

Definition of “Requirement”

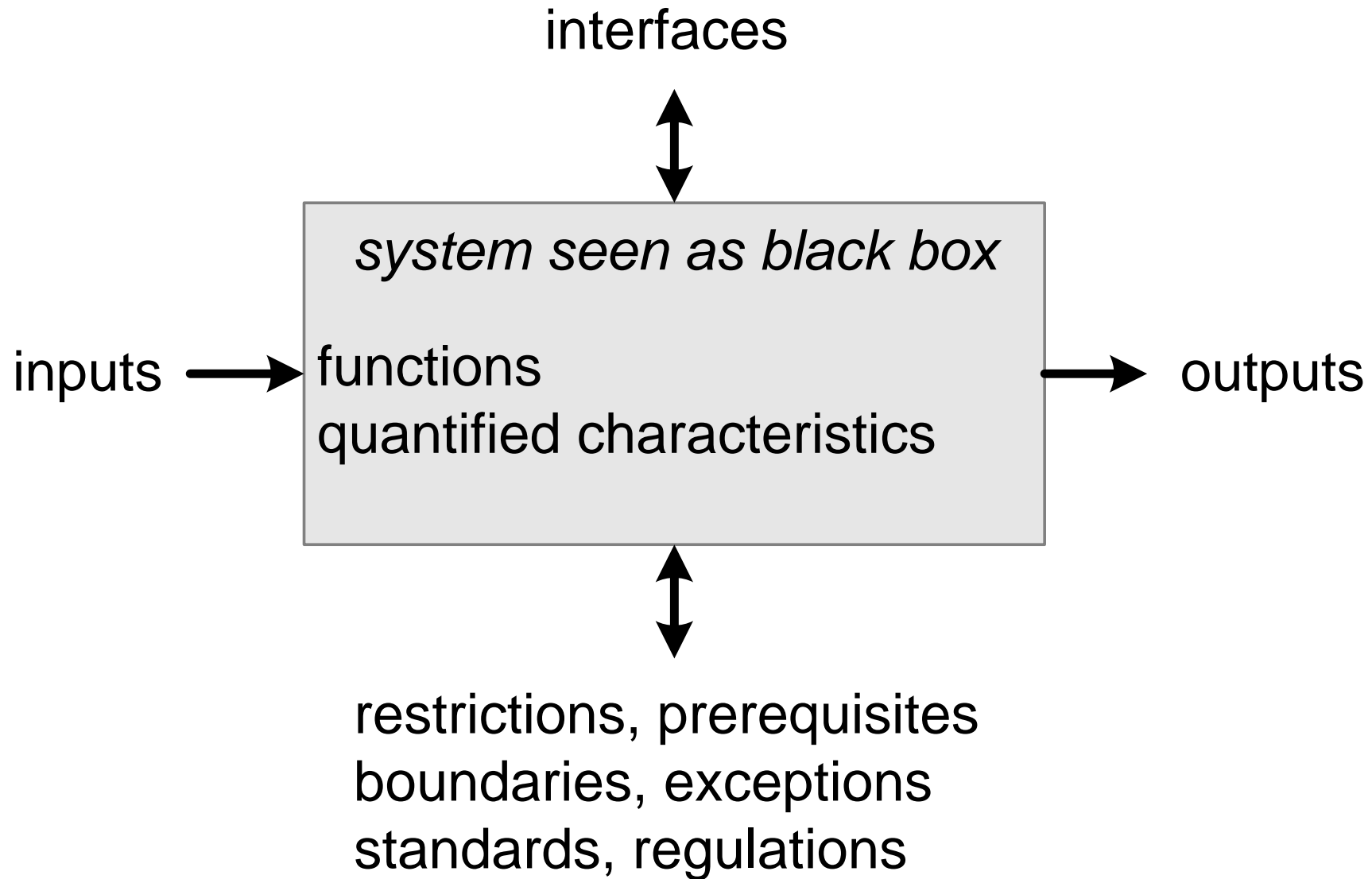
Requirements describing the needs of the customer:
Customer Needs

Requirements describing the characteristics of the final resulting system (product): ***System (Product) Specification***

The ***requirements management process*** recursively applies this definition for every level of decomposition.

Requirements describing the needs of the company itself over the life cycle: ***Life Cycle Needs***

System as a Black Box



Good Requirements are “SMART”

- **S**pecific quantified
- **M**easurable verifiable
- **A**chievable (Attainable, Action oriented, Acceptable, Agreed-upon, Accountable)
- **R**ealistic (Relevant, Result-Oriented)
- **T**ime-bounded (Timely , Tangible, Traceable)

Specific Requirements have Specific Circumstances

Typical Use Case

- What is the user typically doing with the system in the system context
- Quantify the operation and context in this typical case

Other Use Cases

- Operational variants
- Boundary behavior
- Exceptional cases

these use cases >> SysML use cases