

Cluster: software development

Content: design

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Requirement specification

SRD/SRS

Anglo-American world uses two documents

- System requirements definition (SRD)
 - Business analysis (system analyst)
 - identify business problems
 - propose solutions
- Software requirements specification (SRS)
 - requirements specification for a software system
 - complete description of the behavior of a system
 - all necessary requirements for project development

Requirement specification

SRS

Main topics are:

- Introduction (purpose, definitions, system overview)
- Overall description
 - Product perspective (interfaces)
 - Product functions
 - User characteristics
 - Constraints, assumptions and dependencies
- Specific requirements
 - Requirements (function, external interfaces, performance, logical database)
 - Design constraints
 - Software System attributes (reliability, availability, security, maintainability, portability)

Requirement specification

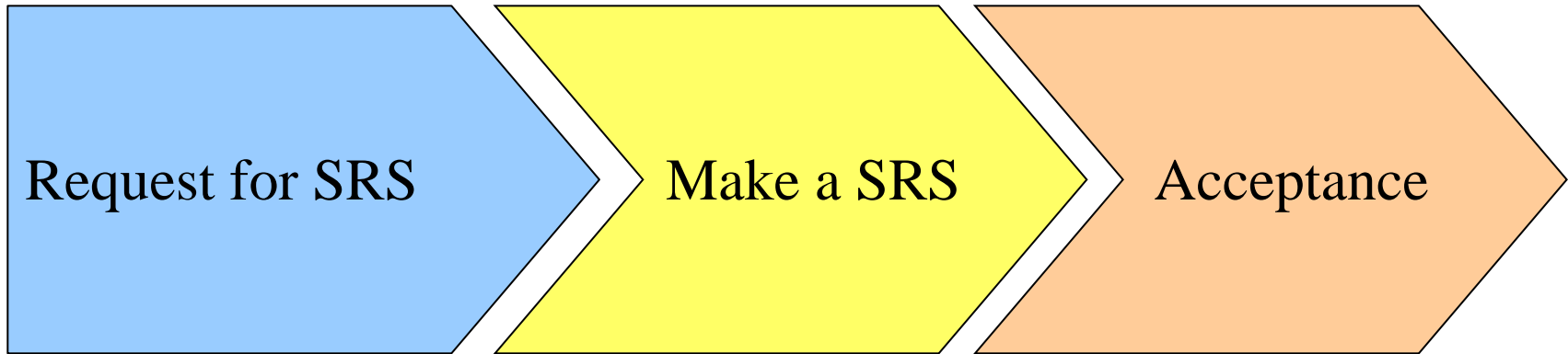
SRS

Continental Europe: there's only one document
(Austria too)

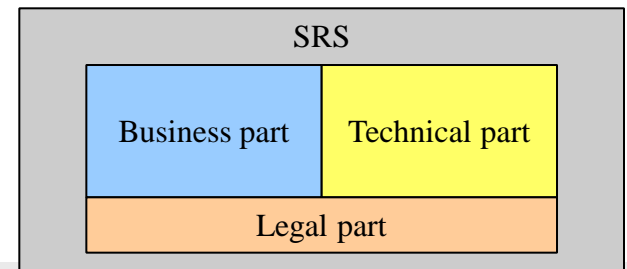
- "Pflichtenheft"
- Similar documents in other engineering branches
- frequently mixed up with the RDD ("Lastenheft")
- **Basis of contract**

SRS

The chronological order

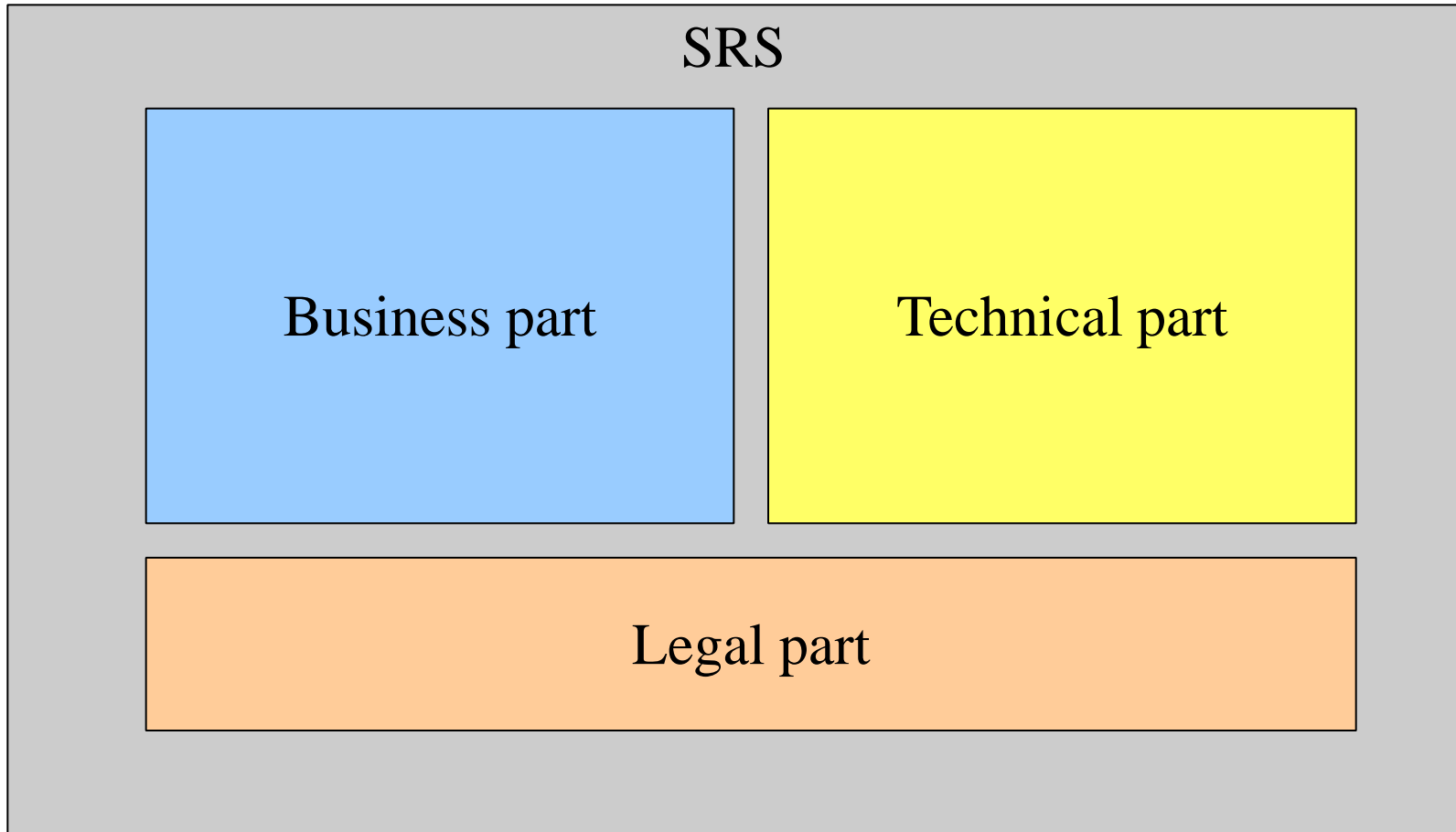


- This should be a request in writing!



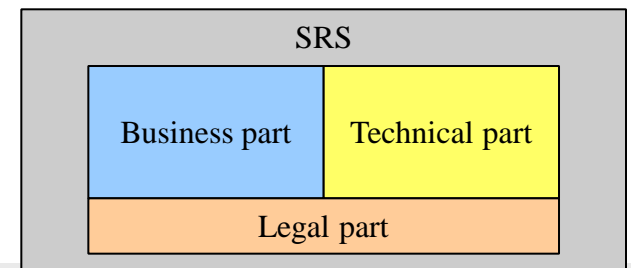
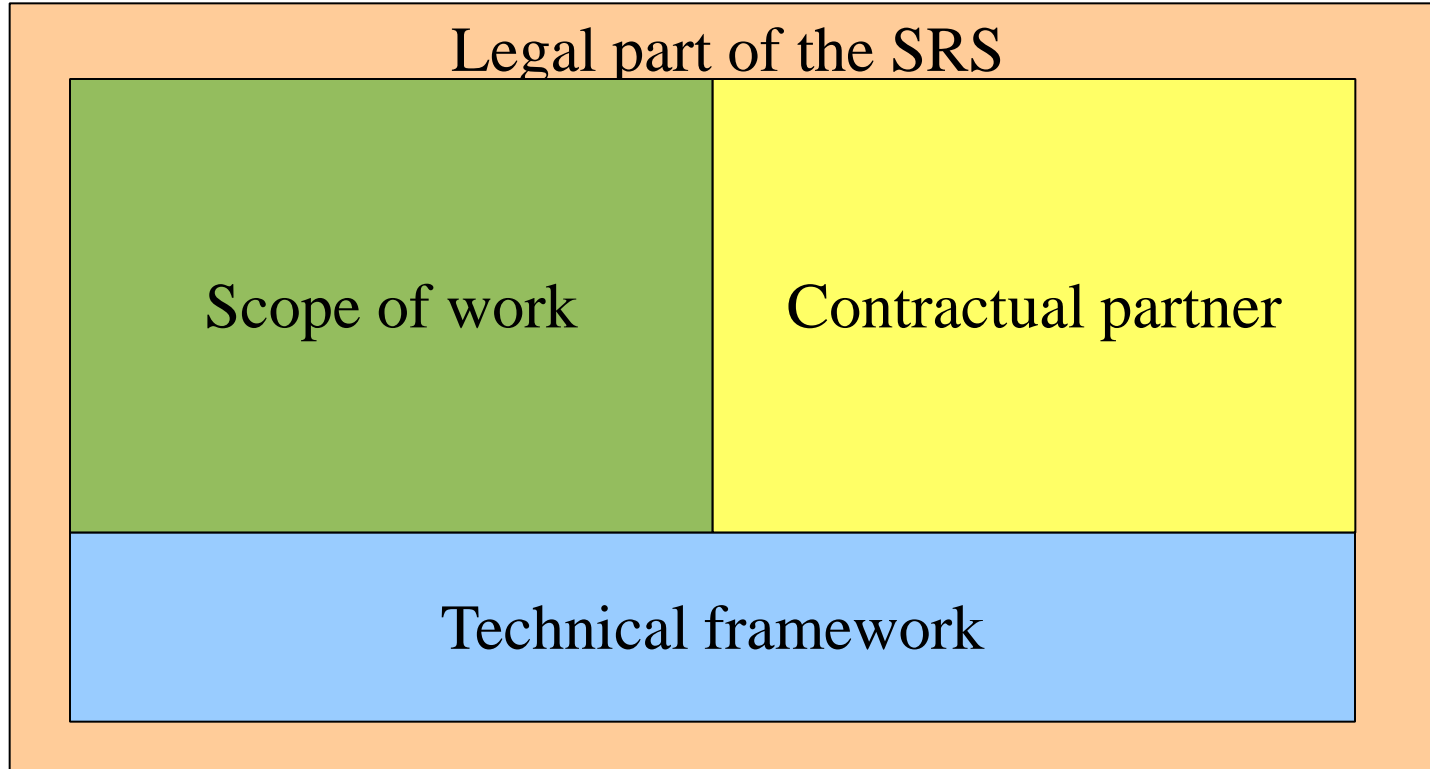
SRS

It mostly consists of ...



SRS

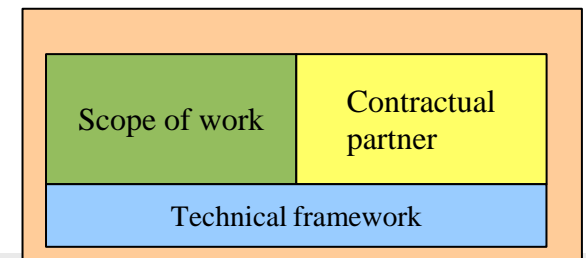
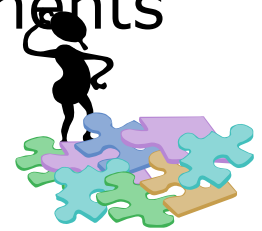
Content of the legal part



SRS

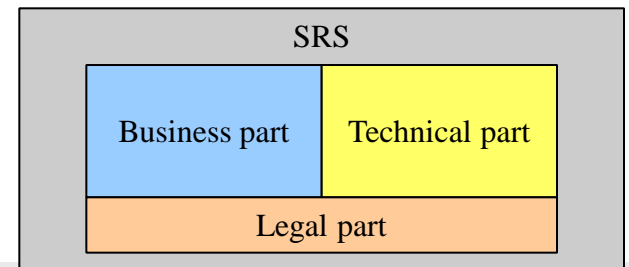
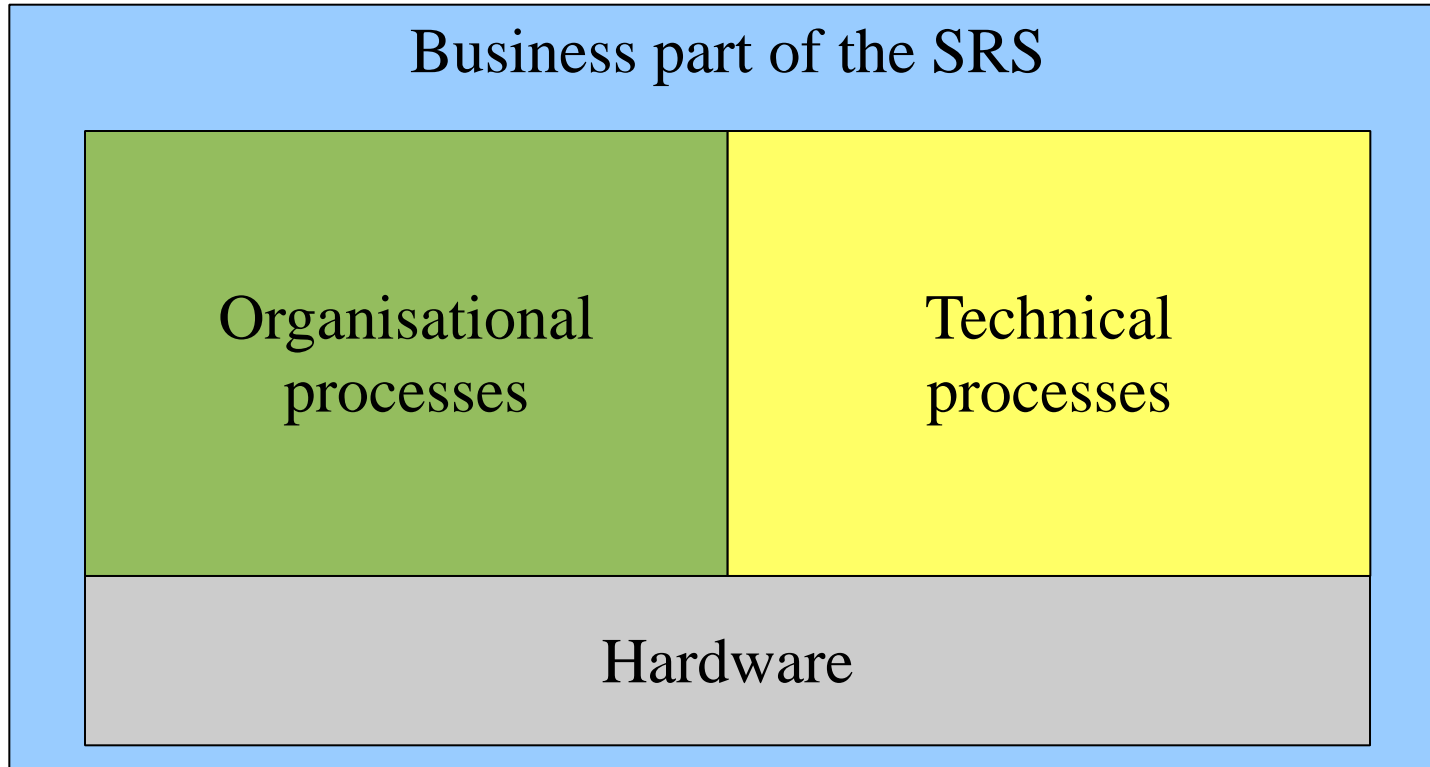
The legal part

- **Scope of work:**
 - precise definition in scope and objectives
- **Contractual partner:**
 - To commit the contractual partners to responsibilities within the project
 - Contact person from concerned departments (look after your project resources!)
- **Technical framework:**
 - Legacy Systems, current software
 - place of delivery
 - Methods, guidelines, etc.



SRS

Content of the business part



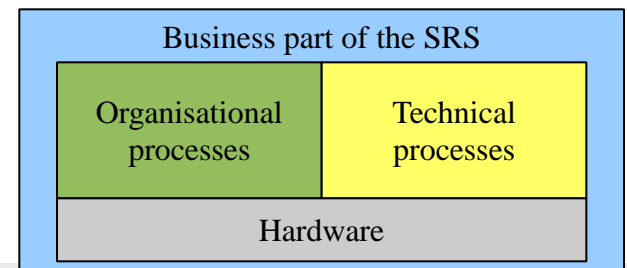
SRS

Business part

■ Overview:

- what to develop
- Use the valid system requirements
- Use a simple but precise structure
- Visualize the processes
- Use the language of the target group
- Document with appr. ~60-80 pages
(Attach complex topics in extra documents!)

Take care of the acceptability
by the concerned department

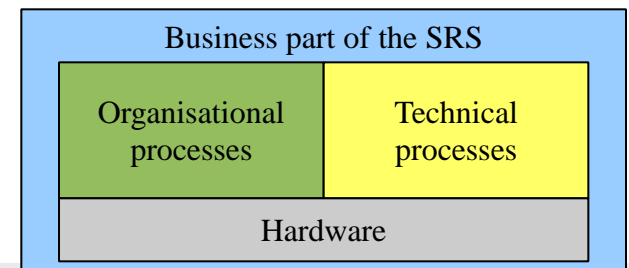


SRS

Business part

- **Organisational processes:**
 - First the overview, then the detailed view
 - Visualize the processes
- **Technical processes:**
 - In conjunction with the organisational processes!
 - Where are the UI?
 - What should be included?
 - Menues
 - Dialogs (Input, Output)
 - Tasks
 - Lists, Forms,...
 - Files (I/O, dataset schema)
- **Hardware:** in touch with the user

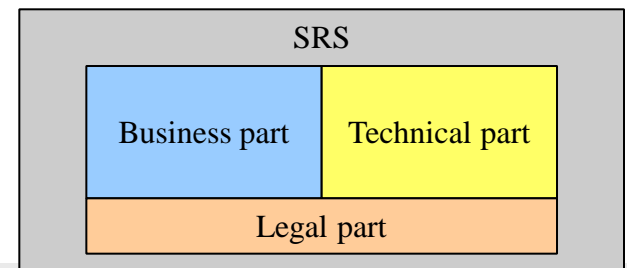
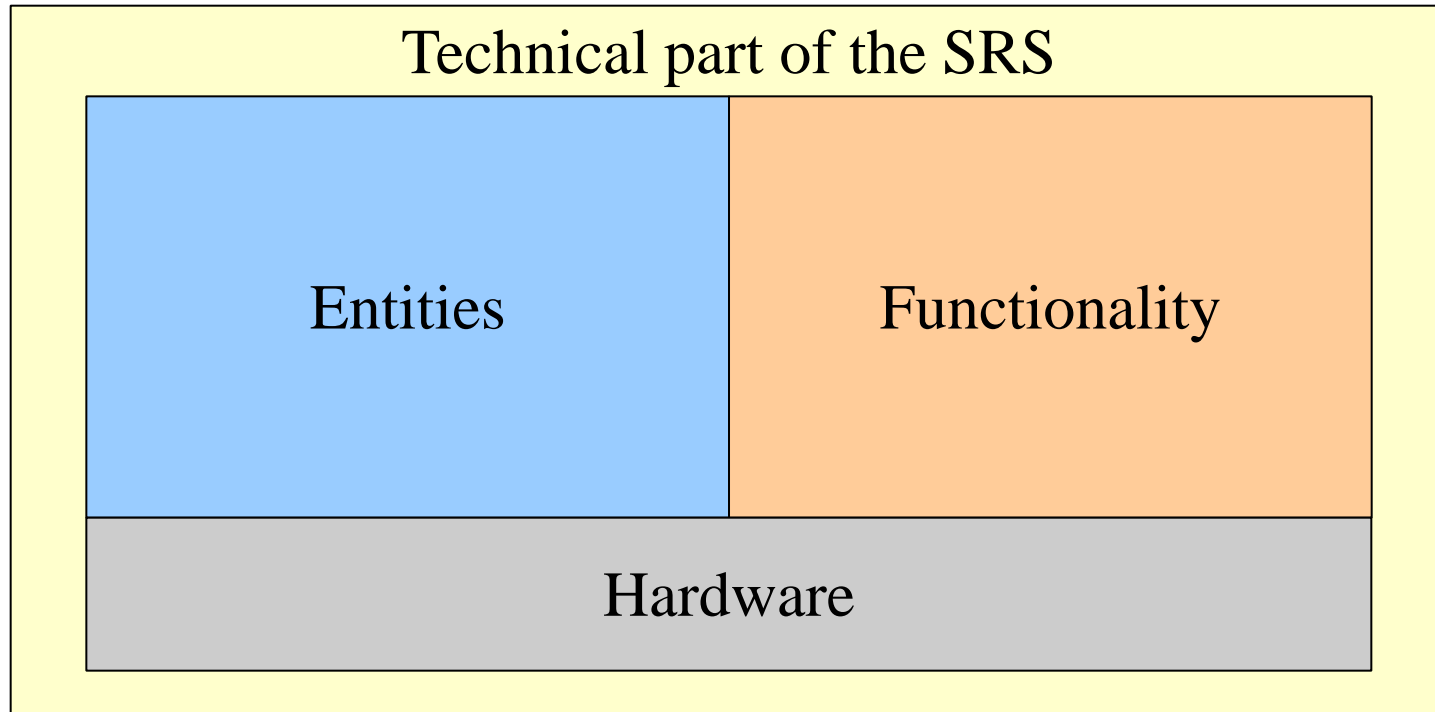
Use a simple visualization
and reuse it for
presentations later!



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SRS

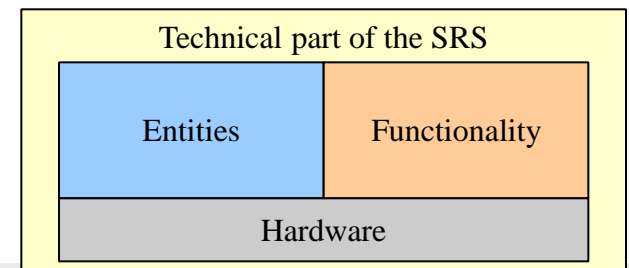
Content of the technical part



SRS

Technical part

- **Overview:**
 - How to develop
 - All necessary information to develop and maintain the application
 - ERM, structure of classes or functions
 - Content depends on the programming paradigm (OOP versus procedural programming)



SRS

Technical part

- **Entities:**
 - Precise description of entities and attributes (business, technical)
 - Conjunction between UI, dialogs and dataset schemas
- **Functionality**
 - Relations and methods
 - Many different ways to describe (UML)

