

Electronic Device Description Language L'ISA SP104

Christian DIEDRICH

Convenor IEC SC65E WG 7 (IEC 61804) « Function Blocks for Process Control and Electronic Device Description Language »

Ifak Magdeburg

Steinfeldstr. 3

D-39179 Barleben – Germany

christian.diedrich@ifak.eu

Key-words: EDDL language, field devices, integration tool, IEC 61804-3, parametrisation

Handhelds of PC based software tools are necessary for the commissioning of intelligent field devices. They are used to carry out configuration, parameterisation and diagnosis tasks. Furthermore, these tools must provide the integration of the field devices into the overall engineering process of the control system. The EDDL (Electronic Device Description Language) is a standardised (IEC 61804-3) description language to solve these tasks.

Field devices are represented in EDD related tools by a textual file. The EDD provides the business and presentation logic which are for example:

- *Identification*
- *General Information*
- *Diagnostics*
- *Performance Analysis (e.g. valve signature, hysteresis, step response etc.)*
- *Operational Statistics*
- *Parameterisation and Range*
- *Advanced setup such as radar echo curve*
- *Simulation and Override*
- *Calibration Trim*
- *Monitoring*
- *Device Security*
- *Reset*

Technicians can interact with devices in their native language based on a multilingual dictionary for both offline and online parameterisation. The look and feel of the function of different device classes and manufactures becomes similar, based on a comprehensive set of text, table and graphic based HMI interface elements.