



Hungarian Atomic Energy Authority

International Experts' Meeting on
Assessment and Prognosis in Response to a Nuclear or Radiological Emergency

IAEA, Vienna, Austria

20-24 April 2015

Member State Experience in Participation in Bilateral Exercises with the IAEA to practice assessment and prognosis

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Hungarian Atomic Energy Authority



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Introduction – Response tasks of HAEA

Modify HNER's operational state

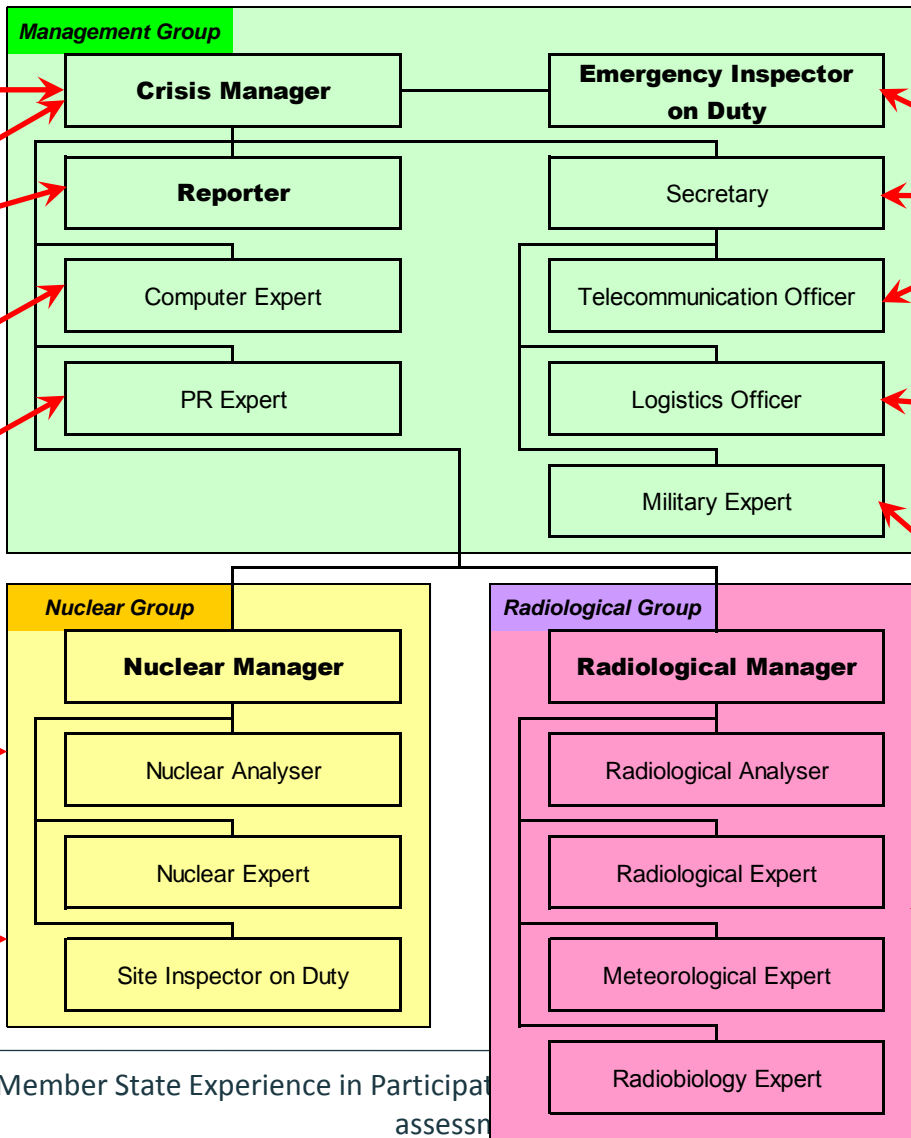
National, international communication

IT support

Public information

Off-site support to facilities

Assessment of nuclear status



National, international communication

Logistical support

Assessment of radiological status

Proposals on countermeasures



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Preparation



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Planning of the exercise

- ☞ Planning is coordinated at national level
 - DMCC issues annual training and exercise plan
 - minimum training and exercise activities for
 - central, sectoral, regional and local organs
 - facilities and practices
 - national exercise with Paks NPP → 19 November 2014
 - the rotation practice
 - preparation and conduct
 - evaluation at national level
- } is changing every other year between DGNDM and HAEA



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The scenario

- Guillotine brake of the pressurizer pipeline
- Safety signals
 - shut down the reactor
 - initiate start up of other safety systems
- Series of artificial assumptions
 - multiple failure of safety systems
 - damage of the confinement system
- SA conditions in ~2 hours with significant release
- Exercise duration → < 8 hours



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Objectives at national level

- ➡ Exercise the response
- ➡ Check the accuracy of regulation
- ➡ Test
 - alert procedures
 - decision making process
 - public information



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HAEA objectives

- ➡ Exercise the response
- ➡ Test the support of the decision making process
- ➡ Verify the adequacy of information flow
- ➡ Provision of technical information to the IAEA and Austrian counterparts
- ➡ Exam for trainees in specific positions



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IAEA objectives

- Gain experience in practicing the expanded mandate from the Action Plan on Nuclear Safety with a MS
- Test two way communication between IAEA and MS
 - requesting additional technical information
 - if more is required than what is shared on USIE
 - mutually sharing IAEA views on the current understanding of the accident and its consequences



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Conduct



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Conduct by HAEA

- Messages on activation and deactivation
- Several nuclear and radiological assessment reports
- 2 status reports to national decision makers
- 2 EMERCON-GENF messages to USIE
- 1 press release
- Communication with
 - domestic partners + IEC, BMLFUW
 - USIE, Emergency webpage, (mobile)phone
 - 100 documents generated



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Conduct by IAEA

- ☞ IAEA's offer of good offices in relation to the event
 - 2014-11-19 10:07 UTC
- ☞ Status report
 - No 1 → Event Status at 2014-11-19 12:30 UTC
- ☞ Press releases
 - No 1 → 2014-11-19 10:45 UTC
 - No 2 → 2014-11-19 11:45 UTC
 - No 3 → 2014-11-19 13:40 UTC



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Evaluation



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Evaluation by HAEA

- ☞ **Examinee in the position of Crisis Manager**
 - difficulties in managing multilateral communication
 - IEC specific interest caused „extra burden” to him
- ☞ **Requires more preparation in advance**
 - communication protocol
 - liaisons, channels, type of information
 - static information
 - NPP design
 - dynamic information
 - accident status



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Evaluation by IAEA

- ➡ Overall communications with HAEA was reasonably quick and effective throughout the exercise
 - in particular, the telephone conversations were very useful for sharing technical information

- ➡ On USIE, the details concerning the initial description of the accident could have included more technical information
 - IAEA technical team needed to telephone to ask more information at several points after the first notification



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Evaluation by IAEA

- ➔ HAEA USIE postings regarding public protective actions were very specific and detailed
 - this was very helpful in documenting exactly what actions were being considered and/or implemented



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Summary

- ➡ The exercise objectives were met
- ➡ The technical communication with IAEA
 - caused some „extra burden” for the HAEA staff
 - requires more preparation in advance
- ➡ Some good practices were identified
- ➡ HAEA expresses appreciation for the joint exercise
 - looks forward to further cooperation with IAEA



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Questions

*Thanks for your
attention!*





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Abbreviations

CERTA	Centre for Emergency Response, Training and Analysis
EPR	emergency preparedness and response
ERP	emergency response plan
ERO	emergency response organization
HAEA	Hungarian Atomic Energy Authority
HLWG	High-level Working Group
IAEA	International Atomic Energy Agency
NERS	Nuclear Emergency Response System
NPP	nuclear power plant
SINAC	Simulator of Nuclear Accidents
USIE	Unified System of Information Exchange