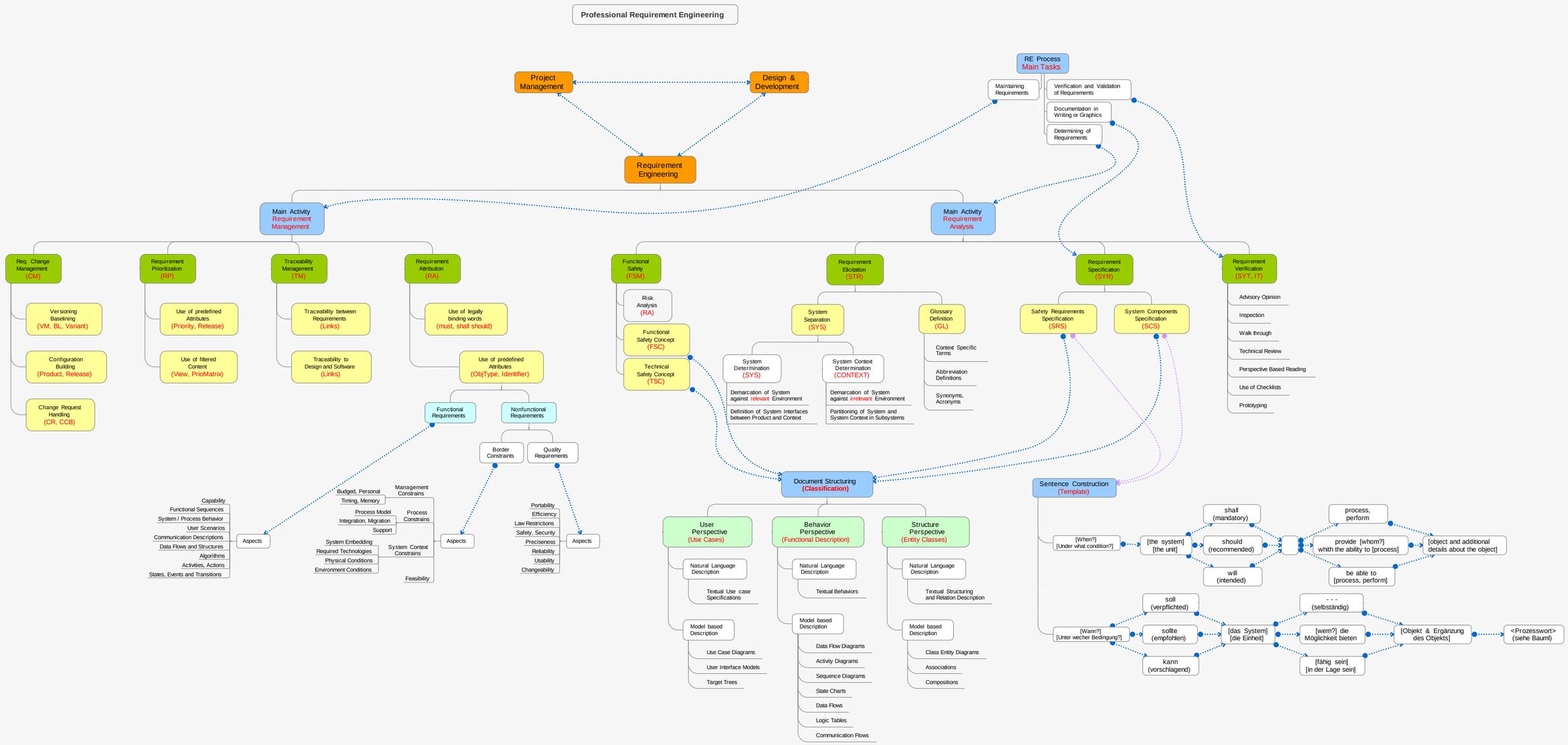
Professional Requirement Engineering
Project Management
Design & Development
Requirement Engineering
RE Process
Main Tasks
Maintaining Requirements
Verification and Validation of Requirements
Documentation in Writing or Graphics
Determining of Requirements
Main Activity
Requirement Management
Main Activity
Requirement Analysis
Req. Change Management (CM)
Versioning Baselining (VM, BL, Variant)
Configuration Building (Product, Release)
Change Request Handling (CR, CCB)
Requirement Prioritization (RP)
Use of predefined Attributes (Priority, Release)
Use of filtered Content (View, PrioMatrix)
Traceability Management (TM)
Traceability between Requirements (Links)
Traceability to Design and Software (Links)
Requirement Attribution (RA)
Use of legally binding words (must, shall should)
Use of predefined Attributes (ObjType, Identifier)
Functional Requirements
Nonfunctional Requirements
Border Constraints
Quality Requirements
Aspects
Capability
Functional Sequences
System / Process Behavior
User Scenarios
Communication Descriptions
Data Flows and Structures
Algorithms
Activities, Actions
States, Events and Transitions
Aspects
Management Constrains
Budged, Personal
Timing, Memory
Process Constrains
Process Model
Integration, Migration
Support
System Context Constrains
System Embedding
Required Technologies
Physical Conditions
Environment Conditions
Feasibility
Aspects
Portability
Efficiency
Law Restrictions
Safety, Security
Preciseness
Reliability
Usability
Changeability
Functional Safety (FSM)
Risk Analysis (RA)
Functional Safety Concept (FSC)
Technical Safety Concept (TSC)
Requirement Elicitation (STR)
System Separation (SYS)
System Determination (SYS)
Demarcation of System against relevant Environment
Definition of System Interfaces between Product and Context
System Context Determination (CONTEXT)
Demarcation of System against irrelevant Environment
Partitioning of System and System Context in Subsystems
Glossary Definition (GL)
Context Specific Terms
Abbreviation Definitions
Synonyms, Acronyms
Requirement Specification (SYR)
Safety Requirements Specification (SRS)
System Components Specification (SCS)
Requirement Verification (SYT, IT)
Advisory Opinion
Inspection
Walk through
Technical Review
Perspective Based Reading
Use of Checklists
Prototyping
Document Structuring (Classification)
User Perspective (Use Cases)
Natural Language Description
Textual Use case Specifications
Model based Description
Use Case Diagrams
User Interface Models
Target Trees
Behavior Perspective (Functional Description)
Natural Language Description
Textual Behaviors
Model based Description
Data Flow Diagrams
Activity Diagrams
Sequence Diagrams
State Charts
Data Flows
Logic Tables
Communication Flows
Structure Perspective (Entity Classes)
Natural Language Description
Textual Structuring and Relation Description
Model based Description
Class Entity Diagrams
Associations
Compositions
Sentence Construction (Template)
[When?] [Under what condition?]
[the system] [the unit]
shall (mandatory)
should (recommended)
will (intended)
process, perform
provide [whom?] whith the ability to [process]
be able to [process, perform]
[object and additional details about the object]
[Wann?] [Unter wecher Bedingung?]
soll (verpflichtet)
sollte (empfohlen)
kann (vorschlagend)
[das System] [die Einheit]
- - - (selbständig)
[wem?] die Möglichkeit bieten
[fähig sein] [in der Lage sein]
[Objekt & Ergänzung des Objekts]
<Prozesswort> (siehe Baum!)