 agreed to have its next face to face meeting on 23 – 24 June 2016 in Tokyo, Japan.

A web meeting may be planned before the 4th F2F meeting.

## **ANNEX 1 - Participants of SG 10 Meeting on 2016-03-10/11**

### **Present:**

Mr Tadashi Ezaki	SG 10 Co-Convenor
Prof Sungkyu Park	SG 10 Co-Convenor
Ms Suzanne Yap	SG 10 Secretary

### **Nominated Experts**

Mr Shuji Hirakawa	JP
Mr Myoung-Jae Shim	KR
Mr Jesse Jur	US
Ms Pamela Gwynn	US (on behalf of Ken Modeste)

### **Nominated TC representatives**

Mr Cheolung Cha	TC 47
Ms Ulrike Haltrich	TC 100
Mr David Swenson	TC 101 (on behalf of Paul Holdstock)
Mr Sami Gabriel	TC 106 (on behalf of Ken Joyner)
Mr Kevin Ravo	TC 108
Mr Shinichi Uehara	TC 110
Mr Joachim Zietlow	TC 111
Mrs Catherine Grant	ISO/IEC JTC 1
Mr Kevin Ravo	TC 108

### **By remote participation**

Mrs Christina Rode-Schubert	DE
Mr Bruce Friedman	TC 62
Mr Alan Hodgson	TC 119

### **Excused with apology**

Mr Anmin Dong	Expert – CN
Mr Cheng Lu	Expert – CN
Mr Andrea Micelotta	Expert – IT
Mrs Federica Censi	Expert – IT
Mr Thomas Korssell	Expert - SE
Mr Ken Modeste	Expert – US (replaced by Pamela Gwynn)
Mr Masahide Okamoto	TC 91
Mr Paul Holdstock	TC 101 (replaced by David Swenson)
Mr Ken Joyner	TC 106 (replaced by Mr Sami Gabriel)

**ANNEX 2 - SG 10 membership list**

Revised: 2016-05-11

<b>NC</b>	<b>Convenor</b>	<b>Company</b>	<b>IEC Roles</b>
JP	Tadashi Ezaki	Sony Corporation	TC 100 Secretary
KR	Sungkyu Park	Chung-Ang University	TC 110 member
<b>NC</b>	<b>Member</b>	<b>Company</b>	<b>IEC Roles</b>
CN	Anmin DONG	BAIDU	
CN	Cheng LU	China Electronics Standardization Institute	TC 100 member
		Transformation Consulting International GmbH	
DE	Christina Rode-Schubert	Mannheim	
FI*	Magnus Käll	GE Health Care	
IT	Federica Censi	Istituto Superiore di Sanita	TC 62/SC 62D/JWG 3 member
IT	Andrea Micelotta	ENEL Distribuzione	
JP	Shuji Hirakawa	Toshiba Corporation	SMB member, TC 119 and SyC Smart Energy member
KR	Myoung-Jae Shin	KSA (Korea Standards Association)	SMB member
SE	Thomas Korszell	SEK Svensk Elstandard	SE Secretary, TC 23/SC 23J, TC 89, SyC Smart Energy member
		N.C. State University, Textile Engineering, Chemistry & Science	
US	Jesse Jur	UL, LL, Product Safety Division	SMB SG 9, CAB/WG 17, ACSEC member
US	Ken Modeste		
<b>TC</b>	<b>Member</b>	<b>TC role</b>	
47	Cheolung Cha	Secretary	
62	Bruce Friedman	Member	
91	Masahide Okamoto	Secretary	
		Chair SyC AAL; TC 100/TA 16 Technical Secretary	
100	Ulrike Haltrich		
101	Paul Holdstock	Chair	
106	Ken Joyner	Member	
108	Kevin Ravo	Secretary	
110	Shinichi Uehara	Assistant Secretary	
111	Joachim Zietlow	Convenor WG 3	
119	Alan Hodgson	Chair	
JTC1	Catherine (Kate) Grant	TC 100/TA 16 Technical Area Manager	

\* Members approved by SMB after the SG 10 meeting on 2016-03-10/11.