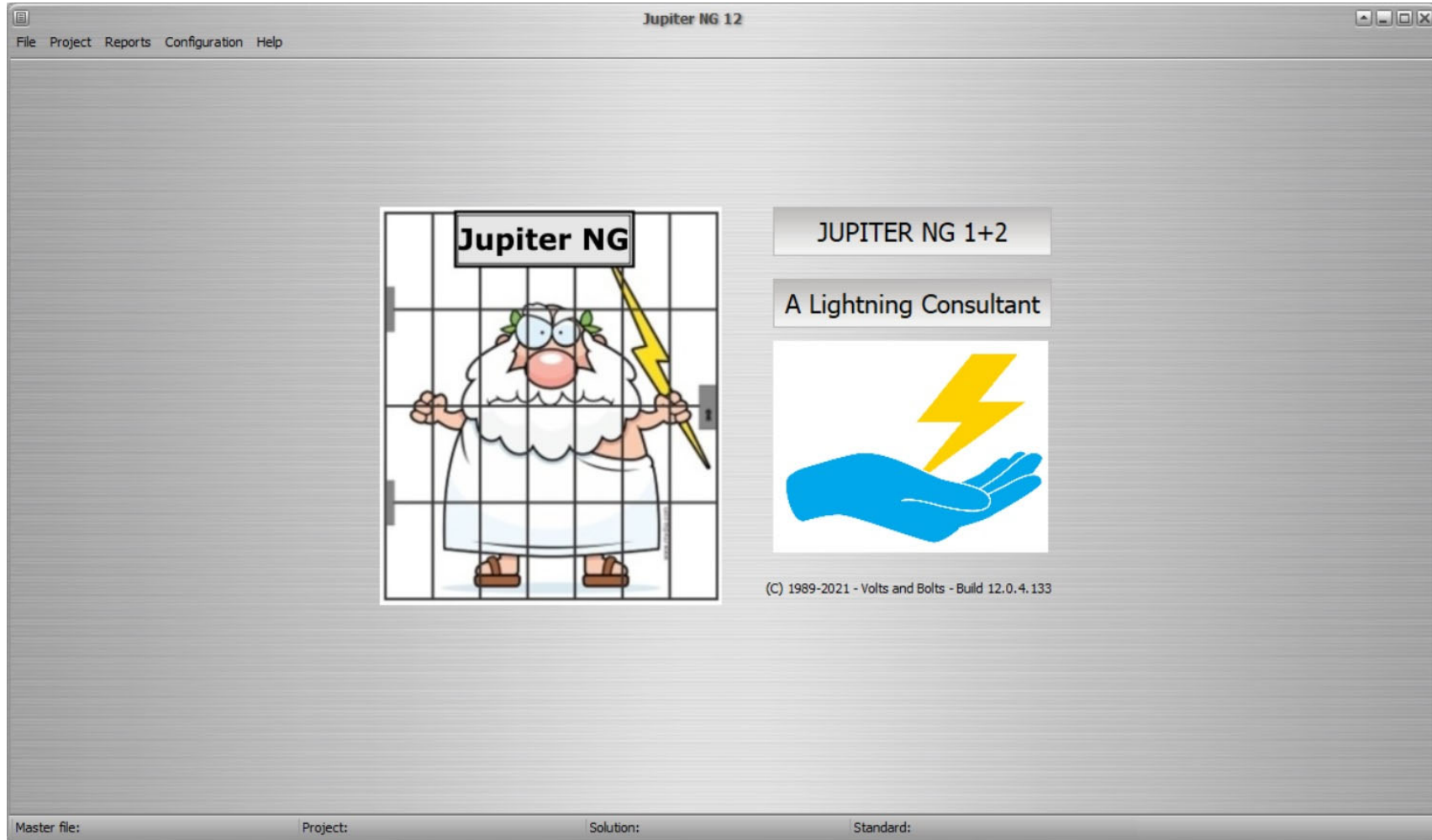


Jupiter NG 1+2



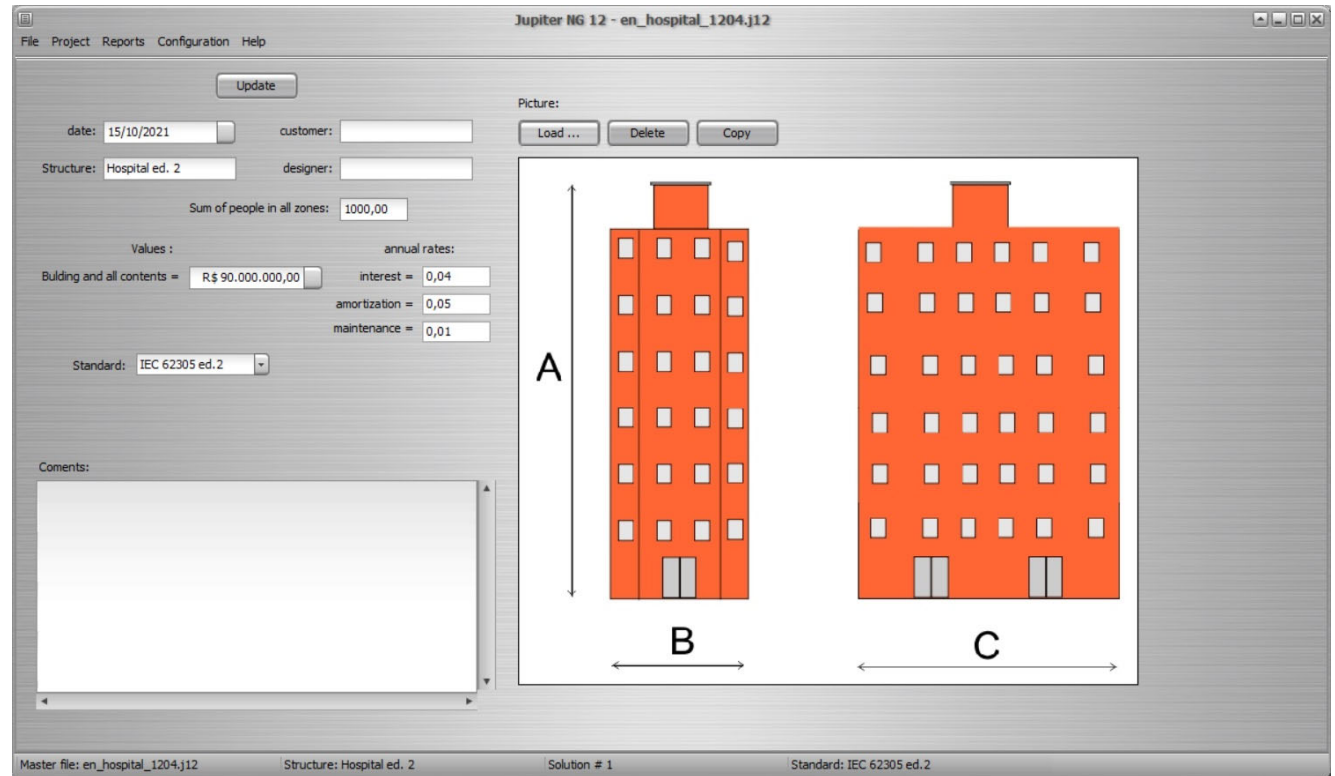
Jupiter NG 1+2

- Risk Assessment according to IEC 62305 part 2
- Complete R1, R2, R3 and R4 analysis
- Comparative analysis between solutions
- Several reports available

Structure data

Complete structure data:

- structure picture
- project global data
- select standard ed. 1 or 2
- your comments

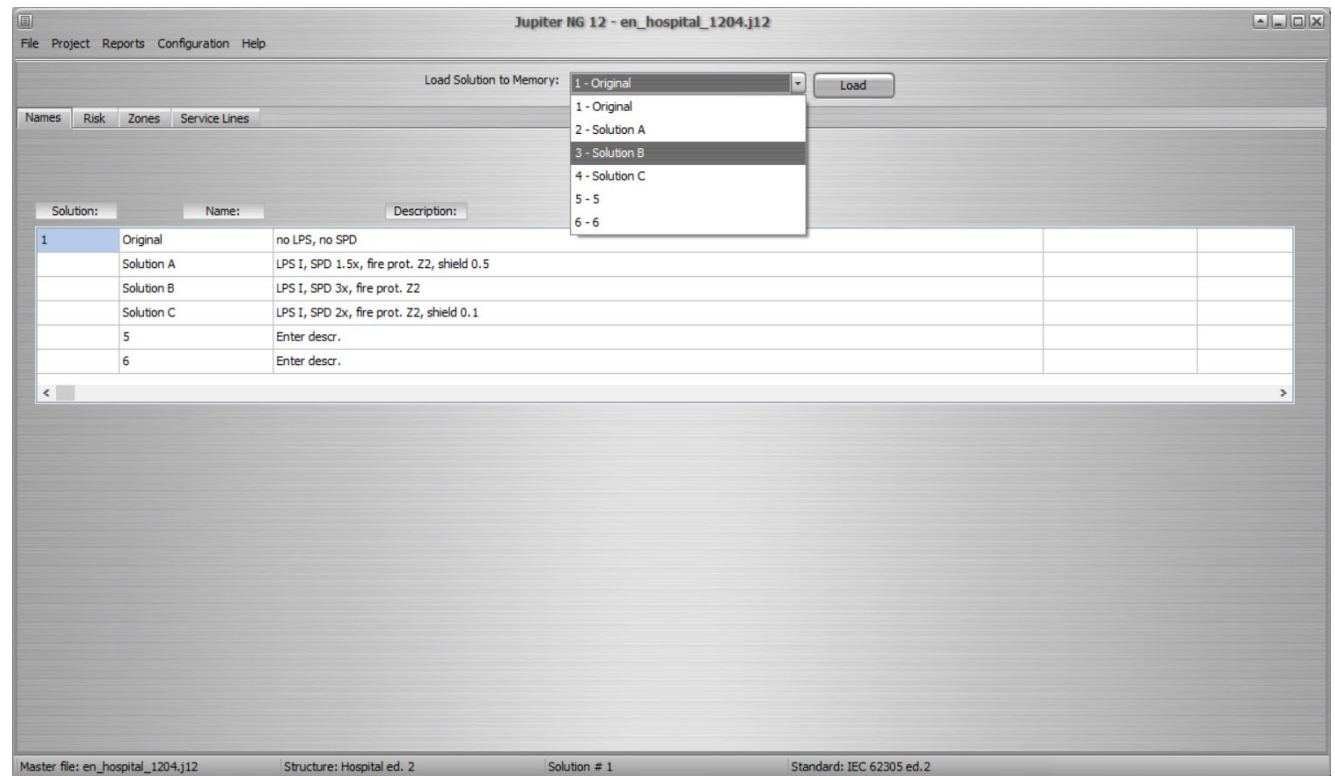


Solutions data

Up to 6 solutions on each structure

Each solution can contain:

- up to 16 zones
- up to 16 service lines
- combine any zone to any service line(s)



Incidence data

In this screen:

enter:

- exposition situation
- flash incidence
- structure dimensions

Jupiter:

- collection area
- influence area
- strikes to and near the structure

The screenshot shows the 'Incidence' tab of the Jupiter NG 12 software. The interface is divided into several sections:

- Environment:** A dropdown menu is set to 'Isolated structure: no other objects in the vicinity'.
- Flash Incidence:** A text input field contains '4,0000' with the unit 'flashes / km² / year'.
- Sources for Incidence data:** A section with links for France (www.meteorage.com/solutions/evaluate), World (ghrc.nsstc.nasa.gov/lightning/dataset-info.html), and Brasil.
- Structure dimensions [m]:** A diagram shows two building footprints, one labeled 'B' and one 'C'. To the right, input fields are: A - Height: 10,00 [m]; B - Width: 50,00 [m]; C - Length: 150,00 [m].
- Incidence:** A text box containing instructions: 'After setting the tolerable Risks, we can calculate how many flashes will hit the Location and its surroundings. Choose the appropriate environment - other buildings near the Location, and their relative height. The standard requires the lightning density in flashes/square kilometer/year, you can find the data on the internet links indicated. Then enter the overall dimensions of the structure and click on the "Update" button to get the expected number of flashes to the structure and on its surroundings each year.'
- Update:** A button labeled 'Update' is positioned above a table of results.
- Results:**

Areas:	Real:	7500,00	[m ²]
	Collection (Ad):	22327,43	[m ²]
	Influence (Am):	985398,16	[m ²]
	Strikes to the structure Nd =	0,08930973	/year
	Strikes near the structure Nm =	3,94159265	/year

The status bar at the bottom indicates: Master file: en_hospital_1204.j12 | Structure: Hospital ed. 2 | Solution # 1 Original | Standard: IEC 62305 ed.2

Service lines data

In this screen:

enter:

- new lines (or edit)
- lines parameters
- line description
- adjacent structure (if any)

Jupiter:

- collection area
- influence area
- strikes to and near the line
- adjacent structure results

The screenshot shows the 'Jupiter NG 12 - en_hospital_1204.j12' application window. The 'Services' tab is active, displaying a list of service lines on the left and configuration parameters on the right. The list includes 'Power original', 'Telecom original', 'Power SPD 1.5x', 'Telecom SPD 1.5x', and 'Power SPD 3x'. The configuration parameters are: Collection Area = 20000,00; Influence Area = 2000000,00; Adj. Area = 0,00; Strikes to service NI = 0,004000; Strikes near the service NI = 0,400000; and Strikes to adj structure Nadj = 0,000000. An 'Update' button is located below the parameters. A 'Description' field with a 'Copy' button is on the right. A note states: 'Jupiter NG can use up to 16 Service lines for each structure. Any one of them can be used by one or more Zones. Please note that, to be used by a Zone calculation, you must click on the button 'Update', above, after changing some parameter and before moving to another Service on the table.' The bottom status bar shows: Master file: en_hospital_1204.j12; Structure: Hospital ed. 2; Solution # 1 Original; Standard: IEC 62305 ed.2.

Zones data and preview

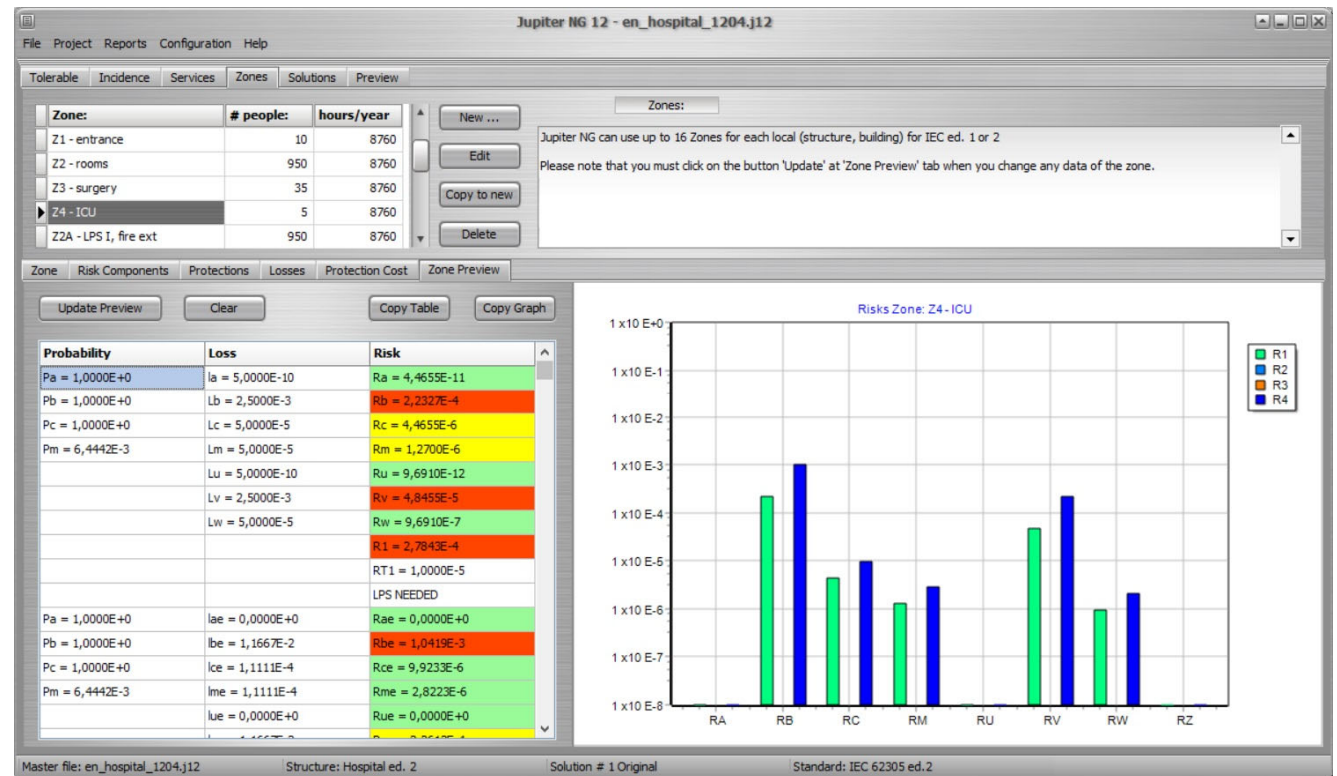
In this screen:

enter:

- new zones (or edit)
- zones parameters
- zone description and picture
- adjacent structure (if any)

Jupiter:

- preview of Zone risks



Zones Reports

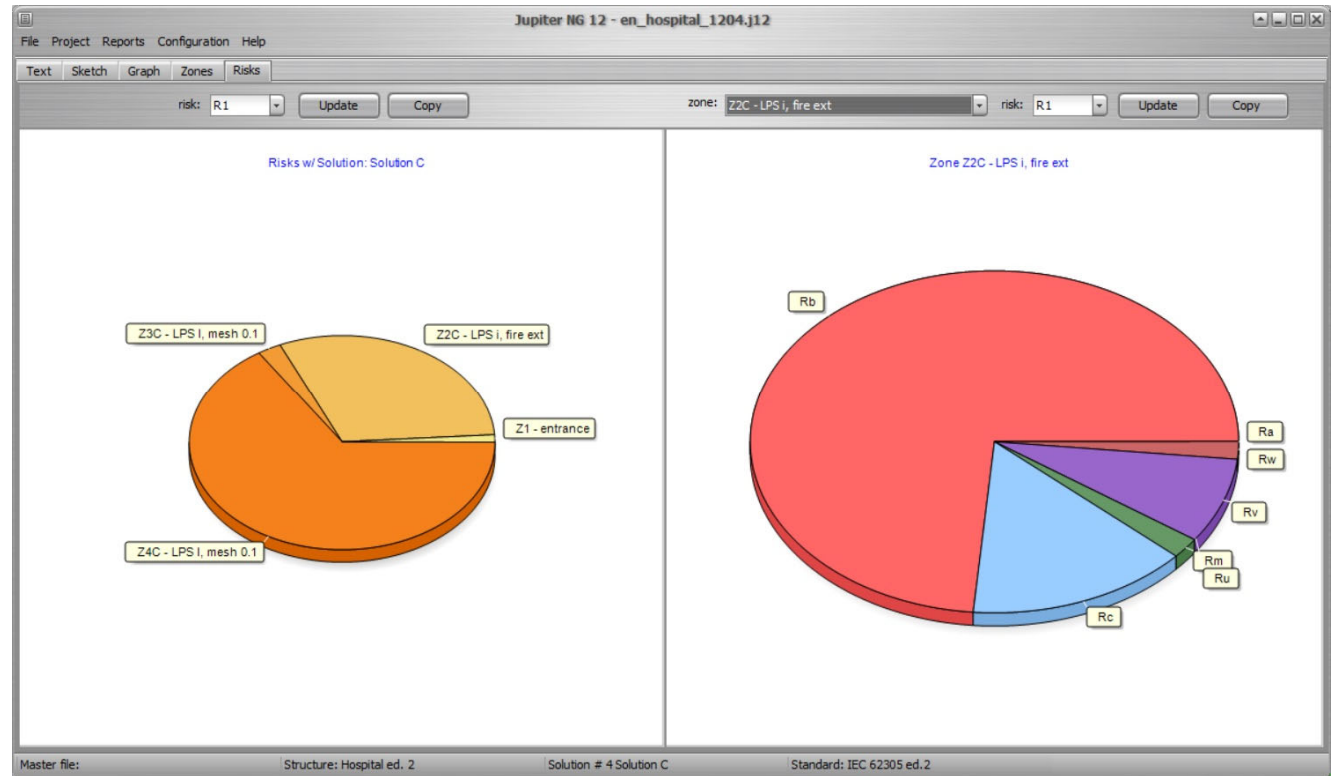
In this screen:

enter:

- select zone
- select chart
- select risks

Jupiter:

- preview of Zone risks



Solutions reports 1

In this screen and the following ones:

enter:

- select Solutions to compare

Jupiter:

- zones of each solution
- service lines
- preview of Solution risks
- comparative risks
- comparative costs

The screenshot shows the 'Select' dialog box in the Jupiter NG 12 - en_hospital_1204.j12 application. The dialog has a menu bar with 'File', 'Project', 'Reports', 'Configuration', and 'Help'. Below the menu bar, there are tabs for 'Names', 'Risk', 'Zones', 'Service Lines', 'Compare Costs', and 'Compare Risks'. The 'Zones' tab is selected. There are 'Update' and 'Copy' buttons. The main area contains a table with the following data:

Solution:	1	2	3	4	5	6
Name:	Original	Solution A	Solution B	Solution C	5	6
Zone: 1:	Z1 - entrance	Z1 - entrance	Z1 - entrance	Z1 - entrance	--	--
Zone: 2:	Z2 - rooms	--	--	--	--	--
Zone: 3:	Z3 - surgery	--	--	--	--	--
Zone: 4:	Z4 - ICU	--	--	--	--	--
Zone: 5:	--	Z2A - LPS I,	--	--	--	--
Zone: 6:	--	Z3A - LPS I,	--	--	--	--
Zone: 7:	--	Z4A - LPS I,	--	--	--	--
Zone: 8:	--	--	Z2B - LPS I,	--	--	--
Zone: 9:	--	--	Z3B - LPS I	--	--	--
Zone: 10:	--	--	Z4B - LPS I	--	--	--
Zone: 11:	--	--	--	Z2C - LPS i,	--	--
Zone: 12:	--	--	--	Z3C - LPS I,	--	--
Zone: 13:	--	--	--	Z4C - LPS I,	--	--

At the bottom of the window, the status bar shows: Master file: Structure: Hospital ed. 2 Solution # 3 Solution B Standard: IEC 62305 ed.2

Solutions reports 2

In this screen and the following ones:

enter:

- select Solutions to compare

Jupiter:

- zones of each solution
- service lines
- preview of Solution risks
- comparative risks
- comparative costs

Jupiter NG 12 - en_hospital_1204.j12

File Project Reports Configuration Help

Select:

Names Risk Zones Service Lines Compare Costs Compare Risks

Clear Update Copy

Zone:	1	2	3	4	5	6	7	8	9	10
Name:	Z1 - entrance	Z2 - rooms	Z3 - surgery	Z4 - ICU	Z2A - LPS I,	Z3A - LPS I,	Z4A - LPS I,	Z2B - LPS I,	Z3B - LPS I	Z4B
Nz	10	950	35	5	950	35	5	950	35	5
Tz	8760	8760	8760	8760	8760	8760	8760	8760	8760	8760
LPS installed:	Structure not	Structure not	Structure not	Structure not	Structure pro	Structure pro	Structure pro	Structure pro	Structure pro	Structure pro
Security measures										
Physical damages:	Hospital, hot	Hospital, hot	Hospital, hot	Hospital, hot	Hospital, hot	Hospital, hot	Hospital, hot	Hospital, hot	Hospital, hot	Hospital, hot
Internal systems:	Other parts o	Other parts o	Intensive car	Intensive car	Other parts o	Intensive car	Intensive car	Other parts o	Intensive car	Intensive car
Type of surface:	Agricultural,	Asphalt, lino	Asphalt, lino	Asphalt, lino	Asphalt, lino	Asphalt, lino	Asphalt, lino	Asphalt, lino	Asphalt, lino	Asphalt, lino
Provisions taken:										
Risk of fire / amount:	explosion / Z	explosion / Z	explosion / Z	explosion / Z	explosion / Z	explosion / Z	explosion / Z	explosion / Z	explosion / Z	explosion / Z
Special hazard:	no special ha	Difficulty of	Difficulty of	Difficulty of	Difficulty of	Difficulty of	Difficulty of	Difficulty of	Difficulty of	Difficulty of
Cultural value:	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000	1000000
Animals value:	0	0	0	0	0	0	0	0	0	0
Building value:	0	70000000	2000000	1000000	70000000	2000000	1000000	70000000	2000000	1000000

Master file: Structure: Hospital ed. 2 Solution # 3 Solution B Standard: IEC 62305 ed.2

Solutions reports 3

In this screen and the following ones:

enter:

- select Solutions to compare

Jupiter:

- zones of each solution
- service lines
- preview of Solution risks
- comparative risks
- comparative costs

Jupiter NG 12 - en_hospital_1204.j12

File Project Reports Configuration Help

Select:

Names Risk Zones Service Lines Compare Costs Compare Risks

Clear Update

Service:	1	2	3	4	5	6	7	8
Name:	Power origina	Telecom origi	Power SPD 1.5	Telecom SPD 1	Power SPD 3x	Telecom SPD 3	Power SPD 2x	Telecom SPD 2
Installation:	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried
Line type:	HV power (wit	LV power, tel	HV power (wit	LV power, tel	HV power (wit	LV power, tel	HV power (wit	LV power, tel
Environment:	Suburban	Suburban	Suburban	Suburban	Suburban	Suburban	Suburban	Suburban
physical damage LF:	Gas, water,	TV, telecommu	Gas, water,	TV, telecommu	Gas, water,	TV, telecommu	Gas, water,	TV, telecommu
failure of internal system:	Gas, water,	TV, telecommu	Gas, water,	TV, telecommu	Gas, water,	TV, telecommu	Gas, water,	TV, telecommu
External line type / Conne:	Shielded buri	Shielded buri	Shielded buri	Shielded buri	Shielded buri	Shielded buri	Shielded buri	Shielded buri
SPD:	No coordinate	No coordinate	Other, lower	Other, lower	Other, lower	Other, lower	Other, lower	Other, lower
Type of internal wiring:	Unshielded ca	Unshielded ca	Unshielded ca	Unshielded ca	Unshielded ca	Unshielded ca	Unshielded ca	Unshielded ca
Withstand voltage Uw:	25	15	25	15	25	15	25	15
Protection level:	No SPD	No SPD	I	I	I	I	I	I
FEB for "Better than I":								
Routing, shielding, bondin:	Shielded aeri	Shielded aeri	Shielded aeri	Shielded aeri	Shielded aeri	Shielded aeri	Shielded aeri	Shielded aeri
Line type:	Power line	Telecom line	Power line	Telecom line	Power line	Telecom line	Power line	Telecom line

Master file: Structure: Hospital ed. 2 Solution # 3 Solution B Standard: IEC 62305 ed.2

Solutions reports 4

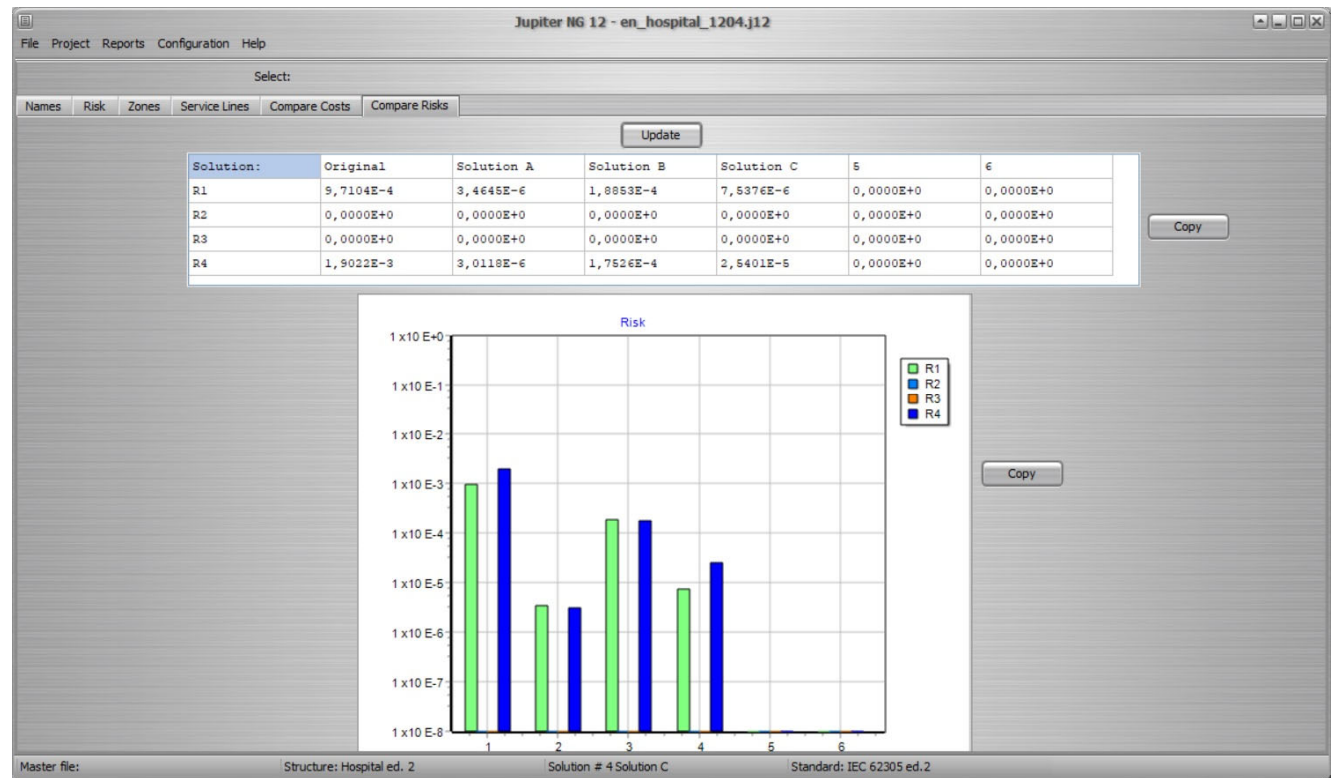
In this screen and the following ones:

enter:

- select Solutions to compare

Jupiter:

- zones of each solution
- service lines
- preview of Solution risks
- comparative risks
- comparative costs



Solutions reports 5

In this screen and the following ones:

enter:

- select Solutions to compare

Jupiter:

- zones of each solution
- service lines
- preview of Solution risks
- comparative risks
- comparative costs

