

# Strategic Outcomes for Nuclear Security 2020

Dr. Roger Howsley Executive Director

Nuclear Industry Summit, Washington DC, 30<sup>th</sup> March 2016

### Outline

# **WINS Update Strategic Outcomes The WINS Academy Conclusions**





### WINS Update

**Strategic Outcomes** 

**The WINS Academy** 

Conclusions



### WINS Foundation 2008



"WINS fills an urgent gap in our need to strengthen the nuclear security system."

### WINS Mission



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



### **WINS' Achievements**

### 65

International Best Practice Workshops and Roundtables

### **36**

International Best Practice Guides Published

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### **International Best Practice Guides**









4.1 Security by Design

WINS INTERNATIONAL BEST PRACTICE GUIDE

GROUP 4: 1

wins international dest practice guide anout 3. Propin in Nuclear Security 3.3 Nuclear Security for Scientists and Engineers





when international best practice guide arour B: Security of Balanche Sources 5.1 Security of High Activity Radioactive Sources

WORLD INSTITUTE FOR NUCLEAR SECURITY WINS INTERNATIONAL BEST PRACTICE GUIDE GROUP 1: Nuclear Security Programme Organisation 1.3 Security Governance







### Website with Interactive Member's Area



### **Facilitated Workshops Using Innovative Techniques**



### WINS Workshops

**AN EVENT EVERY FIVE WEEKS** 

ARGENTINA **AUSTRIA BELGIUM** BRAZIL CANADA FRANCE GERMANY GREECE LITHUANIA JAPAN **JORDAN** KOREA **MEXICO NIGERIA** PHILIPPINES SOUTH AFRICA **SWEDEN** THE NETHERLANDS UNITED ARAB EMIRATES UNITED KINGDOM USA

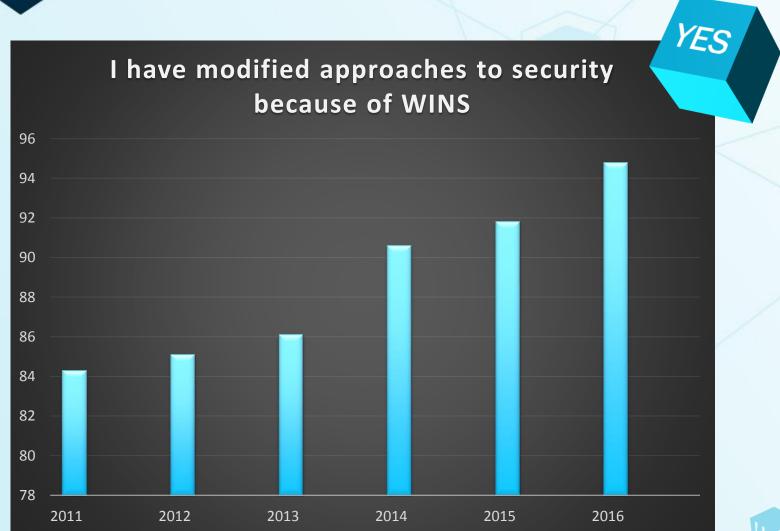
### **WINS Membership Growth**



### WINS Membership Survey 2015-16

I benefit from WINS Membership.	97% agree	
WINS is a valuable forum.	99% agree	
The WINS guides are effective for self-assessment.	<b>98 %</b> agree	
The WINS guides cover relevant topic.	99% agree	
Publishing the guides in different languages is important.	<b>98 %</b> agree	
Attending a WINS workshop was time well spent.	97% agree	
WINS workshops are innovative.	<b>98%</b> agree	
I have modified approaches to security because of WINS.	95 % agree	
The WINS website is useful.	99% agree	
My interactions with WINS are dealt with professionally.	<b>98%</b> agree	

### **Membership Questionnaire**



WNS

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### **Annual Report 2016**



1	Demonstrable competence increasingly becomes a licensing requirement for personnel with accountabilities for nuclear security, including the regulatory requirement for professional certification of key nuclear security management positions.
2	The IAEA's nuclear security programme promotes structured professional development and voluntary certification, and the IAEA has entered into joint nuclear security certification programmes with training institutes, including WINS.
3	An increasing number of organisations, including regulators, operators, police and responsible government departments, publish meaningful governance reports about the corporate oversight of their security programmes.
4	An effective, sustainable international industry forum is operating that implements the recommendations and commitments made during the Nuclear Industry Summits.
5	Some countries have established a peer review programme for nuclear security management practices that involves nuclear operators and related organisations, and it is growing in scope and frequency.
6	Similar to nuclear safety, nuclear security is increasingly seen as a strategic issue for nuclear- related organisations rather than as a regulatory burden.
7	Security programmes are subject to the business disciplines of effectiveness (performance tested) and efficiency, and security regulations are performance-based.
8	Nuclear safety and security continue to coalesce, and more of the nuclear safety-related disciplines and management attitudes are being used to enhance nuclear security.
9	Cybersecurity and physical protection arrangements are properly integrated as part of an all-risks approach to the security programme.
10	High quality nuclear security workshops, events and related best practice guides are being implemented, including new ISO publications, and professionally-facilitated meetings are the norm in the sector.

**Demonstrable competence increasingly** becomes a licensing requirement for personnel with accountabilities for nuclear security, including the regulatory requirement for professional certification of key nuclear security management positions.



### **Nuclear Security Summit 2014**



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#### Joint Statement

The following States: Algeria, Armenia, Australia, Belgium, Canada, Chile, Czech Republic, Denmark, Finland, France, Georgia, Germany, Hungary, Israel, Italy, Japan, Kazakhstan, Lithuania, Mexico, Morocco, the Netherlands, New Zealand, Norway, Philippines, Poland, the Republic of Korea, Romania, Spain, Sweden, Turkey, Ukraine, United Arab Emirates, the United Kingdom, the United States of America and Vietnam, aiming for an effective and sustainable nuclear security regime, commit themselves to:

- Subscribe to the fundamental principles ("Nuclear Security Fundamentals") set forth in the Nuclear Security Series NSS 20, on the Objective and Essential Elements of a State's Nuclear Security Regime;
- Meet the intent of the recommendations contained in the following documents and to realize or exceed these objectives including through the implementation and enhancement of national regulations and other government measures:
- a) NSS13 (INFCIRC225/Rev.5): "Nuclear Security Recommendations on Physical Protection of Nuclear Materials and Nuclear Facilities;
- b) NSS14: "Nuclear Security Recommendations on Radioactive Material and Associated Facilities" and The Code of Conduct on the Safety and Security of Radioactive Sources;
- c) NSS15: "Nuclear Security Recommendations on Nuclear and Other Radioactive Material out of Regulatory Control;
- Continue to improve the effectiveness of their nuclear security regimes and operators' systems by
- a) Conducting self-assessments;
- b) Hosting peer reviews (e.g., IPPAS) periodically;
- c) Acting upon the recommendations identified during these reviews;

 Ensure that management and personnel with accountability for nuclear security are demonstrably competent;

Additionally, subscribing States intend to contribute to the continuous improvement of nuclear security through one or more of the following actions:

"Ensure that management and personnel with accountability for nuclear security are demonstrably competent"

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**NSS in Washington** 

Strengthening nuclear security implementation (25 March 2014)

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### **Nuclear Industry Summit 2014**



#### 2014 NUCLEAR INDUSTRY SUMMIT

Amsterdam - March 23-24, 2014

Beurs van Berlage

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Ensuring that all personnel with accountabilities for security are demonstrably competent by establishing appropriate standards for selection, training, and certification of staff



#### Joint Statement on Certified Training for Nuclear Security Management

#### 2016 Nuclear Security Summit in Washington D.C.

Introduction

Gathered in Washington D.C. on the occasion of the fourth Nuclear Security Summit, the leaders of Canada, the Netherlands, New Zealand, Norway, the United Kingdom and the United States welcome

The IAEA's nuclear security programme promotes structured professional development and voluntary certification, and the IAEA has entered into joint nuclear security certification programmes with training institutes, including WINS.





### INTERNATIONAL CIVIL AVIATION ORGANIZATION

A United Nations Specialized Agency

The Aviation Security Professional Management Course (PMC) is the most advanced certified aviation security training programme in existence today. Its aim is to provide middle and senior management personnel with new management skills and a greater understanding of the application of the ICAO Standards and Recommended Practices. These have become mandatory in today's aviation environment, as aviation security management personnel are required to perform more complex and diverse tasks and display greater communicative and management skills to meet new and emerging threats to civil aviation.

An increasing number of organisations, including regulators, operators, police and responsible government departments, publish meaningful governance reports about the corporate oversight of their security programmes.



### CORPORATE GOVERNANCE ARRANGEMENTS FOR NUCLEAR SECURITY:

Analysis of Annual Reports from Regulators and Operators



### CORPORATE GOVERNANCE ARRANGEMENTS FOR NUCLEAR SECURITY:

### Analysis of Annual Reports from Regulators and Operators

NSS PARTICIPATING STATES	REGULATORS	OPERATORS
ANNUAL REPORT	47%	89%
SECURITY GOVERNANCE	28%	9%



An effective, sustainable international industry forum is operating that implements the recommendations and commitments made during the Nuclear Industry Summits.



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### **WORK IN PROGRESS**



Some countries have established a peer review programme for nuclear security management practices that involves nuclear operators and related organisations, and it is growing in scope and frequency.



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The combined budget of WANO and INPO is bigger than the entire budget of the IAEA. That is how much the nuclear industry prioritizes peer review to achieve safety and operational excellence.

But this excludes security peer review.

Similar to nuclear safety, nuclear security is increasingly seen as a strategic issue for nuclear related organisations, rather than a regulatory burden



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WINS INTERNATIONAL BEST PRACTICE GUIDE

**GROUP 1:** Nuclear Security Programme Organisation

#### **1.4** Nuclear Security Culture

Revision 3.0



## **INPO**<sup>®</sup>

#### Traits of a Healthy Nuclear Safety Culture



Security programmes are subject to the business disciplines of effectiveness (performance tested) and efficiency, and security regulations are performance-based.



Nuclear safety and security continue to coalesce, and more of the nuclear safety-related disciplines and management attitudes are being used to enhance nuclear security.



#### **STAKEHOLDER PERSPECTIVE – INDUSTRY**

"I support a collaborative relationship between our organisations and see a strong similarity in our process of gathering and sharing best practice amongst our members."



PETER PROZESKY, CEO, World Association of Nuclear Operators



Cybersecurity and physical protection arrangements are properly integrated as part of an all-risks approach to the security programme.





Home > NRC Library > Document Collections > NRC Regulations (10 CFR) > Part Index > § 73.54 Protection of digital computer and communication systems and networks.

### § 73.54 Protection of digital computer and communication systems and networks.

"the licensee shall review the cyber security program as a component of the physical security program..."

#### **Strategic Outcomes**

High quality nuclear security workshops, events and best practice guides are being implemented, including new ISO publications, and professionally-facilitated meetings are the norm for the sector.



## **Strategic Outcomes**





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# **WINS Update Strategic Outcomes The WINS Academy Conclusions**



## **The WINS Academy**



WINSACADEMY

## The WINS Academy : Key Roles



**Elective for Elective for** Scientists, Executive **Technicians and** Managers Engineers **Elective for Elective for** Senior **Civil Society Administrators** Engagement and Board Directors FOUNDATION **Elective for Elective for** MODULE Radioactive Incident **Materials** Management Managers **Elective for Elective for Transport** Regulators **Elective for** Security Security **Programme** Managers

## **Delivering Training Curriculum**

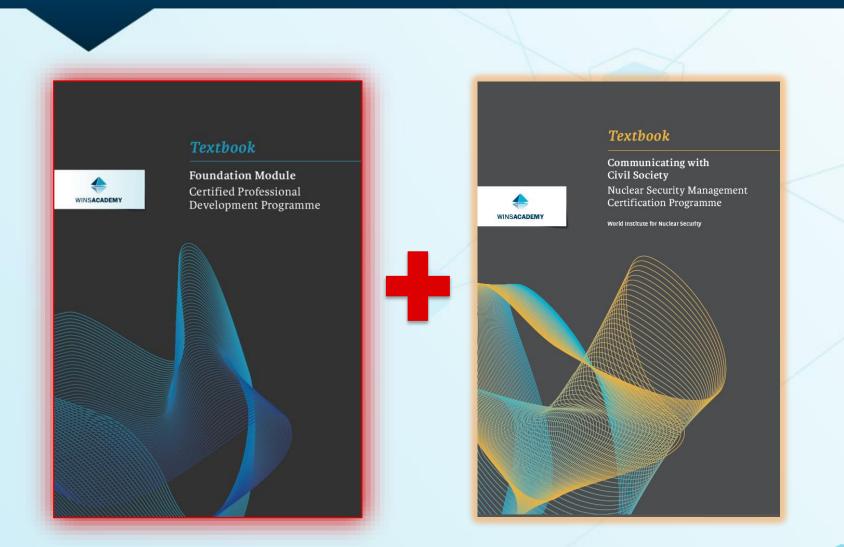
N	ALWAYE LAN
The Nuclear Indu	stry in Context
	2.4 The Evolving Threat Environment
$\blacklozenge$	Defining a Generic Design Basis Threat
SACADEMY	Two questions that frequently arise amongst regulators, operators and response personnel are: "What is a credible threat? What are we trying to defend against?"
volving Threat ent	It is the responsibility of individual States to decide what kind of threats are credible given such factors as their arrangements for border protection, State intelligence, and counter terrorist policing. It is obvious
ions for Further	from reports of terrorist and criminal incidents that many of the same tactics, armaments and equipment are in use worldwide and can be easily used against nuclear and radioactive targets as well.
	The table, which is based on publicly available information, provides a summary of the range of threats that might exist in a State and the potential implications and considerations for the securit of nuclear facilities and materials in transport. The size of the attacking force is not addressed in this table. However, it should be presumed that the attacking force has the assistance of one or more insiders with access to, and knowledge of the site and/or transport operations.
	The IAFA ITDB ITDB Highlights The Design Basis Defining a Generic





### **Foundation Course + Elective**







## **Academy Participation**





## **First Academy Graduates**





## 124 Graduates from 28 Countries



#### **Graduate Experiences**



*"With the WINS Academy Elective for* Executive Managers, I learned a lot. Surely security is not one subject that can be isolated. Security is not only guards and guns, it shall always be considered part of an integrated security programme for business success. Taking the Elective course and getting the certification will surely benefit our career, but most importantly it helps us better contribute to our organisations' daily operations and Lijun Liu, communications." **AREVA ASIA** 



## **WINS Academy Graduate**





Mr. Maleka Physical Security Manager South African Nuclear Energy Corporation (NECSA)



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### Conclusions

- Get involved with WINS for the benefit of the entire industry,
- Make use of the WINS Academy for the benefit of your organisation and staff, and encourage professional certification,
- Benchmark your organisation's performance against the 10 Strategic Outcomes,
- **Encourage dialogue and peer review,**
- **Report your corporate governance arrangements,**
- If you need help, please ask.





## WEBSITE www.wins.org

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