

ISO 16781:2013-11 (E)

Space systems - Simulation requirements for control system

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Terms and definitions	1
3	Abbreviated terms	3
4	Control system simulation	3
4.1	Structure of control system	3
4.2	Objectives of control system simulation	4
4.3	Mathematical simulation and HITL simulation	5
4.4	Simulation in different phases	5
4.5	Simulation process	8
5	General requirements	9
5.1	General	9
5.2	Project level requirements	9
5.3	Simulation model requirements	10
5.4	Simulation facility requirements	11
5.5	Simulation operation requirements	12
5.6	Simulation result analysis requirements	12
5.7	Other document requirements	12
6	Requirements of conceptual design phase simulation	14
6.1	General	14
6.2	Objective	15
6.3	Input	15
6.4	Output	15
6.5	Simulation model requirements	15
6.6	Simulation facility requirements	16
6.7	Simulation operation requirements	16
7	Requirements of detailed design phase simulation	16
7.1	General	16
7.2	Objective	17
7.3	Input	17
7.4	Output	17
7.5	Simulation model requirements	17
7.6	Simulation facility requirements	17
7.7	Simulation operation requirements	18
8	Requirements of prototype phase simulation	18
8.1	General	18
8.2	Objective	18
8.3	Input	19
8.4	Output	19
8.5	Simulation model requirements	19
8.6	Simulation facility requirements	19
8.7	Simulation operation requirements	20

9	Requirements of integrated system phase simulation	20
9.1	General	20
9.2	Objective	21
9.3	Input	21
9.4	Output	21
9.5	Simulation model requirements	21
9.6	Simulation facility requirements	21
9.7	Simulation operation requirements	22
Annex B (normative)	Relationship between simulation phases and tables	24