



WORLD INSTITUTE FOR
NUCLEAR SECURITY

Certified Training for Radioactive Source Security Management

Daniel Johnson
Head of WINS Academy
World Institute for Nuclear Security

ETRAP Conference

Outline



About WINS



The Threat



The WINS Academy



Next Steps



Outline



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Next Steps



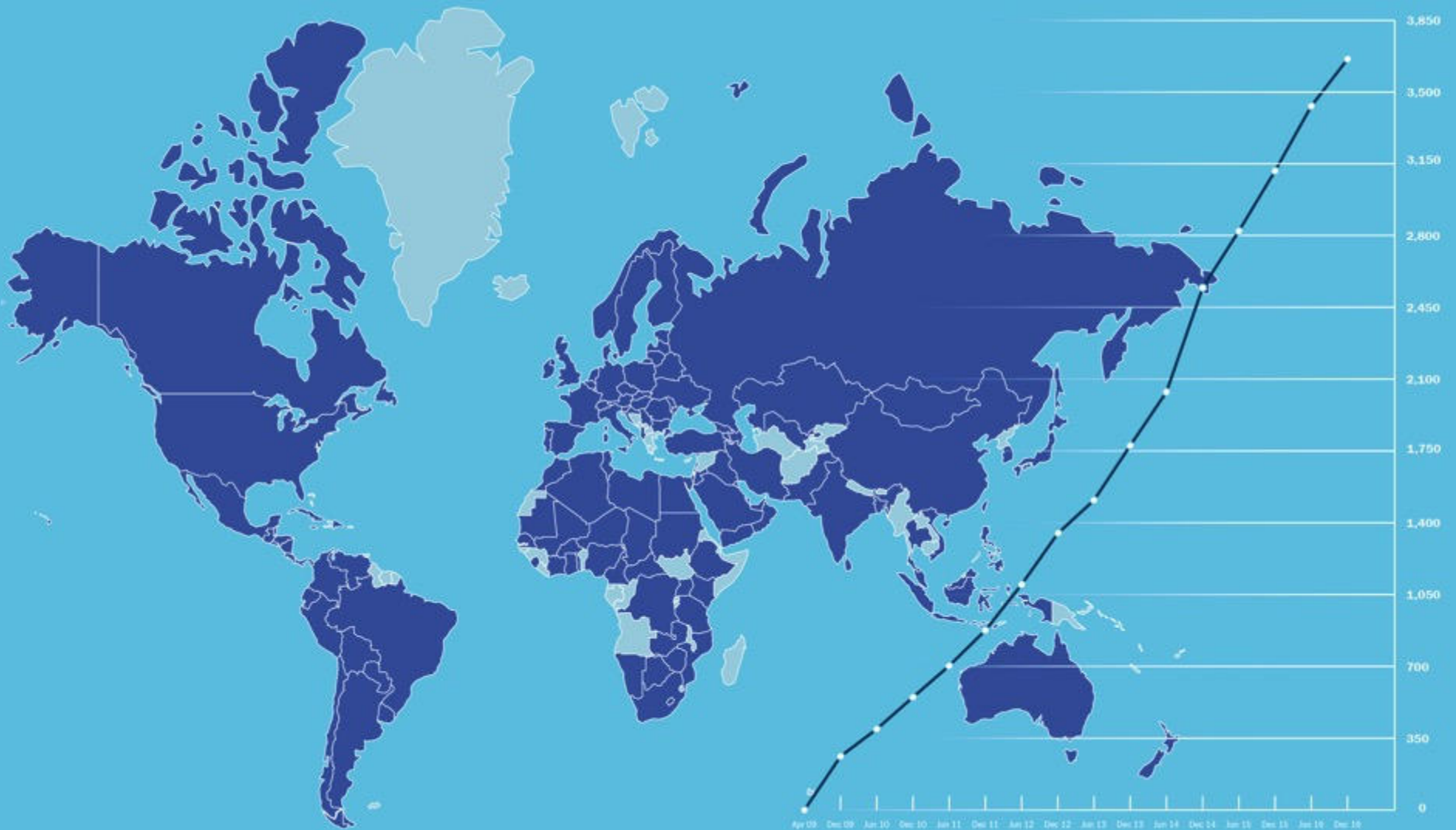
WINS Vision and Mission

All nuclear and other radiological materials and facilities are effectively secured by demonstrably competent professionals applying best practice to achieve operational excellence

To be the leader in knowledge exchange, professional development and certification for nuclear security management



WINS Membership



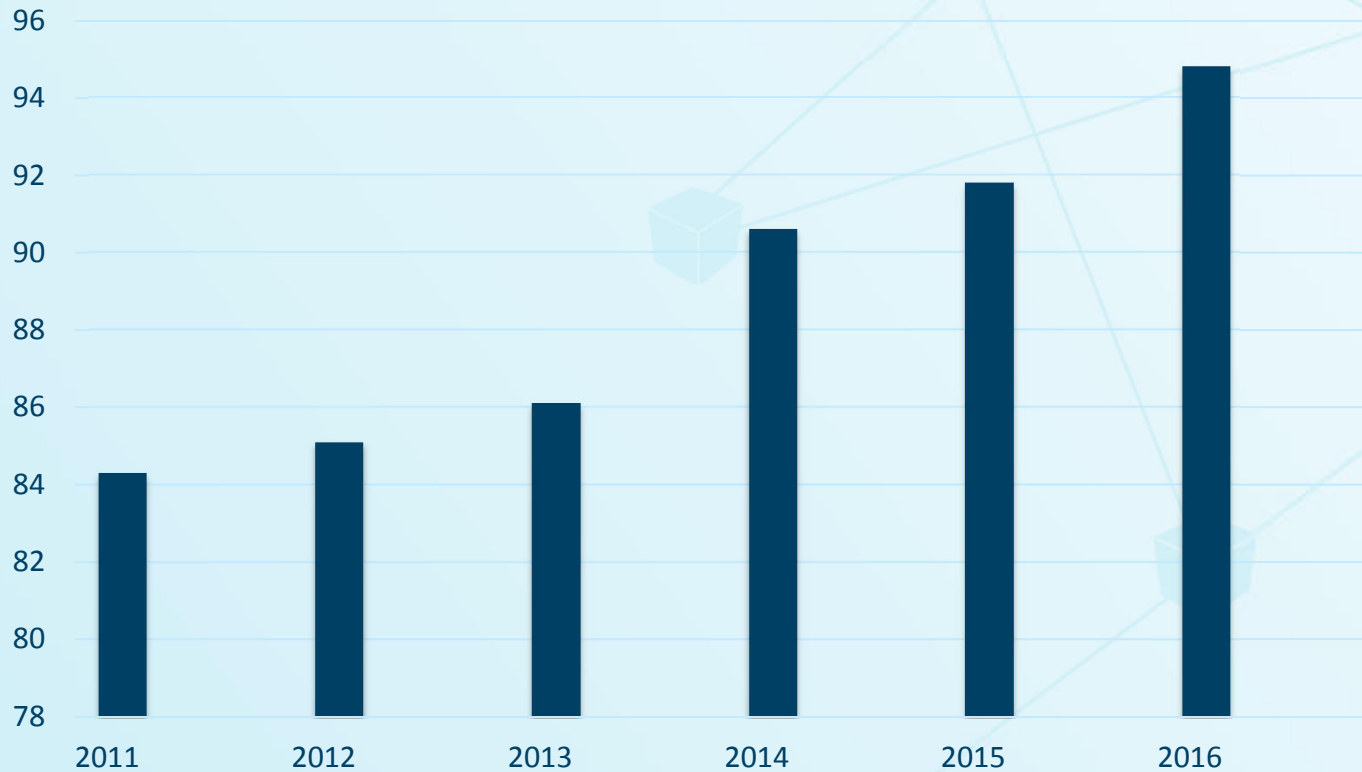
3,872 Members in 122 Countries



Membership Questionnaire

WINS Impact of Security Implementation

I have modified approaches to security because of WINS





WINS Programme



SHARING OPERATIONAL EXPERIENCE

Workshops, Roundtables, Webinars & Membership Forum



KNOWLEDGE CENTRE

Best Practice Guides, Special Reports, Competency Framework



TRAINING AND CERTIFICATION

Online and Blended Learning, Certification Exams, Alumni Network

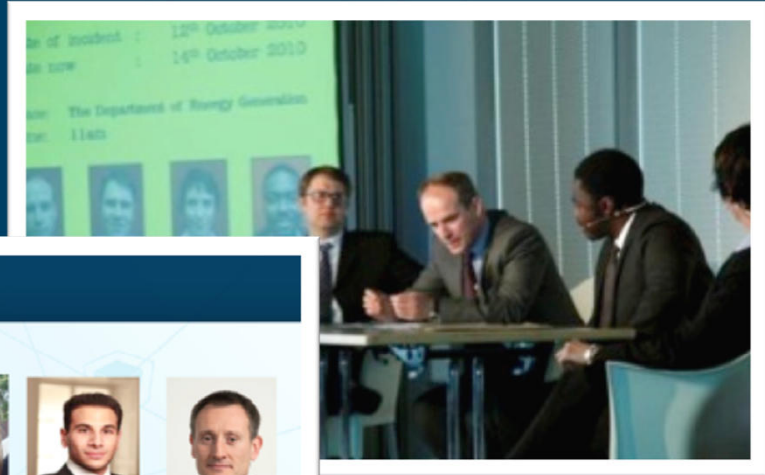


EVALUATION

Self-Assessment Tools, Organisational Competency Assessment, Peer Reviews



Facilitated Workshops & Webinars



SPEAKING TEAM



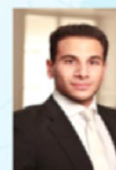
Julian
Powe



Chris
Englefield



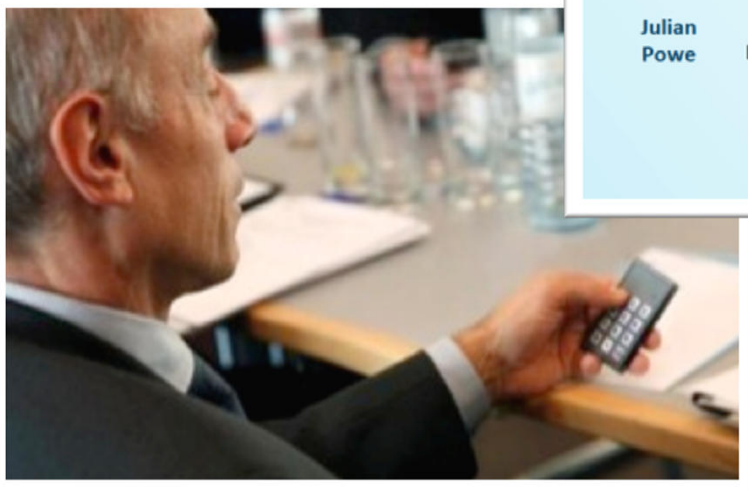
Jodi
Ploquin



Jadallah
Hammal



Pierre
Legoux





WINS Publications on the Security of Radioactive Sources





All Guides have a Self Assessment Section

WINS International Best Practice Guide Nuclear Transport Security

QUESTIONS FOR TRANSPORT OPERATORS (CARRIERS)

Do you understand your potential liability in case of security incident?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you receive sufficient information on possible threats that could affect your shipments?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you thoroughly understand the requirements for transport security imposed by the States from, through and into which your shipments will travel?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Does the transport security plan clearly define roles and responsibilities of organisations and individuals involved in transport security operations?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Have you performed a vulnerability assessment of the transport security arrangements?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you periodically exercise the transport security arrangements?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you have arrangements in place to benefit from operational experience, lessons learned and good practices from other carriers, the nuclear industry and other sensitive industries?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you promote the concept of a "spirit of continuous improvement"?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you perform readiness reviews on the operation of your security systems prior to every shipment?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Have you identified a list of possible malfunctions or failures of security equipment and their impact to security?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Can you permanently track and monitor your shipments?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If the security system detects a possible threat to the integrity of a package or transporting conveyance, will an alarm immediately notify a continuously staffed control centre?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are all personnel involved with shipments suitably trained and qualified commensurate with their accountability for security? Can you demonstrate their competence?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you have an insider mitigation programme? Do you have specific measures to ensure staff reliability?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you have induction programmes to integrate new staff and ensure resilience of the security infrastructure?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you have contingency plans? Do they include all anticipated scenarios?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Have you established formal arrangements with the escort?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you have a media communication plan to be activated in case of a security incident?	<input type="checkbox"/> Yes <input type="checkbox"/> No

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THE "RIGHT"
ANSWER IS
ALWAYS
"YES"





We Provide a Security Management “Maturity Scale”

1	RESILIENT
2	PROACTIVE
3	COMPLIANT
4	REACTIVE
5	VULNERABLE





Permanent Threat Reduction



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Considerations for the Adoption of Alternative Technologies to Replace Radioactive Sources

April 2016

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SECURITY OF SOURCES

- Security by design
- Alternative technologies

Front end

Use and storage

- Inventory
- Physical security
- Management
- Culture and sustainability

OPERATOR LEADERSHIP

Transport

- Tracking
- Access delay
- Communication
- Response

CONTROL OF SOURCES

End of life

- Recycling & Re-use
- Interim storage
- Disposal

STATE AND REGULATORY OVERSIGHT



Outline



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The Threat



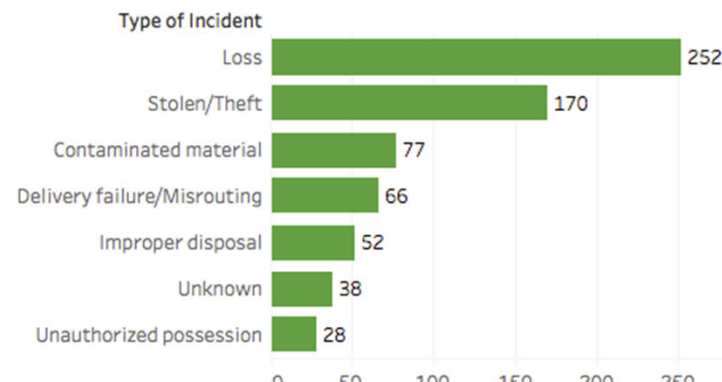
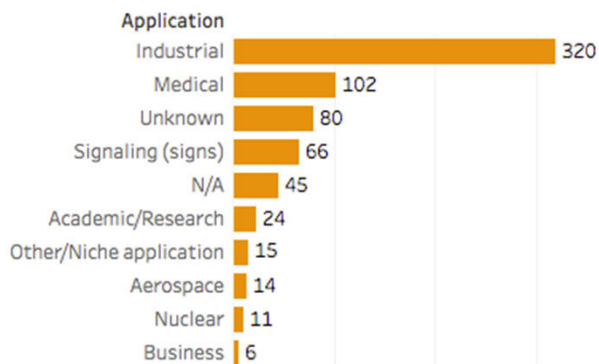
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Recommendations and Conclusions



CNS Global Incidents and Trafficking Database 2013-2016



Moldova 2015



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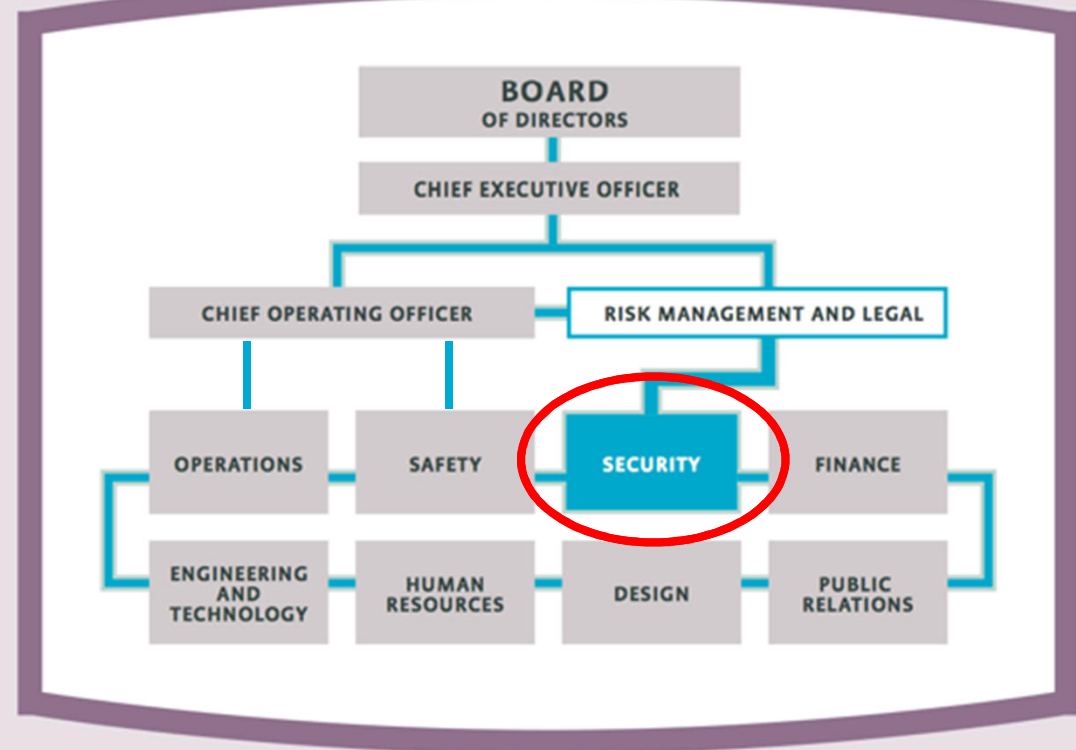
Recommendations and Conclusions



Who Needs to be Demonstrably Competent?

IAEA Guidance

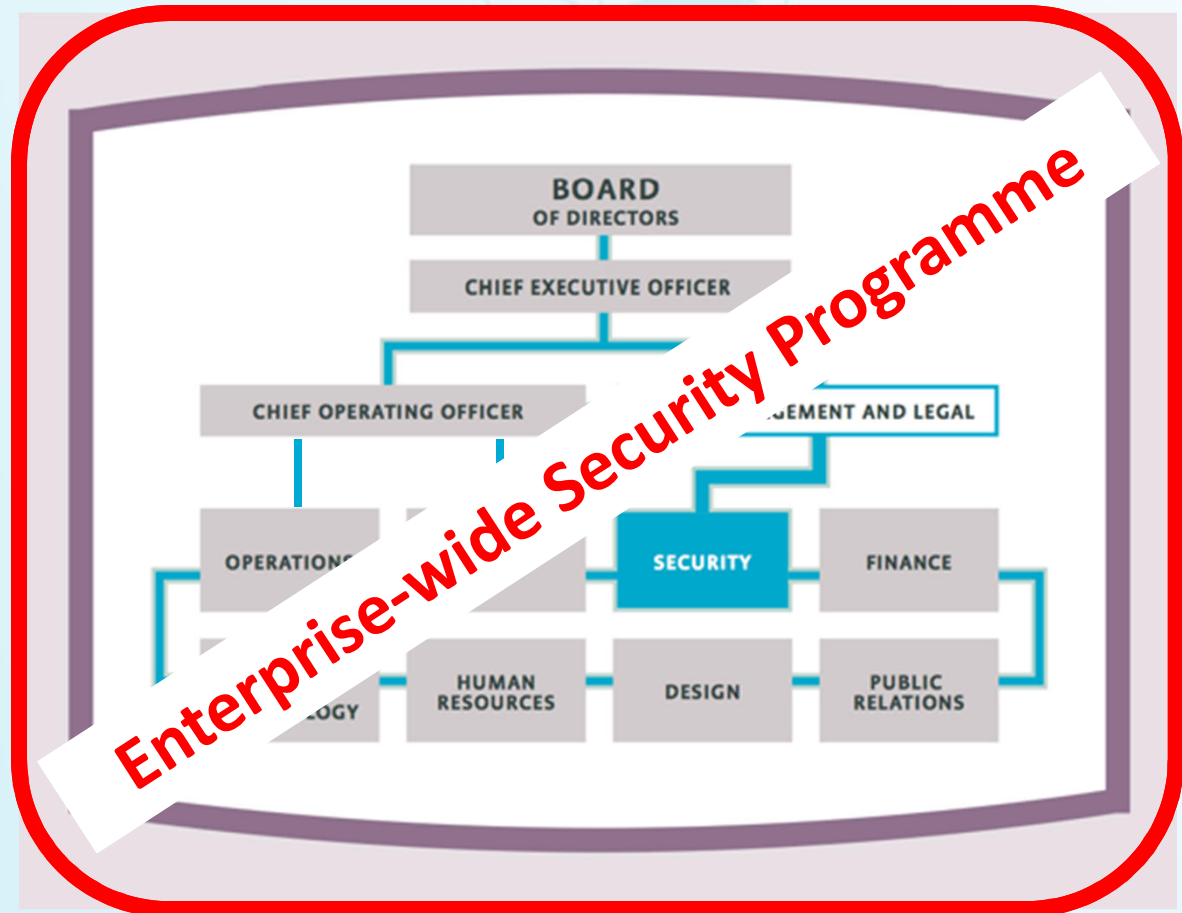
Ensure that **prime responsibility** for the security of nuclear material, other radioactive material, associated facilities, associated activities, sensitive information and sensitive information assets **rests with the authorized persons.**



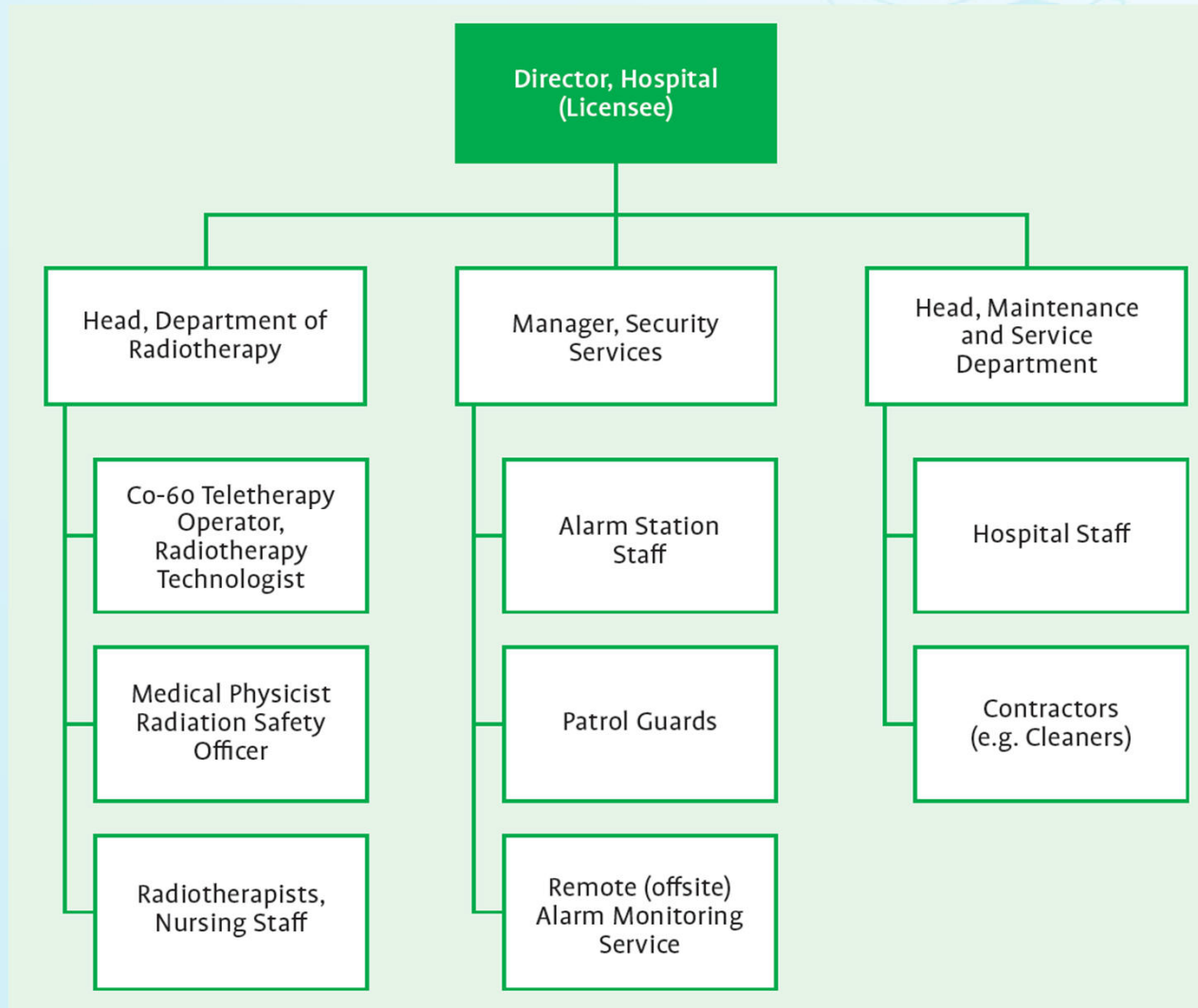
Who Needs to be Demonstrably Competent?

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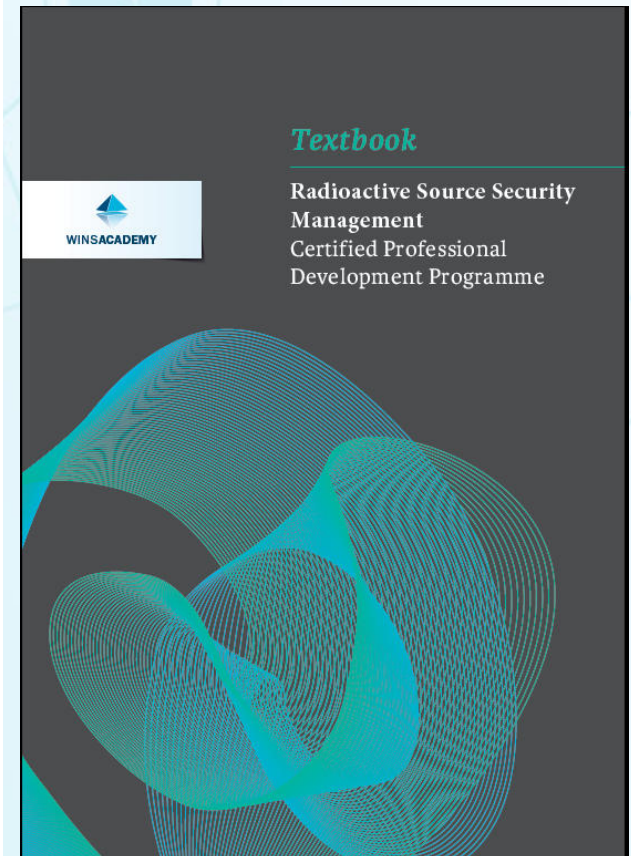
Key Roles with Accountability for Security



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WINSACADEMY



Authors of Radioactive Source Security Module



Chris Englefield,
Editor,
Radiation
Regulator



Ed Waller,
Associate Dean,
University of
Ontario Institute
of Technology



Gregory Herdes,
Principal Technical
Advisor,
US NNSA



Bernie Weiss,
WINS Consultant



Module Content

UNIT 1: THE CHALLENGE

- 1.1 A Brief History
- 1.2 Benefits of Radioactive Sources
- 1.3 Categorisation and Risks
- 1.4 The Threat Landscape

UNIT 2: STAKEHOLDER RESPONSIBILITIES

- 2.1 Global Responsibilities
- 2.2 State Responsibilities
- 2.3 Licensee Responsibilities

UNIT 3: ESSENTIAL ELEMENTS OF SECURITY

- 3.1 Principles of Physical Security
- 3.2 Common Security Systems
- 3.3 Transport Security
- 3.4 Alternative Technologies

UNIT 4: THE RADIOACTIVE SOURCE SECURITY PROGRAMME

- 4.1 The Security Policy and Programme
- 4.2 The Security Plan
- 4.3 Security Culture

UNIT 5: PUTTING IT INTO PRACTICE

COURSE SUMMARY

APPENDIX I: UNDERSTANDING A/D RATIOS

APPENDIX II: ACRONYMS & KEY DEFINITIONS

APPENDIX III: BIBLIOGRAPHY

Module Delivery Online + Proctored Examinations



Foundation Module

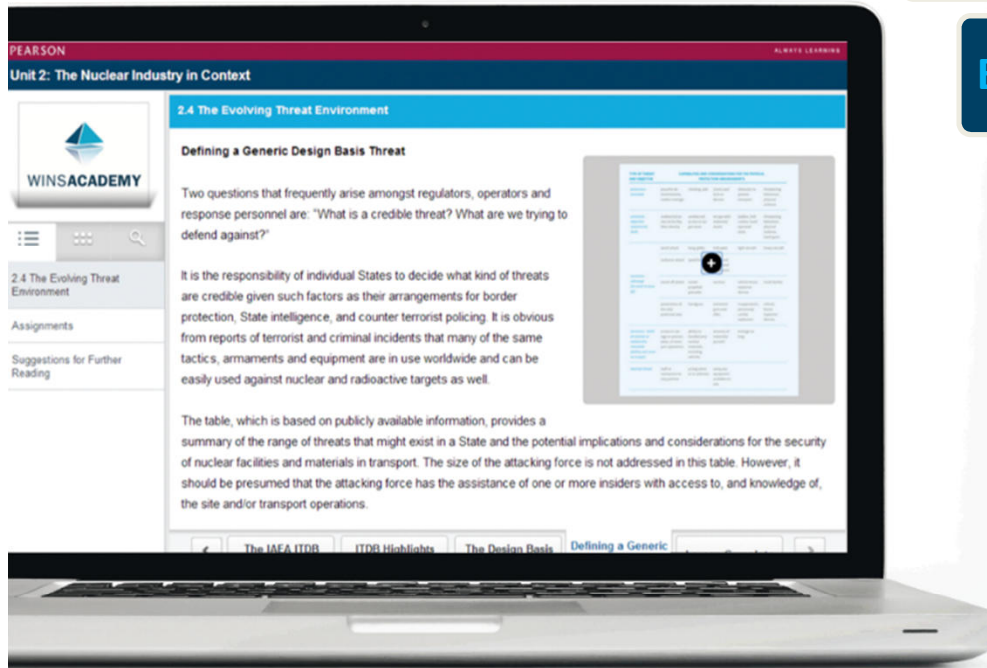
Examination

Elective Module

Examination



CNSP | Certified Nuclear
Security Professional
WORLD INSTITUTE FOR NUCLEAR SECURITY



5,100+ accredited test centres in over 180 countries



Academy Participants – May 2017



900 Enrolled
from
80+ Countries

225+ Certified Nuclear Security Professionals

Graduate Experiences



"From all my security studies, I have never had such a systematic, well organised, comprehensive yet concise, type of module that gives you the whole perspective of an industry in one course, for all stakeholders."

Mr. Mafihla Maleka

Physical Security Manager South African Nuclear Energy Corporation (NECSA)

Measuring Impact – Alumni Network



Alumni Network


Home **Network** Discussions Events Resources Recertification FAQs Contact

NETWORKING HUB

Sort by country or Elective:

 Alumni Directory

 My 2 Favourites

 Discussion Group



Daniel Johnson

Daniel Johnson joined the World Institute for Nuclear Security (WINS) in October 2012 and is responsible for managing the WINS Academy, the world's first international certification program for man ...

[edit my profile](#)



Simon Gillett

United Kingdom FM | EM
Independent



Jussi Kivinen

Finland FM | EM
Sopracon Oy



Leo Liu

China FM | EM
AREVA



Eric MacArthur

Canada FM | EM
MacBell Consulting Inc.



Mafihla Maleka

South Africa FM | STE | SABD
NECSA



ONYEMAECHI OFODILE

Nigeria FM | EM
NIGERIA ATOMIC ENERGY COMMISSION



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IAEA INFCIRC/901 – Recognition of the Academy



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THE GOVERNMENT OF CANADA AND 11 OTHER STATES ENDORSE THE WINS ACADEMY'S COMMITMENT TO PROVIDING CERTIFIED PROFESSIONAL DEVELOPMENT FOR NUCLEAR SECURITY WORLDWIDE – IAEA INFCIRC/901

Vienna, Austria, December 14, 2016 – The World Institute for Nuclear Security (WINS) is pleased to announce that on 1 December 2016 the Government of Canada submitted a Joint Statement on Certified Training for Nuclear Security Management to the Secretariat of the International Atomic Energy Agency (IAEA). The Statement acknowledges the international recognition of the need for nuclear security training, education and certification and commits to providing advocacy, peer review, contributions and other means as necessary to support the WINS Academy's efforts to expand its international certification programme.



Next Steps

- ✓ **Expansion of IAEA INFCIRC/901 to additional States and formation of action plans.**
- ✓ **Pilot blended online and in-person training on radioactive source security with our partners Mexico and Canada.**
- ✓ **Development of peer review for medical sources.**

Thank you

Learn more at

www.wins.org

Email

dan.johnson@wins.org

