

Strengthening the Competency Examination for Certification of RPO: Current and Future

Prof. Dr. Hj. Abdul Aziz Tajuddin



*National Committee for the Certification of
Radiation Protection Officer*

Content

- Historical Reflection
- Current Practices
- Future Outlook and Possible Plans

Previous Practice in Certification

- Parliament passed Atomic Energy Licensing Act (Act 304) – April, 1984
- Formation of AELB – 1 February, 1985
- Certification through sitting for examinations set by AELB

Shortcomings of Previous Practice in Certification (1)

- AELB – set questions, answers, marked them then accredit candidates as RPO – no independent body and various expertise.
- Same questions most of the time – not many new sets (may be none!).
- General in nature – applicable to all fields - no specific fields – irrespective of different difficulties and sophistication of equipment/fields.

Shortcomings of Previous Practice in Certification (2)

- No official training – candidates have to learn on their own.
- No practical trainings and examinations.
- No prerequisites before sitting for the examination.

**Formation of National
Committee for Certification
of Radiation Protection
Officer (NCCRPO) to
Overcome these
Shortcomings of Previous
Practice in Certification**

Overcame the Shortcomings via (1)

- NCCRPO – independent body established around 1999 and made up of experts in various fields and users.
- Developed banks of questions – not the same questions all the time.
- Creation of specific fields considering different difficulties and sophistication of equipment/fields.

Overcame the Shortcomings via (2)

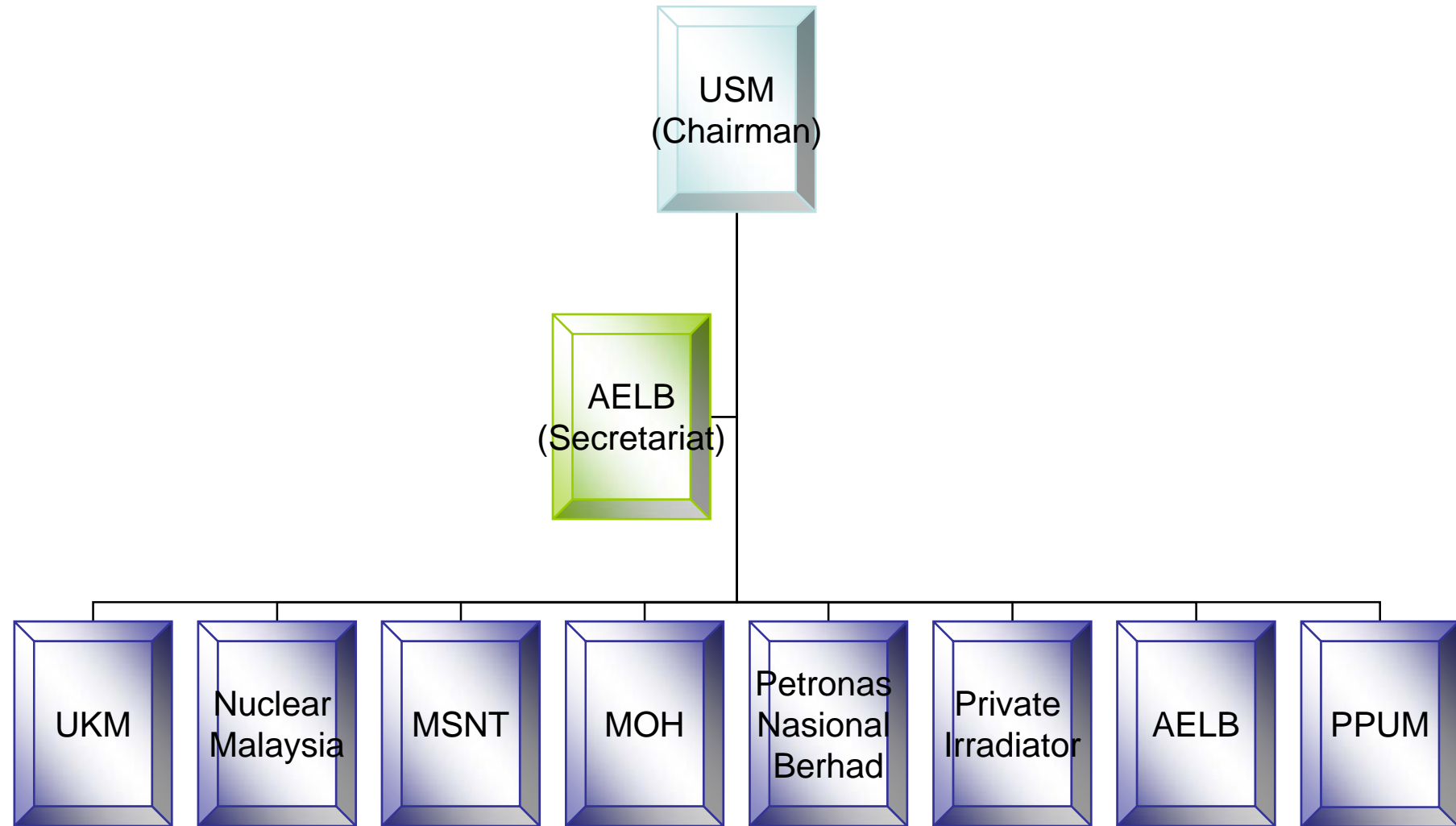
- Need of official training offered by recognized agencies.
- Need to perform practical trainings and examinations.
- Experience, academic qualification and training as prerequisites before sitting for the examination.

Functions of NCCRPO

1. To prepare standard and guidelines for RPO certification examinations and accreditation of RPO Training Center.
2. To prepare questions, guidelines and standards RPO certification examination.
3. To conduct, analyse, inspect and confirm the results of RPO certification examination.
4. To evaluate and endorse applications from agencies wishing to offer radiation protection courses and suggest to the Board for approval.
5. To evaluate and endorse applications from agencies wishing to offer RPO certification examination and suggest to the Board for approval.
6. To do audit Course Center and Examination Center RPO certification examination.



Membership of NCCRPO



Functions of NCCRPO

[1] To prepare standard and guidelines for RPO certification examinations and accreditation of RPO Training Center

- RPO Certification Standard (LEM/TEK/44 Rev.2 [Part A])
- Examination Center Recognition Standard (LEM/TEK/44 Rev.1 [Part B])
- Training Center Recognition Standard (LEM/TEK/44 Rev.1 [Part C])
- Application Guidelines to Sit for RPO Examination (LEM/TEK/44 Rev.2 [Part D])
- RPO Examination Rules (LEM/TEK/44 Rev.1 [Part E])
- Procedures to Handle RPO Certification Examination Discrepancies (LEM/TEK/44 [Part F])



Functions of NCCRPO

- [2] To prepare questions, guidelines and standards RPO certification examination.
- [3] To conduct, analyse, inspect and confirm the result of RPO certification examination.

NCCRPO ACTIVITIES

- Prepared RPO Examination Questions
 - 8 sets for General Paper
 - 8 sets for Gauges Paper
 - 8 sets for Sales Paper
 - 8 sets for Industrial Radiography Paper
 - 8 sets for NORM/TENORM Paper
 - 2 sets for Irradiating Cell Paper
 - 2 sets for Research and Teaching Paper

NCCRPO ACTIVITIES

- In the process of editing and adding to the question banks

• General Paper	-	5 set
• Gauges Paper	-	4 set
• Sales Paper	-	1 set
• Industrial Radiography Paper	-	4 set
• Research and Teaching Paper	-	2 set
• Irradiating Cell Paper	-	2 set
• NORM/TENORM Paper	-	1 set

NCCRPO Activities

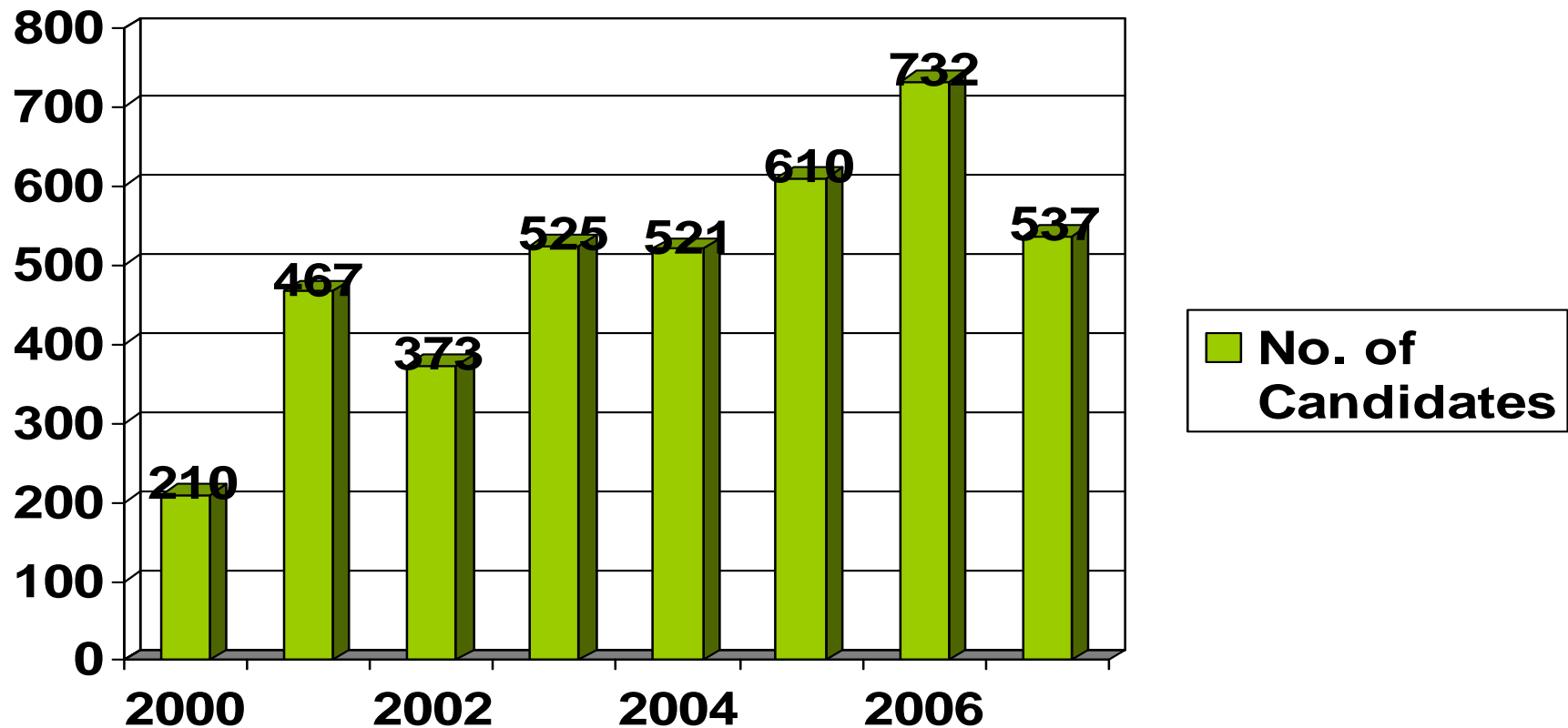
- 2000 till 2007, the frequencies of RPO Certification Examinations are as follows:
 - 2001 – 7 times
 - 2002 – 8 times
 - 2003 – 10 times
 - 2004 – 9 times
 - 2005 – 10 times
 - 2006 – 12 times
 - 2007 – 13 times



NCCRPO Activities

RPO Examinations: Statistics

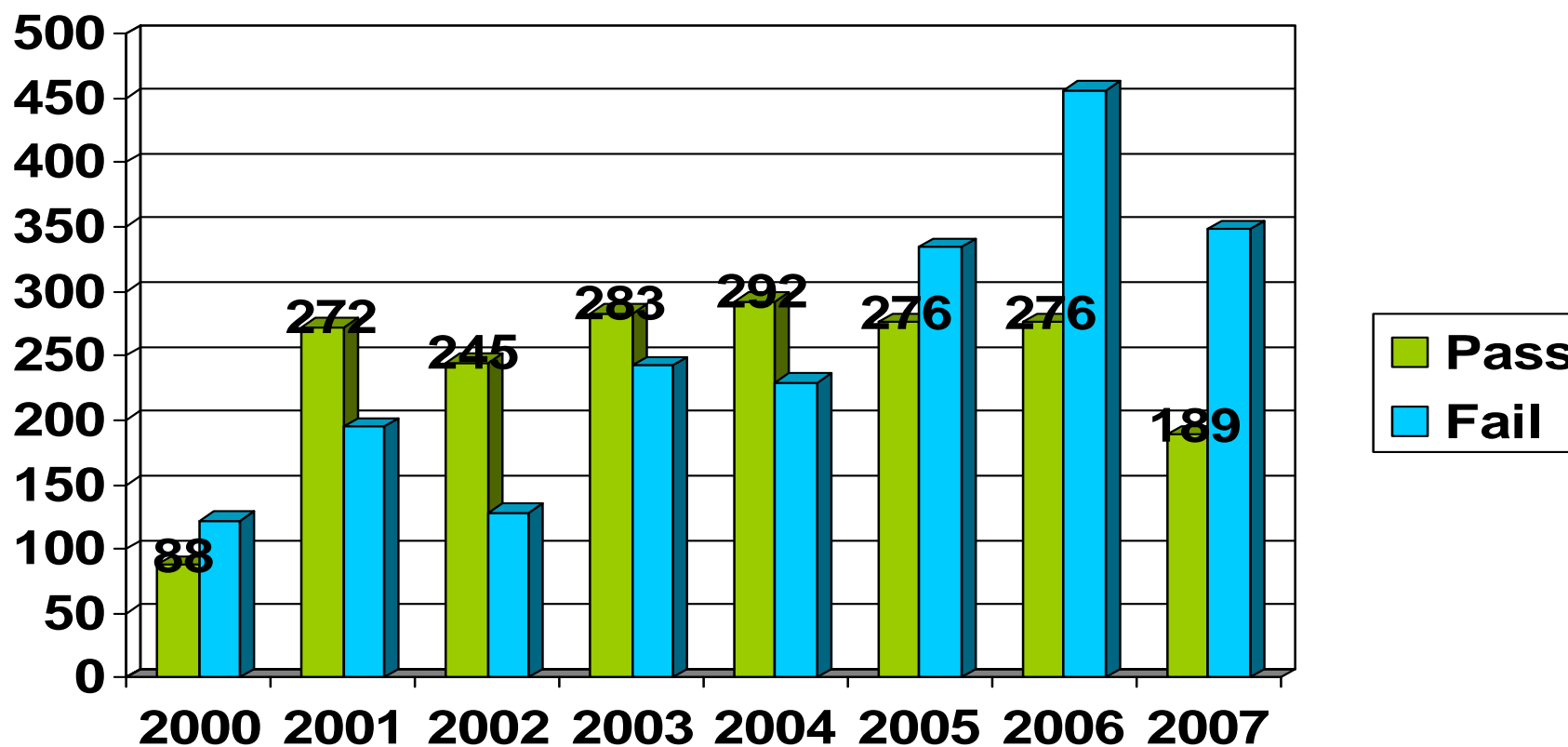
Number of candidates for 2000 till 6.9.2007



NCCRPO Activities

RPO Examinations: Statistics

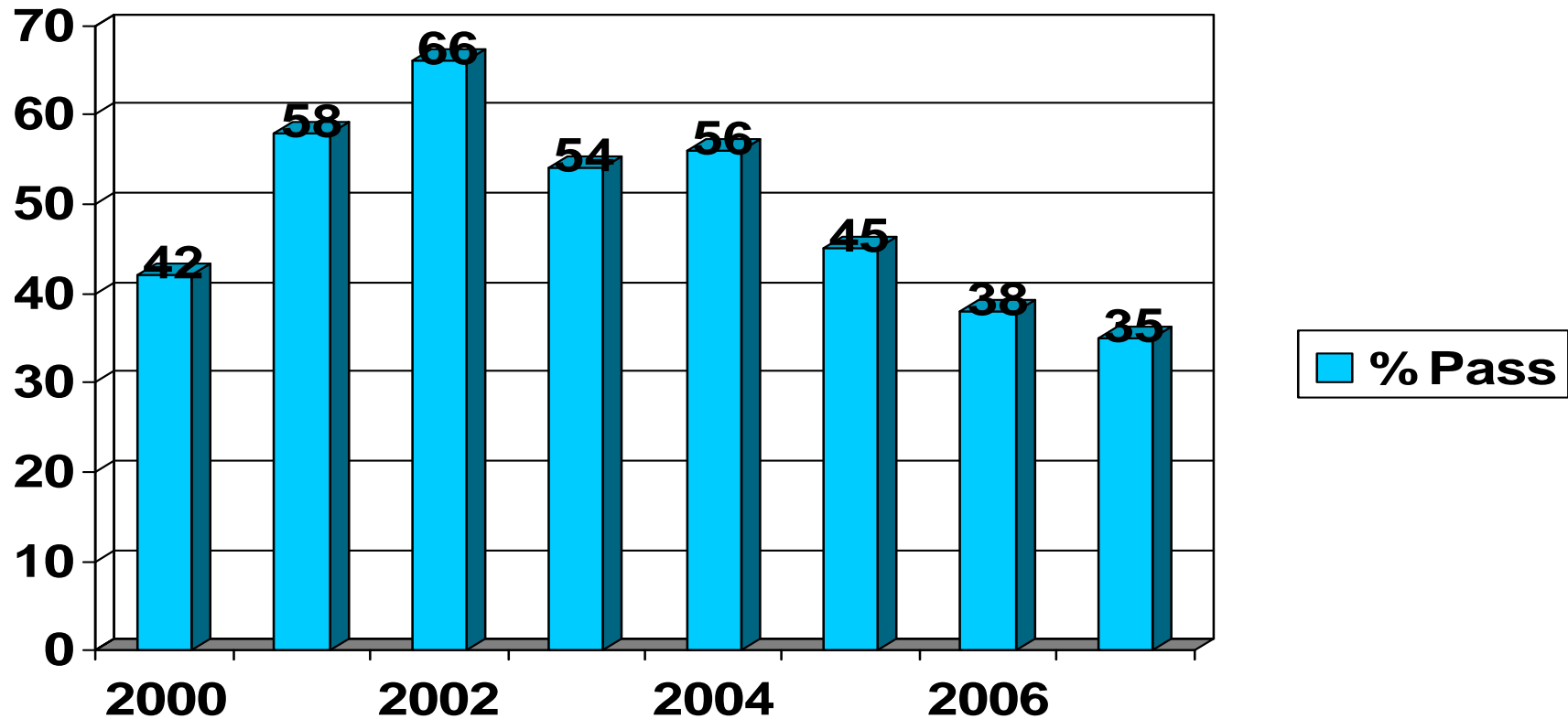
Number of candidates for 2000 till 6.9.2007



NCCRPO Activities

RPO Examination: Statistics

Percentage Passes for 2000 till 6.9.2007



Functions of NCCRPO

- [4] To evaluate and endorse applications from agencies wishing to offer radiation protection courses and suggest to the Board for approval.
- [5] To evaluate and endorse applications from agencies wishing to offer RPO certification examination and suggest to the Board for approval.
- [6] To do audit Course Center and Examination Center RPO certification examination.

Functions of NCCRPO

AGENCY	AUDIT DATES	AIMS OF AUDIT	RESULTS
Malaysia Nuclear Agency	13.03.2003 07.04.2005 18.10.2006	Recognition as RPO Training Center and Examination Center	Approved as RPO Training Center and Examination Center (Theory)
Universiti Kebangsaan Malaysia	20.07.2005 30.10.2007	Recognition of Post Graduate Diploma	In the process
Universiti Sains Malaysia	30.05.2007	Recognition of Post Graduate PGEC5 Course	PGEC5 participants are allowed to sit for RPO examination with a requirement of attending minimum of 2 hours of Act 304 course
Radiation Safety Academy	29.01.2007	Recognition as RPO Training Center	In the process

NCCRPO Activities

- Writing books to help in the dissemination of RP knowledge (especially to those attending RP courses with a view of taking the examination since the content is based on the RP course syllabus):
 - First Edition : “Guides Notes for Radiation Protection Officer (RPO)” – sold out.
 - Second Edition : “Managing Radiation Safety: Guide for RPO” – revised with additional contents – on sale now.
 - Past questions compilation book: in the process of compilation and editing – another way of helping participants to understand on RP.



NCCRPO Activities

- Preparation of lecture slides based on the book “Managing Radiation Safety: Guide for RPO” – to help the lecturers in their presentation that will cover the required syllabus.



NCCPRO CURRENT SHORTCOMINGS

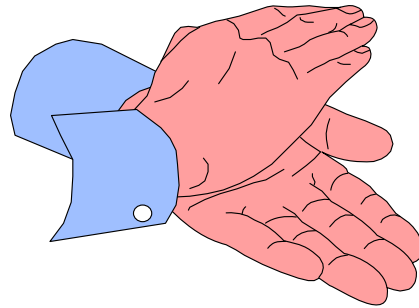
Unable to contribute holistically the safety management and radiation health needs in the field of medicine.

FUTURE OUTLOOK AND POSSIBLE PLANS (1)

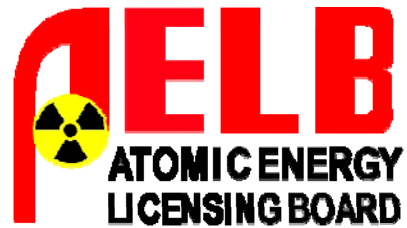
- To prepare new standard and guidelines:
 - Guidelines for Experiments for Specific Courses (LEM/TEK/44 [F])
- To create special courses for specific fields.
- To create examinations for new fields (such as radiology, radiotherapy, nuclear medicine).
- To prepare new questions in order to increase the question banks.
- To encourage more agencies to provide trainings.

FUTURE OUTLOOK AND POSSIBLE PLANS (2)

- To help AELB to create their own laboratories for RPO Practical examinations (currently using UKM facilities).
- To organize conferences/workshops related to RPO certification.
- To reconsider the current specific fields as to whether dividing into different levels rather than fields i.e. new certification for new types and competencies of RPO and RPS.
- To review and propose the possibility of coordination of RPO-SHO.
- To look into the possibility of creating a new position of Radiation Protection Adviser and their roles, job specifications, trainings and examination.



THANK YOU



*National Committee for the Certification of
Radiation Protection Officer*

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