Export Compliance Risk Assessment

Princeton Plasma Physics Laboratory

Robert Sheneman

Deputy Head, ESH&S Department

Head, Office of Export Control

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PPPL PRINCETON PLASMA PHYSICS LABORATORY

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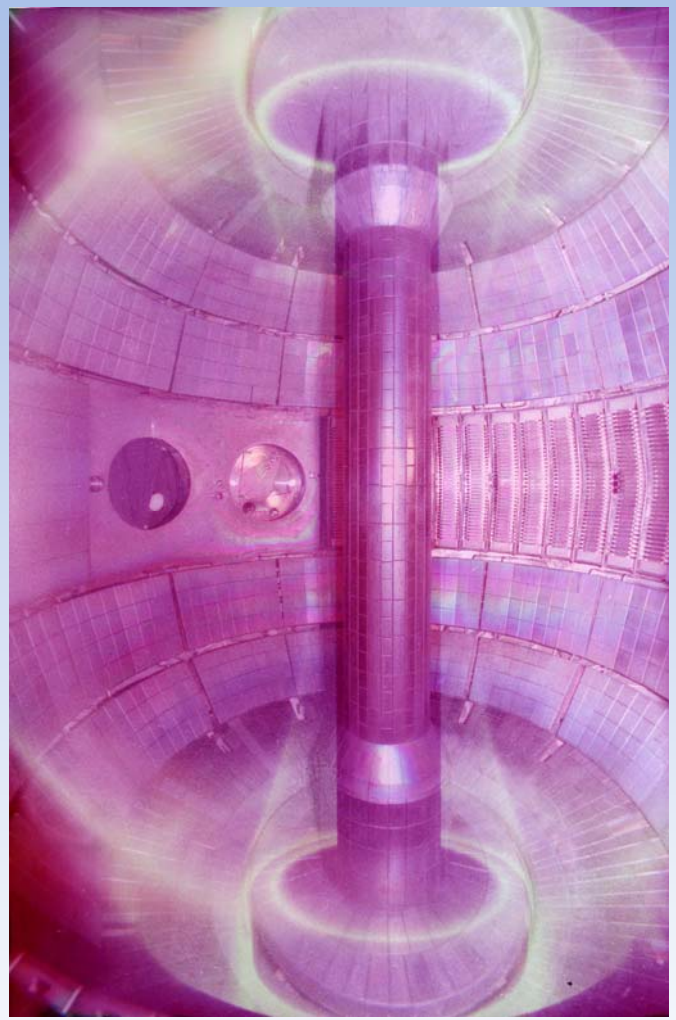

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Business Risk Management

Enterprise Approach

Risk Categories

- Strategic
- Financial
- Market
- Customer
- Supply Chain
- Product
- ES&H
- Security
- Political
- Compliance

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Organizational Risk Registry

Directorate Risk Register (Finance Directorate)
11 September 2009 (25 risks)

Title	Description	Controls in place	Action summary	Action Deadline	Manager	Corporate Objectives	Consequence (current)	Likelihood (current)	Rating (Mitigated)	Directorate	Function	Ref
Decommissioning	The loss of contracts for UCS could result in loss of reputation, and poor morale amongst staff	•Regular meetings with Commissioners - JCB and QMM. •Performance monitoring in place. ● UCS contract in place with Commissioner (3 year contract signed 26/06/06)	•Action Plan in place to deliver performance targets •Robust Tenders produced where required •Expert advice sought where required.	To confirm	Director of Finance and Performance	CO1, CO2, CO4	SIG	POSS	12	FINANC	FINANC	To go to next Risk Watch
Slippage in Depreciation	The capital plan for 2009-10 may slip, which would then reduce the depreciation and therefore could cause a cash flow issue due to spend on cash items than non cash items	Trust monitoring capital spend to agree with depreciation	Trust can borrow funds from the Public Borrowing Limit (PBL)	To confirm	Director of Finance and Performance	CO5	SIG	POSS	12	FINANC	FINANC	To go to next Risk Watch
FINANCIAL PENALTIES FOR NOT ACHIEVING TARGETS	The risk of financial penalties if the Trust does not meet the requirements of the UCS contract. This also applies if the Trust should fail to achieve the B19 target.	●QMM and JCB meetings with Commissioners. ●B19 trajectory plan agreed with SHA.	●Performance regime in place. Corporate performance report CPR published ● Team Performance Cards to be introduced.	Mar-10	Director of Finance and Performance	CO1, CO2, CO5	CAT	UNLIKE	10	F	F	FIN 02
Decommissioning	The loss of contracts for PTS could result in loss of reputation, and poor morale amongst staff	•Regular meetings with Commissioners - JCB and QMM. •Performance monitoring in place.	•Action Plan in place to deliver performance targets •Robust Tenders produced where required •Expert advice sought where required.	To confirm	Director of Finance and Performance	CO1, CO4	CAT	UNLIKE	10	FINANC	FINANC	FIN 03

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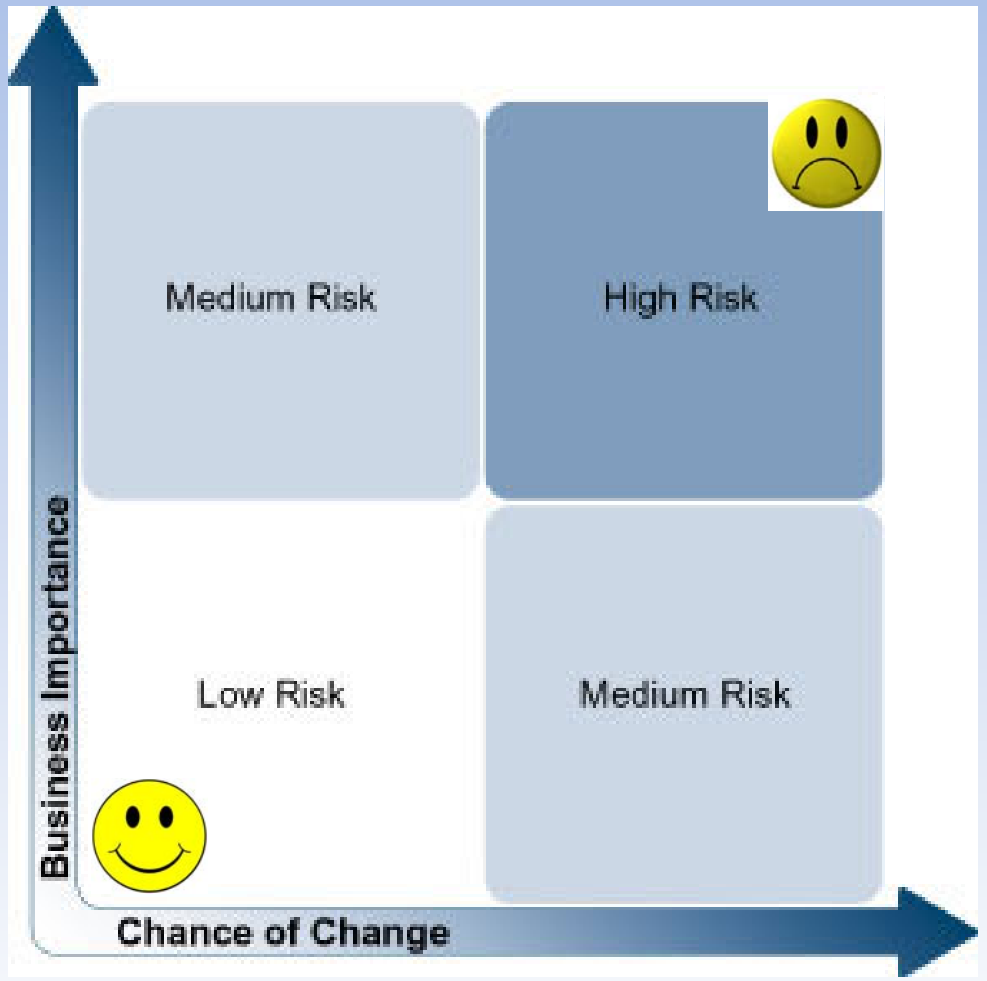
Common 2x2 Risk Matrix

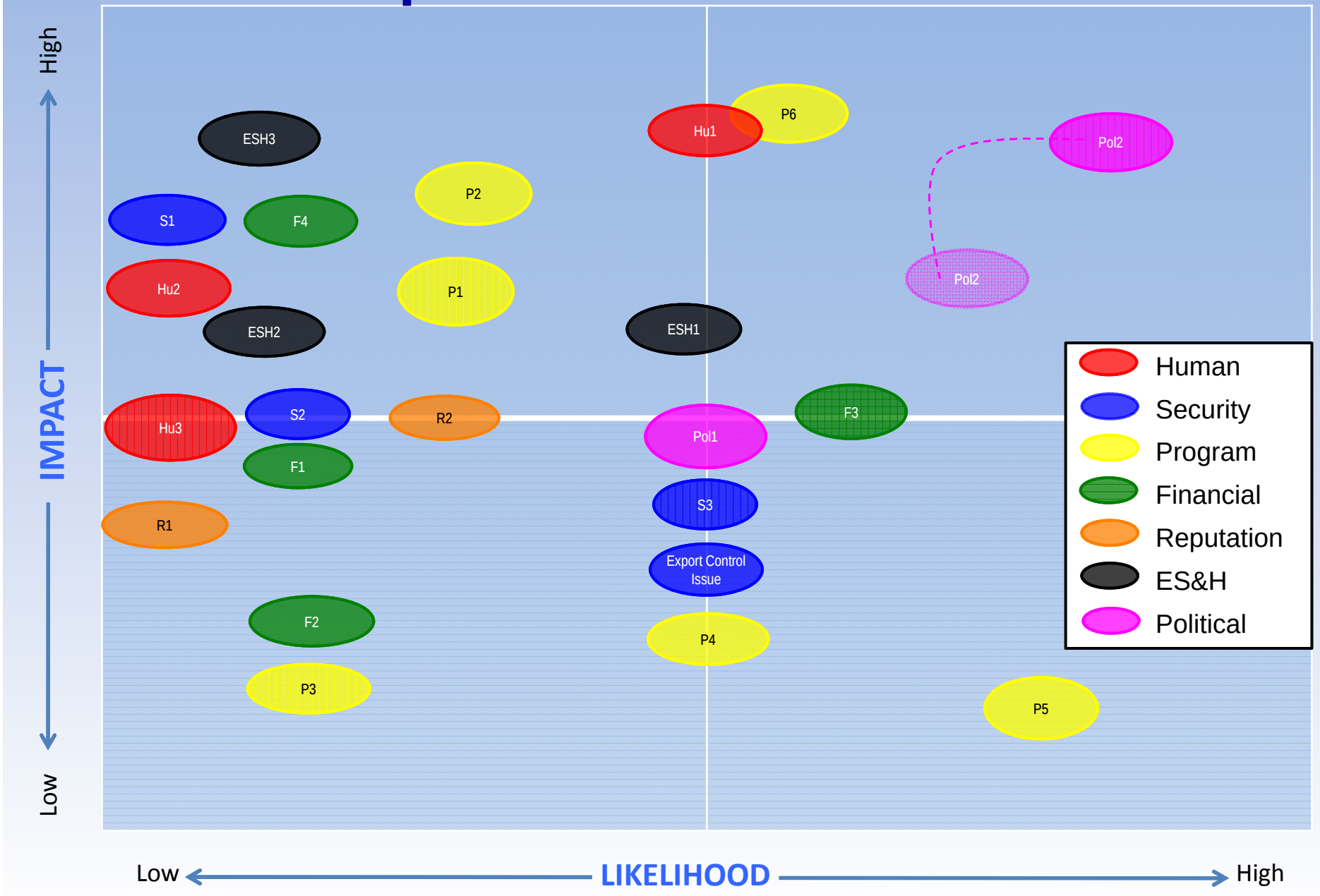
Risk Matrix

- Provide consistency and granularity to risk prioritization
- Communicate relative risk
- Concisely present complex information
- Encourage and facilitate risk discussion
- Not suitable to all situations
- No timeframe

Understanding your organization's risk tolerance is a critical element of any risk management strategy



Example Consolidated Risk Matrix



Example 5x5 Risk Matrix

Risk prioritization map – ISO 31000:2009

Likelihood	1 Insignificant	2 Minor	3 Significant	4 Major	5 Catastrophic
5 Certain	Low	Moderate	High	Extreme	Extreme
4 Likely	Low	Moderate	High	High	Extreme
3 Possible	Low	Moderate	Moderate	High	High
2 Unlikely	Low	Low	Moderate	Moderate	Moderate
1 Rare	Low	Low	Low	Low	Low

Significance

(Figure 1)

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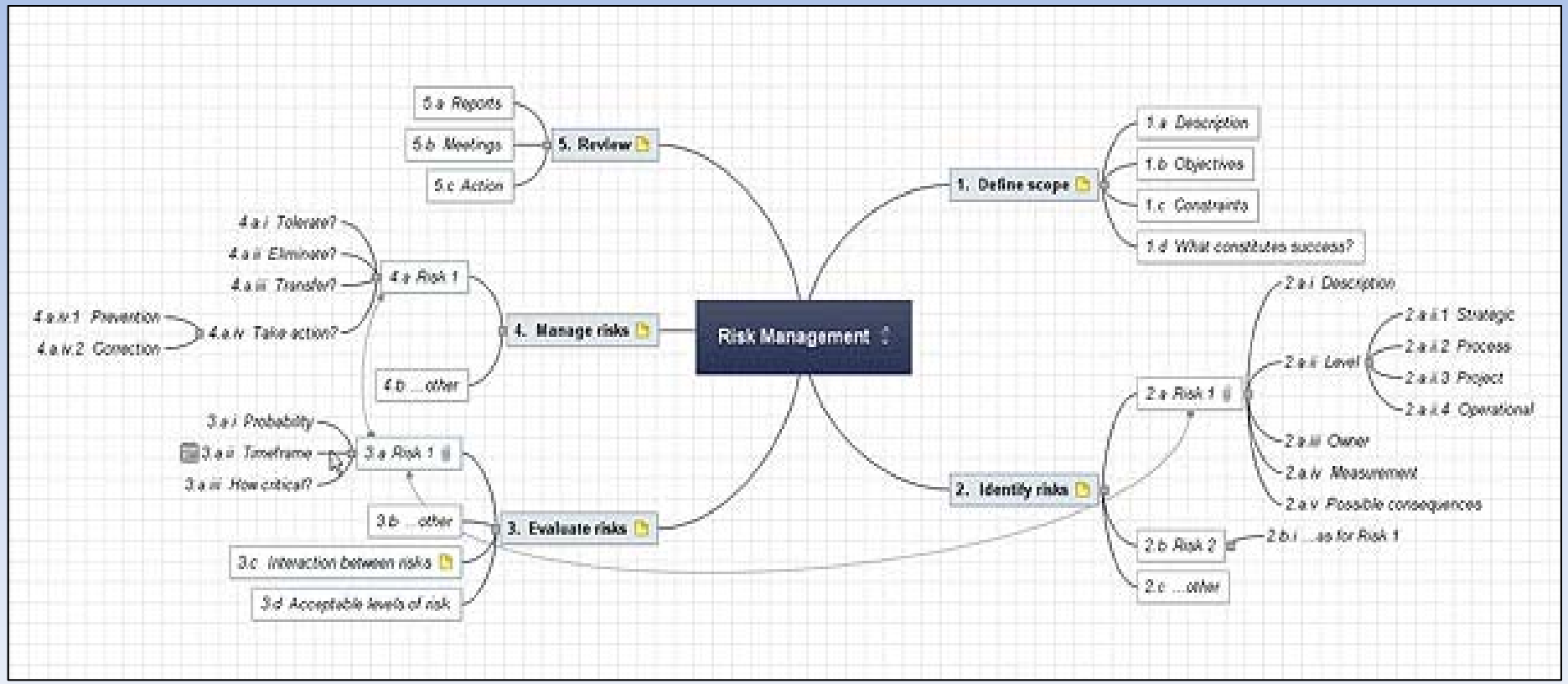
Other Risk Analysis Tools



Risk Management “Mind Map”

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Other Risk Analysis Tools

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Compliance Risk "Heat Map"

ORGANIZATION/ACTIVITY v. RISK CATEGORY	Shipping E.C. Items w/o license (GP #1)	Release of Controlled Technology	Receipt of Controlled Technology	Denied Party or Entity Transactions (GP #4)	Theft of Controlled Technology	Incorrect E.C. Classification	Foreign Nat'l Access to "Use" Technology	Deemed Exports	End Users / End Uses (GP #5)	Fundamental Research Violations	U.S. Content Re-Exports (GP #2)	Violation of any general order, term, or condition (GP #9)
Bio Sciences	3	3	4	2	3	3	3	3	2	3	2	1
Advanced Projects (ARPA-E)	3	2	4	2	2	3	3	3	3	4	3	2
Experimental Fabrication	1	3	3	2	2	2	3	2	4	4	2	2
Experimental Diagnostics	2	3	4	4	2	2	3	3	4	3	2	2
Plasma Technologies	2	3	4	2	2	3	3	2	1	1	3	2
ES & H	1	1	1	1	1	1	1	2	2	1	2	1
Human Resources	1	1	1	2	1	1	3	2	1	1	1	1
Communications/Media Relations	1	3	2	1	1	3	2	3	2	3	1	1
Information Technology	1	3	4	2	3	2	2	4	3	4	2	1

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Compliance Risk "Heat Map"

ORGANIZATION/ACTIVITY v. RISK CATEGORY	Shipping E.C. Items w/o license (GP #1)	Release of Controlled Technology	Receipt of Controlled Technology	Denied Party or Entity Transactions (GP #4)	Anit-Boycott Violations	Theft of Controlled Technology	Incorrect E.C. Classification	Foreign Nat'l Access to "Use" Technology	Deemed Exports	End Users / End Uses (GP #5)	High Risk Property	Proceeding with Knowledge (GP #10)	Sanctioned or Embargoed Countries (GP #6)	Fundamental Research Violations	In Transit Shipment Unlading (GP #8)	Support of Proliferation Activities (GP #7)
International Shipping	4	3	1	3	4	3	4	1	1	3	3	1	1	3	4	2
Freight Forwarders/Third Party Transaction	3	1	1	3	3	2	3	1	1	3	1	2	1	1	4	2
Work for Others	3	4	4	2	3	4	3	4	4	3	2	2	2	3	3	2
Collaborations	3	4	4	3	3	4	3	4	4	4	3	2	3	3	4	3
Property/Equipment Loans	4	3	2	3	2	3	4	3	3	4	3	2	3	3	3	2
Subcontracts	2	3	3	2	3	2	3	3	3	3	2	2	2	3	2	2
Patents & Publications	1	3	1	1	2	1	3	1	2	1	1	1	1	2	1	2
Computer Code Sharing	1	2	2	2	2	1	2	1	4	3	1	2	1	2	1	2
Host Foreign Visitors	1	3	2	2	2	2	1	2	4	1	4	2	1	4	1	2
Foreign Assignments	1	3	3	3	2	2	2	3	4	2	2	1	2	3	1	1
Graduate Students	1	4	2	2	1	2	2	4	4	1	3	1	1	3	1	1
Interns & Fellowships	1	4	2	2	1	2	2	4	4	1	3	1	1	3	1	1
Conferences & Meetings	1	3	3	3	1	2	2	2	4	4	1	2	2	4	1	1
Property Management	1	1	1	2	1	1	4	1	1	1	4	1	1	1	1	1

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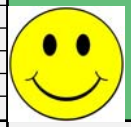
Export Compliance "Heat Map"

ORGANIZATION/ACTIVITY v. RISK CATEGORY	Re-Export Violation	Proceeding with Knowledge (GP #10)	Sanctioned or Embargoed Countries (GP #6)	Violation of any general order, term, or condition (GP #9)	Foregin Banking	Support of Proliferation Activities (GP #7)	Shipping E.C. Items w/o license (GP #1)	In Transit Shipment Unlading (GP #8)	Anit-Boycott Violations	Non-Disclosure Agreements	Foreign Produced Procuct Re-Exports (GP #3)	Theft of Controlled Technology	U.S. Content Re-Exports (GP #2)	High Risk Property	Incorrect E.C. Classification	Foreign Nat'l Access to "Use" Technology	Denied Party or Entity Transactions (GP #4)	Release of Controlled Technology	Fundamental Research Violations	End Users / End Uses (GP #5)	Receipt of Controlled Technology	Deemed Exports	RISK SCORE
Collaborations	2	2	3	3	2	3	3	3	3	3	3	4	3	3	3	4	3	4	3	4			3.14
Work for Others	2	2	2	2	2	2	3	3	3	4	2	4	3	2	3	4	2	4	3	3			2.86
Property/Equipment Loans	3	2	3	3	2	2	4	3	2	2	3	3	3	3	4	3	3	3	3	4			2.86
Advanced Projects	2	2	2	2	1	2	3	2	2	2	3	2	3	3	3	3	2	2	4	3			2.50
International Shipping	3	1	1	2	1	2	4	4	4	2	3	3	3	3	4	1	3	3	3	3			2.50
ITER Diagnostics	1	2	2	2	1	2	2	3	1	2	2	2	2	3	2	3	4	3	3	4	4	3	2.41
ITER SSEN	1	2	2	2	2	2	1	3	1	2	2	2	2	3	2	3	4	2	3	4	4	3	2.36
Subcontracts	1	2	2	2	2	2	2	2	3	2	2	2	2	2	3	3	2	3	3	3	3	3	2.32
Plasma Science & Technology	1	2	1	1	1	2	3	2	1	3	2	3	2	2	3	3	2	3	3	2	4	3	2.23
ITER Fabrication	1	2	2	2	1	2	1	3	1	2	2	2	2	3	2	3	2	3	4	4	3	2	2.23
Technology Transfer	2	1	1	1	1	1	2	1	2	4	2	2	2	2	2	2	2	3	2	4	4	4	2.14
FRT Forwarders/Third Party Transaction	3	2	1	2	2	2	3	4	3	1	3	2	3	1	3	1	3	1	1	3	1	1	2.09
Theory & Computation	2	3	2	1	1	2	1	1	1	1	2	1	3	1	2	2	2	2	4	3	3	4	2.00
Engineering & Infrastructure	2	1	1	2	1	2	2	1	2	3	2	2	2	2	3	3	2	3	1	1	4	2	2.00
Conferences & Meetings	1	2	2	2	1	1	1	1	1	1	1	2	2	1	2	2	3	3	4	4	3	4	2.00
Host Foreign Visitors	1	2	1	2	1	2	1	1	2	1	2	2	2	4	1	2	2	3	4	1	2	4	1.95
Visas	1	1	2	1	1	1	1	1	2	2	1	2	2	2	2	3	3	3	3	2	3	4	1.95
Procurement	1	1	1	1	4	1	2	1	2	2	2	1	2	2	2	1	4	3	1	2	3	3	1.91
NSTX	2	1	1	2	1	1	1	1	1	2	2	1	2	3	2	3	2	2	3	1	4	3	1.86
Information Technology	1	1	1	1	1	2	1	1	1	2	2	3	2	1	2	2	2	3	2	3	4	3	1.86
Graduate Students	1	1	1	1	2	1	1	1	1	1	1	2	2	3	2	4	2	4	3	1	2	4	1.86
Interns & Fellowships	1	1	1	1	2	1	1	1	1	1	1	2	2	3	2	4	2	4	3	1	2	4	1.86
Computer Code Sharing	2	2	1	2	1	2	1	1	2	1	2	1	3	1	2	1	2	2	2	3	2	4	1.82
Excess Property	1	1	1	1	1	2	1	2	1	1	2	1	3	4	2	1	3	1	1	3	1	3	1.68
ITER & Tokamaks	2	1	1	1	1	2	1	1	1	2	1	1	2	2	2	3	1	2	3	1	3	2	1.64
Business Operations	1	1	2	1	4	1	1	1	4	1	2	1	1	1	1	1	4	1	1	2	1	2	1.59
Communictions & Media Relations	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	1	3	3	2	2	3	1.50
Travel Office	1	1	3	2	2	1	1	1	2	1	1	1	1	1	1	1	2	1	1	3	1	3	1.45
Patents & Publications	1	1	1	1	1	2	1	1	2	2	1	1	2	1	3	1	1	3	2	1	1	2	1.45
Accounting			1	1	4	1	1	1	2	1	1	1	1	1	1	1	2	1	1	2	1	3	1.36
Property Management			1	1	2	1	1	1	1	1	1	1	1	4	4	1	2	1	1	1	1	1	1.36
Human Resources			1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	1	1	1	1	2	1.18
Best Practices & Outreach			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	2	1.14
Env., Safety, Health & Security			1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	2	1.14
RISK SCORE	1.44	1.44	1.47	1.53	1.56	1.59	1.62	1.65	1.74	1.74	1.76	1.79	2.06	2.09	2.24	2.24	2.29	2.41	2.41	2.44	2.47	2.88	



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Questions & Discussion

Robert Sheneman

rsheneman@pppl.gov

609.243.3392

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