

Substation / VoltageLevel / ... hierarchy. A forward slash, “/”, must be used as the separator between names.

- Although not defined within this profile group, the IdentifiedObject.mRID attribute should be used as the RDF ID. The RDF ID can not begin with a number. An underscore should be added as the first character if necessary. The RDF ID must be globally unique. A prefix may be added, if necessary, to ensure global uniqueness, but the RDF ID including the prefix must be within the maximum character limit specified below.
- The maximum character length of names and identifiers are listed below.
 - rdf:ID – 60 characters maximum
 - IdentifiedObject.name – 32 characters maximum
 - IdentifiedObject.aliasname – 40 characters maximum
 - IdentifiedObject.description – 256 characters maximum
- To maintain a consistent naming hierarchy, each Substation must be contained by a SubGeographicalRegion and each SubGeographicalRegion must be contained by one and only one GeographicalRegion.
- Equipment defined without connectivity, because the associated Terminal(s) are not connected to ConnectivityNodes is allowed, for instance a ShuntCompensator whose Terminal is not associated to a ConnectivityNode.
- UTF-8 is the standard for file encoding. UTF-16 is not supported.
- **Instance data to be exchanged MUST make use of the most detailed class possible. The classes GeneratingUnit, Switch, and EnergyConsumer should only be used if the information to determine the more detailed class (ThermalGeneratingUnit, HydroGeneratingUnit, Breaker, Disconnecter, etc.) is not available.**

Borttaget: abstract

3.3 Transformer modeling

A two winding PowerTransformer has two TransformerWindings. This gives the option to specify the impedance values for the equivalent pi-model completely at one of the windings or split them over the two windings. The impedances shall be specified at the primary voltage side as shown in [Figure 1](#) below.

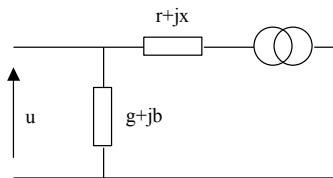


Figure 1 – Two winding transformer impedance

A three winding PowerTransformer has three TransformerWindings. The equivalent pi-model corresponds to three TransformerWindings connected in wye configuration as shown below. Each