Spallation Neutron Source
Draft Procedure

Procedure: ICS-PR-002
Date: DRAFT
Revision: 0

WBS 1.9.1/1.9.2 ICS DOCUMENT NUMBERING

1. Purpose

To present a document numbering strategy for "global" Integrated Control System (ICS) documents. This procedure applies to documentation for systems that are shared by several major SNS subsystems. (For example: the timing system and equipment protection systems).

2. Procedure Numbering

A project-wide method of numbering procedures has not yet been developed. Until such a method is defined, the following format should be used: [I copied the BNL format for tech notes…]

Procedure number = "ICS-PR-"
+ 3-digit sequential number

For example, ICS-PR-002 is assigned to this procedure.
The sequential number assignments will be maintained via an index maintained in the ICS area on the SNS file server.

3. Tech Note Numbering

A project-wide method of numbering technical notes has not been developed yet. Until such a method is defined, the following format should be used: [I think this is the format BNL is using]

Procedure number = "ICS-TN-"
+ 3-digit sequential number

For example, ICS-TN-002.
The sequential number assignments will be maintained via an index maintained in the ICS area on the SNS file server.

4. Design Document Numbering

The existing ORNL document numbering system will be used for global ICS design documents, including:

- Drawings
- Bills of material
- Data sheets
- Job/Equipment specifications

ORNL uses an in-house system named the "Engineering Design Information System" (EDIS) to automatically assign design document numbers. Use of EDIS prevents duplicate drawing numbers and enforces a standard number format. It will also allow global ICS documentation to be stored and retrieved using the existing ORNL records management system. [It also imposes a limited selection of conventions that may not be to our liking…] Numbers can be reserved in blocks to enable some continuity in number sequences. [The system is web-based. Access could conceivably be provided to other ICWG members. It also provides some remote-viewing capabilities.]

[A drawback of this (at least for the short-term) is that an ORNL person will have to reserve the drawing numbers. However, we can mitigate this by reserving a large block of numbers and then maintaining the an index on the SNS file server.]

Drawing Numbering

ORNL EDIS-derived drawing numbers have the format shown below:

Drawing number = discipline code
+ site code
+ drawing size
+ engineering job number
+ sequential number

For global ICS subsystems:

discipline code = "I" (for "instrumentation and controls")
site code = "8" for SNS
drawing size = "A" for an A-size drawing, or "B" for a B-size drawing, etc.
engineering job number (EJN) = a 6-digit number supplied by the project (automatically assigned by EDIS). There is a one-to-one correspondence between EJN's and building numbers. The EJN may or may not use the actual building number as part of the 6 digits [TBD by ORNL management]. [SNS building numbers and corresponding EJNs are currently being developed.]
sequential number = an alphabetic character followed by 3-digit number (automatically assigned by EDIS)

For example, the drawing number "I8E-012345-A001" [dummy EJN number] could conceivably be assigned to an E-size drawing showing a block diagram of the timing system.

Numbering of Other Design Documents

ORNL EDIS-derived document numbers for design analysis/calculations, bills of material, datasheets, and job/equipment documents have the format shown below:

Drawing number = document type code
+ discipline code
+ engineering job number
+ sequential number

For global ICS subsystems:

document type code = "DAC" for design analysis/calculation documents
or "BM" for bills of material
or "DS" for data sheets
or "JS" for job/equipment specifications
discipline code = "IEX" (for "instrumentation and/or electrical engineering for ORNL")
engineering job number (EJN) = a 6-digit number supplied by the project (automatically assigned by EDIS). There is a one-to-one correspondence between EJN's and building numbers. The EJN may or may not use the actual building number as part of the 6 digits [TBD by ORNL management]. [SNS building numbers and corresponding EJNs are currently being developed.]
sequential number = an alphabetic character followed by 3-digit number (automatically assigned by EDIS)

For example, the design analysis document "DAC-IEX-012345-A001" [dummy EJN number] could conceivably be assigned to an analysis of timing system requirements.