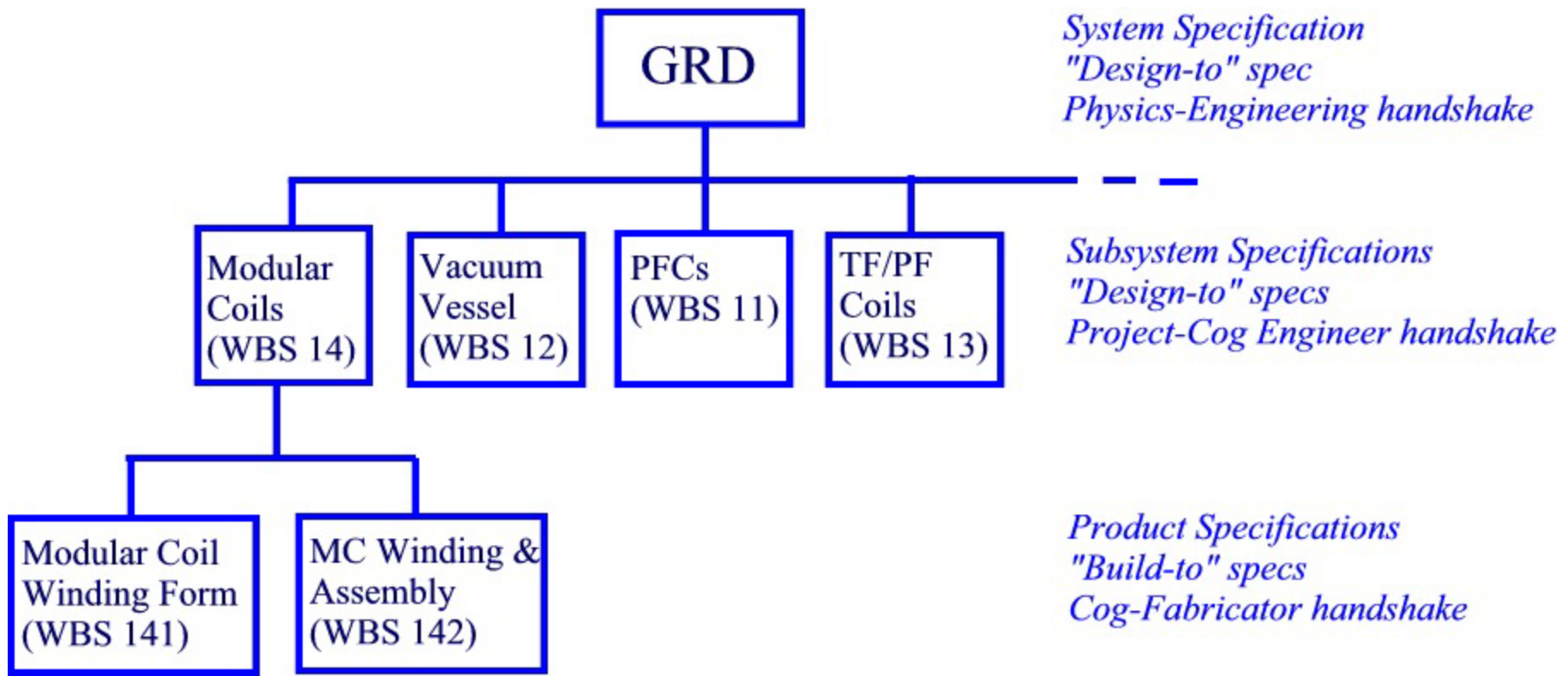


# About the GRD

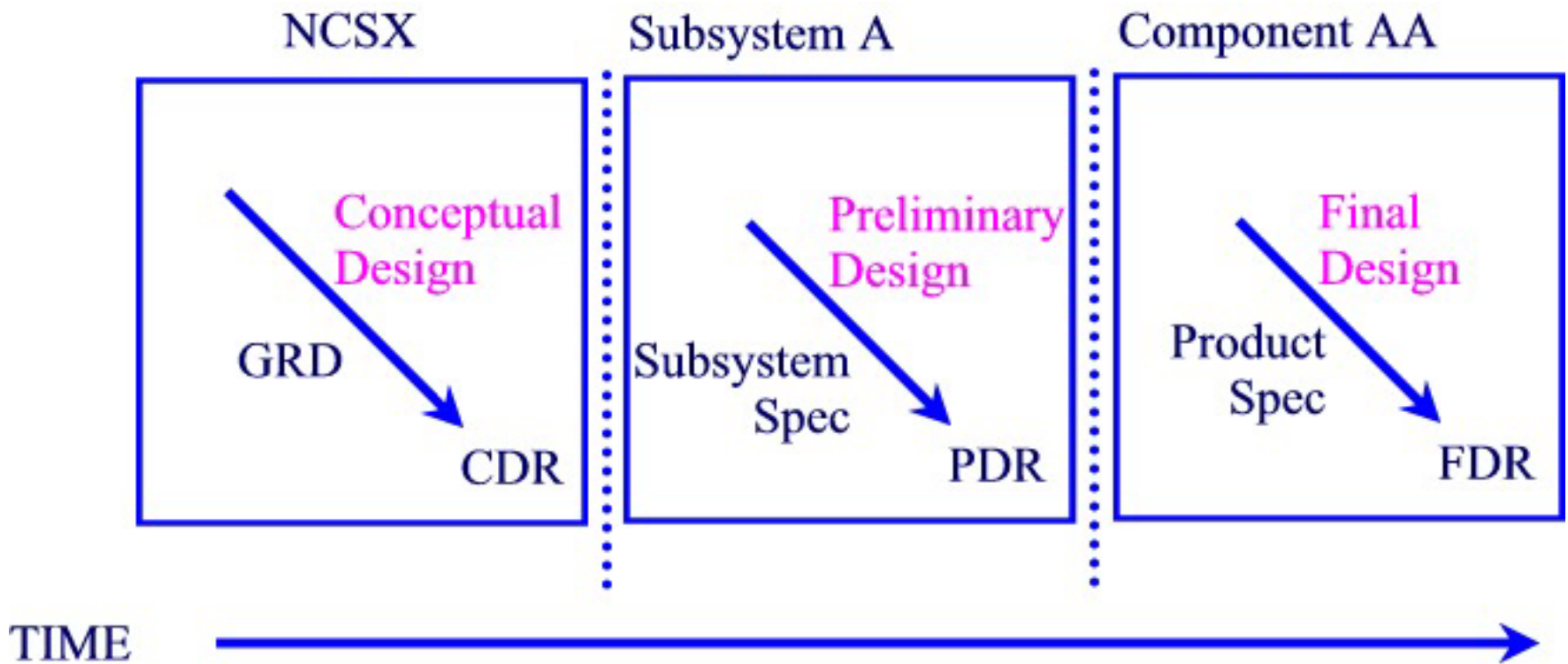
Reiersen

03 April 2003

# GRD is the top-level specification



# GRD developed in Conceptual Design



# Project spec formats patterned after standards in industry and government

- Leverage off wealth of experience that went into developing specification practices
  - MIL-STD-490, MIL-STD-961, etc...
- Specification types and formats are posted on the Engineering Web on the [Specifications Page](#)

# The 6-part format used throughout

Subsection contents tailored to type of spec

## 1 Scope

- Provide a clear, concise abstract of the coverage of the spec

## 2 Applicable documents

- Lists all and only the documents referenced in Section 3, 4 and 5

# 3 Requirements

Key subsections include the following...

- 3.2 **Characteristics** – Performance and physical characteristics defined here.
- 3.3 **Design and construction** – Requirements not controlled by performance characteristics or interface requirements defined here
- 3.7 **Characteristics of subordinate elements** – Requirements are allocated to lower level configuration items here.  
*Enforces traceability. Provides basis for developing lower level specs.*

# 4 Quality Assurance Provisions

- The principle behind this section is *verification* - if a requirement is important enough to be specified in Section 3 or 5, then it is important enough to be verified that it is met.
- For each requirement in Sections 3 and 5, the verification method (inspection, test, or analysis) is specified.
- *Provides basis for developing both analysis requirements and inspection and test plans.*

Remaining sections are straightforward

5 Preparations for Delivery

6 Notes and Appendices

- Technical data should be documented in appendices and referenced in the text of the spec to facilitate updating if the technical data (which is more volatile than the text) is changed



# Summary

- The GRD is the top-level spec and is the primary handshake between Physics and Engineering
- Lower level specs will be developed from requirements that flow down from the GRD
- Spec formats have been established based on industry/govt standards to promote consistency and completeness in developing specs
- The Specifications page on the Engineering Web lists the specs and format requirements
- Follow the guidelines and provide feedback so we can improve them