

Resources Constraints

Description

The Resources Constraints (Rs-Ct) domain defines limitations, constraints, and performance parameters for resources, their interactions, performed functions, and data. It specifies traditional textual rules/non-functional requirements. The addition of SysML parametrics provide a computational means of defining resource constraints within a specific context.

The intended usage of the Resources Constraints (Rs-Ct) view includes:







- Definition of implementation logic.
- Identification of resource constraints.

Implementation

The Resources Constraints (Rs-Ct) view is represented by:

- [Resources Constraints table](#).
- [Resources Constraints Definition diagram](#).
- Resources Constraints Excel Spreadsheet (.xlsx) report.

Sample

#	Applies To	Name	Rule Specification	Rule Kind
1	 Boat	GMDSS Vessel Requirements	Ships subject to Title II Part II and Part III of the Communications Act of 1934, as amended have to fit GMDSS equipment <u>under</u> FCC Regulation 47 CFR 80 Subpart W. These include all ships, including fishing vessels, to be navigated in the open sea outside of a harbor or port, except: Ships other than than passenger vessels <u>less than</u> 300 gross tonnage, Passenger ships having six passengers <u>or less</u> , U.S. Government Ships, Yachts of <u>less than</u> 600 gross tons, Vessels in tow, Ships navigating solely on any bays, sounds, rivers or protected waters within the U.S., Ships being navigated with the Great Lakes of North America, and small passenger ships meeting the requirements of 47 CFR 80 Subpart S.	Constraint
2	 Boat	Marine Vessel Communications	Mariners need to be able to communicate with other ships of any size or nationality. Mariners need to be able to receive and send urgent maritime safety information. Mariners need to be able send or receive distress alerts in an emergency to or from rescue coordination centers ashore and nearby ships anywhere in the world.	Constraint
3	 Boat	Radio Watch Keeping	In general, any vessel equipped with a VHF marine radiotelephone (whether voluntarily or required to) must maintain a watch on channel 16 (156.800 MHz) whenever the radiotelephone is not being used to communicate.	Constraint
4	 Communication Device  Lighting Device	Distress System Usage	The radiotelephone alarm signal is used only in a distress, including when a person has been lost overboard and the assistance of other vessels is required	Constraint
5	 Communication Device	GDMSS Equipment Operation	A GDMSS Radio Operator's License is necessary for a person to use required GDMSS equipment.	Constraint

An example of the Resources Constraints table

Related elements

- [Actual Resource](#)
- [Capability Configuration](#)
- [Data Element](#)
- [Function](#)
- [Natural Resource](#)
- [Organization](#)
- [Organizational Resource](#)
- [Person](#)
- [Physical Resource](#)
- [Post](#)
- [Resource Architecture](#)
- [Resource Artifact](#)
- [Resource Constraint](#)
- [Resource Performer](#)
- [Resource Role](#)
- [Responsibility](#)
- [Rule](#)
- [Subject Of Resource Constraint](#)

Related procedures

- [Working with Resources Constraints Definition diagram](#)
- [Working with Resources Constraints table](#)
- [Generating document based reports](#)