

WG14 Part 4 Issues - CIM Issues #7027

WireInfo inconsistency with Electropedia

10/14/2024 06:52 AM - Celso Rocha

|                                     |   |                                       |
|-------------------------------------|---|---------------------------------------|
| <b>Status:</b>                      | New   |                                       |
| <b>Priority:</b>                    | Normal  |                                       |
| <b>Target version:</b>              |   |                                       |
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| <b>Base Release:</b>                |   | <b>Version:</b>                       |
| <b>Solution to be Applied To:</b>   |   | <b>Clause:</b>                        |
| <b>Solution Version:</b>            |   | <b>Sub-Clause:</b>                    |
| <b>Solution Applied By:</b>         |   | <b>Paragraph:</b>                     |
| <b>Completion Date:</b>             |   | <b>Table:</b>                         |
| <b>CIM Keywords:</b>                | 61968-AssetInfo, 61970-Wires                                    | <b>Originally Closed in Version:</b>  |
| <b>Breaking Change:</b>             |   | <b>Origination Date:</b>              |
| <b>Breaking Change Description:</b> |   | <b>Origination ID:</b>                |
| <b>CIM Impacted Groups:</b>         | WG13, WG14  | <b>Originally Assigned To:</b>        |
| <b>Requestor:</b>                   |   |                                       |

**Description**

According to Electropedia:

- In the context of Overhead lines: (466-10-02)

wire

strand

one of the individual wires used in the manufacture of a stranded conductor

- In the context of Electrical and magnetic devices: (151-12-28)

wire

flexible cylindrical conductor, with or without an insulating covering, the length of which is large with respect to its cross-sectional dimensions

In the context of cables, you also have (461-01-07):

- stranded conductor

conductor consisting of a number of individual **wires or strands** all or some of which generally have a helical form

Note 1 – The cross-section of a stranded conductor may be circular or otherwise shaped.

Note 2 – **The term “strand” is also used to designate a single wire .**

In other words, within IEC vocabulary, wire is a synonym of strand. However, WireInfo in 61968-4 is a ConductorInfo that can have multiple strands, which is inconsistent with Electropedia. Since there are several changes being proposed to WireInfo and CableInfo classes as part of issue [#6870](#), this seems a good timing to rename WireInfo to better align with Electropedia. Main users of this

class is perhaps WG 13 as it is used to describe conductor characteristics for line impedance computation.

**Proposed Solution**

Since wire/strand are flexible conductors, and RigidBusbarInfo has recently been added in 61968-4 as a child of ConductorInfo, we propose renaming WireInfo to FlexibleConductorInfo (as opposed to RigidBusbarInfo).