

International Electrotechnical Commission

IEC Technical Committee No. 3

Documentation and graphical symbols

SC3A Graphical symbols for diagrams

SC3B Documentation

SC3C Graphical symbols for use on equipment

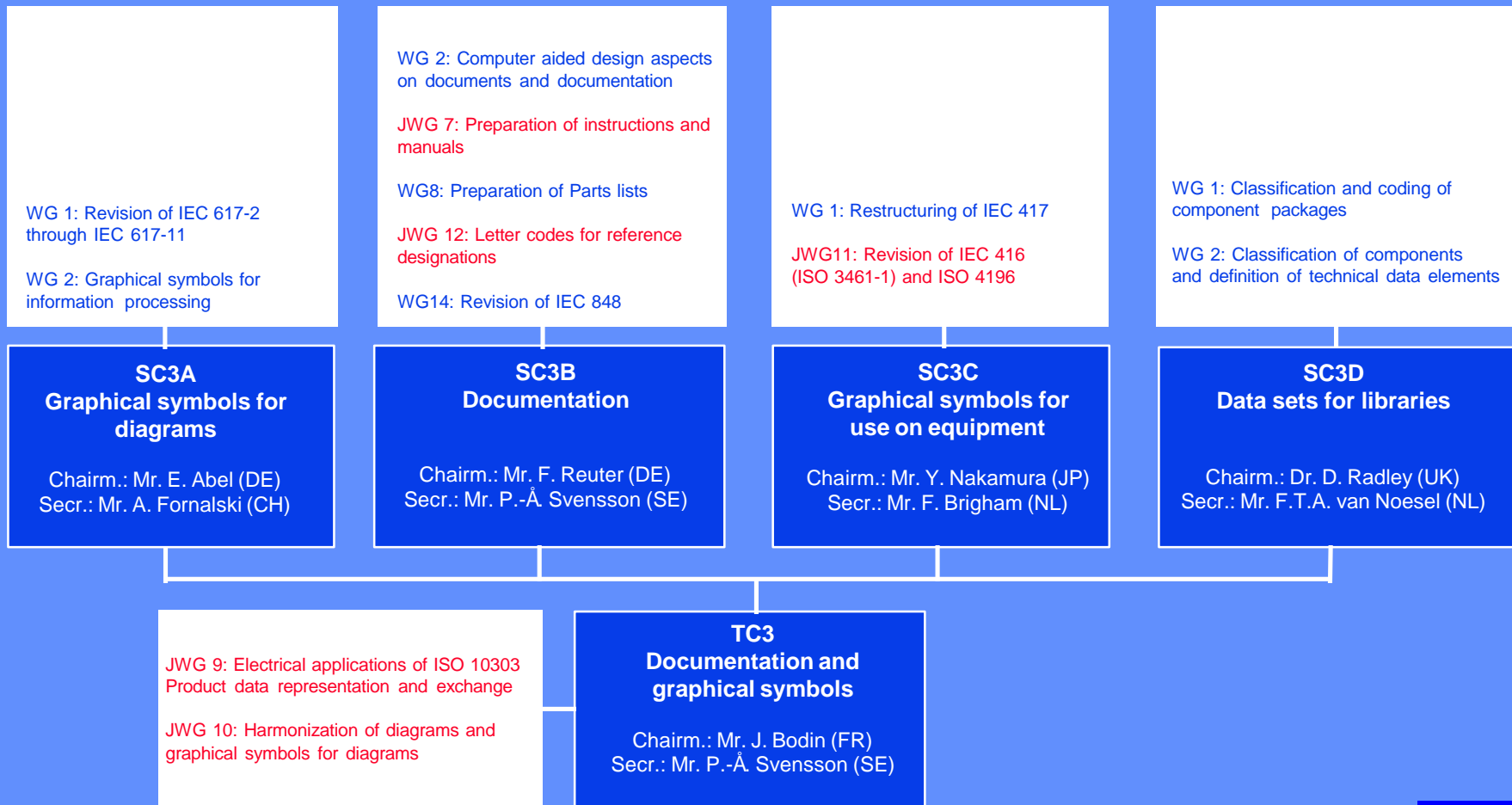
SC3D Data sets for libraries

TC3 Documentation and graphical symbols

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Parties interested in standardization: producers and consumers - enterprises, organizations, etc. via National Committees



TC3 Documentation and graphical symbols



Business environment

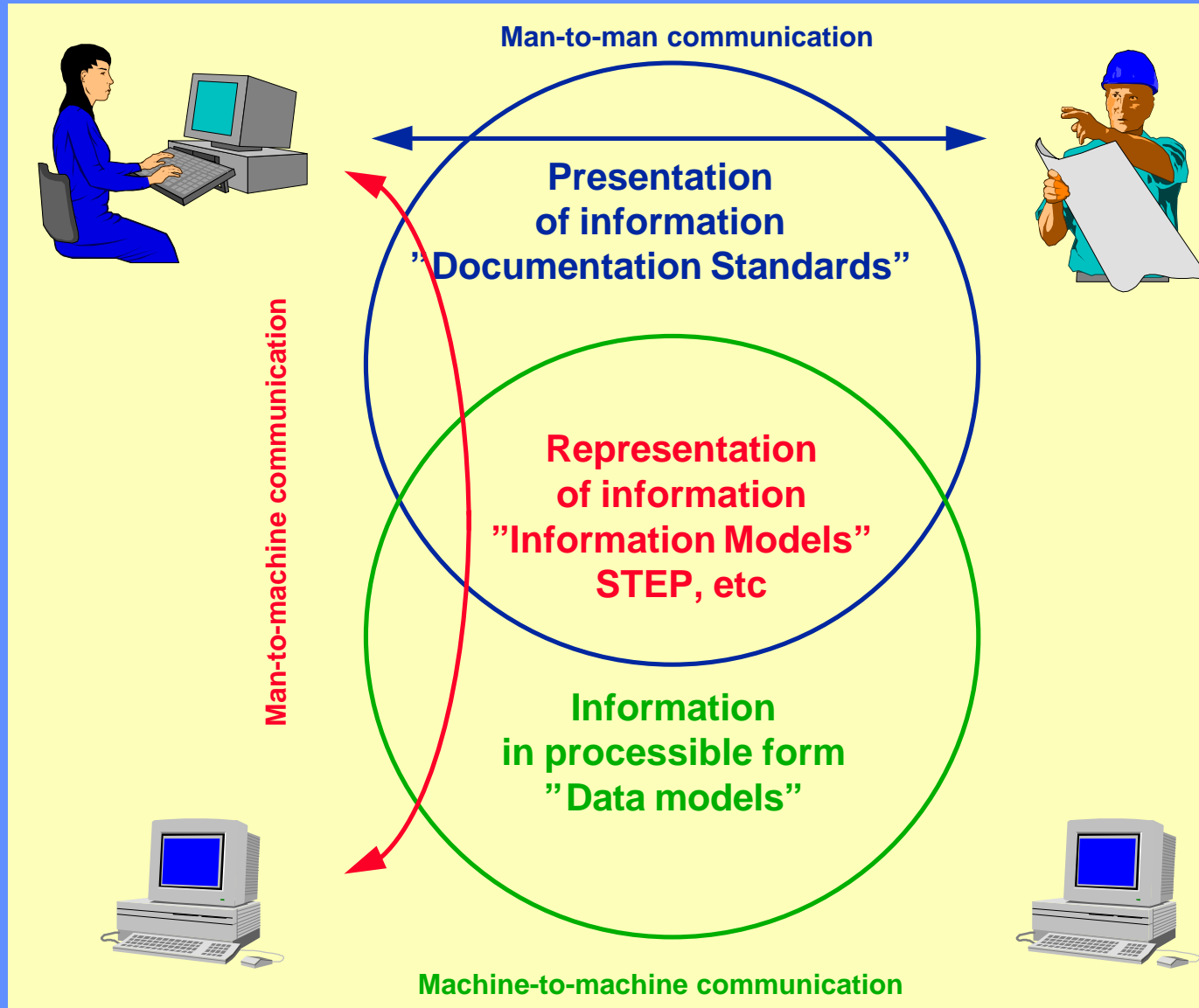
- Documentation is part of the product, system or installation
- Documents and information from different sources need to be integrated
- Multidisciplinary environment
- The whole life cycle of the product, system or installation should be served
- Information technology changes the products, systems and installations

Market demand for the standards

- The traditional documentation and symbols standards belong to the group of "best sellers", since they are used in the daily work
- Information technology related standards manifest themselves as functionality in CAx systems and influence the work indirectly: therefore not likely to be "best-sellers", but maybe even more important

Trends in technology and trade

- Information technology changes the way of working
 - the move to computer-based documentation has now been completed with regard to the production of "simple" documents
 - focus on management, distribution and use
 - networking
 - concurrency instead of sequence
- Computer sensible (interpretable) - not only computer processible



TC3 Documentation and graphical symbols

Scope of TC3 (part 1)

- Methods and rules associated with the human interpretation of documentation
 - presentation of information in technical documentation
 - graphical symbols for use in technical documentation
 - graphical symbols for human interaction with equipment

Scope of TC3 (part 2)

- Methods and rules associated with the handling of information in computer sensible form
 - information models for the purpose of technical documentation
 - definition of data element types and data sets

Methods and rules associated with the human interpretation of documentation

- presentation of information in technical documentation

- IEC 60848 Preparation of function charts for control systems
- IEC 61082 Preparation of documents used in electrotechnology
 - Part 1 General requirements
 - Part 2 Function-oriented diagrams
 - Part 3 Connection diagrams, tables and lists
 - Part 4 Installation and location documents
 - (Part 5) Parts lists (co-ord with ISO > IEC 62023 + IEC 62027)
 - Part 6 Index
 - Part 11 Instructions (co-ordinated with ISO)

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Methods and rules associated with the human interpretation of documentation

- presentation of information in technical documentation

- IEC 61346 Structuring principles and reference designations,
 - Part 1: Basic rules (co-ordinated with ISO)
 - Part 2: Classification of objects and codes for objects (co-ordinated with ISO)
 - Part 3: Application guidelines (co-ordinated with ISO)
 - Part 4: TR Discussion of concepts ...
- IEC 61355 Classification and designation of documents for plants, systems, ... (co-ordinated with ISO)
- IEC 61666 Identification of terminals within a system

Methods and rules associated with the human interpretation of documentation

- graphical symbols for use in technical documentation

- IEC 60617 Graphical symbols for diagrams
 - Part 1 to 13 (New ed. 2 published 1996)
- ISO 11714 Design of graphical symbols ..,
 - Part 1: Basic rules (co-ordinated with IEC)
- ISO 14617 Graphical symbols for diagrams
 - -1 ... 5 TR (co-ordinated with IEC)

Methods and rules associated with the human interpretation of documentation

- graphical symbols for human interaction with equipment

- IEC 60416 Design of graphical symbols for use on equipment
- IEC 60417 Graphical symbols for use on equipment (co-ordinated with ISO)

- ISO 10303 "STEP-AP"
 - Part 210 Printed circuit assembly, design and manufacture
 - Part 212 Electrotechnical design and manufacture
 - Part 220 PCA manufacturing planning
- IEC 61286 Character set for electrotechnical diagrams
- IEC 61714 Design of graphical symbols ...
 - Part 2: Specification of graphical symbols in computer sensible form ...
 - Part 3: Classification of connect nodes

Methods and rules associated with the handling of information in computer sensible form

- definition of data element types and data sets

- IEC 61360 Standard data element types ... for electric components
 - Part 1: Definitions - Principles and methods
 - Part 2: EXPRESS dictionary schema (co-ordinated with ISO)
 - Part 3: Maintenance and validation procedure
 - Part 4: IEC reference collection of standard data element types, component classes and terms