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

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Submission to JTC 1
JTC 1 WG 7's Feedback and Comments regarding JTC 1 N10016 and N10017

SG3 DECISION 0: To put in place a formal liaison between NIST SGIP and SMB SG3

JTC 1 WG 7 notes that the ISO/IEC Directives, Part 1, require that to qualify for acceptance as a liaison, an organization shall have an international or broadly-based regional scope. This requirement is not modified for IEC by the IEC Supplement. The NIST SGIP appears from its name to be a US national organization and thus not meet the requirements to be accepted into liaison with an IEC or ISO body.

SG3 DECISION 1: TCs will provide practical guidelines to increase current usability of standards

JTC 1/WG 7 believes that JTC 1 SCs/WGs can provide useful guidance on the use of the identified JTC 1 standards in Smart Grid applications.

SG3 DECISION 2: Fast-track new standards to close the gaps

JTC 1/WG7 already has gap analysis for sensor network in its program and will devote its resources to accelerate the development of standards to fill the identified gaps.

JTC 1 new work item proposal form already has a question (Clause B.3 - Other Source of standards) asking if the proposed item uses other standards.

SG3 DECISION 3: Set up a Feedback process for continuous improvement

JTC 1/WG 7 requests that the members of SWG on Smart Grid and the members of JTC 1/WG 7 are given the access to IEC SG3 Smart Grid Wiki to provide feedback once such wiki is implemented under IEC.

SG3 DECISION 4: Across the IEC Smart Grid Framework, the Application Domain TCs must use the methods delivered by the "horizontal" TCs included in the Framework.

JTC 1/WG 7 suggests that JTC 1 should be included as one of the "horizontal" TCs because JTC 1 standards impact many aspects of Smart Grid Framework.

SG3 DECISION 5: The Application Domain TCs must develop their own Data Models and Test Cases

JTC 1/WG 7 believes that JTC 1 has considerable experience and expertise in developing and implementing data models in many application areas. Appropriate JTC 1 standards should be available to application domain TCs. IEC TC 57 is encouraged to establish liaison with JTC 1 and its SCs/WGs.

SG3 DECISION 6: Accelerate the harmonization of IEC 61850 and CIM

NA

SG3 DECISION 7: Deliver generic Use Cases

JTC 1/WG 7 desires to exploit the output of IEC TC 8, the generic use cases, along with use cases from other Smart Grid SDOs and Consortiums, for example, CENELEC CWA on IFRS Interoperability Framework Requirement Specification, SGIP, IEEE P2030, OpenSG. JTC 1/WG 7 will seek a liaison relationship with IEC TC 8 to ensure good coordination of their respective work programs.

SG3 DECISION 8: Establish a new TC or SC on “connecting the consumer applications”

There is an existing SC in JTC 1, SC 25, which has a scope that includes most of the items addressed in Decision 8 for a new IEC TC or SC. SC 25 has a very strong link to IEC. JTC 1/WG 7 suggests that JTC 1/SC 25 is the appropriate home for the new work.

SG3 DECISION 9: Add a Smart Grid certification process to the IEC System family

JTC 1/WG 7 believes that, where information technology aspects are included in the certification process, the involvement of JTC 1 experts in developing the assessment of the system may be appropriate.

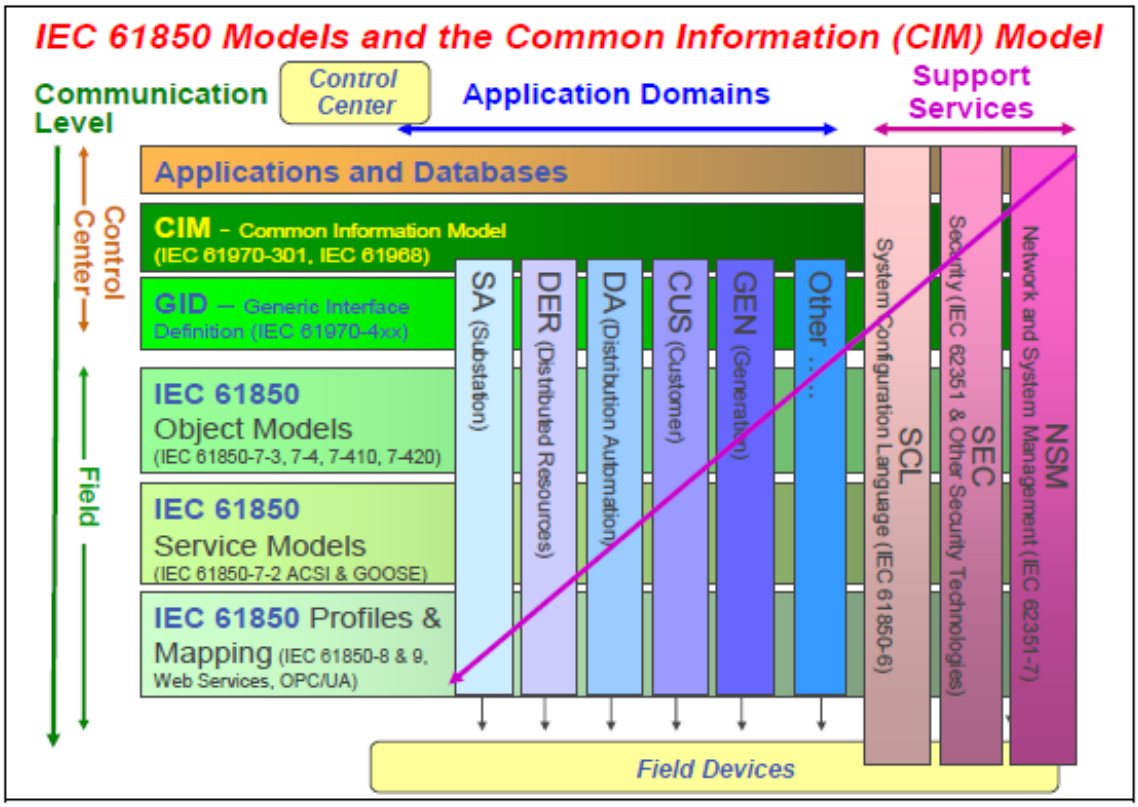
SG3 DECISION 10: Add operational management of the IEC Smart Grid Framework

JTC 1/WG 7 believes that the expansion of SG3 should include the representation from ISO and ISO/IEC JTC 1 to provide their views and concerns regarding Smart Grid standard development activities and also in the operational management of smart grid framework.

In addition to the JTC 1/WG 7 responses to the Decisions, JTC 1/WG 7 recommends following standards become part of the IEC Smart Grid Strategic Group Framework. JTC 1/WG 7 used the figure found on Page 18 of the document:

ISO-IECJTC1_N0017_Revised_Report_of_SG3__Smart_Grid_after_th.pdf.

The domains in this figure are used to identify the standards for JTC 1/WG 7 inputs to JTC 1.



Applications and Databases

- SC 32 standards – ISO/IEC 9075 SQL;
- SC 29 standards – ISO/IEC 21000 (MPEG 21 – Multimedia)
- SC 24 standards – ISO/IEC 18025 (Environmental data coding specification), 18026 (Spatial reference model), and 19775 (X3D)
- SC 6 standards – ISO/IEC 8824 (Abstract syntax notation one ASN.1) and 8825 (Encoding rules for ASN.1)
- SC 32 – ISO/IEC 13249
- ISO TC 211 – ISO 19125 – Simple feature access
- ISO 19136 – Geographic Mark-up Language (GML)
- SC 34 – ISO 8879 – SGML (language behind HTML, XML, etc.)

Common Information Model (CIM)

- ISO CD 19156 – Observations and Measurements (used in OGC, see page 7 of [http://bit.ly/aVFlUM])
- SC 32 - ISO/IEC 11179, 20944, 14957, 19763, 24076

GID (Generic Interface Definitions)

- JTC 1 may list the identified standards for GID.
- JTC 1/WG 7 suggests that the input from JTC 1 SC 22 would be relevant.

Object Models

- SC 7 – ISO/IEC 17450/2/3 Open distributed processing (ODP) - ask
- SC 7 – ISO/IEC 15476

Service Models

- SC 7 – ISO/IEC 17450/2/3 Open distributed processing (ODP) - ask
- Visualization – JPEG, Rendering, etc (?)
- ISO 19128 (Web Map Server interface) offers dynamically rendered maps in encodings such as JPEG, GIF etc. The service requestor issues an HTTP GET request with multiple parameters including the bounding coordinates to be rendered. Example WMS from NASA [http://bit.ly/aT14Sc]
- ISO/DIS 19142 (Web Feature Service) offers an interface for retrieving location-referenced data from databases over HTTP. Example WFS at [http://bit.ly/cDxVAH].
- OGC Sensor Observation Service Interface Standard for accessing observations from any sensor.
- OGC Sensor Planning Service Interface Standard for requesting a sensor to change its mode for performing an observation.
- OGC Sensor Model Language (SensorML) Encoding Standard is an XML vocabulary that is designed for describing the characteristics of any sensor type.

Profiles & Mapping

- JTC 1 may list the identified standards for Profiles & Mapping.

System Configuration Language

- ISO/IEC 14750 – ODP Interface Definition Language

Security

- SC 27 – Privacy and Security Frameworks standards

Network and System Management

- ISO/IEC 7498-4: Open system interface – Basic reference model – Part 4: Management Framework.

SA - Substation

- JTC 1 may list the identified standards for SA.

DER – Distribution Resources

- JTC 1 may list the identified standards for DER.

DA – Distribution Automation

- JTC 1 may list the identified standards for DA.

CUS – Customers

- JTC 1 may list the identified standards for CUS.

GEN – Generation

- JTC 1 may list the identified standards for GEN.