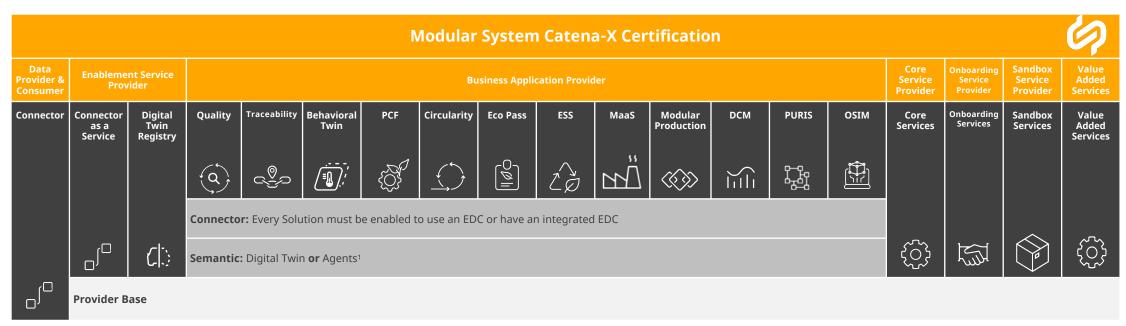


#### Modular System Release Jupiter Version 3.3.0

03.02.2025

Supported by Federal Ministry for Economic Affairs and Climate Action

#### Modular System Release Jupiter - Overview



<sup>1</sup> Each standard in the respective use case defines for itself which model may be used.

#### Detail View (1/3) | Business Application Provider

#### **Modular System Catena-X Certification**

#### **Business Application Provider<sup>2</sup>**

| Virtual indication       Virtual i |                                 |                      |                           |                          |  |  |                                    |              |                   |                               |                    |                          |                                    |                          |   |              |         |                                   |                                   |               |               |                                  |  |                                       |                     |                         |                                  |
|--|---------------------------------|----------------------|---------------------------|--------------------------|--|--|------------------------------------|--------------|-------------------|-------------------------------|--------------------|--------------------------|------------------------------------|--------------------------|---|--------------|---------|-----------------------------------|-----------------------------------|---------------|---------------|----------------------------------|--|---------------------------------------|---------------------|-------------------------|----------------------------------|
| Base Standard $I$  | Use Case                        | Qua                  | lity                      | Traceability             | Ве                                     | havioral T                             | win                                | P            | CF                |                               |                    | Circularity              | y                                  |                          | Eco<br>Pass   | ESS          | Ma      | aaS                               | МР                                | D             | СМ            |                                  |  | PURIS                                 |                     |                         | OSIM                             |
| Additional       / $Additional$ /       /       /       /<   | Role /<br>Capability            | As OEM data provider | As Supplier data provider | Use                      | Behavioral Twin Endurance<br>Predictor | Behavioral Twin Endurance<br>Estimator | Behaviour Twin Health<br>Indicator | PCF Exchange | PCF Calculation   | Secondary Material<br>Content | 1                  | CE-Assistant             | Secondary Marketplace <sup>4</sup> | Asset Tracking           | Use Case Circular Economy<br>- Digital Product Passport | ESS Use Case |         | Request for Quotation<br>Exchange | Shop Floor Information<br>Service | As a Supplier | As a Costumer | Delivery Information<br>Exchange | Short-Term Material<br>Demand Exchange | Planned Production Output<br>Exchange | Item Stock Exchange | Days of Supply Exchange | Online Control and<br>Simulation |
|  | Base<br>Standard                | CX-0                 | 123                       | CX-0125                  | CX-0059                                | CX-0138                                | CX-0141                            | CX-0         | 0136              | /                             | CX-0               | 0053                     | CX-0117                            | CX-0105<br>CX-0045       | CX-0143   | CX-0144      | CX-0115 | CX-0129                           | CX-0142                           | CX-I          | 0128          | CX-0118                          | CX-0120                                | CX-0121                               | CX-0122             | CX-0145                 | CX-0133                          |
|  | Additional                      | /                    | /                         | CX-<br>0005 <sup>1</sup> | /                                      | /                                      | /                                  | 1            | /                 | /                             | /                  | CX-<br>0136 <sup>6</sup> | /                                  | /                        | /   | /            | /       | /                                 | /                                 |               |               |                                  | CX-01466                               |                                       |                     |                         | /                                |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $   | Industry<br>Core <sup>5,6</sup> | /                    | /                         | CX-0127                  | /                                      | /                                      | /                                  | CX-0         | )126 <sup>R</sup> |                               | CX-0126<br>CX-0127 |                          | /                                  | CX-<br>0127 <sup>7</sup> | CX-0126<br>CX-0127                                      | /            | /       | /                                 | /                                 |               |               |                                  | CX-0126 <sup>R</sup>                   |                                       |                     |                         | /                                |

Connector<sup>3</sup> CX-0018

Semantic Digital Twin CX-0002 or Agents CX-0084

Provider CX-0008<sup>8</sup> Base

<sup>1</sup> If "Additional" Standards are used or offered in a Solution, the certification of these Standards is required.

<sup>2</sup> Business Application Provider has to perform an interoperability check.

<sup>3</sup> If no EDC is implemented in the solution, at least the Data Management-API is subject of the certification.

<sup>4</sup> Can only be provided in combination with certified Core Services.

<sup>5</sup> Digital Twins have to contain the defined Specific Asset Ids. Additional use case specific data models have to be provided as Digital Twin submodels. If the respective data models are used, these have to be certified against the specification defined within the Industry Core standard.

<sup>6</sup> When using certain features, the referenced section of the standard is required.

<sup>7</sup> When using certain features, the focussed section of the standard is optional.

\* TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP and TISAX Level 3 is mandatory for CSP-A/B (as soon as the standard is adapted).

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### Detail View (2/3) | Remaining Roles

|                                    |  | MO                            | aular System Catena-X (  |   |  |  |
|------------------------------------|--|-------------------------------|--|---|--|--|
|                                    | Data Provider & Consumer   | Enablement S                  | ervice Provider  | Core Service Provider <sup>5</sup>  | Onboarding Service Provider <sup>2</sup> | Sandbox Service Provider   |
| Use Case                           | Connector  | Connector as a Service        | Digital Twin Registry as a Service                                 | Core Services   | Onboarding Services                      | Sandbox Services⁴  |
| Role / Capability<br>Base Standard | When using a CX-Certified<br>enablement service, no separate<br>certification is required<br>CX-0018 | Connector<br>CX-0018          | Digital Twin Registry<br>CX-0002                                   | SSI:<br>(X-0013<br>(X-0049<br>(X-0050<br>(X-0149<br>Portal:<br>(X-0001<br>(X-0006<br>(X-0009<br>(X-0014       | CX-0006<br>CX-0009                       | Connector:<br>CX-0018<br>Onboarding:<br>CX-0006<br>CX-0009<br>BPDM:<br>CX-0010<br>CX-0011<br>CX-0012                       |
| Additional <sup>1</sup>            | CX-0002<br>CX-0003<br>CX-0005<br>CX-0007<br>CX-0045<br>CX-0055<br>CX-0084<br>CX-0126<br>CX-0127      | CX-0002, CX-<br>Backend Integ | ration Pattern 1<br>0003, CX-0055<br>ration Pattern 2<br>, CX-0084 | CX-0014<br>CX-0015<br>CX-0053<br>CX-0074<br>Marketplace:<br>CX-0054<br>BPDM:<br>CX-0010<br>CX-0011<br>CX-0012 |  | CX-0012<br>CX-0053<br>CX-0074<br>Golden Record:<br>CX-0076<br>Identity Wallet:<br>CX-0013<br>CX-0049<br>CX-0050<br>CX-0149 |
|                                    |  | CX-                           | a Exchanger<br>0007<br><b>Chain</b><br>, CX-0045                   |   |  | Portal:<br>CX-0001<br>CX-0006<br>CX-0009<br>CX-0014<br>CX-0015<br>CX-0053<br>CX-0074<br>Marketplace:<br>CX-0054            |
|                                    |  | Provider Base: CX-00083       |  |   |  |  |

Modular System Catena-X Certification

<sup>1</sup> If "Additional" Standards are used or offered in a Solution, the certification of these Standards is required.

<sup>2</sup> Limitations Jupiter: this role currently only covers part of the registration process in the Catena-X data space. The currently available process is depicted in figure "General Onboarding Process". <sup>3</sup> TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP. TISAX Level 3 is mandatory for CSP-A/B (as soon as the standard is adapted).

<sup>4</sup> Catena-X Sandboxes contain all services required for the operation of a minimum valuable Catena-X data space, namely: CSP-B services (excluding the cleansing service of BPDM and GXDCH integration) and OSP services.

<sup>5</sup> Core Services B lists Core Services that can only be operated once in the Catena-X data space due to business reasons or technical limitations and are therefore tendered via the nomination process of the Association.

# Detail View (3/3) | Remaining Roles

|                                       | Modular System Catena-X Certification       |                        |                          |                       |              |                                 |                                   |  |
|---------------------------------------|---|------------------------|--------------------------|-----------------------|--------------|---------------------------------|-----------------------------------|--|
| Value Added Serv<br>Use Case          | ices <sup>1</sup><br>Data Quality Dashboard | Bank Data Verification | Natural Person Screening | BPDM Fraud Prevention | Country Risk | Sanction Watchlist<br>Dashboard | Company Certificate<br>Management |  |
| Role /<br>Capability<br>Base Standard | CX-0076<br>CX-0077                          | CX-0078                | CX-0079                  | CX-0080               | CX-0081      | CX-0116                         | CX-0135                           |  |
| Provider Base                         | CX-0008 <sup>2</sup>                        |                        |                          |                       |              |                                 |                                   |  |

<sup>1</sup> Can only be provided in combination with certified Core Services.

<sup>2</sup> TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP. TISAX Level 3 is mandatory for CSP-A/B (as soon as the standard is adapted).

| Quality <sup>1</sup>   | <b>As OEM data provider:</b><br>CX-0123  | <b>As Supplier data<br/>provider:</b><br>CX-0123 |  |  |  |
|------------------------|--|--|--|--|--|
| Connector <sup>2</sup> | CX-0018                                  |  |  |  |  |
| Semantic               | Digital Twin: CX-0002 or Agents: CX-0084 |  |  |  |  |
| Provider Base          | CX-0008 <sup>3</sup>                     |  |  |  |  |

<sup>1</sup> Business Application Provider has to perform an interoperability check. <sup>2</sup> If no EDC is implemented in the solution, at least the Data Management-API is subject of the certification.

<sup>3</sup> TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP and TISAX Level

3 is mandatory for CSP-A/B (as soon as the standard is adapted).



| <b>Traceability</b> <sup>1</sup> | CX-0125<br>Additional <sup>2</sup> :<br>CX-0005   |
|----------------------------------|---|
| Industry Core <sup>5,6</sup>     | CX-0127:<br>It is tightly bound to the Industry Core, as Quality Alerts and Quality Investigation Requests should<br>reference batches and/or serialized part instances as described in the standard CX - 0127 INDUSTRY<br>CORE: PART INSTANCE.<br>Regarding CX-0005: This standardization is built upon existing standards, such as CX-0127. |
| Connector <sup>3</sup>           | CX-0018   |
| Semantic                         | Digital Twin: CX-0002 or Agents: CX-0084  |
| Provider Base                    | CX-00084  |

<sup>1</sup>Business Application Provider has to perform an interoperability check.

<sup>2</sup> If "Additional" Standards are used or offered in a Solution, the certification of these Standards is required.

<sup>3</sup> If no EDC is implemented in the solution, at least the Data Management-API is subject of the certification.

<sup>4</sup>TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP and TISAX Level 3 is mandatory for CSP-A/B (as soon as the standard is adapted).

<sup>5</sup> Digital Twins have to contain the defined Specific Asset Ids. Additional use case specific data models have to be provided as Digital Twin submodels. If the respective data models are used, these have to be certified against the specification defined within the Industry Core standard.

<sup>6</sup> When using certain features, the referenced section of the standard is required.

| <b>Behavioral Twin</b> <sup>1</sup> | <b>Behavioral Twin<br/>Endurance Predictor:</b><br>CX-0059 | <b>Behavioral Twin<br/>Endurance Estimator:</b><br>CX-0138 | <b>Health Indicator:</b><br>CX-0141 |
|-------------------------------------|--|--|-------------------------------------|
| Industry Core <sup>4, 5</sup>       |  |  |                                     |
| Connector <sup>2</sup>              | CX-0018  |  |                                     |
| Semantic                            | Digital Twin: CX-0002 or A                                 | gents: CX-0084   |                                     |
| Provider Base                       | CX-0008 <sup>3</sup>                                       |  |                                     |

<sup>1</sup>Business Application Provider has to perform an interoperability check.

<sup>2</sup> If no EDC is implemented in the solution, at least the Data Management-API is subject of the certification.

<sup>3</sup>TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP and TISAX Level 3 is mandatory for CSP-A/B (as soon as the standard is adapted).

<sup>4</sup> Digital Twins have to contain the defined Specific Asset Ids. Additional use case specific data models have to be provided as Digital Twin submodels. If the respective data models are used, these have to be certified against the specification defined within the Industry Core standard.

<sup>5</sup>When using certain features, the referenced section of the standard is required.

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### Modular System – Business Applikation Provider

| PCF <sup>1</sup>       | CX-0136                                  |
|------------------------|--|
| Connector <sup>2</sup> | CX-0018                                  |
| Semantic               | Digital Twin: CX-0002 or Agents: CX-0084 |
| Provider Base          | CX-0008 <sup>3</sup>                     |

<sup>1</sup> Business Application Provider has to perform an interoperability check.

<sup>2</sup> If no EDC is implemented in the solution, at least the Data Management-API is subject of the certification.

<sup>3</sup> TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP and TISAX Level 3 is mandatory for CSP-A/B (as soon as the standard is adapted).



|                                 |   | • •  |  |  | / /                                   |  |
|---------------------------------|---|--|--|--|---------------------------------------|--|
| <b>Circularity</b> <sup>1</sup> | <b>Circularity Core:</b><br>CX-0131   |  |  | Secondary<br>Marketplace <sup>2</sup> :<br>CX-0117 | Asset Tracking:<br>CX-0105<br>CX-0045 |  |
|                                 | Secondary Material Content:   | <b>EoL / Dismantling Services:</b><br>CX-0053  | <b>CE-Assistant:</b><br>CX-0053  |  |                                       |  |
|                                 |   |  | Additional (Recommended)⁴:<br>CX-0136  |  |                                       |  |
| Industry Core <sup>4,5</sup>    | CX-0126:<br>2.0 Industry Core: Part Type with<br>the Aspect Model<br>"SingleLevelBomAsPlanned"<br>(RECOMMENDED)   | CX-0126:<br>2.0 Industry Core: Part Type with<br>the Aspect Model<br>"SingleLevelBomAsPlanned"<br>(RECOMMENDED)  | CX-0126:<br>2.0 Industry Core: Part Type with the<br>Aspect Model<br>"SingleLevelBomAsPlanned"<br>(RECOMMENDED)  |  |                                       |  |
|                                 | <ul> <li>CX-0127:</li> <li>2.0 Industry Core: Part Instance<br/>with the Aspect Model<br/>"SerialPart"</li> <li>2.0 Industry Core: Part Instance<br/>with the Aspect Model<br/>"SingleLevelBoMAsBuilt"</li> </ul> | <ul> <li>CX-0127</li> <li>2.0 Industry Core: Part<br/>Instance with the Aspect Model<br/>"SerialPart"</li> <li>2.0 Industry Core: Part<br/>Instance with the Aspect Model<br/>"SingleLevelBoMAsBuilt"</li> </ul> | <ul> <li>CX-0127</li> <li>2.0 Industry Core: Part Instance<br/>with the Aspect Model "SerialPart"</li> <li>2.0 Industry Core: Part Instance<br/>with the Aspect Model<br/>"SingleLevelBoMAsBuilt"</li> </ul> |  |                                       |  |
| <b>Connector</b> <sup>3</sup>   | CX-0018   |  |  |  |                                       |  |
| Semantic                        | Digital Twin: CX-0002 or Agents: C  | X-0084   |  |  |                                       |  |
| Provider Base                   | CX-0008 <sup>7</sup>  |  |  |  |                                       |  |

<sup>1</sup>Business Application Provider has to perform an interoperability check.

<sup>2</sup> Can only be provided in combination with certified Core Services.

<sup>3</sup> If no EDC is implemented in the solution, at least the Data Management-API is subject of the certification.

<sup>4</sup>When using certain features, the referenced section of the standard is required.

<sup>5</sup> Digital Twins have to contain the defined Specific Asset Ids. Additional use case specific data models have to be provided as Digital Twin submodels. If the respective data models are used, these have to be certified against the specification defined within the Industry Core standard.

<sup>6</sup>When using certain features, the focussed section of the standard is optional.

<sup>7</sup>TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP and TISAX Level 3 is mandatory for CSP-A/B (as soon as the standard is adapted).



| Eco Pass <sup>1</sup>        | CX-0143  |
|------------------------------|--|
| Industry Core <sup>4,5</sup> | CX-0126:<br>As described in the industry core standards <u>CX-0126</u> and <u>CX-0127</u> , when digital<br>twins MUST include the key digitalTwinType.<br>CX-0127:<br>As described in the industry core standards <u>CX-0126</u> and <u>CX-0127</u> , when digital<br>twins MUST include the key digitalTwinType. |
| Connector <sup>2</sup>       | CX-0018  |
| Semantic                     | Digital Twin: CX-0002 or Agents: CX-0084   |
| Provider Base                | CX-0008 <sup>3</sup>   |

<sup>1</sup>Business Application Provider has to perform an interoperability check.

<sup>2</sup> If no EDC is implemented in the solution, at least the Data Management-API is subject of the certification.

<sup>3</sup> TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP and TISAX Level 3 is mandatory for CSP-A/B (as soon as the standard is adapted).

<sup>4</sup> Digital Twins have to contain the defined Specific Asset Ids. Additional use case specific data models have to be provided as Digital Twin submodels. If the respective data models are used, these have to be certified against the specification defined within the Industry Core standard.

<sup>5</sup>When using certain features, the referenced section of the standard is required.



| <b>ESS</b> <sup>1</sup> | CX-0144                                  |
|-------------------------|--|
| Connector <sup>2</sup>  | CX-0018                                  |
| Semantic                | Digital Twin: CX-0002 or Agents: CX-0084 |
| Provider Base           | CX-0008 <sup>3</sup>                     |

<sup>1</sup> Business Application Provider has to perform an interoperability check.

<sup>2</sup> If no EDC is implemented in the solution, at least the Data Management-API is subject of the certification.

<sup>3</sup>TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP and TISAX Level 3 is mandatory for CSP-A/B (as soon as the standard is adapted).

| MaaS <sup>1</sup>      | Manufacturing Capability Exchange:<br>CX-0115 | CX-0129 |
|------------------------|---|---------|
| Connector <sup>2</sup> | CX-0018                                       |         |
| Semantic               | Digital Twin: CX-0002 or Agents: CX-0084      |         |
| Provider Base          | CX-0008 <sup>3</sup>                          |         |

<sup>1</sup> Business Application Provider has to perform an interoperability check.

<sup>2</sup> If no EDC is implemented in the solution, at least the Data Management-API is subject of the certification.

<sup>3</sup>TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP and TISAX Level 3 is mandatory for CSP-A/B (as soon as the standard is adapted).



| Modular Production <sup>1</sup> | Shop Floor Information Service:<br>CX-0142 |
|---------------------------------|--|
| Connector <sup>2</sup>          | CX-0018                                    |
| Semantic                        | Digital Twin: CX-0002 or Agents: CX-0084   |
| Provider Base                   | CX-0008 <sup>3</sup>                       |

<sup>1</sup>Business Application Provider has to perform an interoperability check.

<sup>2</sup> If no EDC is implemented in the solution, at least the Data Management-API is subject of the certification.

<sup>3</sup>TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP and TISAX Level 3 is mandatory for CSP-A/B (as soon as the standard is adapted).



| DCM <sup>1</sup>             | <ul> <li>CX-0128</li> <li>Additional<sup>4</sup>:<br/>CX-0146:</li> <li>5.10 Supply Chain Disruption Notifications<br/>To enable a quick information flow outside a capacity group and the DCM process with<br/>regards to upcoming disruptions in the supply chain and potential effect beyond the one-to-<br/>one business relationship, a notifications functionality MAY be used. If a business partner<br/>decides to use this feature it MUST be used conforming to [<u>CX-0146</u>].</li> </ul> |
|------------------------------|--|
| Industry Core <sup>4,5</sup> | CX-0126:<br>Regarding CX-0128: When registering Submodels with<br>semanticId WeekBasedMaterialDemand, the data provider (supplier) MUST reuse the IDs<br>mandated in [ <u>CX-0126</u> ], section 2.1.4.<br>Regarding CX-0146: This standard utilizes the Catena-X Material Global Asset ID as an<br>optional property in the DemandAndCapacityNotification aspect model, that needs to be<br>compliant to standard [ <u>CX-0126]</u> Industry Core: Part Type.   |
| Connector <sup>2</sup>       | CX-0018  |
| Semantic                     | Digital Twin: CX-0002 or Agents: CX-0084   |
| Provider Base                | CX-0008 <sup>3</sup>   |

<sup>1</sup>Business Application Provider has to perform an interoperability check.

<sup>2</sup> If no EDC is implemented in the solution, at least the Data Management-API is subject of the certification.

<sup>3</sup>TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP and TISAX Level 3 is mandatory for CSP-A/B (as soon as the standard is adapted).

<sup>4</sup> When using certain features, the referenced section of the standard is required.

<sup>5</sup> Digital Twins have to contain the defined Specific Asset Ids. Additional use case specific data models have to be provided as Digital Twin submodels. If the respective data models are used, these have to be certified against the specification defined within the Industry Core standard.

<sup>6</sup>When using certain features, the referenced section of the standard is required.

|                                 | -  |   |  |   |   |  |  |
|---------------------------------|--|---|--|---|---|--|--|
| <b>PURIS</b> <sup>1</sup>       | CX-0118<br>Additional⁵:  | CX-0120<br>Additional <sup>5</sup> :  | CX-0121<br>Additional <sup>5</sup> :   | CX-0122<br>Additional⁵:   | CX-0145<br>Additional⁵:   |  |  |
|                                 | CX-0146:   | CX-0146:  | CX-0146:   | CX-0146:  | CX-0146:  |  |  |
|                                 | 5.10 Supply Chain<br>Disruption Notifications<br>To enable a quick<br>information flow outside a<br>capacity group and the DCM<br>process with regards to<br>upcoming disruptions in the<br>supply chain and potential<br>effect beyond the one-to-one<br>business relationship, a<br>notifications functionality<br>MAY be used. If a business<br>partner decides to use this<br>feature it MUST be used<br>conforming to [ <u>CX–0146</u> ]. | 5.10 Supply Chain Disruption<br>Notifications<br>To enable a quick information flow<br>outside a capacity group and the<br>DCM process with regards to<br>upcoming disruptions in the supply<br>chain and potential effect beyond<br>the one-to-one business<br>relationship, a notifications<br>functionality MAY be used. If a<br>business partner decides to use this<br>feature it MUST be used conforming<br>to [CX-0146]. | 5.10 Supply Chain Disruption<br>Notifications<br>To enable a quick<br>information flow outside a<br>capacity group and the DCM<br>process with regards to<br>upcoming disruptions in the<br>supply chain and potential<br>effect beyond the one-to-one<br>business relationship, a<br>notifications functionality<br>MAY be used. If a business<br>partner decides to use this<br>feature it MUST be used<br>conforming to [ <u>CX-0146</u> ]. | 5.10 Supply Chain Disruption<br>Notifications<br>To enable a quick information<br>flow outside a capacity group<br>and the DCM process with<br>regards to upcoming<br>disruptions in the supply chain<br>and potential effect beyond<br>the one-to-one business<br>relationship, a notifications<br>functionality MAY be used. If a<br>business partner decides to<br>use this feature it MUST be<br>used conforming to [ <u>CX–0146</u> ]. | 5.10 Supply Chain<br>Disruption Notifications<br>To enable a quick<br>information flow outside a<br>capacity group and the<br>DCM process with regards<br>to upcoming disruptions in<br>the supply chain and<br>potential effect beyond the<br>one-to-one business<br>relationship, a notifications<br>functionality MAY be used. If<br>a business partner decides<br>to use this feature it MUST<br>be used conforming to [ <u>CX-</u><br><u>0146</u> ]. |  |  |
| Industry<br>Core <sup>4,5</sup> | CX-0126:   |   |  |   |   |  |  |
|                                 | The definition of identification data (Catena-X ID, Asset Administration Shell ID, specific asset ID) MUST follow the Industry Core Part Type [CX-0126].   |   |  |   |   |  |  |
| Connector <sup>2</sup>          | CX-0018  | CX-0018   |  |   |   |  |  |
| Semantic                        | Digital Twin: CX-0002 or Age   | ents: CX-0084   |  |   |   |  |  |
| Provider Base                   | CX-0008 <sup>3</sup>   |   |  |   |   |  |  |

<sup>1</sup>Business Application Provider has to perform an interoperability check.

<sup>2</sup> If no EDC is implemented in the solution, at least the Data Management-API is subject of the certification.

<sup>3</sup>TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP and TISAX Level 3 is mandatory for CSP-A/B (as soon as the standard is adapted).

<sup>4</sup>Digital Twins have to contain the defined Specific Asset Ids. Additional use case specific data models have to be provided as Digital Twin submodels. If the respective data models are used, these have to be certified against the specification defined within the Industry Core standard.

<sup>5</sup>When using certain features, the referenced section of the standard is required.

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#### Modular System – Business Applikation Provider

| <b>OSIM</b> <sup>1</sup> | CX-0133                                  |
|--------------------------|--|
| Connector <sup>2</sup>   | CX-0018                                  |
| Semantic                 | Digital Twin: CX-0002 or Agents: CX-0084 |
| Provider Base            | CX-0008 <sup>3</sup>                     |

<sup>1</sup> Business Application Provider has to perform an interoperability check.

<sup>2</sup> If no EDC is implemented in the solution, at least the Data Management-API is subject of the certification.

<sup>3</sup> TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP and TISAX Level 3 is mandatory for CSP-A/B (as soon as the standard is adapted).

#### Data Consumer & Provider and Enablement Service Provider



#### Modular System – Data Provider and Consumer

| Connector | When using a CX-Certified enablement service, no separate certification is required  |
|-----------|--|
|           | CX-0018  |
|           | Additional <sup>1</sup> :<br>CX-0002<br>CX-0003<br>CX-0005<br>CX-0007<br>CX-0045<br>CX-0055<br>CX-0084<br>CX-0126<br>CX-0127 |

<sup>1</sup>If "Additional" Standards are used or offered in a Solution, the certification of these Standards is required.



#### Modular System – Enablement Service Provider

| Connector as a Service | Connector as a Service<br>CX-0018  |
|------------------------|--|
|                        | Additional <sup>1</sup> : Backend Integration Pattern 1<br>CX-0002<br>CX-0003<br>CX-0055 |
|                        | Additional <sup>1</sup> : Backend Integration Pattern 2<br>CX-0055<br>CX-0084            |
|                        | Additional <sup>1</sup> : Simple Data Exchanger<br>CX-0007                               |
|                        | Additional <sup>1</sup> : Data Chain<br>CX-0005<br>CX-0045                               |
| Provider Base          | CX-0008 <sup>2</sup>   |

<sup>1</sup> If "Additional" Standards are used or offered in a Solution, the certification of these Standards is required.

<sup>2</sup> TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP. TISAX Level 3 is mandatory for CSP-A/B (as soon as the standard is adapted).



#### Modular System – Enablement Service Provider

| Digital Twin Registry as a<br>Service | Digital Twin Registry aaS<br>CX-0002   |
|---------------------------------------|--|
|                                       | Additional <sup>1</sup> : Backend Integration Pattern 1<br>CX-0002<br>CX-0003<br>CX-0055 |
|                                       | Additional <sup>1</sup> : Backend Integration Pattern 2<br>CX-0055<br>CX-0084            |
|                                       | Additional <sup>1</sup> : Simple Data Exchanger<br>CX-0007                               |
|                                       | Additional <sup>1</sup> : Data Chain<br>CX-0005<br>CX-0045                               |
| Provider Base                         | CX-0008 <sup>2</sup>   |

<sup>1</sup> If "Additional" Standards are used or offered in a Solution, the certification of these Stand

<sup>2</sup>TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP. TISAX Level 3 is mandatory for CSP-A/B (as soon as the standard is adapted).

Core Service Provider, Onboarding Service Provider, Sandbox Service Provider and Third Party Information Provider



#### Modular System – Core Service Provider

| <b>Core Service Provider</b> <sup>2</sup> | MIW<br>CX-0013<br>CX-0049<br>CX-0050<br>CX-0149  |  |
|---|--|--|
|   | Portal           CX-0001           CX-0006           CX-0009           CX-0014           CX-0015           CX-0053           CX-0074 |  |
|   | Marketplace           CX-0054           BPDM           CX-0010           CX-0011           CX-0012                                   |  |
| Provider Base                             | CX-0008 <sup>1</sup>   |  |

<sup>1</sup>TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP. TISAX Level 3 is mandatory for CSP-A/B (as soon as the standard is adapted). <sup>2</sup>Core Services B lists Core Services that can only be operated once in the Catena-X data space due to business reasons or technical limitations and are therefore tendered via the nomination process of the Association.



### Modular System – Onboarding Service Provider

| Onboarding<br>Service<br>Provider <sup>1</sup> | CX-0006<br>CX-0009   |
|--|----------------------|
| Provider Base                                  | CX-0008 <sup>2</sup> |

<sup>1</sup> Limitations Jupiter: this role currently only covers part of the registration process in the Catena-X data space. The currently available process is depicted in figure "General Onboarding Process". <sup>2</sup> TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP. TISAX Level 3 is mandatory for CSP-A/B (as soon as the standard is adapted).

#### Modular System – Sandbox Service Provider

| Sandbox Services <sup>1</sup> | Connector<br>CX-0018           Onboarding<br>CX-0006<br>CX-0009           BPDM<br>CX-0010<br>CX-0011<br>CX-0011<br>CX-0012<br>CX-0053<br>CX-0074           Golden Record |  |
|-------------------------------|--|--|
|                               | CX-0149<br>Portal<br>CX-0001<br>CX-0006<br>CX-0009<br>CX-0014<br>CX-0015<br>CX-0015<br>CX-0053<br>CX-0074<br>Marketplace<br>CX-00083                                     |  |
| Provider Base                 | CX-0008 <sup>3</sup>   |  |

<sup>1</sup> Catena-X Sandboxes contain all services required for the operation of a minimum valuable Catena-X data space, namely: CSP-B services (excluding the cleansing service of BPDM and GXDCH integration) and OSP services.

<sup>2</sup> TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP. TISAX Level 3 is mandatory for CSP-A/B (as soon as the standard is adapted).

#### Value Added Services



#### Modular System – Value Added Services

| Value<br>Added<br>Services <sup>1</sup> | Data Quality<br>Dashboard:<br>CX-0076<br>CX-0077 | Bank Data<br>Verification:<br>CX-0078 | Natural<br>Person<br>Screening:<br>CX-0079 | <b>BPDM Fraud</b><br><b>Prevention</b><br>CX-0080 | <b>Country Risk:</b><br>CX-0081 | Sanction<br>Watchlist<br>Dashboard:<br>CX-0116 | Company<br>Certificate<br>Management:<br>CX-0135 |
|---|--|---------------------------------------|--|---|---------------------------------|--|--|
| Provider Base                           | CX-0008 <sup>2</sup>                             |                                       |  |   |                                 |  |  |

<sup>1</sup> Can only be provided in combination with certified Core Services.

<sup>2</sup> TISAX Level 2 is mandatory from July 2025, with grace period of 12 month, for all OSP, ESP and BAP. TISAX Level 3 is

mandatory for CSP-A/B (as soon as the standard is adapted).