Digital Nameplate (DNP) and Digital Product Passport (DPP) are enablers for Green Deal

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AIOTI Signature Event
November 30th, 2021
The Digital Nameplate 4.0 (DNP)
consistent.sustainable.future-proved.connected

Saving time and costs
• Access to product documentation online
• No costs for paper and logistics

One valid standard
• Across companies
• via DIN SPEC 91406
  -> IEC TS 61406 ("Identification Link")

Global Access
• Documents in all languages
• Locale Certificates (CE, CCC, ...)

Sustainability
• Saving resources
• No paper documentation anymore
Example Digital Nameplate (DNP)

Online readable with Siemens App
Industry only support
(Apple Store, Google Playstore)

Offline & online readable with any QR Code App
e.g. Qrbot, QR-Code,
QRCodeScanner, ScanDIT
(Apple Store, Google Playstore)
ZVEI supports the position of ORGALIM on SPI and DPP

Orgalim views on the SPI and DPP

Our **general position on the proposed content of the DPP** is as follows noting that it will depend on the type of products that will be within the scope of the passport as well as on how these proposed requirements will be formulated in detail:

- **We agree** with the following proposals:
  - List of legislation and standards that the product complies with, or the technical specifications that it fulfils
  - Information on safe use and instructions, where applicable

- **We are neutral** on the following proposals
  - Information relevant for testing, disassembly, maintenance, repair or reassembly
  - Information on Product Environmental and/or carbon footprint, or other relevant sustainability characteristics
  - Any possession of sustainability labels, such as the EU Ecolabel
  - Information on how the product should be recycled and/or handled at the end of life

**Orgalim views on the SPI and DPP**

Our **general position on the proposed content of the DPP**:

- **We disagree** with the following proposals:
  - Economic actors at the origin of information
  - Recycled content of each material present in the product
  - Results of compliance tests against legislations, standards or technical specifications
  - Expected lifespan of the product

- **We strongly disagree** with the following proposals:
  - List of materials and substances present in the product
  - Quantities of materials and substances present in the product
  - Presence in the product of hazardous chemicals, and if so, their location
  - Information relevant to remanufacture and spare parts (e.g., CAD technical drawings, 3D printing files)
  - Information on the origin of product components
  - Information on material sources (e.g., conflict-free materials, responsible mining etc.)
“EU Digital Product Passport (DPP)“ is the combination of „Digital nameplate (DNP)“ and any „Product information“ provided by the manufacturer at an „Identification Link“

Product

Digital nameplate

Product Information provided by manufacturer
· IEC 62474 (Material declaration for products of and for the E&E industry)
· PCF (Product Carbon Footprint)
  -> ZVEI-Show-Case
· ...

Product lifecycle

Design → Engineering → Production → Operation → Recycling

Digital nameplate

Product Information
· ...
· ...

= EU Digital product passport

Source: ZVEI
“EU Digital Product Passport (DPP)” will enable “Digital Transformation” and trigger business based on “Digital Services” („Digital €€“)

Product

Digital nameplate

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Product Information
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= EU Digital product passport

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- Other information provided by the manufacturer:
  -...
  - - Digital Services
  - - New Business Models

Source: ZVEI
ZVEI-Showcase „CO₂-Footprint of a Control Cabinet“ based on AAS (Asset Administration Shell)

- OEM = Manufacturer of Control Cabinet
- 1st-Tier-Supplier = Manufacturer of Components C1, C2, C3,…
- For each component C1, C2, C3,… each manufacturer provides:
  - Digital Nameplate
  - CO₂-Footprint
  - Calculation of CO₂-Footprint along existing PCF-methods (e.g. ISO14067)
ZVEI-Show-Case PCF@Control Cabinet
Participating Stakeholders

- ABB
- ARENA 2036
- Endress+Hauser
- BERTHOLD
- bitkom
- DKE VDE DIN
- FESTO
- HUAWEI
- IDTA
- ifm electronic
- Knick
- Mitsubishi Electric
- Pfannenberg
- Phoenix Contact
- Rexroth Bosch Group
- Rittal
- SCHAEFFLER
- PLATTEFIRM INDUSTRIE 4.0
- Life Is On Schneider Electric
- Siemens
- StaHL
- VDMA
- WittENstein
- wöhner ALLES MIT SPANNUNG

Prof. Dr. Dieter Wegener  I  November 30th, 2021
Siemens Technology –
Contact and further information

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Other external activities:

(1) since 2014 Chair of ZVEI Management Circle “Industrie 4.0”, Frankfurt
(ZVEI = German Electrical and Electronic Manufacturers’ Association)

(2) since 2015 Vice-President DKE, Frankfurt
(DKE = German Commission for Electrical, Electronic & Information Technologies of DIN and VDE)

(3) since 2016 Chair of Advisory Board SCI4.0 (Co-Founder), Frankfurt
(SCI4.0 = “Standardization Council Industrie 4.0”)

(4) since 2019 Vice-Chair of DMEC (Co-Founder), Digital Europe, Brussels
(DMEC = Digital Manufacturing Executive Council)

(5) since 2019 Chair of DIN Presidential Committee FOCUS.ICT for “German ICT- Standardization”, DIN, Berlin

(6) since 2019 Member of DIN/DKE-Coordination Group "German AI-Standardization Roadmap", DIN, Berlin

(7) since 2021 Vice-Chair of ZVEI Management Circle “Environment-, Energy- & Climate Politics”, Frankfurt