

The Regulatory Challenge of Nanotechnology – 20.01.2012

Nano Regulation as a Challenge for the Synergy Process

Franz Xavier Perrez

franz.perrez@bafu.admin.ch

Overview

1. Context:
 - a) Why International Regulation?
 - b) Overview of the Existing International Chemicals Regime
2. Synergy as a Challenge
3. The Challenge of Bringing Nano Regulation into Today's International Chemicals and Waste Regime
4. Conclusions

1. Context

- a) Why International Environmental Regulation?**
- b) Overview of the Existing International Chemicals Regime**

Why international environmental regulation?

International regulation is desirable when interests (typically: well-being) can be better served through common rules and formalized cooperation.

Why international environmental regulation?

- geographical variations
- different preferences
- different capacities
- experimentation with different policies
- competition
- political participation
- self-determination, ownership and responsibility
- may be faster
- no consensus => higher standards

De-centralized approach

Why international environmental regulation?

centralized approach

- externalities
 - physic (tbm through air, water, foodchain, products)
 - tragedy of the commons
 - economic (fair competition vs. race to the bottom)
 - social, psychic,
- facilitation of trade
- economies of scale
- effective representation of interests
- pooling of competence
- costs are less visible, sacrifices more palatable

Why international environmental regulation?

Interests, that are involved:

- Environment (transboundary movements, waste treatment)
- Human Health (including labour safety)
- Economic (chemicals industry is most important export industry of Switzerland, the 2nd contributor to the Swiss economy)
- Research
- Capacity challenges
- Quality of life and well-being

2. Existing International Chemicals Regime

Global Instruments

- Sea: London Dumping Convention (1972) and MARPOL (1973)
- Vienna Convention (1985) and Montreal Protocol (1987)
- Basel Convention (1989)
- Rotterdam Convention (1998)
- Stockholm Convention (2001)
- Strategic Approach to International Chemicals Management SAICM (2006)
- ?Minamata Convention on mercury and other substances of global concern (2013)?

Regional Instruments

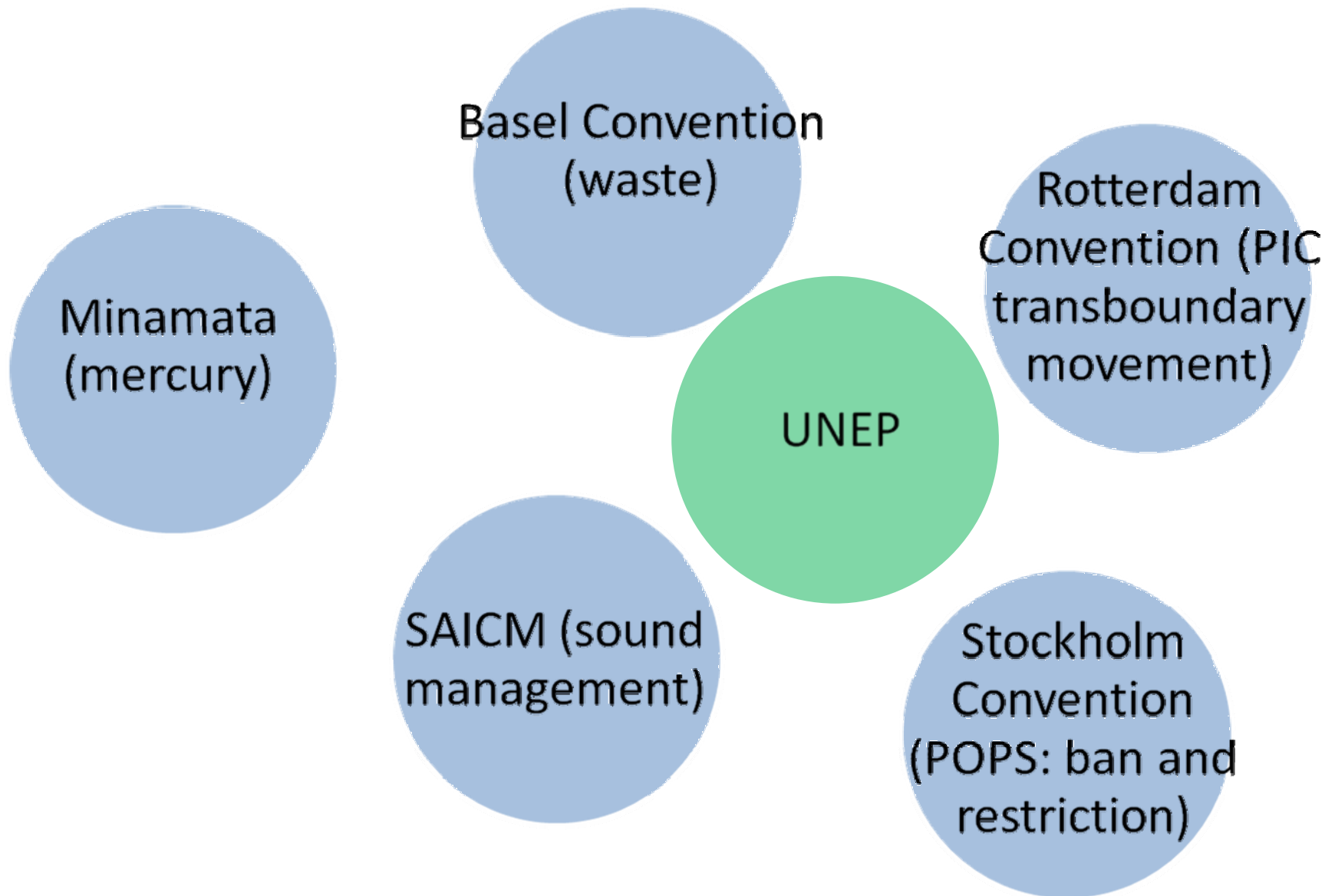
- UN-ECE Convention on Long-Range Transboundary Air Pollution (1979) and its POPs and Heavy-Metals protocols (1998)
- Bamako Convention (1991) prohibiting all imports of hazardous wastes into Africa

2. Synergy as a Challenge

3. Synergy as a challenge

- Evolution of international regime through limited *ad hoc* approach (subject matter, region, measure)
- Benefit:
 - each problem addressed with specific solution
 - possibility to pick and choose where to cooperate

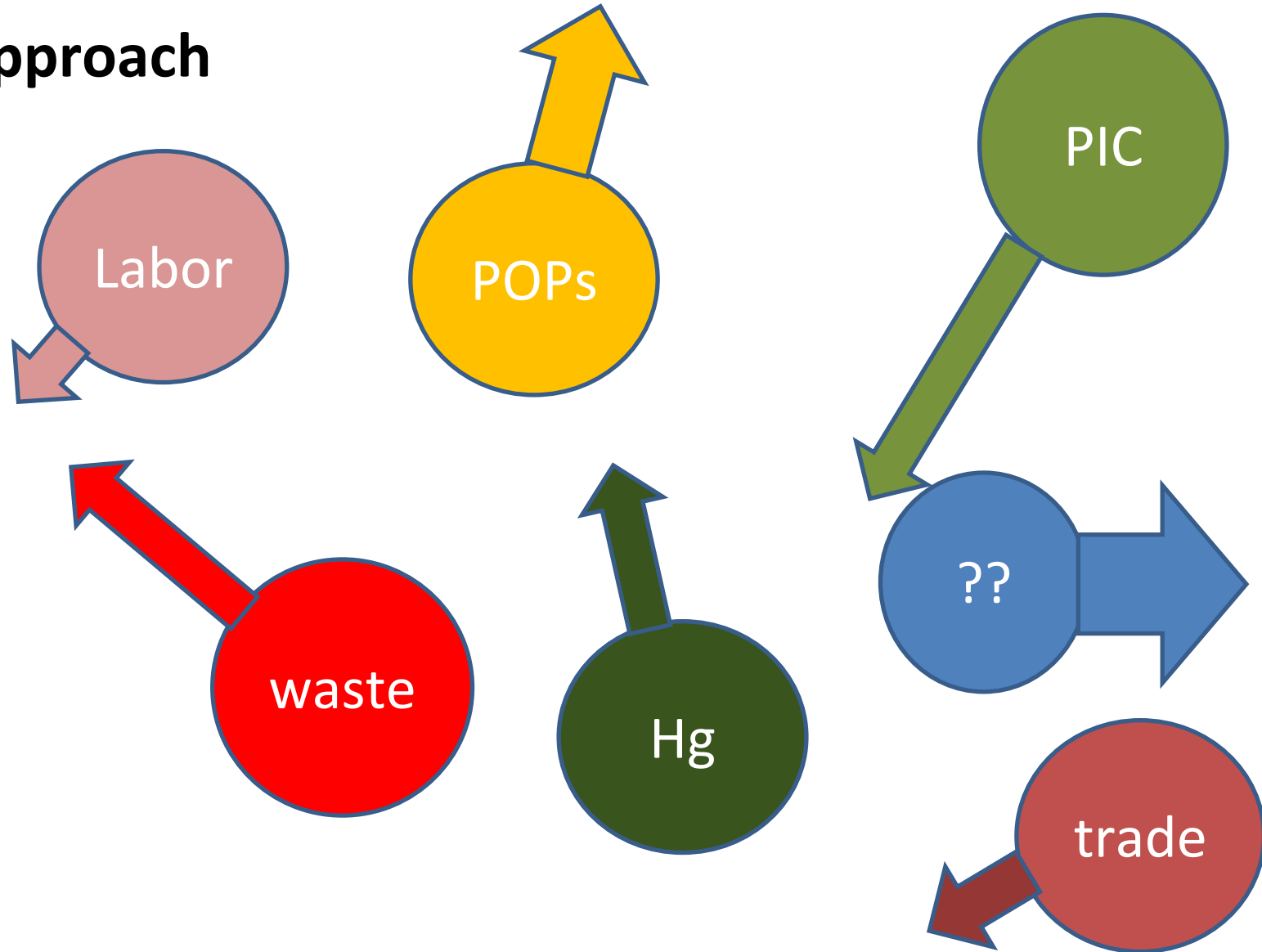
3. Synergy as a challenge



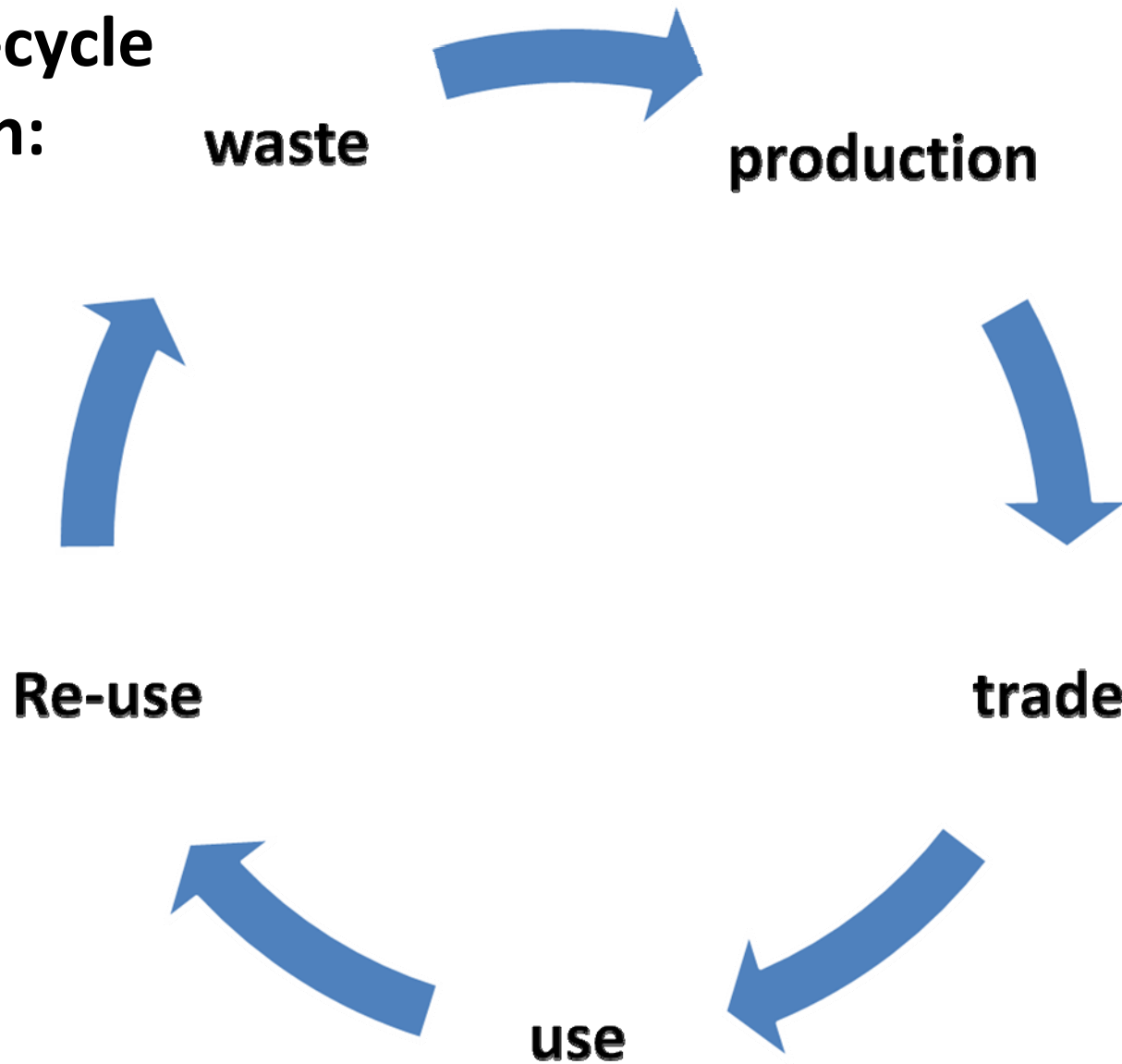
3. Synergy as a challenge

- Disadvantages:
 - Proliferation of instruments and processes
 - Fragmentation
 - Costs (machinery for each institution)
 - Lack of overview
 - Lack of coordination and cooperation
 - Lack of coherence
 - Overlaps, duplications, contradictions

Evolution from an ad hoc approach



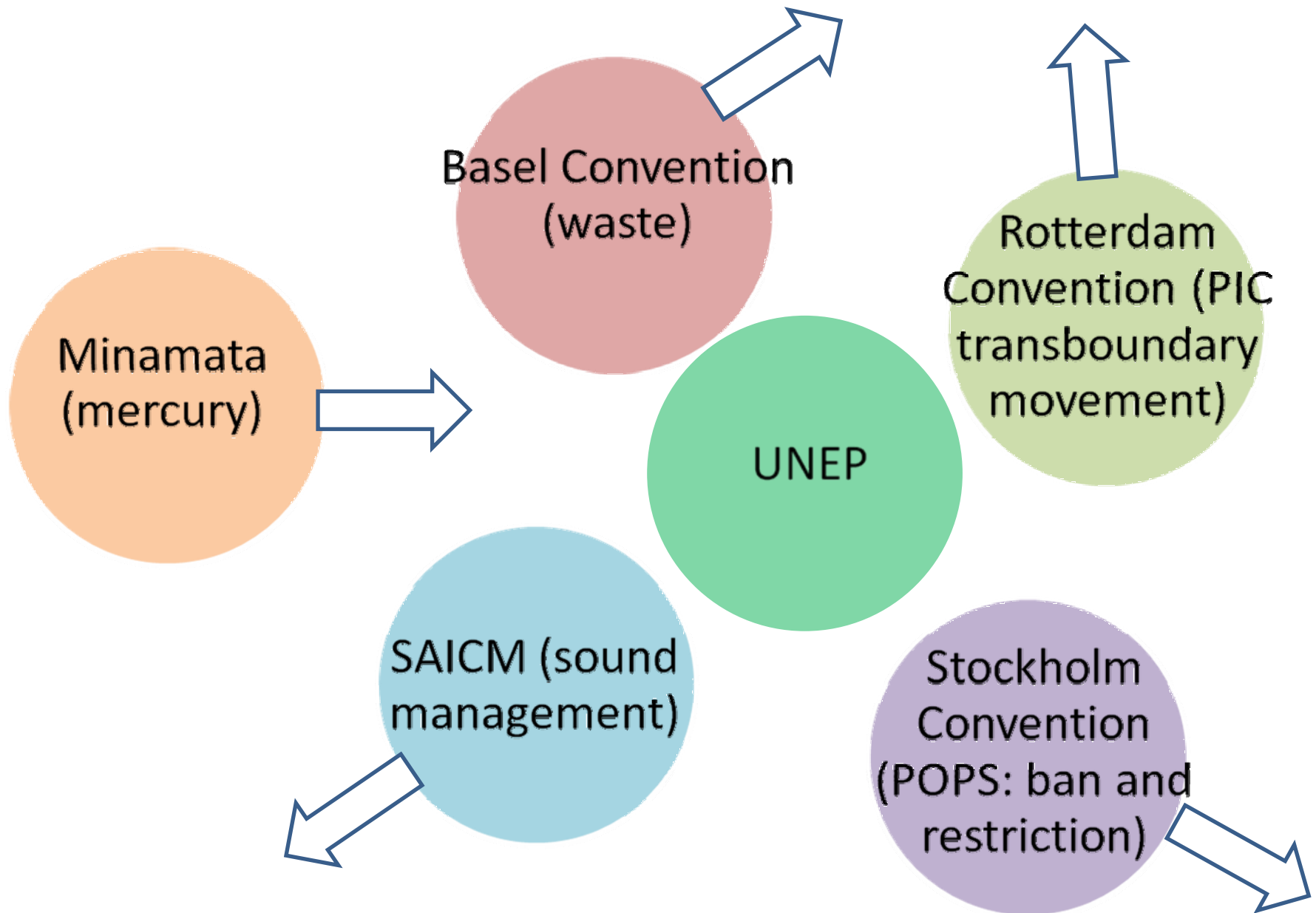
**To a life-cycle
approach:**



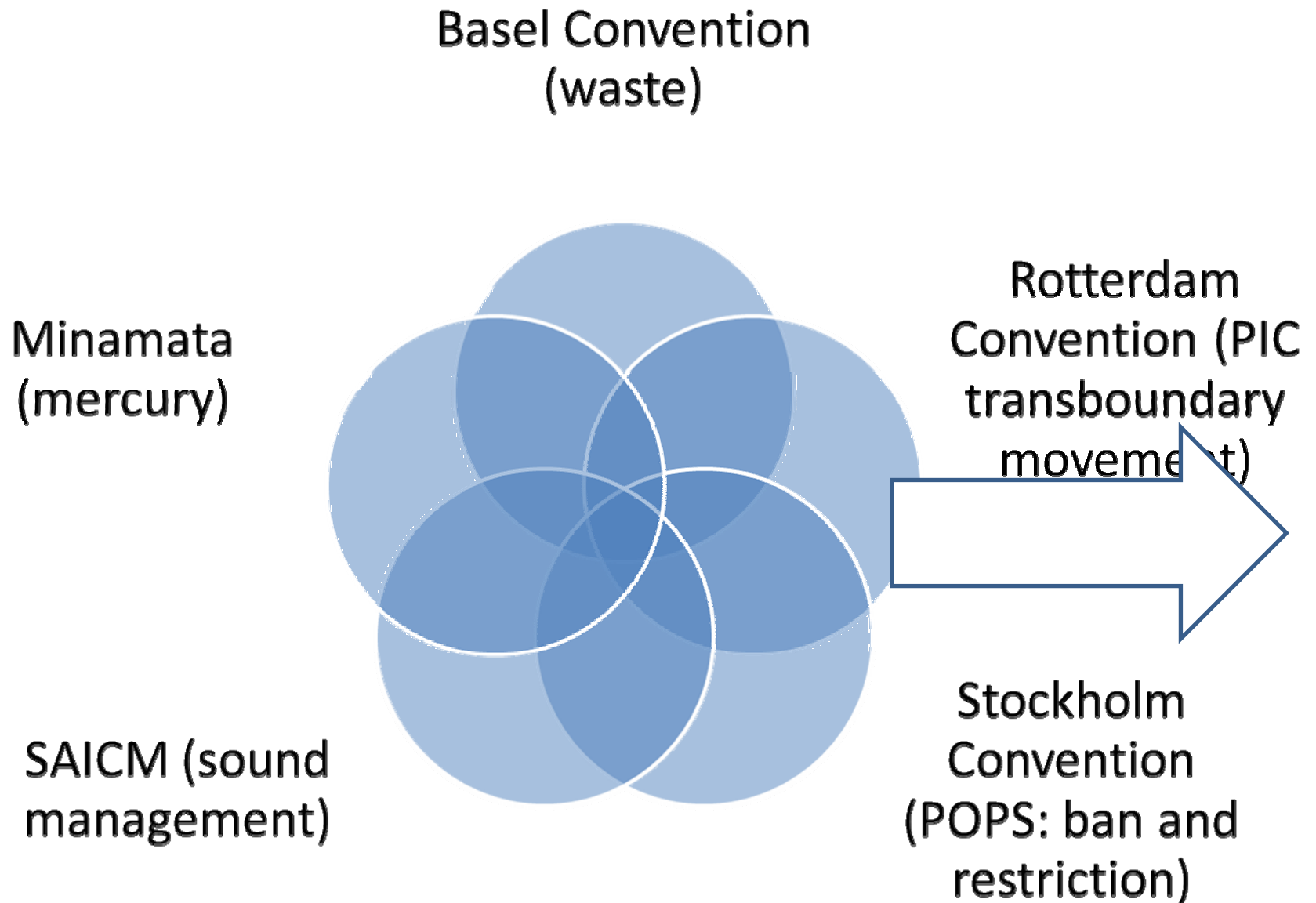
Typical elements / measures of a chemicals related MEA:

- **Supply:**
 - phasing out primary production
- **Products:**
 - ban of products
 - establish threshold limits
- **Processes:**
 - BAT/BEP
 - ban certain uses
 - emission standards
- **Disposal:**
 - Standards for disposal according to special waste regulations
- **Public Awareness**
 - Public information
 - Awareness
- **Research to close information gap**

3. Synergy as a challenge



3. Synergy as a challenge



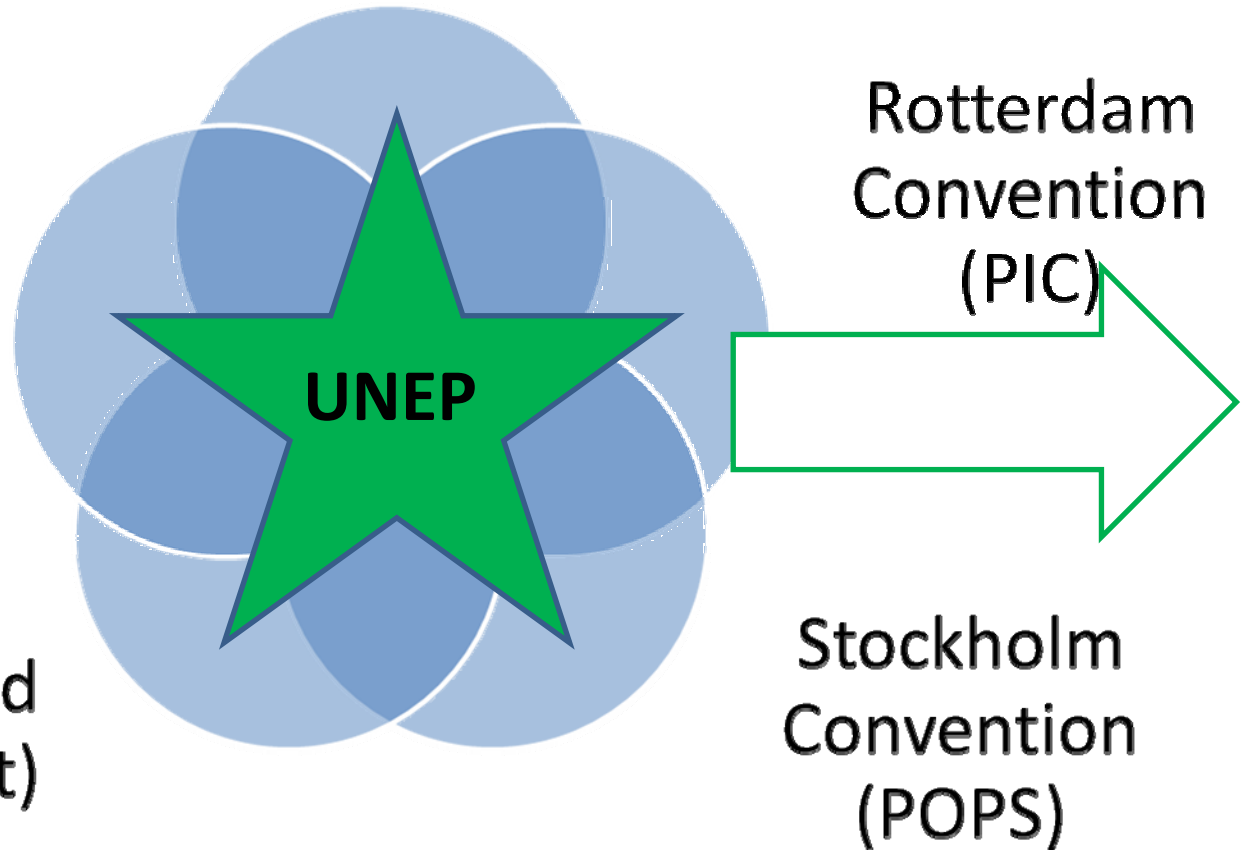
3. Synergy as a challenge

Basel
Convention
(waste)

Minamata
(mercury)

Rotterdam
Convention
(PIC)

SAICM (sound
management)



Stockholm
Convention
(POPS)

3. Synergy as a challenge

Synergy as a Challenge:

- Synergy is challenging existing structures
- Synergy is reflecting interdependence and thus reducing independence and autonomy

=> Resistances against synergies:

- Those who don't want to give up independence
- Those who don't want a coherent regime
- Those who don't want a comprehensive regime

3. Synergy as a challenge

Synergy Process:

2002, based on Swiss proposals, UNEP Cartagena decision on strengthening international environmental governance calls for:

- improved coordination among MEAs,
- enhancing synergies and linkages between MEAs with comparable areas of focus, and
- enhancing collaboration among MEA secretariats in specific areas where common issues arise, such as ... chemicals and waste.

3. Synergy as a challenge

Synergy Process:

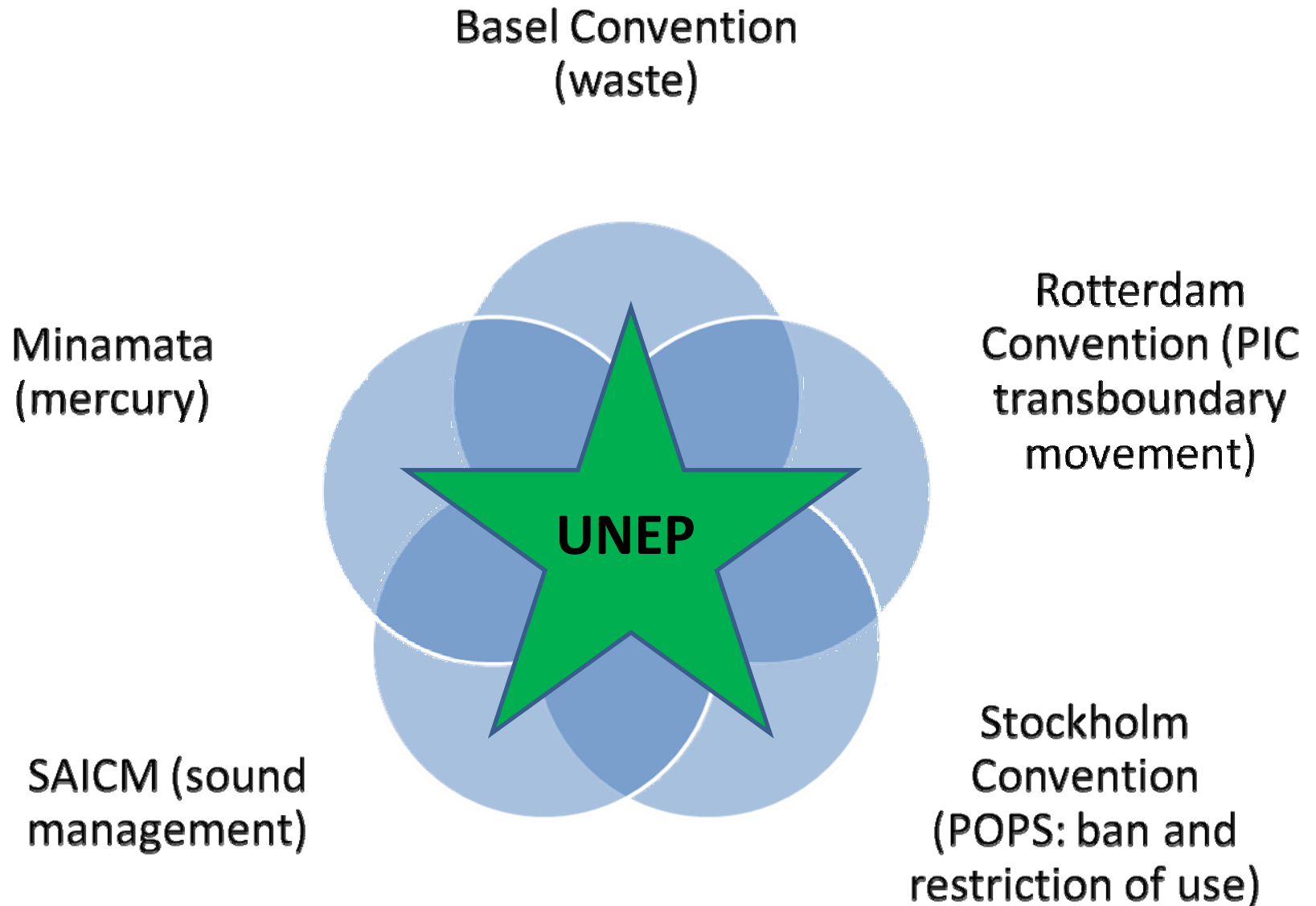
- 2003: based on Swiss proposals, SAICM
 - stresses the need to improve synergies between the chemicals related international instruments and processes,
 - stresses the general determination to strengthen coherence and synergies in the international chemicals regime
 - calls for increased cooperation and synergies in implementation of MEAs, considering developing common structures between the chemicals and waste conventions

3. Synergy as a challenge

Synergy Process:

- 2004 and 2005: decisions by COPs of Rotterdam and Stockholm Conventions to accept Swiss offer to co-locate their secretariats in Geneva.
- 2006: Swiss proposal for joint management of Basel, Rotterdam and Stockholm Conventions
=> Ad Hoc Joint Working Group.
- 2008/09: Adoption by 3 COPs of synergies decision: joint services, joint budgetary cycles, assessing option of joint head.
- 2009/10: UNEP GC supports synergy process
- 2010: simultaneous extraordinary COP decides to establish joint head.
- 2013: probably simultaneous ordinary COPs

3. Synergy as a challenge



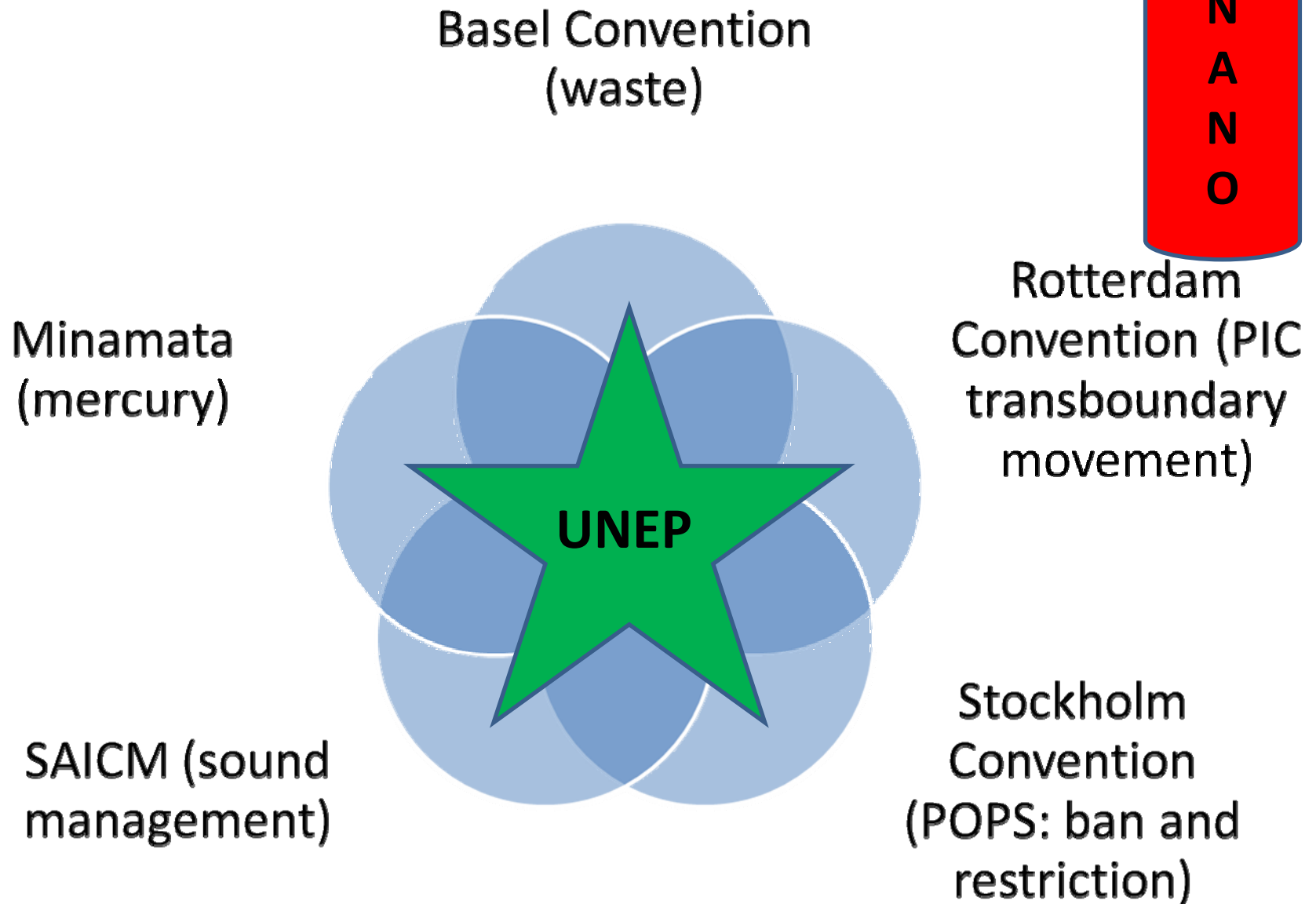
3. Synergy as a challenge

Limits of Synergy Process:

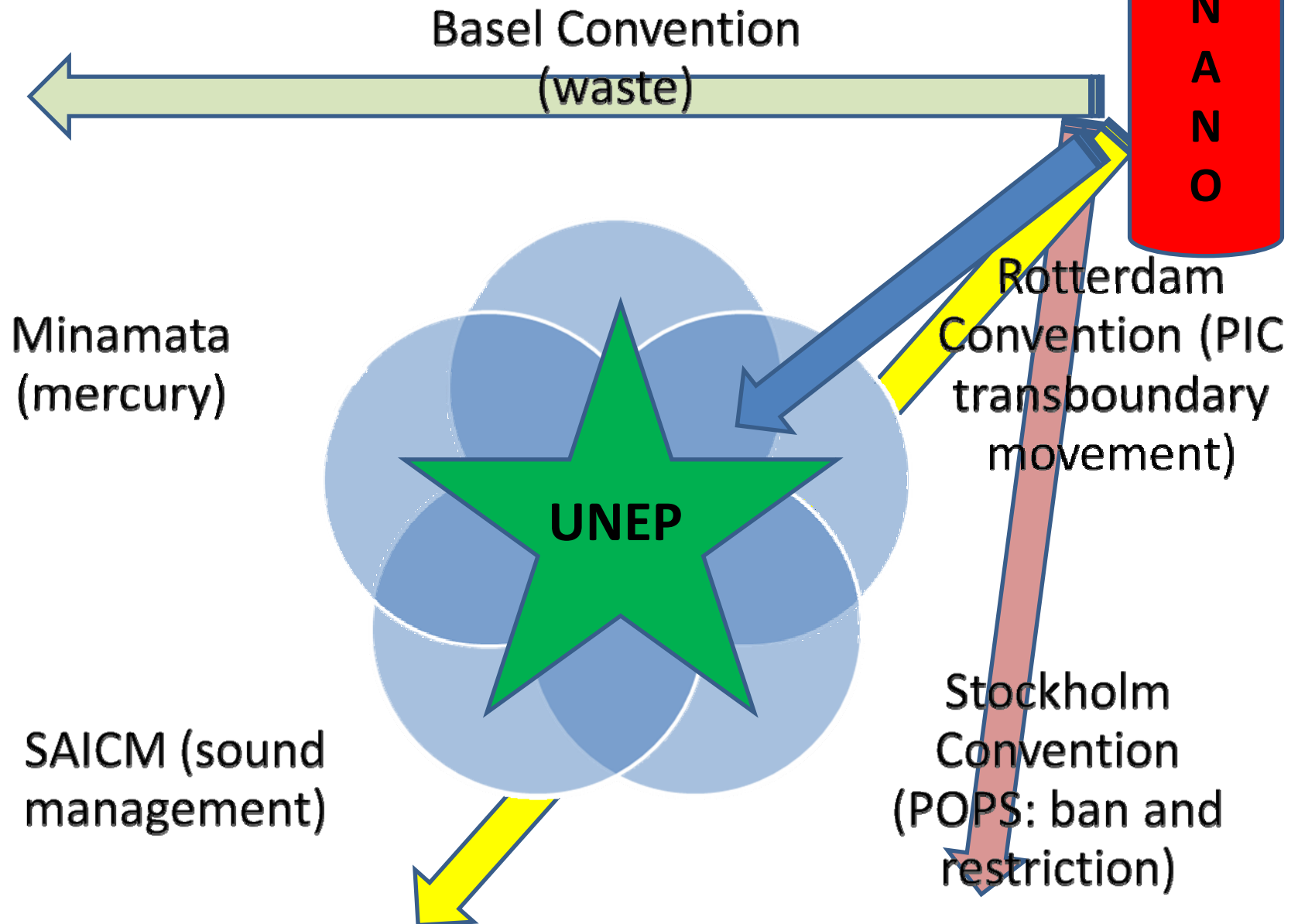
- Focused so far on administrative issues (secretariats of Basel, Rotterdam Stockholm)
=> not yet full agreement to expand to decision making (COPs), scientific bodies, compliance, financing...
- Institutionally limited to existing 3 conventions
=> what happens with new convention?
=> what happens with SAICM?
- Resistance to move ahead from key-actors (China, Brazil, India, Egypt, US, Australia, Canada) still here.
- Willingness to courageously lead (UNEP) still limited.

4. The Challenge of Bringing Nano Regulation into Today's International Chemicals and Waste Regime

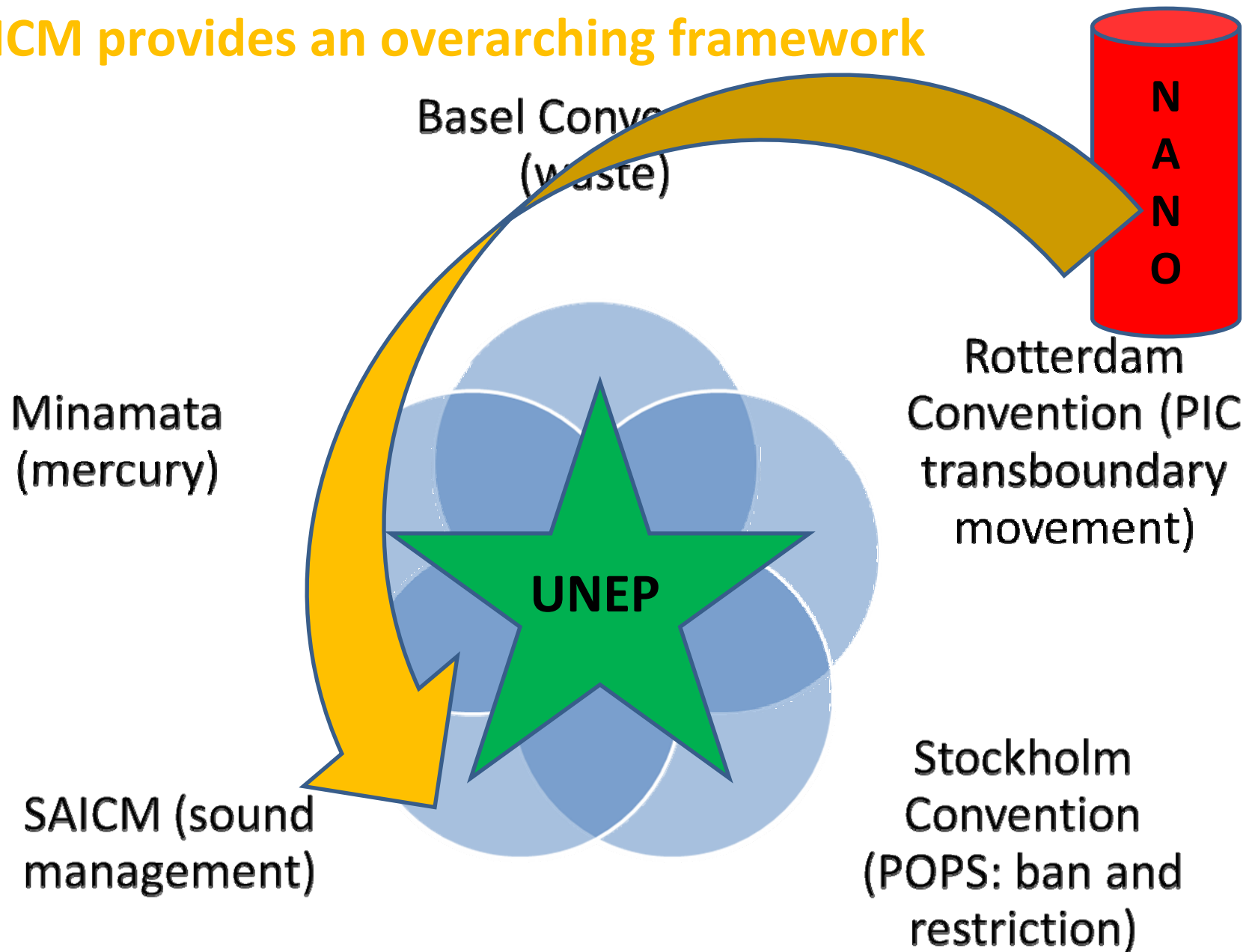
4. Bringing nano into the internat. regime



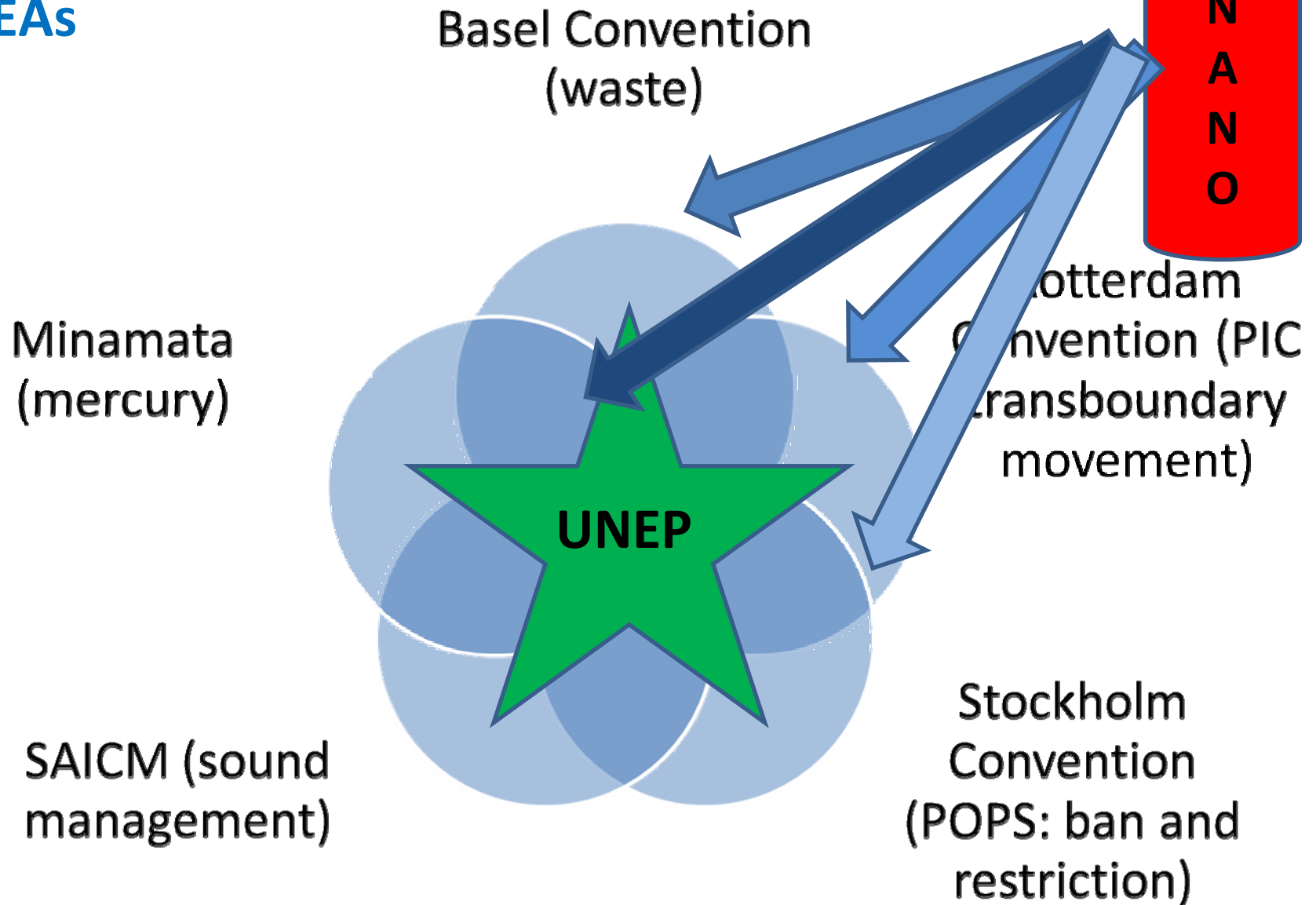
Nanotechnology dealt with by different institutions



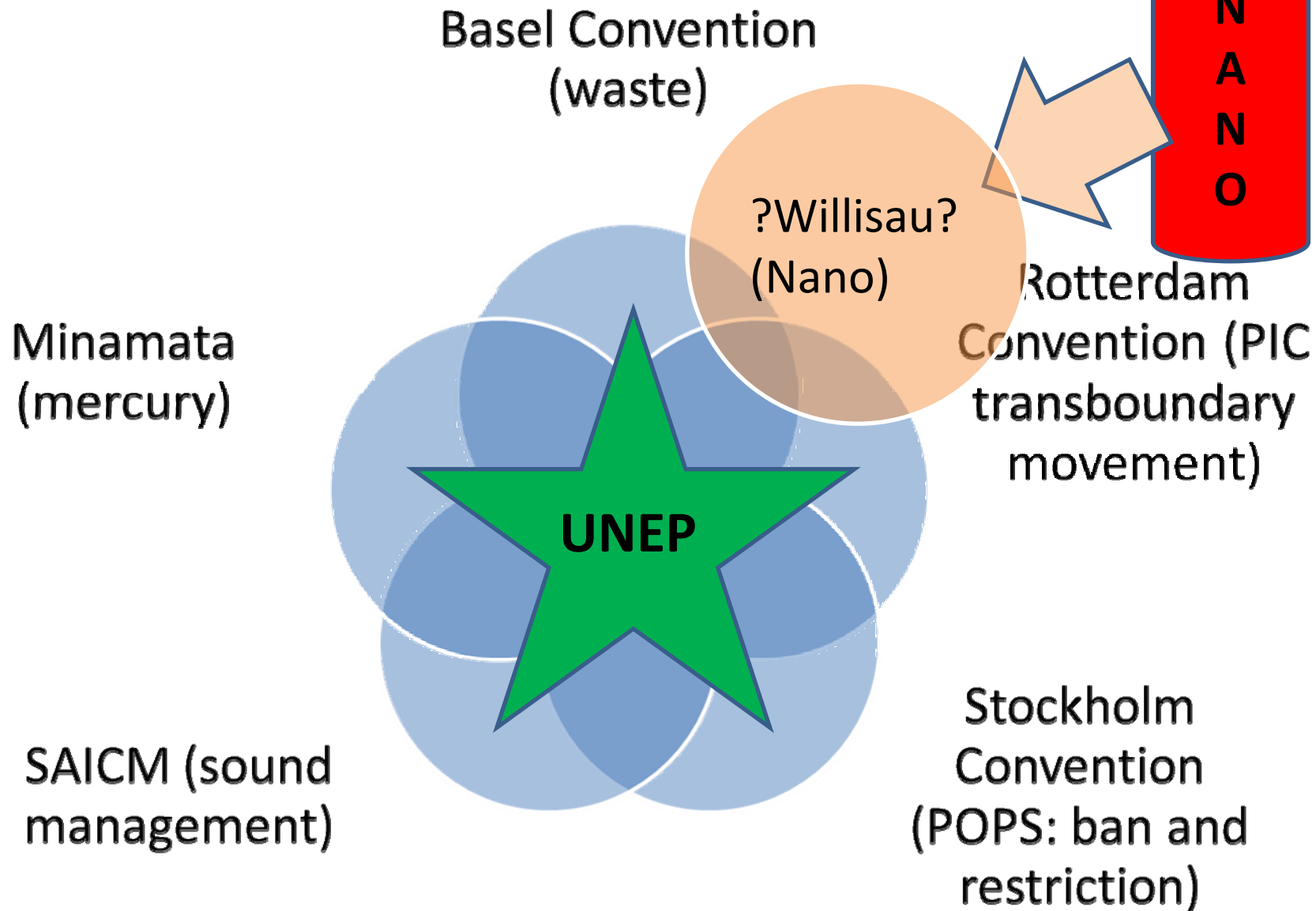
SAICM provides an overarching framework



Address nano through existing chem&waste MEAs



New convention on nano



4. Bringing nano into the internat. regime

Different Options:

- Nanotechnology dealt with by different institutions (WHO, ILO, OECD, SAICM...)
- SAICM provides an overarching framework and guidance for nano-policy
 - => politically binding overarching policy strategy
 - => outline of possible voluntary measures
- Address nano through existing chem&waste MEAs
- new convention on nano is developed with legally binding obligations and embedded in existing cluster

5. Conclusions

5. Conclusions

- Reason for international regulation is to better / more effectively serve interests.
- Chemicals regime is moving from an ad hoc approach towards a more integrated approach.
- Synergy process is currently limited to administrative issues and to 3 conventions.
- Should nano:
 - ne taken up in ad hoc or synergetic manner?
 - supported through administrative, political, financial synergy?
 - be dealt with in voluntary SAICM-framework?
 - be embedded through new Convention in Chemical&Waste Cluster?