

STRUCTURED DESCRIPTION OF SYSTEM AND FUNCTIONS

The system specification summarizes the requirements for a mechatronic system in a central document. It creates the basis for a uniform understanding of the system and the goal for all project participants. The clarification and documentation of functions and requirements in the specification reveal ambiguities at an early stage and help to minimize project risks from the start. It provides the basis for reliable time and cost planning needed for a successful project.

Minimize errors and delays

The large amount of software and the high demands on a mechatronic system require individual departments to be "structured interdisciplinarity" in order to determine the interfaces to each other and the requirements for the system at an early stage.

Classic, sequential development approaches often do not do justice to this interdisciplinary approach, as each discipline has its own requirements, processes and therefore its own schedule.

Sequential development approaches mean that risks, errors and inadequate requirements are often only recognized at an advanced stage of the project, resulting in high costs and delays in resolving these errors.





System specification creates acceptance!

The system specification is an important tool for creating this uniform system understanding. It is a structured description of the system and its functions.

The aim is to define, quantify and describe features and characteristics. These features serve as the basis for development work and can be used as criteria for acceptance or handover.

We help you to introduce the system specification in your company and to establish it as a central working basis for developments and order processing. In joint workshops, your template for the specification is worked out in interdisciplinary teams.

SYSTEM SPECIFICATION

CENTRAL WORKING BASIS FOR ALL DISCIPLINES



APPROACH

We proceed in a structured manner

The system specification describes the most important aspects of a mechatronic system in a structured document: An introduction gives a brief overview and describes the reason for the development, the rough structure and where the system is to be used. The subsequent specification contains a complete description of the system. In addition to the environment, configurations and ope-

rating modes, the functions and properties of the system are also described. Test scenarios can later be derived from applications and processes. The framework conditions describe all requirements such as mechanical, electrical as well as environmental and operating conditions. Requirements for standards, guidelines, delivery, support, project management and documentation are also included in the specification of the system.



"A good system specification at the beginning of a project is an important basis for its success."

Jörn Linke ITQ Branch Manager NRW ☐ linke@itq.de

BENEFITSWhat's the offer?

- Early recording/identification of all requirements and risks in the project
- Central working document for all disciplines
- Creation of a basis for modularization
- Improvement of project management in the company
- Specification of the technical solution
- Creation of a modular system with a repeated procedure
- Possibility of systematic testing and improvement of quality assurance
- Lower project costs through shorter commissioning and lead times
- Improved development process

SERVICES

Our contribution to your successful engineering

- Definition and analysis of requirements for your system
- Implementation of risk assessments and containment
- Support in developing a generic system specification template

 Implementation of workshops on working with the system specification

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- Support with the introduction of the system specification in your company
- Analysis and optimization of your development process

SYSTEMS ENGINEERING

ITQ GmbH