

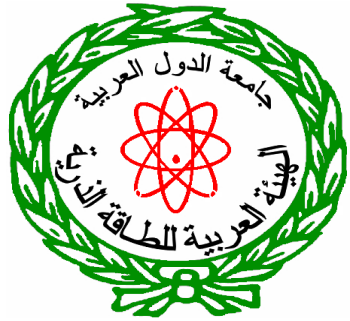


**Arab Atomic Energy Agency**  
**Arab Network for Nuclear**  
**Regulators - ANNuR**  
**Chairmanship – Tunisia (2013-2015)**

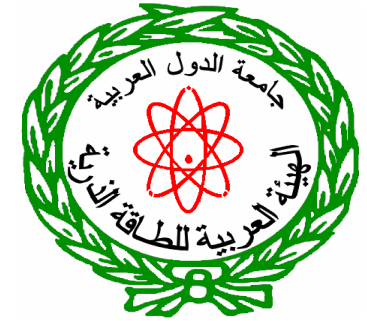
**Regional Priorities for Nuclear and Radiation Safety in North Africa  
and the Middle East and 2015 Work plan**

**Prof. Moktar Hamdi – DG CNSTN, Chairman ANNuR**  
**Prof. Abdelmajid Mahjoub – DG AAEA**  
**Dr. Daw Mosbah, AAEA**

**Fifth Steering Committee Meeting of the Global Nuclear Safety and Security  
Network, 1-3 December 2014, Vienna, Austria**



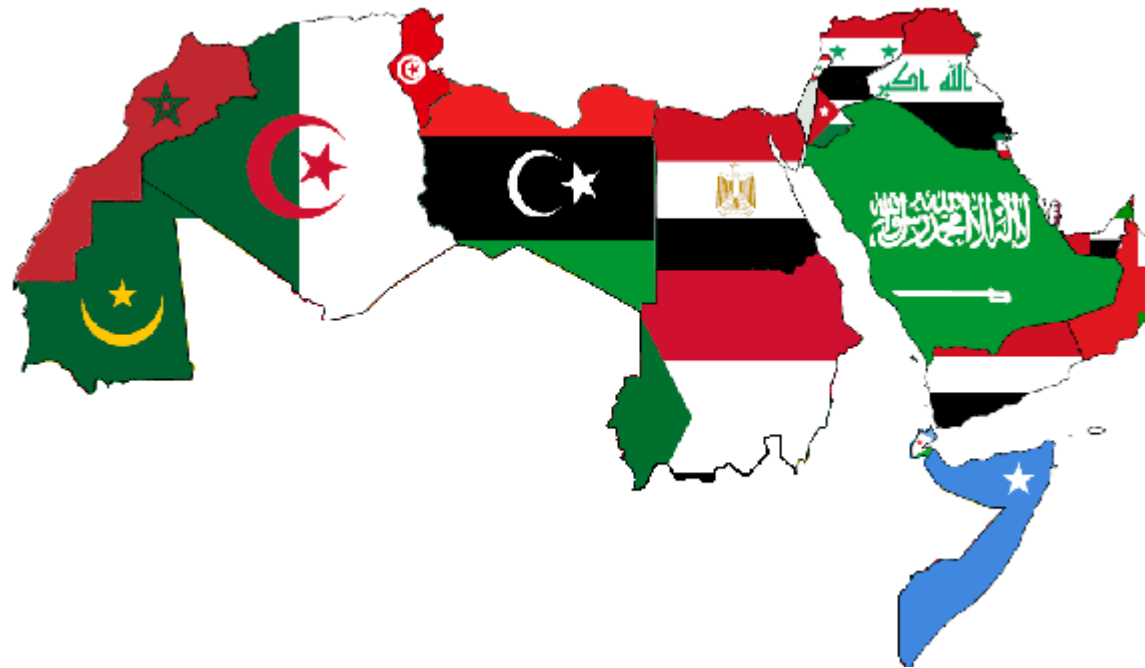
# ANNuR MEMBRE STATES



22 member states in LAS

## African Countries

Egypt  
Libya  
Sudan  
Tunisia  
Mauritania  
Morocco  
Algeria  
Comoros  
Djibouti  
Somalia



## Gulf Countries

Bahrain  
KSA  
Kuwait  
Oman  
Qatar  
UAE

## Asian Arab Countries

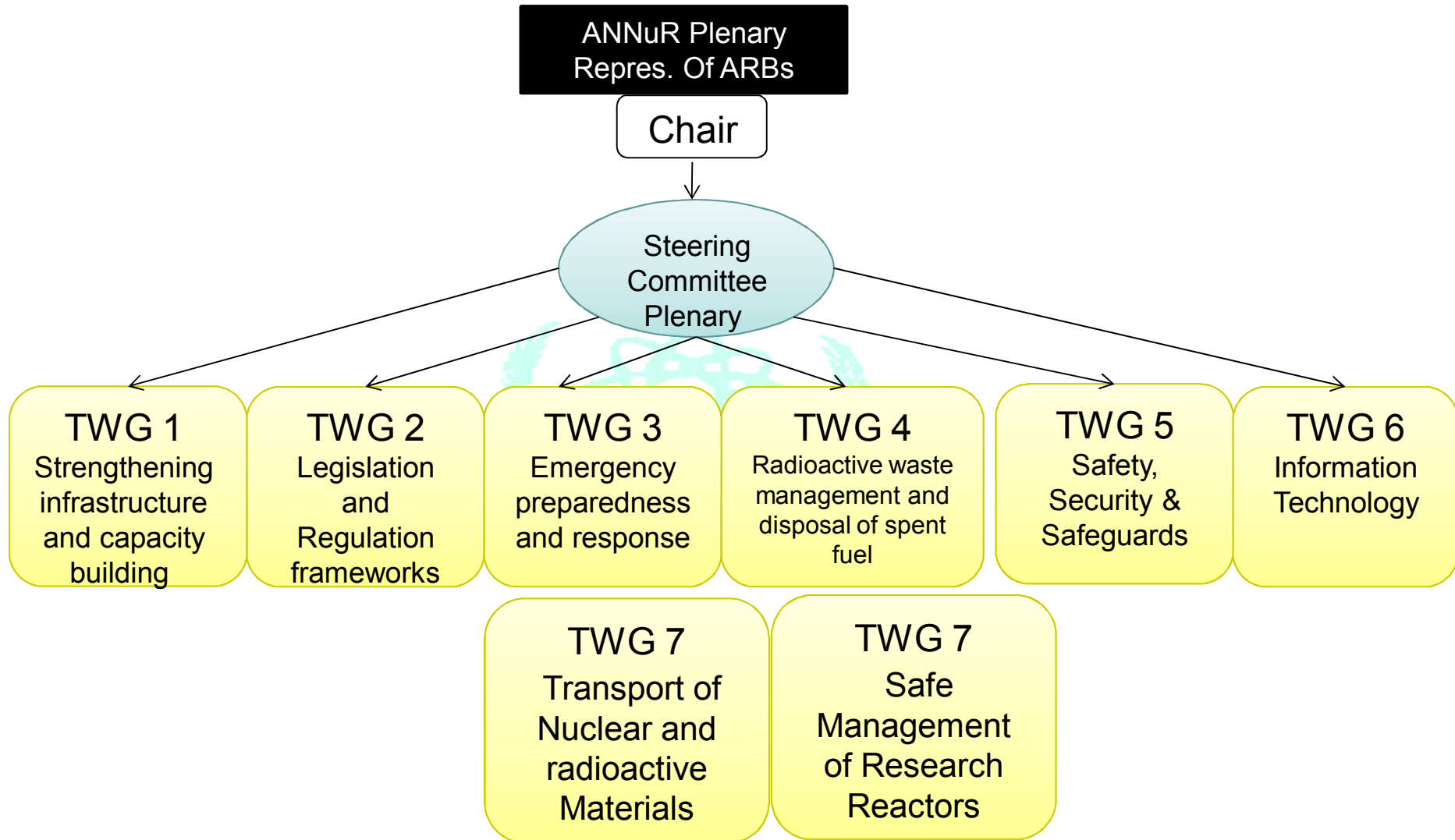
Iraq, Jordan, Lebanon,  
Palestine, Syria, Yemen,

# Need for **Arab Safety Networks**

- ☞ To ensure that safety, security and knowledge, experience, and lessons learned are made visible and available, through links between Arab RB,
- ☞ To enable and support interaction and collaboration between competent people and organizations relevant to nuclear regulation.
- ☞ Therefore, The Arab Network of Nuclear Regulators (ANNuR) has been established

☞ **January 2010**

# ANNuR Hirarchy



# The Thematic Working Groups

| Thematic Working Group                                                   | coordinator |
|--------------------------------------------------------------------------|-------------|
| Strengthening infrastructure and capacity building for regulatory bodies | Jordan      |
| Legislation and Regulation frameworks                                    | Tunisia     |
| Emergency preparedness and response                                      | Iraq        |
| Radioactive waste management and disposal                                | Libya       |
| Safety, Security and Safeguards                                          | Egypt       |
| Information Technology                                                   | IAEA/AAEA   |
| Transport of Nuclear and Radioactive Materials                           | TBD         |
| Safety Management of Research Reactors                                   | TBD         |

- Chairmanship → Jordan 2011 -2013 , 2013-2015 → Tunisia

# ANNuR Meetings

- ANNuR established, January 2010 +++++→ First meeting

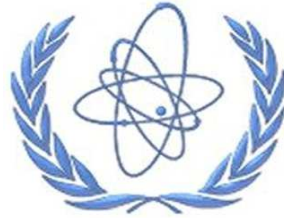
, May 2011 +++++→ Second meeting

, April 2012 +++++→ Third meeting

, March 2013 +++++→ Fourth meeting

, March 2014 +++++→ Fifth meeting

# Cooperation with IAEA



***IAEA assisted in establishing ANNuR and send experts to participate in different ANNuR activities***

***IAEA supporting many ANNuR activities, training programmes.***

***ANNuR and IAEA signed a practical agreement on cooperation in the area of strengthening the nuclear safety and security frameworks***



- Round Table on Fukushima Accident Impacts on Arab Nuclear Programmes, 7 May 2011, Hammamet, Tunisia,
- First Regional Workshop on Collaboration on Radioactive Waste Management in Arab Countries, 12-14 April 2012 , Dubai, UAE
- Workshop on Self-Assessment Tool for the SSG-16 , 15-18 July 2012, Tunisia.
- Second Regional Workshop on Collaboration on Radioactive Waste Management in Arab Countries, 12-14 November, Tunisia 2013



- Meeting of National Committees for Nuclear and Radiological Law, 14 - 15 March 2013, Tunisia.
- Training Course on Knowledge Safety Networks, August 2013, Tunisia,
- Workshop on Radiological Emergencies Response, September 2013, Morocco
- Training Course on Legislation and Regulation for Licensing and Inspection, 1 - 5 September 2013, Jordan.
- Regional Workshop on Self-Assessment for Regulatory Authorities: Introduction to the SSG-16 Self-Assessment Methodology and the IRIS Software, 18–21 November 2013, Jordan.

- Workshop on Radioactive Waste Management, 24-28 March 2014 Tunisia.
- Regional Workshop on Nuclear Safety Management for Young Professionals on Applying the Guidelines for Systematic Assessment of Regulatory Competence Needs (SARCoN), 15-19 June 2014, Jordan.
- Workshop on Regulatory Inspection Programmes of Research Reactors , 28 September – 2 October 2014, Egypt.
- Regional Workshop on the Regulatory Framework for Nuclear Power Plants, 27- 31 October 2014, Tunisia.

## Cooperation with KINS



*MOU has been signed between KINS and AAEA*

- *Co- sponsoring ANNuR and attending all its 5 meetings*
- *MsC grants in ISNS for ANNuR member states.*
- *Training course for Arab professionals about Fundamentals of Nuclear Power Plants and safety regulation, October 2011, Daejeon, Korea.*
- *Workshop on legislation and regulation of nuclear facilities, 2012, Hammamet, Tunisia.*
- *Workshop on nuclear and radiation emergency preparedness and response, KINS radiation and nuclear emergency centre, September 2012, Daejeon, Korea.*
- *Workshop on Inspection and Licensing, September 2013, Amman, Jordan.*
- *Workshop on reactors safety and technology, 2013, Daejeon, Korea.*
- *Workshop on Nuclear and Radiological Emergency Preparedness and Responses, 9-18 June 2014, Daejeon, Korea.*
- *Workshop on Establishing and Organizing a Regulatory Body in the Arab region, 15-19 September, Rabat, Morocco,*

## Cooperation with US-NRC



- Nuclear Executive Workshop for Decision Makers in Nuclear Power Programs, March 2012, New Orleans, USA.
- Workshop on the Physical Protection and Security of Radioactive Sources, June 2012, Tunisia.
- Site Application Review, February 2013, Tunisia.
- Workshop on Physical Protection of Nuclear Materials and Installations, November 2013, Kuwait.
- Regulatory Aspect of Power and Research reactors siting, September 2013, Jordan.
- Radiological and Nuclear Emergencies, August 2013
- Workshop on Construction Permit for Power and Research Reactors, October 2014, Rockville, USA
- Workshop on Probabilistic Risk Assessment, November 2014, Kuwait



- **EU representatives participate at all ANNuR meetings**
- **EU supported a training course on Legal & Regulatory Frameworks and Basic Safety Requirements for NPP, April 2013, Hammamet, Tunisia.**

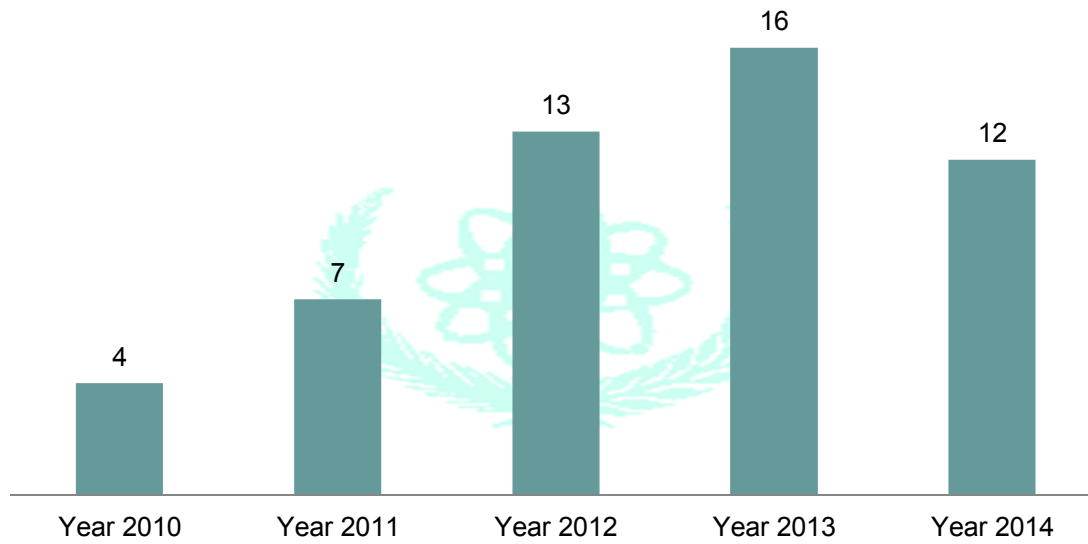




➤ **AAEA has an agreement with DoE, LLNL to support 3 activities annually in the field of Nuclear SSS**

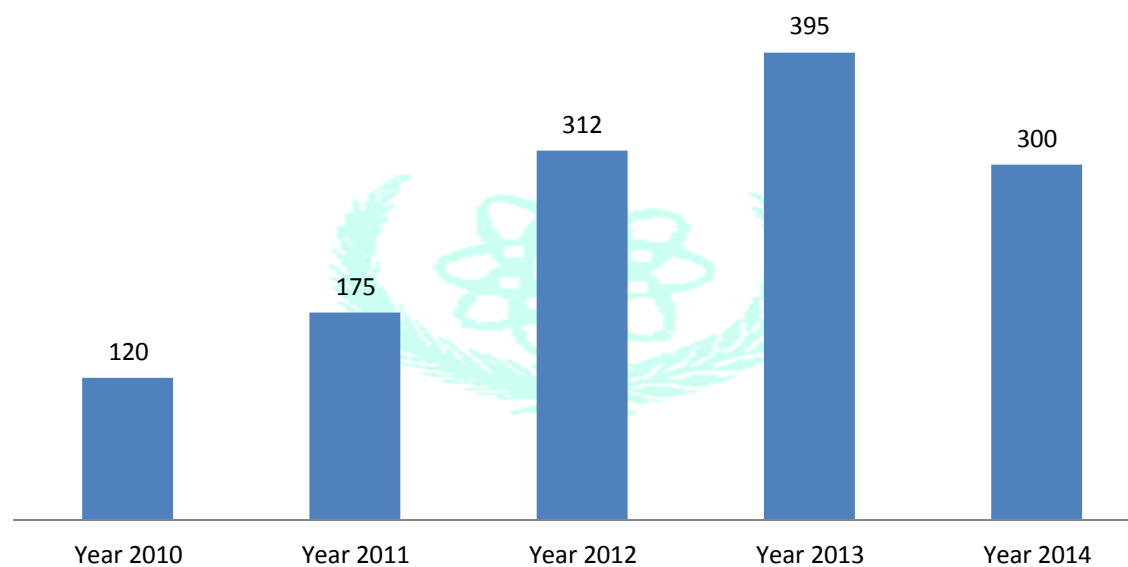
- Workshop on Nuclear Power Program Project Management, April 2011, Kuwait.
- Training Course on Basic Requirements of Nuclear Regulatory Bodies, 2011, Jordan.
- Regional Seminar on Radiation Protection, Nuclear Safety and Nuclear Security, June 2011, Kuwait.
- Regional Workshop on Nuclear Security and Safeguards, November 2012, Morocco.
- Workshop on Regulation, Legislation and Security of Radioactive Sources, December 2012, Saudi Arabia.
- Workshop on Radiation Monitoring and Export Control, November 2013, Bahrain.

## ANNuR Number of training events per Year





### Number of trainees per year





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ANNuR Documents Overview

ANNuR Contact List

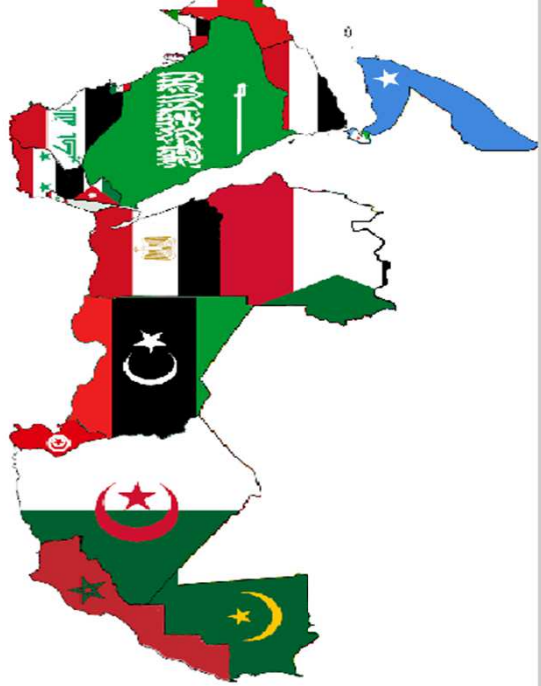
Thematic Working Groups

ANNuR Blog

ANNuR Discussion Board

National Nuclear Regulatory Portal List of Countries

## Arab Network of Nuclear Regulators



ANNUR Regis

Click here to request password-protected

Related Links

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## Objectives

The objectives of ANNuR are to:

1. Provide a platform for fostering regional cooperation;
2. Provide for the exchange of expertise, information and experience;
3. Provide opportunity for mutual support and coordination of regional initiatives;
4. Leverage the development and optimization of resource utilization.

## Webinar



## Membership

Membership of the ANNuR shall be open to all national nuclear regulatory bodies in all Arab countries on a voluntary basis. Participants in ANNuR meetings shall be senior representatives of regulatory bodies in member states as well as representatives from AAEA, IAEA and KINS.

Observers from other international or regional organizations may be invited to attend meetings on an ad-hoc or continuing basis by the decision of the Steering Committee.

## National Nuclear Regulatory Portals of the ANNuR Member States



## The ANNuR 2015 Programme

(TWG1) Basic professional Nuclear Safety TC for regulators (USNRC+.....)

(TWG7) WS on Technologies and regulations of Research Reactors (Two Weeks)  
(USNRC) (Q3)

WS on Advanced Steps on Safety of Radiation Sources and Nuclear Materials (ANNuR  
+FNRBA) (USNRC) (Q1 or Q2)

(TWG4) Workshop on management and safe disposal of radioactive wastes

(TWG2) Workshop on Radiological and Nuclear Legal frameworks + Expert meeting on  
nuclear law

The 6<sup>th</sup> meeting of ANNuR + 8 TWG meetings

- ANNuR side meeting during IAEA GC 59 Vienna

## The ANNuR 2015 Programme

(TWG1) Training course on knowledge safety networks+NNRPs

- Pilot project

(TWG3) Workshop on Radiological Emergencies Response

- Coordination meeting on Emergency Preparedness in Arab countries ---> Report

(TWG2) Workshop on self-assessment for regulatory authorities using IAEA tools  
(Regional and National)

Workshop on SMRs –Technology and Regulatory aspects (USNRC) (Q4)

Fundamentals of Reactors Safety (Two WS) (ENSTTD)

- Power Reactors (to be held in an EU country)
- Research Reactors (To be held in an Arab country)

## The ANNuR 2015 Programme

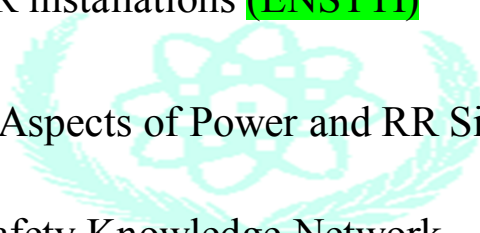
(TWG5) Detection techniques of unauthorized nuclear and radioactive materials activities

Workshop on Management Systems of RBs

Inspection procedures for RR installations (ENSTTI)

(TWG2) TC on Regulatory Aspects of Power and RR Siting

(TWG1) WS on National Safety Knowledge Network





شكراً

Thank you

4<sup>th</sup> GNSSN Steering Committee Meeting. 30 June - 2 July 2014 Vienna, Austria