VLCB Versatile Layout Control Bus

Consume Own Events Service Specification

Service# 8 CoE

Version 1.1, March 2024, for Service version 1

Compatible with CBUS ® 4.0 Rev 8j

0.1 Table of Contents

0.2 Document History

Date	Changed by	Summary of changes	Service version
20/10/2023	Martin Da Costa, M6223	Initial Document	1
12/11/2023	Martin Da costa, M6223	Detail amendments	1

1. Introduction

This document describes the service related to the consumption of events by the module that produced them. This is an optional service, which may be added to the MNS.

While the above are reported as separate services, practically these can be implemented as a single library, since they have very similar needs, with facilities to characterise the events as producer, consumer, or both. In addition, Learning is intimately related to the definition, storage, and search functions included with Events. While Short and Long events can be considered as separate, again, it is practical to implement them together.

1.1 Dependencies on other services

The Consume Own Events service depends upon the mandatory Minimum Node Service as well as the Event Consumer Service and the Event Producer Service. These, in turn, depend upon the Event Teaching Service.

2. Description

Generally, a module is not expected to be able to read from the transmission medium whilst it is sending. This Service implements a buffer mechanism that allows a copy of a sent message to be stored until the module is able to process it as if that message had been received over the transmission medium.

3. Summary of Opcodes

Refer to the VLCB Opcode Specification document for details of the opcodes.

The Consume Own Events Service does not receive or send any opcodes from the transmission medium. It receives the following opcodes from the Event Producer Service and makes them available to the Event Consumer Service.

Opcode	Use by Consumer	Use by Producer
ACON{1,2,3}	Consumed by a module to perform an ON action as defined by the EVs of the event NN:EN.	Sent by a module to indicate that something ON has happened within the module as defined by the event's EVs.
ACOF{1,2,3}	Consumed by a module to perform an OFF action as defined by the EVs of the event NN:EN.	Sent by a module to indicate that something OFF has happened within the module as defined by the event's EVs.
ASON{1,2,3}	Consumed by a module to perform an ON action as defined by the EVs of the event EN. The Node Number in the event is ignored.	Sent by a module to indicate that something ON has happened within the module as defined by the event's EVs.
ASOF{1,2,3}	Consumed by a module to perform an OFF action as defined by the event's EVs of the event EN. The Node Number in the event is ignored.	Sent by a module to indicate that something OFF has happened within the module as defined by the event's EVs.

4. Service Specific Modes

None

5. Service Specific Status Codes

None

6. Service Specific Diagnostic Data

6.1 DiagnosticCodes

None

6.2 Diagnostic Payload Data Return

There are no RDGN diagnostic payload data returns.

7. Service Specific Automatic Power-up Tests

No service specific power-up tests are specified by the Consume Own Events service.

8. Service Documentation

Modules implementing the Consume Own Events services must provide full documentation.

9 Service Data

9.1 Parameters

The following parameters are associated with consume own events and shall be supported.

Param#	Name	Usage	VLCB should set these values
8.4	COE	Indicates if the module is able to consume events that it produces.	Bit set if the Consume Own Events service is used.

9.2 ESD data bytes

Not used