

Procedure PR-PRO-021

Risk and Opportunity Management

1. SUMMARY

- 1.1. The company has established, implemented and maintained this procedure for managing risks and opportunities throughout the Pure Rail.
- 1.2. Responsibility and authority for this procedure are spread across various functions, and defined within this procedure.
- 1.3. Note: this procedure has adopted definitions for key terms developed specifically by Pure Rail and determined appropriate for its use within the unique requirements of its management system. It does not adopt current ISO definitions, which Pure Rail has determined are not sufficient for its use.

2. REVISION AND APPROVAL

Rev.	Date	Nature of Changes	Approved By
1	01/01/2016	Original issue.	Kyle Devine
2	06/12/2021	Updated document number, formatting and references to relevant controlled document numbers added.	Kyle Devine

3. DEFINITIONS

- 3.1. **Risk:** A negative effect of uncertainty.
- 3.2. **Opportunity:** A positive effective of uncertainty.
- 3.3. **Risk Assessment:** a systematic investigation and analysis of potential risks, combined with the assignment of severities of probabilities and consequences. These are used to rate risks in order to prioritize the mitigation of high risks.
- 3.4. **Risk Mitigation:** a plan developed with the intent of addressing all known or possible risks and preventing their occurrence.
- 3.5. **FMEA (Failure Mode Effects Analysis):** a specific risk treatment method which ranks risks by probability and consequence.

4. PROCEDURE: GENERAL

- 4.1. Pure Rail considers and manages risks and opportunities differently.
- 4.2. Risks are managed with a focus on decreasing their likelihood, and minimizing their impact if they should occur.

- 4.3. Opportunities are managed to increase their likelihood, and to maximize their benefits if they should occur.
- 4.4. Where risks and opportunities overlap, the best appropriate method for managing them shall be ascertained, given the situation at hand. Elements of such “blended” uncertainties may require methods which both address the negative risk and positive opportunity.

5. PROCEDURE: MANAGEMENT OF RISKS

- 5.1. Risks are identified as part of the “Context of the Organization Exercise” described in ***PR-PRO-002 Context of the Organization***.
- 5.2. Additional risks may be identified by any employee at any time.
- 5.3. Each process is defined in detail through a Process Definition. This document includes the identification and mitigation plans for key risks associated with the defined process. Pure Rail management reviews these risks and takes action to minimize them.
- 5.4. Risks identified as part of the Context of the Organization exercise are entered into the Issue Log. This indicates a rough priority, as well as a selected risk treatment method.
- 5.5. The methods for risk assessments vary, but should always include a means of identifying the risk under examination, and a description of the result of the risk assessment.
- 5.6. Detailed methods may include FMEA (failure mode effects analysis), SWOT (strength, weakness, opportunity and threat) or other tools. No single method is used for all risk assessments; the tool selected should be the best tool applicable to that particular risk analysis.
- 5.7. ISO 31010 provides guidance on the selection of risk tools.
- 5.8. Where FMEA style risk treatment is deemed optimal, an entry shall be made in the Risk Register. When using the Risk Register, the following steps are to be followed:
- 5.9. Each type of actual risk assessment is conducted by:
 - 5.9.1. Identifying the risk.
 - 5.9.2. Identifying the process for which the risk most likely dominates.
 - 5.9.3. Assigning a probability rating to the identified risk; this probability is comprised of two elements: likelihood and previous occurrences. Each element is given a score from 1 (lowest risk) to 5 (highest risk). The final probability rating is the higher of the two elements.
 - 5.9.4. Assigning a consequence rating if the risk were to be encountered; this consequence is comprised of five elements: eventual loss of contract; negative impact on existing customers; inability to meet contract terms; any violation of statutory regulations or law; impact on Pure Rail’s reputation; and estimated cost of correction. Again, each element is given a score from 1 (lowest risk) to 5 (highest risk). The final probability rating is the higher of the two elements.
 - 5.9.5. Calculating a final Risk Factor based on the equation:

PROBABILITY RATING x CONSEQUENCE RATING = RISK FACTOR

- 5.9.6. For risks with a final Risk Factor rating equal to or greater than the threshold set in the Risk Register, management will decide whether to reject the subject due to the risk, or accept the risks after the development of a risk mitigation plan. The mitigation plan must be documented, either in the Risk Register or in another document which must be referenced on the form.
- 5.9.7. Risks with a factor less than the risk threshold may be accepted without a mitigation plan, unless otherwise directed by management.
- 5.9.8. The final column allows for entry of an estimated risk factor after mitigation, which is an estimate on what the risk should be reduced to if the risk treatment is successful.

6. PROCEDURE: MANAGEMENT OF OPPORTUNITIES

- 6.1. As part of the Customer Interaction process, Pure Rail shall seek out opportunities which could enhance its financial viability and market position. For example:
 - obtaining new contracts
 - obtaining access to new markets
 - identification of new industries which may be served by Pure Rail
 - development of new offerings that are within the scope of capabilities of Pure Rail
 - streamlining existing processes to improve efficiency and reduce costs
- 6.2. Opportunities are also identified as part of the “Context of the Organization Exercise” described in ***PR-PRO-002 Context of the Organization***.
- 6.3. Discussing and analyzing opportunities shall be done by top management. If made part of the management review activities, these shall be recorded in the management review records.
- 6.4. If an opportunity requires a risk assessment, this shall be done as defined above.
- 6.5. Analysis of any opportunity will generally result in one of the following possible determinations:
 - Pursue the opportunity
 - Explore the opportunity in greater detail before proceeding
 - Accept the opportunity, but under limited and controlled conditions
 - Decline the opportunity, typically based on a high expected risk