

APPENDIX A – RISK TOLERANCE AND APPETITE

Risk Tolerance Statement

USask acknowledges that there is an element of risk in any decision or activity and encourages informed risk taking when the risk is appropriately managed. Risk management is defined as coordinated activities to direct and control risk. USask's ERM Framework provides critical processes for identifying, prioritizing and proactively managing risks. This statement applies at the enterprise level and is a critical component of USask's ERM Framework.

Quantifying Risk

The level of risk USask is willing to tolerate across the following areas:

- Financial
- Reputational
- Infrastructure (Information Technology and Physical)
- Education/Research
- Human Resources
- Safety/Security

USask's ERM Framework quantifies risk by combining an assessment of Likelihood of a negative event or condition with the impact.

Likelihood

The assessment of a chance or probability of a risk event occurring is assisted by the following table:

Likelihood	Qualitative Interpretation
Rare	Similar events have not occurred globally at any other university in the last 10 years.
Unlikely	Similar events have not occurred at a Canadian university within the last 10 years or globally at any university in the last 5 years.
Normal	Similar events have occurred at Canadian universities at least once every 10 years or globally at any university at least once every 5 years.
Likely	Similar events have occurred at USask at least once every 10 years, or at another Canadian university at a rate of at least once every 5 years, or a non-Canadian university at least once every 2 years.
Almost Certain	Similar events have occurred at USask at least once every 5 years, or at another Canadian university at least once every 2 years, or at a non-Canadian university at least once every year.

Impact

The assessment of impact is assisted by the following decision table:

Impact	Qualitative Interpretation
Insignificant	• A financial loss of less than \$650,000. • Brief negative attention in local news/social media. • Minor disruption or damage to software, networks, or infrastructure where operations can continue without interruption. • Unable to provide education for a small number of courses or perform research for a period of less than 1 day. • Loss of competitiveness such that USask's ability to attract and retain suitable talent is marginally below that of similar universities. • No adverse health effect for any individual.
Minor	• A financial loss between \$650,000 and \$1,300,000. • Negative attention in the local news/social media for up to 1 week. • Disruption or damage to software, networks, or infrastructure that results in an operational impact less than 4 hours. • Unable to provide education for several courses or perform research for a period of between 1 day and 1 week. • Loss of competitiveness such that USask's ability to attract and retain suitable talent is noticeably below that of similar universities. • Minor injuries or illness to one or two individuals.
Normal	• A financial loss between \$1,300,000 and \$2,600,000. • Negative attention in national news/social media for less than one week, or local news/social media for 1-2 weeks. • Disruption or damage to software, networks, or infrastructure that results in an operational impact greater than 4 hours but no more than 1 business day. • Inability to provide education for a substantial number of courses or perform research for a period between 1 and 2 weeks. • Loss of competitiveness such that USask's ability to attract and retain suitable talent is significantly below that of similar universities. • Serious injuries or illness to one or more individuals or minor injuries to three or more.
Major	• A financial loss between \$2,600,000 and \$6,500,000. • Negative attention in international news/social media for less than 1 week, or national news/social media for 1-2 weeks, or local news/social media for more than 2 weeks. • Disruption or damage to software, networks, or infrastructure that results in an operational impact greater than 1 day but not more than 3 business days. • Inability to provide education for a substantial number of courses or perform research for a period between 2 weeks and 1 month. • Loss of competitiveness such that USask's ability to attract and retain suitable talent is significantly below that of similar universities, such

	that entire departments or units are unable to meet their obligations. • Permanently disabling injuries to one or more individuals or illness affecting 10% to 25% of employees.
Severe	• A financial loss greater than \$6,500,000 • Intense negative attention in international news/social media for more than 1 week, or intense negative attention in national news/social media for more than 2 weeks. • Disruption or damage to software, networks, or infrastructure that results in an operational impact greater than 3 days. • Inability to provide education for a substantial number of courses or perform research for more than 1 month. • Loss of competitiveness such that USask's ability to attract and retain suitable talent is significantly below that of similar universities, such that USask is unable to operate and carry out its mission. • One or more fatalities, injury affecting 5 or more employees or illness affecting more than 25% of employees.
The financial basis for quantifying risk should be routinely reviewed by management, the Audit and Finance Committee, and the Board of Governors. USask's financial risk appetite or tolerance is related to its annual total revenues and will increase or decrease as USask activity grows or declines. The ranges adopted to quantify financial risk are: Insignificant: Annual Total Revenues ~\$1.3B x 0.05% Minor: Annual Total Revenues ~\$1.3B x 0.1% Normal: Annual Total Revenues ~\$1.3B x 0.2% Major: Annual Total Revenues ~\$1.3B x 0.5%	

Risk Velocity

The assessment of the speed of Risk onset is assisted by the following table:

SPEED	SPEED OF ONSET DESCRIPTION
Long-term	Slow onset, greater than 36 months (3 years).
Mid-term	Onset occurs in a matter of 18 to 36 months.
Short-term	Onset occurs in a matter of 6 months to 18 months.
Near-Term	Onset occurs in a matter of weeks to 6 months.
Rapid	Very rapid onset with little or no warning, instantaneous.

Risk Map

The assessment of risk is initially completed independently by Senior Management and then reviewed and discussed collaboratively to arrive at the generally accepted risk likelihood, impact, and velocity for each Enterprise Risk. The results of which are mapped, appearing as circles according to the horizontal and vertical axis whereby the size of the circle reflects velocity (larger

circles are quicker impacts).

IMPACT	SEVERE	HIGH	CRITICAL	CRITICAL	CRITICAL	CRITICAL
	MAJOR	NORMAL	HIGH	HIGH	CRITICAL	CRITICAL
	NORMAL	NORML	NORMAL	NORMAL	HIGH	HIGH
	MINOR	LOW	LOW	NORMAL	NORMAL	HIGH
	INSIGNIFICANT	LOW	LOW	LOW	LOW	NORMAL
		RARE	UNLIKELY	NORMAL	LIKELY	ALMOST CERTAIN
LIKELIHOOD						

Risk Mitigation

Mitigation involves the implementation of policies, procedures, and actions to eliminate, minimize, or manage risk based on the Risk Map. The following table is designed to support the assessment of mitigation.

RISK LEVEL	MITIGATION REQUIREMENTS
CRITICAL	- Level of risk is not acceptable given existing circumstances and must be mitigated immediately. - Risk poses non-recoverable, immediate and/or lasting threat of loss. - Risk exposure requires immediate, continued, mitigation and/or cessation of activity giving rise to the risk. - Risk should be monitored and reviewed monthly.
HIGH	- Level of risk is not acceptable given existing circumstances unless it is reduced to a lower level. - Risk poses significant but recoverable (with effort) loss. - Requires mitigation measures to immediately reduce risk Level and/or continued effort with additional mitigation strategies to reduce risk exposure to acceptable levels. - Risk should be monitored and reviewed quarterly.
NORMAL	- Level of risk is known and is being successfully managed. - Continuation of planned/existing mitigation strategies is expected and managed by specific monitoring or response procedures. - Risk should be monitored and reviewed at minimum annually.
LOW	- Level of risk is acceptable and planned for, such as a risk inherent to approved business operations and strategic priorities. - Risk is managed by routine procedures and does not require additional mitigation. - Risk should be monitored and reviewed at least annually.

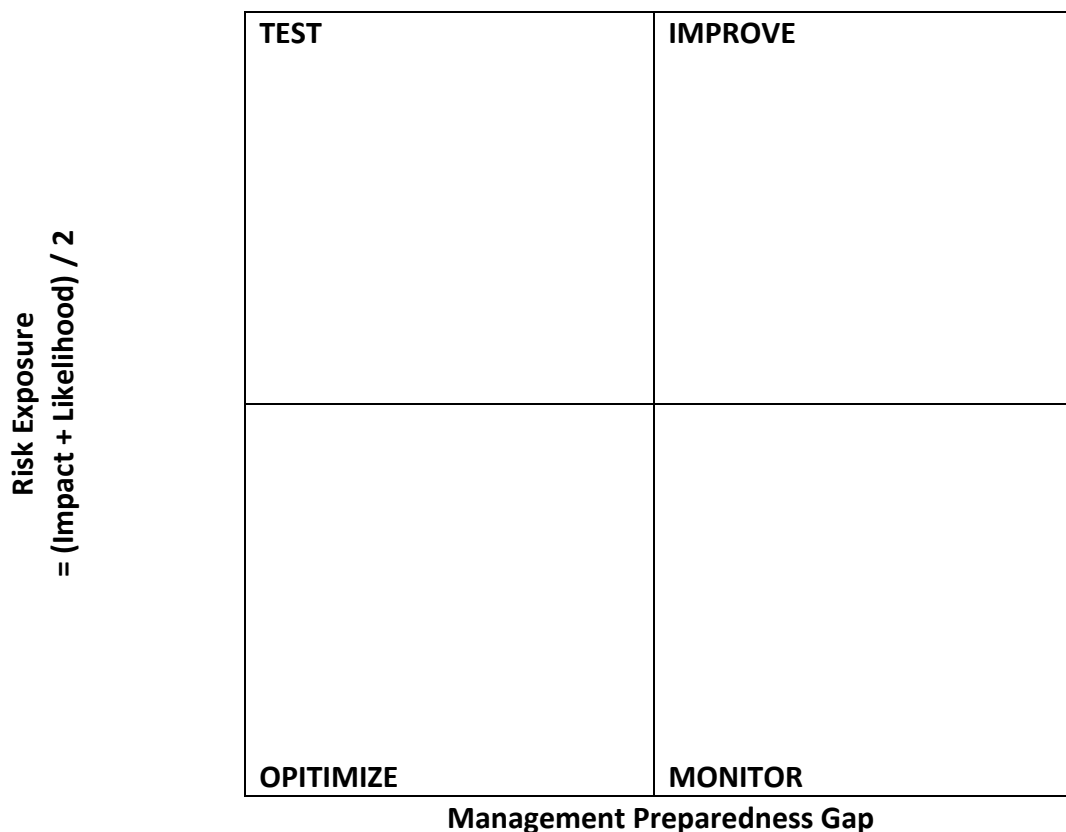
Note: USask assumes collective agreement requirements will be met and are not risk assessed.

Risk Action Matrix

A Risk Action Matrix maps risk exposure, which is a function of impact plus likelihood divided by two along the vertical axis and management preparedness gap along the horizontal axis. The assessment of risk that involves consideration of management's preparedness, supported by the following table:

Requires	Management Preparedness Gap
Critical Improvement	Controls and/or risk management activities are non-existent or have major deficiencies and/or don't operate as intended.
Significant Improvement	Limited controls and/or risk management activities in place and a high level of risk remains.
Moderate Improvement	Key controls and/or risk management activities are in place, with moderate opportunities for improvement identified.
Limited Improvement	Controls and/or risk management activities are properly designed and operating, with opportunities for improvement identified.
Requires No Improvement	Controls and/or risk management activities are properly designed and operating as intended.

The Risk Action Matrix plots the Enterprise Risks using circles where size reflects the speed of onset (larger circles are quicker onsets). The Risk Action Matrix provides a visual representation of where management should focus its efforts, by organizing the output into quadrants labeled by Improve, Test, Monitor, and Optimize, shown below:



Related Policies and Documents

[Enterprise Risk Management Policy](#)

[Enterprise Risk Management Framework](#)