**Store Configuration Data**

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**Reviewers:**

Reviewers of this document

**Date and version:**

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**Input documents:**

Subset 26

**Description**

This function manages configuration data, which are fixed data such as train, on-board, or maintenance configuration data.

add schema here

Issues :

* There is no specific requirement for this function, we will use the list of configuration data and parameters described in Alstom API proposal, and try to link them to subset-26 document. For now, the list of configuration data and parameters collected so far are stored in file StoreConfigurationData.txt.
* From which equipment(s) configuration data are they loaded ?
* For example, should we consider MA Request Parameters and Position Report Parameters from packets 57 and 58 sent by the RBC as configuration data ?
* How should configuration data be stored on-board ? In what kind of data structure(s) ?

**Functions**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Occurrence** | **Type** | **Description** |
| Name | 1 | T\_Text | **StoreConfigurationData** |
| Definition | 1 | T\_Definition | Stores configuration data |
| *Input* | *0..n* | *T\_Variable* | *TrainConfigurationData, OnboardConfigurationData, MaintenanceConfigurationData* |
| *Output* | *0..n* | *T\_Variable* |  |
| *Local* | *0..n* | *T\_Variable* |  |
| *Parameter* | *0..n* | *T\_Constant* |  |
| *Requirement* | *0..n* | *T\_Requirement* |  |
| *Block* | *1 (optional)* | *T\_FunctionalBlock* |  |
| *Parent* | *0..1* | *T\_Function* |  |
| *Allocation* | *1* | *T\_System* | Kernel |
| Safety | 1 | Boolean |  |

**Variables**

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| --- | --- | --- | --- |
| **Name** | **Occurrence** | **Type** | **Description** |
| Name | 1 | T\_Text | TrainConfigurationData |
| Definition | 1 | T\_Definition | Train configuration data |
| Source | 1 | T\_SourceDocument | Subset-26 |
| Nature | 1 | T\_VariableNature |  |
| MinimalValue | 0..1 | T\_Text |  |
| MaximalValue | 0..1 | T\_Text |  |
| SpecialValue | 0..n | T\_Text |  |
| Allocation | 1 | * Interface * Packet * Internal |  |
| *Requirement* | *1..n* | *T\_Requirement* |  |
| Store | 0..1 | T\_Variable |  |
| Resolution | 0..1 | T\_VariableNature |  |
| Safety | 1 | Boolean |  |

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| **Name** | **Occurrence** | **Type** | **Description** |
| Name | 1 | T\_Text | AdhesionIndependentBrakeConfig |
| Definition | 1 | T\_Definition |  |
| Source | 1 | T\_SourceDocument | Subset-26 |
| Nature | 1 | T\_VariableNature |  |
| MinimalValue | 0..1 | T\_Text |  |
| MaximalValue | 0..1 | T\_Text |  |
| SpecialValue | 0..n | T\_Text |  |
| Allocation | 1 | * Interface * Packet * Internal |  |
| *Requirement* | *1..n* | *T\_Requirement* | *SA-1,* |
| Store | 0..1 | T\_Variable |  |
| Resolution | 0..1 | T\_VariableNature |  |
| Safety | 1 | Boolean |  |

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| --- | --- | --- | --- |
| **Name** | **Occurrence** | **Type** | **Description** |
| Name | 1 | T\_Text | OnboardConfigurationData |
| Definition | 1 | T\_Definition | On-board configuration data |
| Source | 1 | T\_SourceDocument | Subset-26 |
| Nature | 1 | T\_VariableNature |  |
| MinimalValue | 0..1 | T\_Text |  |
| MaximalValue | 0..1 | T\_Text |  |
| SpecialValue | 0..n | T\_Text |  |
| Allocation | 1 | * Interface * Packet * Internal |  |
| *Requirement* | *1..n* | *T\_Requirement* |  |
| Store | 0..1 | T\_Variable |  |
| Resolution | 0..1 | T\_VariableNature |  |
| Safety | 1 | Boolean |  |

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| **Name** | **Occurrence** | **Type** | **Description** |
| Name | 1 | T\_Text | SpecialBrakesInterface |
| Definition | 1 | T\_Definition | Interfaces to a special/additional brake. |
| Source | 1 | T\_SourceDocument | Subset-26 |
| Nature | 1 | T\_VariableNature |  |
| MinimalValue | 0..1 | T\_Text |  |
| MaximalValue | 0..1 | T\_Text |  |
| SpecialValue | 0..n | T\_Text |  |
| Allocation | 1 | * Interface * Packet * Internal |  |
| *Requirement* | *1..n* | *T\_Requirement* | *SRS-3.13.2.2.2.9,* |
| Store | 0..1 | T\_Variable |  |
| Resolution | 0..1 | T\_VariableNature |  |
| Safety | 1 | Boolean |  |

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| --- | --- | --- | --- |
| **Name** | **Occurrence** | **Type** | **Description** |
| Name | 1 | T\_Text | RadioMsgRepetitionDelay |
| Definition | 1 | T\_Definition | Waiting time before radio message repetition. |
| Source | 1 | T\_SourceDocument | Subset-26-3 |
| Nature | 1 | T\_VariableNature |  |
| MinimalValue | 0..1 | T\_Text |  |
| MaximalValue | 0..1 | T\_Text |  |
| SpecialValue | 0..n | T\_Text | 15 sec |
| Allocation | 1 | * Interface * Packet * Internal |  |
| *Requirement* | *1..n* | *T\_Requirement* | *SRS-3-A.3.1* |
| Store | 0..1 | T\_Variable |  |
| Resolution | 0..1 | T\_VariableNature |  |
| Safety | 1 | Boolean |  |

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| --- | --- | --- | --- |
| **Name** | **Occurrence** | **Type** | **Description** |
| Name | 1 | T\_Text | MaintenanceConfigurationData |
| Definition | 1 | T\_Definition | Maintenance configuration data |
| Source | 1 | T\_SourceDocument | Subset-26 |
| Nature | 1 | T\_VariableNature |  |
| MinimalValue | 0..1 | T\_Text |  |
| MaximalValue | 0..1 | T\_Text |  |
| SpecialValue | 0..n | T\_Text |  |
| Allocation | 1 | * Interface * Packet * Internal |  |
| *Requirement* | *1..n* | *T\_Requirement* |  |
| Store | 0..1 | T\_Variable |  |
| Resolution | 0..1 | T\_VariableNature |  |
| Safety | 1 | Boolean |  |

**Requirements**

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| --- | --- | --- | --- |
| **Name** | **Occurrence** | **Type** | **Description** |
| Name | 1 | T\_Text | SA-1 |
| Definition | 1 | T\_Definition | * + - 1. The kernel shall store brake characteristics (coming from driver through DMI, or automatically loaded (from which equipment?)) |
| Nature | 1 | * Structural * Functional * Definition |  |
| Source | 1 | T\_SourceDocument | Subset-26-3 |
| Discussion | 1 (Optional) | T\_Text |  |
| Parent | 0..1 | T\_Requirement | 3.13.1.1.1 |
| Allocation | 0..1 | T\_System | Kernel |
| Safety | 1 | Boolean |  |

**Exported Requirements :**

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| --- | --- | --- | --- |
| **Name** | **Occurrence** | **Type** | **Description** |
| Name | 1 | T\_Text |  |
| Definition | 1 | T\_Definition |  |
| Source | 1 | T\_SourceDocument |  |
| Allocation | 0..1 | T\_System |  |
| Safety | 1 | Boolean |  |