



WORLD INSTITUTE FOR  
NUCLEAR SECURITY

## **Women's Cyber Forum: Launching Careers in Cyber Space**

**Guns, Guards, Gates, Geeks and 'Girls'  
Building a Cyber Skill Set – A nuclear  
security perspective**

**Rhonda Evans, Head WINS Academy**

# Outline

- **WINS introduced**
- **Unpacking  
Demonstrable  
Competence in the  
context of gender**
- **Next steps**



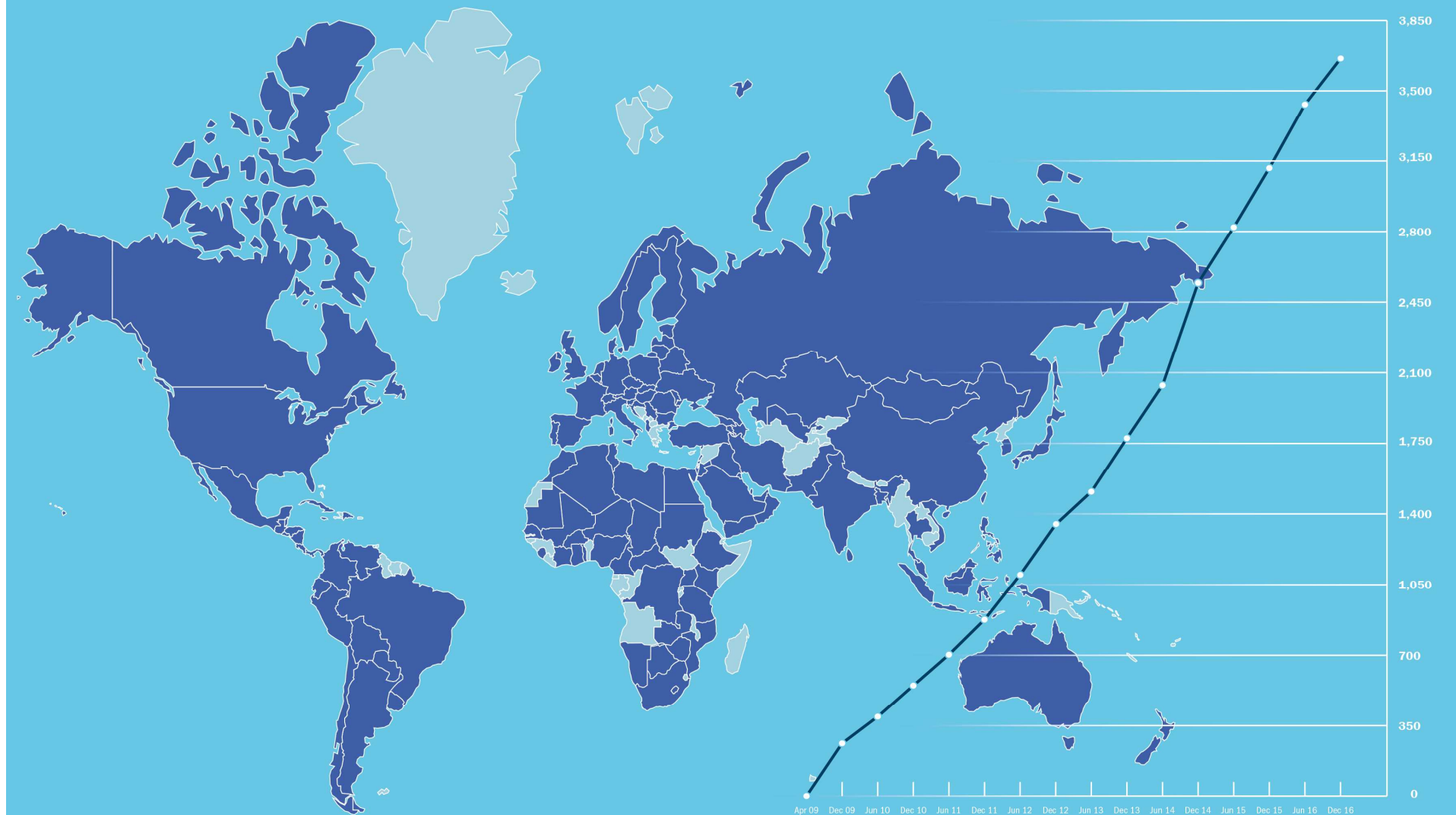
# 1. Introducing WINS Vision and Mission

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 - October 2017



**Over 4,000 Members in 122 Countries**



# 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



# WINS Academy Certification Programme



**944 Enrolled**  
from  
**80+ Countries**

**264 Certified Nuclear Security Professionals**

**Gender (Im)Balance 25:75**  
**Specific programme to increase no. of women (2018)**





# The WINS Academy mapping the Modules



The world's first  
certified  
professional  
development  
programme for  
personnel with  
accountabilities  
for nuclear  
security-

**New Module on  
Cyber Security  
(March 2018)**

## 2. Demonstrable competence unpacked

**Demonstrable: (Adj)** Clearly apparent or capable of being logically proved (Oxford Dictionary)

*Late Middle English: from Latin demonstrabilis, from demonstrare - point out*

**Competence (Noun)** The ability to do something successfully or efficiently

**Gender: (F/M; D/H)** Objectively irrelevant to the demonstration of competence although bias (subjectivity) of the assessor may influence that conclusion!





# IAEA Nuclear Security Series- DC as a contributor to a sustainable nuclear security regime

## Nuclear Security Fundamentals - Objective and Essential Elements of a State's Nuclear Security Regime (NSS 20 – 2013)

- ✓ **Essential Element 12: Sustaining a nuclear security regime**
  - ✓ Demonstrating leadership in nuclear security matters at the highest level
  - ✓ Allocating sufficient human financial and technical resources to carry out the organisation's nuclear security responsibilities on a continuing basis using a risk informed approach
  - ✓ Routinely conducting maintenance, training and evaluation to ensure the effectiveness of the nuclear security systems
  - ✓ Routinely performing assurance activities to identify and address issues and factors that may affect the capacity to provide adequate nuclear security, including cyber security, at all times.

## C. Demonstrable Competence - Regulatory Assurance

### ✓ Context

- ✓ **UK ONR FUNDAMENTAL SECURITY PRINCIPLES: FSYP 3 COMPETENCE MANAGEMENT:**
- ✓ **Duty holders must implement and maintain effective arrangements to manage the competence of those with assigned security roles and responsibilities**
  - ✓ Systematic approach to competence management
  - ✓ Essential that all personnel are Suitably Qualified and Experienced Personnel (SQEP)
  - ✓ Formal assessment of competence and experience

## D. Political Support by States - IAEA INFCIRC/869 following NSS in 2014



### 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:*

1. **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;
2. **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;
3. **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;
4. **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”



# D. Industry Support

## **JOINT STATEMENT OF THE 2014 NUCLEAR INDUSTRY SUMMIT**

Amsterdam - March 23-24, 2014

Beurs van Berlage



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



## D. Political Support by States INFCIRC/901



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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.



## C. Encouraging more women into nuclear security including cyber

- ✓ **Exploring Barriers to Full participation**
  - ✓ **Study Pathways** to nuclear security: law; engineering; physics; computer science; psychology; political science- increasing female students
  - ✓ **Career pathways** to nuclear security: military; law enforcement; regulatory bodies; policy roles; legal advisors; Duty holders must implement and maintain effective arrangements to manage the competence of those with assigned security roles and responsibilities- ensuring full access to interesting and new roles -
  - ✓ **Changing minds** about the presence of women in this field
    - ✓ Be determined
    - ✓ Be fearless
    - ✓ Maintain and Use networks
    - ✓ When unsuccessful request post interview feedback
    - ✓ Persist



**Thank you for your attention  
I welcome your questions and  
comments**

**rhonda.evans@wins.org**

