Nuclear Non-Proliferation

A short intensive course for practitioners

September 26-30, 2011
VCDNP, Donau-City Strasse 6, 1220 Vienna, Austria

Part I. Online preparatory module
(to be completed by participants prior to the course in Vienna)

- A brief history of the nuclear age
- Motivations for nuclear pursuit and reversal
- Nuclear energy, fuel cycle, nuclear weapons
- IAEA safeguards
- The Nuclear Non-Proliferation Treaty regime

Part II. The five-day intensive course in Vienna

Day 1  Monday, September 26

09:00 – 09:30: Welcome, Introductions, Course Organization and Goals
Elena Sokova, VCDNP, and Gaukhar Mukhatzhanova, CNS

09:30 – 10:45: Nuclear Proliferation: Challenges and Opportunities
William C. Potter, CNS

  - The nature of the problem
  - Strategies for control

10:45 – 11:00: Break

11:00 – 11:45: A recap: Nuclear energy, fuel cycle and weapons
Gaukhar Mukhatzhanova, CNS

The Nonproliferation Regime: Elements

11:45 – 12:45: The Treaty on the Non-Proliferation of Nuclear Weapons (NPT), Overview
Tariq Rauf, IAEA

Negotiation history
  o The Irish Resolution, Eighteen-Nation Committee (role of states other than the two superpowers)
  o US-USSR negotiations

Provisions
  o The Three Pillars
  o Safeguards

12:45 – 13:45: Lunch

13:45 – 15:15: The Treaty on the Non-Proliferation of Nuclear Weapons (NPT), Overview (continued)

  Current issues and challenges (include discussion here)
  o Debates over Article IV
  o Implementation of Article VI
  o Ideas on amending Article X
  o Non-compliance
  o Lack of universality

15:15 -15:30: Break

15:30 – 17:00: Export control regimes
  Leonard (Sandy) Spector, CNS

    o Zangger Committee
    o NSG: history, guidelines
    o Issues, including US-India nuclear deal and India exemption

17:00 – Reception

Day 2        Tuesday, September 27

9:00 – 14:00
Field Trip: Zwentendorf Nuclear Power Plant

14:00 – 15:15: Fukushima and its implications for nuclear safety, security, and nonproliferation
  Mark Hibbs, Carnegie Endowment for International Peace

15:15 – 15:30: Break

The Nonproliferation Regime: Elements (continued)
15:30 – 17:00: NPT Review Process and Major Rev Con Decisions  
Tariq Rauf, IAEA  
  
o  How does it work?  
o  Organization – PrepComs and Rev Cons, strengthened review  
  ▪ The Purpose of PrepComs  
  ▪ RevCon: Main Committees and Subsidiary Bodies, role of the President and Chairs  
  ▪ Consensus and Voting Rules  
  
  ▪ 1995: Extension package, its significance  
  ▪ 2000: Consensus document, 13 Practical Steps, the role of NAC  
  ▪ 2010: Action Plan  

Day 3       Wednesday, September 28  

The Nonproliferation Regime: Elements (continued)  

09:00 – 10:30: Comprehensive Test Ban Treaty  
Jean du Preez, CTBTO  
  o  History  
  o  Negotiation  
  o  Provisions (and the verification regime)  
  o  Entry into force challenges  

10:30 – 10:45: Break  

10:45 – 12:15: Nuclear-Weapon-Free Zones  
Gaukhar Mukhatzhanova, CNS  
  o  History  
  o  Provisions  
  o  Significance  
  o  Status and challenges (disputed provisions, status of additional protocols)  

12:15–13:15: Lunch  

13:15 – 14:45: The International Atomic Energy Agency  
Laura Rockwood, IAEA  
  o  Mandate (peaceful uses, technical cooperation, verification)  
  o  Organization (policy bodies, secretariat), relationship with other organizations;
Legal framework and decision making

14:45 – 15:00: Break

15:00 – 17:00: IAEA and International Nuclear Safeguards

   Jill Cooley, IAEA

   - Different kinds of safeguards, their implementation
   - Information collection and analysis
   - Issues and challenges (Implementation of AP, resources for safeguards, development of new safeguards, etc.)

Day 4    Thursday, September 29

Special Challenges, Unconventional Threats

9:00 – 10:50: A Region in Focus: Middle East

   Patricia Lewis, CNS, Gaukhar Mukhatzhanova, CNS

   - Instances of past noncompliance
   - The nuclear programs of Iran, Israel, and Syria

10:50 – 11:00: Break

11:00 – 12:00: Middle East WMD-Free Zone, intro to the simulation

   Patricia Lewis, CNS

   - Proposals, 1995 Resolution 2010 NPT RevCon decisions re Middle East
   - Status of implementation of the 2010 decisions
   - Future outlook

12:00 – 13:00: Lunch (30 min) and lead into the simulation

13:00 – 17:00: Simulation Exercise – 2012 Middle East Conference

   Patricia Lewis (CNS), Gaukhar Mukhatzhanova (CNS), Nikolai Sokov (VCDNP)

Day 5    Friday, September 30

Special Challenges, Unconventional Threats (Continued)

9:00 – 10:30: Nuclear Security and Countering Nuclear Terrorism

   Elena Sokova, VCDNP

   - What is the threat? Why is it important?
   - International agreements (CPPNM + Amendment), IAEA Guidelines
o UNSCR 1540 (2004)
o Nuclear Security Summit
o PSI, GICNT and other mechanisms (very briefly)

10:30 – 10:45: Break

Nuclear Arms Control and Nuclear Disarmament

Nikolai Sokov, VCDNP
  o Provisions, reductions – what is counted? What is reduced/ dismantled?
  o Verification regime
  o Post STARTs – what should/could the next treaty cover?

12:15 – 14:00: Lunch Seminar “Reflections on International Nuclear Order”
William Walker, University of St. Andrews

Nuclear Arms Control and Nuclear Disarmament (continued)

14:00 – 15:30: Issues in Disarmament
Patricia Lewis, CNS
  o Going beyond the bilateral arrangements
  o Disarmament verification

15:30 – 16:30: Concluding Round-table discussion
All instructors still in Vienna

16:30 – 16:50  Evaluation

16:50 – 17:00  Closing Remarks, Elena Sokova, VCDNP

18:30 – 20:30  Farewell dinner