

TR-PSR

– Dual Use and Sensitive Technology Treatments of Risk Matrix

This Matrix has been developed by a University Research Offices New Zealand working group on sensitive technology as part of a larger programme of work led by Universities New Zealand – Te Pōkai Tara.

Its purpose is to describe the high-level approaches to be used in treating sensitive technology risks in university-led projects. A standard approach is desirable to enable the efficient development of multiparty research proposals and contracting and to give confidence to sponsors that the research will be managed appropriately.

Research proposals will be submitted for a risk assessment much as you would if you were applying for ethics or permissions through any other regulating body (contact your research office for details). It is important to do this early, particularly if you intend to seek external collaboration or sponsorship.

When a research project receives a risk rating, a process is initiated to identify the specific elements of the research that are critical to protect. A risk plan will be required and this Matrix is used as an initial guide to inform the plan. Specific guidelines, policies and processes are either available or being developed that will provide more detail.

If your research project is sponsored, the risk plan is likely to be a contract precondition.

Depending on the nature of the risk, regular project monitoring and reporting will be needed.

	TOPIC	LOW RISK	MODERATE RISK	HIGH RISK	SEVERE RISK
PROJECT DESIGN PHASE	Project assessment	<ul style="list-style-type: none"> Assess nature of technology, sensitivity type (export control, dual use, NZ reputation, culture, commercial, personal data) and sensitivity level Assess risk 	<ul style="list-style-type: none"> Assess nature of technology, sensitivity type (export control, dual use, NZ reputation, commercial, personal data) and sensitivity level Assess risk 	<ul style="list-style-type: none"> Assess nature of technology, sensitivity type (export control, dual use, NZ reputation, commercial, personal data) and sensitivity level Assess risk 	<ul style="list-style-type: none"> Assess nature of technology, sensitivity type (export control, dual use, NZ reputation, commercial, personal data) and sensitivity level Assess risk
	Sponsor/partner/collaborator assessment	<ul style="list-style-type: none"> Country and organisational values (ethical, moral, legal or national security) – funding, affiliations, freedoms Partners agree to sensitive technology principles 	<ul style="list-style-type: none"> Country and organisational values (ethical, moral, legal or national security) – funding, affiliations, freedoms Partners agree to sensitive technology principles 	<ul style="list-style-type: none"> Country and organisational values (ethical, moral, legal or national security) – funding, affiliations, freedoms Partners agree to sensitive technology principles 	<ul style="list-style-type: none"> Country and organisational values (ethical, moral, legal or national security) – funding, affiliations, freedoms Predefined handling standards
	Other 'interested parties' to include (MBIE, MFAT ISDD, DTA, NZSIS, GCSB, iwi)?	<ul style="list-style-type: none"> Seek advice on relevant parties to consult 	<ul style="list-style-type: none"> Seek advice on relevant parties to consult 	<ul style="list-style-type: none"> Seek advice on relevant parties to consult 	<ul style="list-style-type: none"> Seek advice on relevant parties to consult
PEOPLE & KNOWLEDGE	Contract visibility	<ul style="list-style-type: none"> Public 	<ul style="list-style-type: none"> De-identified Additional clauses or schedules 	<ul style="list-style-type: none"> Not disclosed Additional clauses or schedules 	<ul style="list-style-type: none"> Secret Additional clauses or schedules
	Intellectual property	<ul style="list-style-type: none"> Project intellectual property advisory group Standard intellectual management processes 	<ul style="list-style-type: none"> Project intellectual property advisory group, including third-party 'interested parties' Specific protocol for intellectual property protection and development 	<ul style="list-style-type: none"> Project intellectual property advisory group, including third-party 'interested parties' Specific protocol for intellectual property protection and development 	<ul style="list-style-type: none"> Sponsor (100%)
	Subcontracting	<ul style="list-style-type: none"> Standard subcontract agreement 	<ul style="list-style-type: none"> Probable – adherence to additional clauses and sensitive research management requirements 	<ul style="list-style-type: none"> Possible – adherence to additional clauses and sensitive research management requirements 	<ul style="list-style-type: none"> No partners other than sponsor
	Post-contract	<ul style="list-style-type: none"> Protocol for use of background intellectual property in future work 	<ul style="list-style-type: none"> Protocol for use of background intellectual property in future work 	<ul style="list-style-type: none"> Protocol for use of background intellectual property in future work 	<ul style="list-style-type: none"> Predefined handling standards
	People	<ul style="list-style-type: none"> Standard employment procedures Conflicts of interest (ongoing) 	<ul style="list-style-type: none"> Due diligence check (consider discussing with PSR) Security induction Conflicts of interest (ongoing) 	<ul style="list-style-type: none"> Due diligence check (consider discussing with PSR) Security induction Conflicts of interest (ongoing) 	<ul style="list-style-type: none"> Discuss with PSR Security induction Conflicts of interest (ongoing)
	Student rights	<ul style="list-style-type: none"> Non-disclosure Intellectual property may or may not be assigned depending on funding 	<ul style="list-style-type: none"> Non-disclosure Intellectual property assigned to university Thesis may be embargoed 	<ul style="list-style-type: none"> Non-disclosure Intellectual property assigned to university Thesis may be embargoed indefinitely 	<ul style="list-style-type: none"> No students
	Environment	<ul style="list-style-type: none"> Card security access/building(s)/field site(s) 	<ul style="list-style-type: none"> Shared space(s) Card security access Passive monitoring and reporting 	<ul style="list-style-type: none"> Dedicated space(s) Two-factor security access Passive monitoring and reporting 	<ul style="list-style-type: none"> Dedicated space(s) Two-factor security access Active monitoring and reporting
PHYSICAL	Equipment/devices	<ul style="list-style-type: none"> Protected or not permanently stored 	<ul style="list-style-type: none"> Data password protected or removed University-owned computers only Remote devices encrypted 	<ul style="list-style-type: none"> Dedicated equipment University-owned computers only Remote devices encrypted 	<ul style="list-style-type: none"> Dedicated equipment off network
	Materials	<ul style="list-style-type: none"> General security 	<ul style="list-style-type: none"> Secured space/import licence/protection protocol if required to leave space/custodian 	<ul style="list-style-type: none"> Secured in dedicated space/import licence/protection protocol required to leave space/instance signoff 	<ul style="list-style-type: none"> Secure/dedicated space(s), import licence/returned to sponsor/destroyed
	Paperwork	<ul style="list-style-type: none"> Prescribed notebook recommended 	<ul style="list-style-type: none"> Issued notebook/locked away/retained by organisation 	<ul style="list-style-type: none"> Issued notebook/stays in room/retained by organisation 	<ul style="list-style-type: none"> Notes only/stays in room
	Contract record	<ul style="list-style-type: none"> Additional security clauses or schedules are incorporated in collaborating partner agreements Document sensitive security plan and any assessments (including assessment of any new parties post-ideas phase) 	<ul style="list-style-type: none"> Additional security clauses or schedules are incorporated in collaborating partner agreements Document sensitive security plan and any assessments (including assessment of any new parties post-ideas phase) 	<ul style="list-style-type: none"> Additional security clauses or schedules are incorporated in collaborating partner agreements Document sensitive security plan and any assessments (including assessment of any new parties post-ideas phase) 	<ul style="list-style-type: none"> Additional security clauses or schedules are incorporated in collaborating partner agreements Document sensitive security plan and any assessments (including assessment of any new parties post-ideas phase)
INFORMATION	Data	<ul style="list-style-type: none"> Multifactor password protection recommended/confidential information classification/standby lock 	<ul style="list-style-type: none"> Stored centrally/restricted information classification/multifactor password protection/temporary devices encrypted/standby lock 	<ul style="list-style-type: none"> Stored centrally only/restricted information classification/data split/multifactor password protection/temporary devices encrypted/standby lock 	<ul style="list-style-type: none"> Offline server Secret information classification No cloud Approval to move
	Backup	<ul style="list-style-type: none"> Central recommended 	<ul style="list-style-type: none"> Central only 	<ul style="list-style-type: none"> Central only 	<ul style="list-style-type: none"> Predefined handling standards
	Archive	<ul style="list-style-type: none"> University records management policy appropriate to this level of risk 	<ul style="list-style-type: none"> University records management policy appropriate to this level of risk 	<ul style="list-style-type: none"> University records management policy appropriate to this level of risk 	<ul style="list-style-type: none"> All material returned to sponsor/destroyed
	Communications	<ul style="list-style-type: none"> Approved by project leader 	<ul style="list-style-type: none"> Limited Approved by research office 	<ul style="list-style-type: none"> Limited Approved by DVC (via research office) 	<ul style="list-style-type: none"> No publicity
	Outputs	<ul style="list-style-type: none"> All outputs subject to project leader review. Will not be unreasonably withheld 	<ul style="list-style-type: none"> All outputs subject to university review. Will not be unreasonably withheld 	<ul style="list-style-type: none"> All outputs subject to university review. May be deemed classified 	<ul style="list-style-type: none"> Predefined handling standards
DISSEMINATION	Reporting	<ul style="list-style-type: none"> Annual risk review and reporting 	<ul style="list-style-type: none"> Half-year risk review and reporting 	<ul style="list-style-type: none"> Quarterly risk review and reporting 	<ul style="list-style-type: none"> Predefined handling standards
	Other 'interested parties' to include (MBIE, MFAT ISDD, DTA, NZSIS, GCSB, iwi)?	<ul style="list-style-type: none"> Check-in 	<ul style="list-style-type: none"> Possible reporting (security incidents and suspicious activity) 	<ul style="list-style-type: none"> Yes, inclusion in relevant advisory group(s) and reporting (security incidents and suspicious activity) 	<ul style="list-style-type: none"> Yes, inclusion in relevant advisory group(s) and reporting (security incidents and suspicious activity)
	Outcomes	<ul style="list-style-type: none"> Some constraints on use 	<ul style="list-style-type: none"> Moderate constraints on use 	<ul style="list-style-type: none"> Significant constraints on use 	<ul style="list-style-type: none"> Predefined handling standards
	Post-contract	<ul style="list-style-type: none"> Protocol for using background intellectual property in future work 	<ul style="list-style-type: none"> Protocol for using background intellectual property in future work 	<ul style="list-style-type: none"> Protocol for using background intellectual property in future work 	<ul style="list-style-type: none"> Predefined handling standards