### 5.2.6 Port control operations

This clause specifies the rules for port control operation in case they are applied to a stream port. The operations behave differently specified in the clause 22.5 of ES 201 873-1 [1] as steam ports don’t have any queues, but might contain sampling history.

The close operation applied to a stream port removes the port history completely. Only the last acquired sample is kept and it is still possible to access it with the value and timestamp operations.

The start operation applied to a stream port removes port history completely, activates port sampling (if it was suspended by the stop or halt operation) and allows the use of data stream access operation (value, timestamp, delta), data navigation operations (prev, at) and data extraction and application operations (history, values, apply). The started port will have its default value.

The stop operation applied to a stream port removes port history and suspends port sampling, i.e. port history won’t be updated while the port is stopped. In case of stopped out ports, the value of all ports connected or mapped to the stopped port won’t change while the port is stopped. During the time when the port is stopped, it is not allowed to call any of the data stream access operation (value, timestamp, delta), data navigation operations (prev, at) and data extraction and application operations (history, values, apply). Calling any of these operations shall cause an error.

The halt operation applied to a stream port suspends port sampling, i.e. port history won’t be updated while the port is halted. In case of halted out ports, the value of all ports connected or mapped to the halted port won’t change while the port is halted. During the time when the port is halted, it is not allowed to use any of the data stream access operation (value, timestamp, delta) on the left hand side of an assignment and the apply operation. Calling any of these operations shall cause an error. The history of the halted port is not discarded and it possible to use any of the data stream access operation (value, timestamp, delta) if they occur on the right hand side of an assignment, data navigation operations (prev, at) and data extraction operations history and values.