Exception 23-02

Date of receipt:	*2022-11-11*	
Requestor	*IO-Link community, Frank Moritz (Head of Quality WG)*	

Approval

☒ approved	☐ granted with time limit until	☐ not granted
Date : *2023-09-27*	Name: Frank Moritz	Sign :

State

☒ in process by clearing group	*2022-03-17*
☒ decision by clearing group	*2023-09-04*
☒ submitted to steering committee	*2023-09-27*

Incident description

☐ Master ☒ Device ☐ other	☒ IO-Link ☐ IO-Link Safety ☐ IO-Link Wireless

Product Identification: *see specific Device manufacturer declaration claiming this exception*

Description

General exception for family extension according inactive IO-Link Interface and System Specification V1.1.2.

It is planned to extend an existing product family according IO-Link Interface and System Specification V1.1.2 by an additional product while maintaining the general behavior and user experience.
By supporting the specification V1.1.3 the product would be changed in this aspects.
Therefore, it should be allowed to release the additional new product according to the inactive specification.

Justification

Failure will compromise the IO-Link system   ☒ no ☐ yes
Impact on IO-Link system: *no impact*
Impact on market: *delayed availability of products compliant to increased quality requirements by following the current specification*

No effect, except that new devices should be implemented according to the latest specification in order to consistently develop the quality and functionality of IO-Link. However, since this is only an extension of an existing product family, this effect is negligible.

The claiming of this exception is time limited to the validity period of the IO-Link Interface and System Specification V1.1.3.
This exception applies under the conditions stated in Annex A.

Annex A

Condition 1:
A named member of the family must be released, launched and still available to customers. This named member must be declared conform to the IO-Link Interface and System Specification V1.1.2 and associated specifications. This named member must not be based on a granted exception.

Condition 2:

The conformance of the new family member is declared in a new Manufacturer Declaration (MD). This new MD must declare conformance to the same specifications and versions as the named member's MD. This new MD must indicate the family extension by referencing this exception and the named member's identification in Part B of the manufacturer declaration, see template of Part B below.

Part B - Conformance exceptions

We herewith declare the following deviations to the related specifications	Reason
Family extension according to Exception 23-02	This declaration is based on the manufacturer declaration of the following product <ProductName> identified by <VendorID – DeviceID> issued at <date>

Condition 3:

The new family member must be tested[1] according the latest test specification for the IO-Link Interface and System Specification V1.1.2 including the corresponding CRs in Implementation.

In case of deviations, the manufacturer contacts the Clearing Group to request an appropriate exception.

[1] The community recommends to use the latest version of a qualified test system.

Condition 4:

The IODD rules defined in Annex B must be applied while creating the new Device IODD in respect to the named member's IODD

Condition 5:

These exception also apply for creating a brand-labeled device derived from a named member from another manufacturer.

Condition 6:

The invocation of this exception must be indicated to the service center of the IO-Link Community under

IO-Link Community, Ohiostraße 8, 76149 Karlsruhe, Germany or via info@io-link.com

Annex B

IODD rules :
1. It is not allowed to change the vendor identification attributes (**vendorID**, **vendorName**, **VendorText**, **VendorURL**, **VendorLogo, DeviceFamily**) of Element **DeviceDescription** to preserve the common identification of the family. The only exception of this is the identification of brand-label devices (Condition 5).
2. The **DeviceIdentity** attribute **deviceID** may need to be changed according the common DeviceID rules, other attributes like **additionalDeviceIds** may be changed
3. It is not allowed to change the **value** of the attribute **textId** in any occurence
4. The elements **DeviceVariantCollection** and **DeviceVariant** may be changed in structure and content
5. It is not allowed to change the element **Features** in any kind to preserve base functionalities
6. It is not allowed to change the availability of parameters (Element **Variable**), naming (attribute **id**) and their structure (**xsi:type**, **bitLength**) to preserve the functionality
7. It is not allowed to change the presence and content of the following attributes of any element **Variable**
   a. subindexAccessSupported
   b. dynamic
   c. modifiesOtherVariables
   d. accessRights
   e. index
   f. bitOffset
   g. subindex
   h. excludedFromDataStorage
8. The attributes **defaultValue**s or **fixedLengthRestriction** of the element **Variable** may be changed in presence and content
9. Variable content definitions (**ValueRange**, **SingleValue**) may be changed in presence and content
10. It is not allowed to change the following **StdVariableRef** elements in presence and content, regardless of the previous rules
    a. V_DirectParameters_1
    b. V_DirectParameters_2
    c. V_SystemCommand
    d. V_VendorName (exception by condition 5)
    e. V_ApplicationSpecificTag
    f. V_ProcessDataInput
    g. V_ProcessDataOutput
    h. V_CP_FunctionTag
    i. V_CP_LocationTag
    j. V_DeviceAccessLocks
    k. V_DetailedDeviceStatus
    l. V_DeviceStatus
11. It is not allowed to change the structure of the process data description in element **ProcessDataCollection**, only content changes via attribute **value** or **ValueRange** attributes are allowed
12. It is not allowed to change the presence or content of the elements **ErrorTypeCollection** and **EventCollection**
13. It is not allowed to change the presence or content of the element **UserInterface**, excluding the attributes
    a. Gradient
    b. Offset
    c. displayFormat
    d. unitCode, the replacement must describe the same physical measurand
14. It is not allowed to change the values of the attributes of the elements **CommNetworkProfile (iolinkRevision, compatibleWith)** or **PhysicalLayer (bitrate**, **minCycleTime**, **sioSupported**, **mSequenceCapability)**
15. The element **Connection** may be changed in content
16. It is not allowed to change from ClassA to ClassB or vice versa
17. It is not allowed to change the presence or content of the **Test** element of **CommNetworkProfile**
18. It is not allowed to change the presence or content of **Text** elements referenced by **Name** elements in the existing (**Primary)Language**

19. The content of the attribute **value** in **Text** elements referenced by **Description** elements in the existing (**Primary)Language** text collection may be changed
20. Additional **Language**s may be added
21. The **name** and **version** attributes of the **Checker** element must reference the latest version "V1.1.4 Rx"