

Past NEA work on ^{99}Mo Security of Supply

Nicholas Sherman

Deputy Head of Division,
Division of Nuclear Technology Development
and Economics

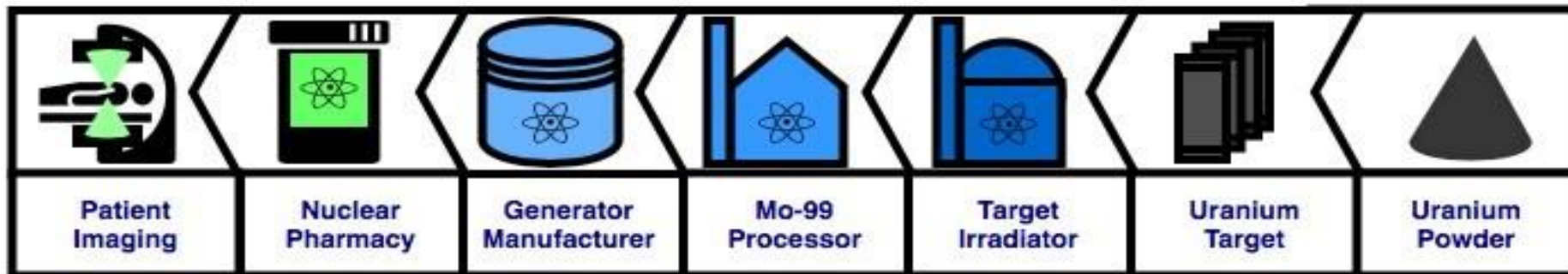


The HLG-MR

- The [High-Level Group on the Security of Supply of Medical Radioisotopes \(HLG-MR\)](#) was established at the request of NEA member countries, following global supply shortages of $^{99}\text{Mo}/^{99\text{m}}\text{Tc}$ in 2009-2010 that resulted from simultaneous unplanned outages of ageing research reactors in Canada and the Netherlands and processing problems in Belgium.
- The HLG-MR was run based on Voluntary Contributions and the 4th Mandate formally [ended in December 2018](#)
- HLG-MR Membership:
 - 18 countries (including some non-NEA countries e.g. Brazil and South Africa),
 - EC and the IAEA,
 - the global radioisotope supply chain (commercial companies), and
 - healthcare community representatives

The efforts of the HLG-MR

- reviewed the whole $^{99}\text{Mo}/^{99\text{m}}\text{Tc}$ supply chain
- recommended options to address supply chain weaknesses to help ensure reliable and sustainable supply
- worked with stakeholders to ensure clear communication and implementation of policies



HLG-MR Policy Principles to be implemented by 2014

1. All ^{99m}Tc supply chain participants should implement **full-cost recovery (FCR)**, including costs related to capital replacement.
2. Reserve capacity should be sourced and paid for by the supply chain. A common approach should be used to determine the amount of reserve capacity required. (**ORC – Outage Reserve Capacity**)
3. Governments should help establish a proper environment for **efficient and safe** market operation.
4. Governments should help facilitate the **conversion to low-enriched uranium (LEU)** based production
5. **International co-operation** should continue through a policy and information sharing forum (HLG-MR)
6. **Periodic review** on progress towards achieving economically sustainable, secure supply – (HLG-MR Self Assessment)

The Strategic Plan of the NEA 2023-2028

1. Strategic Programme Area

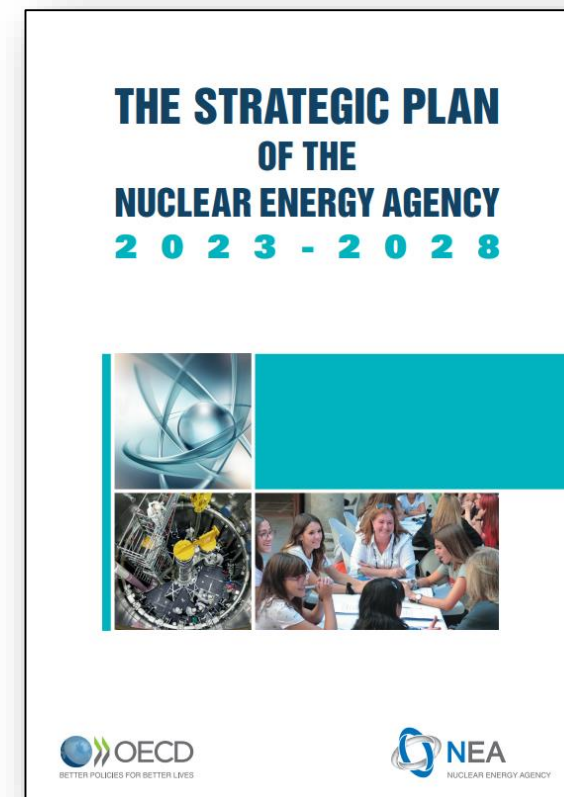
D. Development and Innovation in the Civil Use of Nuclear Energy

- assist member countries, upon request, in identifying and addressing emerging opportunities and concerns related to nuclear technology and radioactive materials, including medical radioisotopes

2. Vital Infrastructure and Enablers

C. Economics and Resources for Nuclear Development

- study the industrial and business cases of innovative nuclear reactor types, designed to contribute to the production of heat, hydrogen or medical radio-isotopes
- collect, analyse and disseminate information on the long-term security of supply of vital medical radioisotopes
- support member countries as appropriate in assuring the long-term security of supply of radioisotopes and promote the full-cost recovery principle





**Thank you for
your attention**