

Controls for Event Vulnerabilities (by Control)

In addition to managing (view, add, assign) the [Controls for Events Vulnerabilities for one selected event at a time \(by Event\)](#), you can also perform the same actions for one selected control at a time (by Control).

| MANAGE MODELS | | IDENTIFY/STRUCTURE | | LIKELIHOOD OF EVENTS | | IMPACT OF EVENTS | | RISKS | | CONTROLS | | CONTROLLED RISKS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|----------------------------|---|-------------------------------|---|---|---|---------------------------------|-----------------------------|-------------------------------|-------------------------------|------------------|--------|---------|------------|-----------|--|--|--|--|--|--|--|--|--|--------------|--|--|--|---------------|--|--|----------------|--|--|----------------------------|---|-------------------------------|---|---|---|---------------------------------|-----------------------------|-------------------------------|-------------------------------|---|--------------------|--|---|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--------------|--|---|---|--|--|--|--|--|--|--|--|--|--|--------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Identify | Measure | Manually Select | Optimize | Efficient Frontier | | | | | | | | | Reload | On-line | Lock | Snapshots | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div style="display: flex; justify-content: space-between; align-items: center;"> <input type="button" value="Add a control"/> <input type="button" value="Paste controls"/> <input type="checkbox"/> Descriptions </div> <div style="text-align: center;"> <h3>Control "Monitoring Gate System Approach" for vulnerabilities of events to sources</h3> <p>Select a control: Monitoring Gate System Approach</p> </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="3">Index</th> <th rowspan="3">Event Name</th> <th colspan="10">Sources</th> </tr> <tr> <th colspan="4">Human Factor</th> <th colspan="3">Environmental</th> <th colspan="3">Infrastructure</th> </tr> <tr> <th>Inadequately Trained Staff</th> <th>Disregarding or Not Following Proper Policies, Processes, or Procedures</th> <th>Lack of Situational Awareness</th> <th>Engineers Failure to Properly Install Equipment</th> <th>Flooding of Intelligent Event Monitoring Infrastructure</th> <th>Lightning Striking Signaling Infrastructure</th> <th>Minor Electrical Power Shortage</th> <th>Major Electrical Power Loss</th> <th>Mechanical Failure of Sensors</th> <th>Mechanical Failure of Signals</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Late Train Running</td> <td></td> <td style="text-align: center;">✓</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>Degradation of Intelligent Monitoring System Physical Assets</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>Line Closure</td> <td></td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Failed Integration with Future</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> | | | | | | | | | | | | | | Index | Event Name | Sources | | | | | | | | | | Human Factor | | | | Environmental | | | Infrastructure | | | Inadequately Trained Staff | Disregarding or Not Following Proper Policies, Processes, or Procedures | Lack of Situational Awareness | Engineers Failure to Properly Install Equipment | Flooding of Intelligent Event Monitoring Infrastructure | Lightning Striking Signaling Infrastructure | Minor Electrical Power Shortage | Major Electrical Power Loss | Mechanical Failure of Sensors | Mechanical Failure of Signals | 1 | Late Train Running | | ✓ | | | | | | | | | | | 2 | Degradation of Intelligent Monitoring System Physical Assets | | | | | | | | | | | | | 5 | Line Closure | | ✓ | ✓ | | | | | | | | | | | Failed Integration with Future | | | | | | | | | | | | |
| Index | Event Name | Sources | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Human Factor | | | | Environmental | | | Infrastructure | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Inadequately Trained Staff | Disregarding or Not Following Proper Policies, Processes, or Procedures | Lack of Situational Awareness | Engineers Failure to Properly Install Equipment | Flooding of Intelligent Event Monitoring Infrastructure | Lightning Striking Signaling Infrastructure | Minor Electrical Power Shortage | Major Electrical Power Loss | Mechanical Failure of Sensors | Mechanical Failure of Signals | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Late Train Running | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Degradation of Intelligent Monitoring System Physical Assets | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Line Closure | | ✓ | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Failed Integration with Future | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

From the grid above, you can specify to which events the selected control "Monitoring Gate System Approach" can be applied to mitigate its vulnerabilities given threats/sources.


You can select another control using the "Select a control:" dropdown:

Select a control: Monitoring Gate System Approach

- Monitoring Gate System Approach
- Reprimand
- Frequent Monitoring and Replacement (Signals/Sensors/Cables)
- Engineer Credentials
- On the spot training
- Replace Operator
- Implement External Emergency Power Support
- Power Redistribution via National Grid
- Reboot from Software back-up
- Disaster Recovery System by different ISP
- Increase Security Measures
- Purchase and install latest bespoke and COTS SW version
- Isolate Network from external access
- Purchase latest hardware technology

Next to the index column is the "Event Name" column which lists all the events as rows. The succeeding column headings correspond to the Sources Hierarchy of your Riskion model.

The intersecting cells given the events (row) and the covering sources (column) are clickable. Clicking a cell will show a

checkmark  which means that the selected control is a control of the event given the source. Clicking the same

cell will uncheck the cell.

From below, the selected control "**Monthly Gate System Approach**" is a potential control to mitigate the vulnerability of the event "**Late Train Running**" given the source "**Disregarding or Not Following Proper Policies, Processes, or Procedures**".

| | | Select a control: Monitoring Gate System Approach | | | | |
|-------|--|---|---|-------------------------------|---|---|
| Index | Event Name | Sources | | | | |
| | | Human Factor | | | | Environmental |
| | | Inadequately Trained Staff | Disregarding or Not Following Proper Policies, Processes, or Procedures | Lack of Situational Awareness | Engineers Failure to Properly Install Equipment | Flooding of Intelligent Event Monitoring Infrastructure |
| 1 | Late Train Running | | ✓ | | | |
| 2 | Degradation of Intelligent Monitoring System Physical Assets | | | | | |

The dark gray cells (disabled) mean that the source is not contributing to the event (event is not vulnerable to the source), thus you will not be able to assign a control for it. This is true for "Late Train Running" given "Lack of Situational Awareness". You can assign to which sources an event is vulnerable on the "[Vulnerabilities Grid](#)".

| | | Select a control: Monitoring Gate System Approach | | | | |
|-------|--------------------|---|---|-------------------------------|---|---|
| Index | Event Name | Sources | | | | |
| | | Human Factor | | | | Environmental |
| | | Inadequately Trained Staff | Disregarding or Not Following Proper Policies, Processes, or Procedures | Lack of Situational Awareness | Engineers Failure to Properly Install Equipment | Flooding of Intelligent Event Monitoring Infrastructure |
| 1 | Late Train Running | | ✓ | | | |

To add a new control to mitigate "Event Consequences", click the  button.

Add a control

Control name:

Cost:

Category:

Add category: +

Here you can specify the Control Name, Cost, and categories. The Control name is required, once you enter the control name the OK button will be enabled.

The added control will be displayed as a new row on the Controls column.

You can add multiple controls at once by pasting them from the clipboard.

You can see the format by hovering on the Paste controls button

+
+ Add a control
📄 Paste controls
 Descriptions

To paste controls from clipboard, include these columns, separated by a tab, or in separate worksheet columns:

- Control name
- Control description
- Control cost
- Control category 1 (if applicable)
- Control category 2 (if applicable)
- Control category n (if applicable)

Once you are ready, click "Paste controls".
