Session III: Relationship between International and National Safety Standards.

Impact of international safety standards on domestic safety standards in the Middle East.

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Workshop on safety Standards for the safe use of Low GWP alternative Refrigerants.

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1- The Main Standard organizations in the Middle East:

A- The Egyptian Organization for Standards and quality– EOS.
www.eos.org.eg/en

B- The Saudi Standards, Metrology & Quality Organization – SASO.

C- The Emirate Authority for Standardization and Metrology-ESMA

D- GCC Standardization Organization-GSO.
https://www.gso.org.sa/
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2- Adoption of International Standards in the M.E.

• The main M.E standard organizations adopt international standards.

• Standards are rarely modified from the original except when there are conflicting issues with local regulations.

• Main Challenges:

  - Flammability and toxicity issues related to the size of the charge.
3- Challenges to Implementing International standards in M.E.

- **Modifying local practices** to comply with International safety standards.
  - Slow and Laborious process.

- **Relaxing charge limit** in National Standardisation Bodies (NSB) to reflect international standards.
  - Amending local codes and regulations for flammability and toxicity.

- **Training of technicians** in handling flammable and toxic refrigerants.
  - Creating training courses and an accreditation system to be taught at training centres.

- **Awareness programs for local consultants** and other stakeholders in RACHP of new development in Standards.
  - Awareness will take time and will need technical and financial assistance.
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4- The Focus in the M.E. is on Testing standards.

• The main focus in the M.E. is on testing standards.

• Safety and toxicity issues are not given the importance they deserve.

• UNIDO/UNEP implemented two testing programs.

• PRAHA and EGYPRA tested 12, A2L low-GWP and HC refrigerants in HAT conditions.

• Important results were produced for efficiency and capacity of alternative low-GWP refrigerants in HAT conditions.
5- Conclusions and the way forward.

- International safety standards will be adopted by National Standardization Bodies (NSB) in M.E. EOS, SASO, ESMA and GSO.

- **Challenges exist:**
  - Increased refrigerant charge in HAT countries and the perceived risks of flammability and toxicity.
  - Relaxing the size of the charge of flammable refrigerants in International Safety Standards will help faster adoption by NSBs.
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5- Conclusions and the way forward (cont. 1).

• Facilitating involvement of NSBs in voting of International Standards Organizations, will reflect positively on local industry needs.

• Inclusion of NCBs in committee/teams of International Organizations for adoption of new modified standards, will result in faster adoption.

• Adoption of training and accreditation programs at the NSBs level for local technicians on handling flammable refrigerants.
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5- Conclusions and the way forward (cont. 2)

- **Explaining** developments in Standards to RACHP community, especially local consultants responsible for specifying equipment and systems.

- **Enforcing** transportation and storage of flammable refrigerants standards at NSBs level.
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Thank you..

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