

**ISO/IEC JTC 1/WG 7**  
**Working Group on Sensor Networks**

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# **BUSINESS PLAN FOR ISO/IEC JTC 1/WG 7**

## **Sensor Networks**

Period Covered: August 2010 – March 2011

Submitted by: Yongjin KIM (Convenor)

### **1. MANAGEMENT SUMMARY**

#### **1.1 STATEMENT OF SCOPE**

1) In the area of generic solutions for sensor networks, undertake standardization activities that support and apply to the technical work of all relevant JTC 1 entities and to other standards organizations. This would include activities in sensor networks such as the following:

- a) Standardization of terminology.
- b) Development of a taxonomy.
- c) Standardization of reference architectures.
- d) Development of guidelines for interoperability.

2) In the area of application - oriented sensor networks, identify gaps and commonalities as they may impact standardization activities within the scope of JTC 1. Further, share this information with relevant entities within and outside of JTC 1. Unless better pursued within another JTC 1 entity, the following standardization activities may be pursued as projects by this Working Group:

- a) Addressing the technology gaps within the scope of JTC 1 entities.
- b) Exploiting technology opportunities where it is desirable to provide common approaches to the use of sensor networks across application domains.

3) In order to foster communication and sharing of information between groups working in the field of sensor networks:

- a) Seek liaison relationships with all relevant JTC 1 SCs/WGs.
- b) Seek liaison relationships with other organizations outside JTC 1 including but not limited to: relevant ISO TCs, IEC TCs and ITU - T SGs, IEEE 1451, IEEE 1588, IEEE P2030, IEEE 802.15, Open Geospatial Consortium, ZigBee Alliance, IETF 6LoWPAN, IETF ROLL WG, ETSI, IPSO Alliance, EPCglobal, ISA 100, LONMARK, KNX Association, Zwave Alliance.
- c) Consider the possibility of conducting joint projects with relevant ITU - T SG.
- d) Seek input from relevant research projects and consortia.

## 1.2 ORGANIZATION

WG 7 is a WG directly under the JTC 1.

WG 7 established an Ad hoc group on Terminology of Sensor Networks at its 2nd meeting in August 2010, US.

## 1.3 PROJECT REPORT

WG 7 has the following 9 projects under development:

ISO/IEC Designation #	Title	Current Status
ISO/IEC WD 29182 Part 1	Sensor Network Reference Architecture (SNRA) – Part 1: General overview and requirements	WD
ISO/IEC WD 29182 Part 2	Sensor Network Reference Architecture (SNRA) – Part 2: Vocabulary and Terminology	Project registered
ISO/IEC WD 29182 Part 3	Sensor Network Reference Architecture (SNRA) – Part 3: Reference architecture views	Project registered
ISO/IEC WD 29182 Part 4	Sensor Network Reference Architecture (SNRA) – Part 4: Entity models	Project registered
ISO/IEC WD 29182 Part 5	Sensor Network Reference Architecture (SNRA) – Part 5: Interface definitions	Project registered
ISO/IEC WD 29182 Part 6	Sensor Network Reference Architecture (SNRA) – Part 6: Application Profiles	WD
ISO/IEC WD 29182 Part 7	Sensor Network Reference Architecture (SNRA) – Part 7: Interoperability guidelines	WD
ISO/IEC WD 20005	Specification of Data Value Domain Services and Interfaces Supporting Collaborative Information Processing in Intelligent Sensor Networks	WD
ISO/IEC NP 30101	Sensor Network and its Interface for Smart Grid System	NP Approved

## **1.4 COOPERATIONS WITH OTHER ORGANIZATIONS**

[Internal liaison within ISO/IEC JTC 1]

ISO/IEC JTC 1/SC 6

ISO/IEC JTC 1/SC 25

ISO/IEC JTC 1/SC 27

ISO/IEC JTC 1/SC 31

ISO/IEC JTC 1/SC 32

ISO/IEC JTC 1/SC 36

ISO/IEC JTC 1/SC 37

[Internal liaison within ISO/TCs and IEC/TCs]

ISO/TC 211

IEC/TC 65

IEC/TC 100

[External - Category C liaison]

OGC (Open Geospatial Consortium)

## **2. PERIOD REVIEW**

### **2.1 MARKET INITIATIVES**

In the ubiquitous era, machine to machine communications as well as man to man and man to machine communications will be emerging as a blue ocean in ICT markets. Sensor network is an implementation of Internet of everything which requires all kind of these communications. Sensor Networks' market segments and application area are so vast and diverse concerning both horizontal and vertical markets.

In the horizontal point of view, JTC 1/WG 7 will undertake standardization activities for generic solutions for overall sensor networks applications such as terminology and reference architectures in order to improve the interoperability.

For the vertical markets, countless market areas are related to sensor networks, but the initial marketing areas includes in following:

- Energy and Utility (e.g. Smart Grid System)
- Environment observation, forecast, and protection (e.g. Climate Change)

- Logistics and Supply Chain management
- Health care Medical applications at home and in hospital
- Intelligent Transportation and Traffic
- Defence and Military applications

## **2.2 ACHIEVEMENTS**

Two NPs were approved in JTC 1: ISO/IEC 20005 and ISO/IEC 30101.

Subdivision of project ISO/IEC WD 29182 (Part 1 to Part 7) was approved.

Their current status is shown in 1.3 PROJECT REPORT.

## **3. FOCUS DURING NEXT WORK PERIOD**

### **3.1 DELIVERABLES**

Development of CD of ISO/IEC 29182 Part 1, Part 6 and Part 7.

Development of WD of ISO/IEC 29182 Part 2, Part 3, Part 4 and Part 5.

Development of CD of ISO/IEC 20005

Development of WD of ISO/IEC 30101

### **3.2 STRATEGIES**

Enhance more contribution from members to develop WDs of WG 7 current projects.

Speed up development process of WG 7 current projects to meet the ISO timeframe.

Continue to develop WD of ISO/IEC 30101 in close relation with relevant groups in JTC 1, ISO, IEC and others.

### **3.3 OPPORTUNITIES**

Seek for enhancement of liaison for the current WG 7 project, especially ISO/IEC NP 30101 Sensor Network and its Interface for Smart Grid System with relevant groups in JTC 1, ISO and IEC.

Mine more new work items on sensor networks.