

Anhang 1 Normungsprojekte und relevante Begriffe:

- [1] Industrie 4.0 Ergebnispapier „Fortschreibung der Anwendungsszenarien“, Szenario „Wandlungsfähige Fabrik“, Seiten 11-13, Plattform Industrie 4.0 Oktober 2016, https://www.acatech.de/wp-content/uploads/2018/04/PI40_lang_Forschungsbeirat_Wandlungsa%CC%88igkeit_lang_bf_fin.pdf
- [2] Duden 2016, <http://www.duden.de/suchen/dudenonline/Grammatik>
- [3] <https://de.wikipedia.org/wiki/Grammatik>
- [4] <https://de.wikipedia.org/wiki/Syntax>
- [5] <https://cdd.iec.ch/cdd/iec61360/iec61360.nsf/TreeFrameset?OpenFrameSet>
- [6] https://www.vdi.de/fileadmin/user_upload/VDI-GMA_Statusreport_Referenzarchitekturmodell-Industrie40.pdf
- [7] Der eCI@ss ISO/IEC normenkonforme Industriestandard für die Klassifizierung von Produkten und Dienstleistungen: <https://www.eclass.eu/>
- [8] Normenreihe DIN 820: Normungsarbeit; Berlin : Beuth-Verlag.
- [9] ETSI GS ISI 006: {03-2019} IMA and C-Slang
- [10] ISO/IEC JTC1/SC27 WG4 Information Security, Cybersecurity and Privacy Protection - Security Controls and Services
- [11] IEC 61360, p1-p4 Common Data Dictionary CDD V2.0014.0016, <https://cdd.iec.ch>
- [12] IEC SC3D Product Properties and Classes and their Identification
- [13] W3C RDF Resource Description Framework <https://www.w3.org/RDF/>
- [14] DGS Deutsche Gesellschaft für Semiotik e.V. <http://www.semiotik.en/>
- [15] Klaus Bernsau: Was ist eigentlich Semiotik? Was hat Semiotik mit Wirtschaft und Unternehmen zu tun? Buchauszug S.213-S.218
- [16] JTC1/SC42 DIS 20547-3:2019 N1829 IT Big Data Reference Architecture —> RDF Graph Storages
- [17] onem2m.org TS-0034-Semantics_Support-V4_0_0.doc, 2019, <http://www.onem2m.org/technical/published-drafts/release-4>
- [18] OMG ReqIF™ v1.2:07-2016, Requirements Interchange Format <https://www.omg.org/spec/ReqIF/About-ReqIF/>, machine-consumable files reqif.cmof, reqif.xsd, driver.xsd and, https://de.wikipedia.org/wiki/Requirements_Interchange_Format
- [19] AutomationML (IEC 62714)
- [20] Organic Computing Self-X-Funktionalität - Int. Symposium on Object-oriented Real-Time Distributed Computing (IEEE ISORC:2005)
- [21] NAMUR Open Architecture (NOA): Interessensverband der Anwender der Automatisierungstechnik <https://www.namur.net/de/ueber-uns/vision-und-mission.html>
- [22] The Attributed Graph Grammar Transformation Tool (AGG 2.1), TU Berlin: <http://www.user.tu-berlin.de/o.runge/agg/>
- [23] GrGen.NET Graph Rewrite Generator for declarative languages for Graph Modelling, KIT: <http://www.info.uni-karlsruhe.de/software/grgen/>
- [24] TÜV-Süd Zertifizierung nach IEC 62443: <https://www.tuev-sued.de/fokus-themen/it-security/industrial-it-security/zertifizierung-nach-iec-62443>
- [25] IEC 62443 Industrial Automation and Control Systems (IACS) multipart standard series: https://de.wikipedia.org/wiki/IEC_62443
- [26] Matlab Datenanalyse: <https://de.mathworks.com/videos/big-data-and-machine-learning-for-engineers-with-matlab-1491597665623.html>
- [27] ISO/IEC JTC1/SC41 N0990: WG3 Next Generation Architecture and Vocabulary, Antonio Kung: Externaldocs_21823-3_IoT_Semantic_Interoperability_20190810.doccx

[28] OPC Foundation: Interoperabilität für I4.0 und IIoT - Standards für Vertikale und Horizontale Kommunikation <https://opcfoundation.org/wp-content/uploads/2015/04/OPC-UA-Interoperability-For-Industrie4-and-IIoT-DE1.pdf>

[29] Natasha Noy et al: ‚Industry-scale Knowledge Graphs: Lessons and Challenges‘ [CACM.ACM.ORG](https://cacm.acm.org) 08/2019 Vol.62 No. 08, pp.36-43;

[30] Jan de Meer: ‚Data Theory‘ Präsentationen bei GI/ACM I4.0 ACS Workshop - GI Jahrestagungen 2016 - 2019

[31] Vassilis Kambhampati, Gerhard Ritter: ‚Computational Intelligence based on Lattice Theory‘, Springer-Verlag

[32] Common Logic Framework: ISO/IEC 24707:2007 - Information technology — Common Logic (CL), https://en.wikipedia.org/wiki/Common_LoGic

hier verwendet Abkürzungen und Begriffe:

BDL	Big Data Lake, ETSI GS006 - IMA
CL	Common Logic Framework, ISO/IEC 24707:2007
C-Slang	Common Semantics Specification Language, ETIS GS ISI006:03/19
CPS	Cyber-Physical System
DER	Distributed Energy Resources, Smart Grid Infrastructure
FLN	Functional Linkage Network [Journal of Biological Theory]
	Fuzzy Lattice Neurocomputing [Computational Intelligence based on Lattice Theory]
GMS	Graph Manipulation Semantics, ‚Prozeß Graph‘ genannt
HMI	Human-Machine Interface, Mensch-Maschine Schnittstelle
IACS	Industrial Automation and Control Systems, IEC 62443
IMA	ISI Measurement and Event Management Architecture, ETIS GS ISI006:03/19
ISI	Information Security Indicators, ETSI GS ISI001- GS ISI005, GS ISI007
KG	(Industry-scale) Knowledge Graph, ‚Daten Graph‘ Äquivalenz
MMI	Machine-Machine Interface
NOA	NAMUR Open Architecture, NAMUR.net
OPC UA	Open Platform Communications Unified Architecture, OPC Foundation
RDF	Resource Description Framework, W3.org
SGS	Semantic Graph Storage, ‚Daten Graph‘ genannt