



Reflections on ALARA in RP training

Fernand VERMEERSCH

Rovinj May 7, 2014

*15th European ALARA Network Workshop and 5th
EUTERP Workshop Education and Training in Radiation
Protection: Improving ALARA Culture
Rovinj, Croatia, 7th-9th May 2014*



Introduction

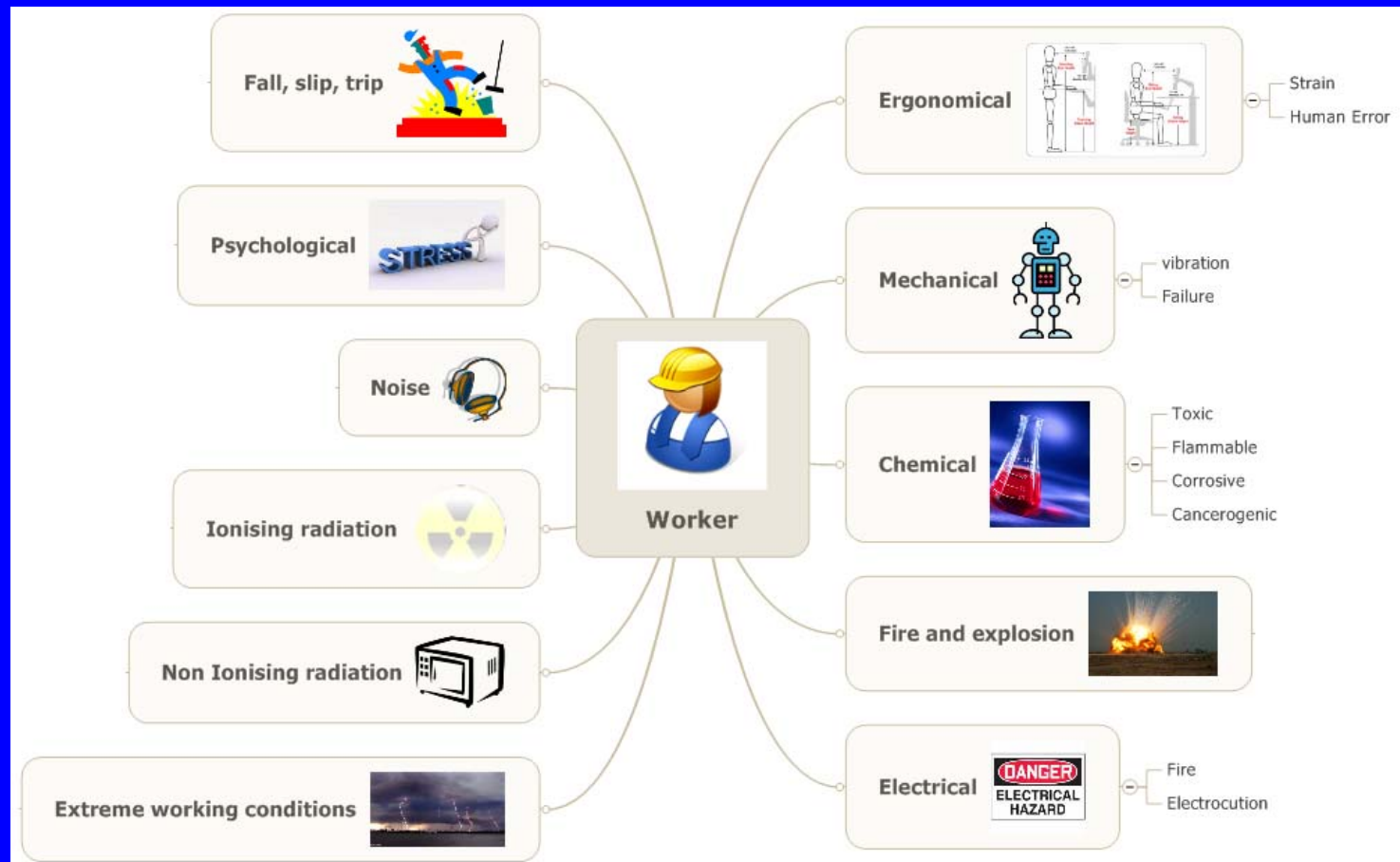
All human activities meeting economic or social requirements includes an element of risk
A balance must be found



Human activity	Risk
<ul style="list-style-type: none">• Economic requirements• social requirements• health	<ul style="list-style-type: none">• Worker• Public• Environment

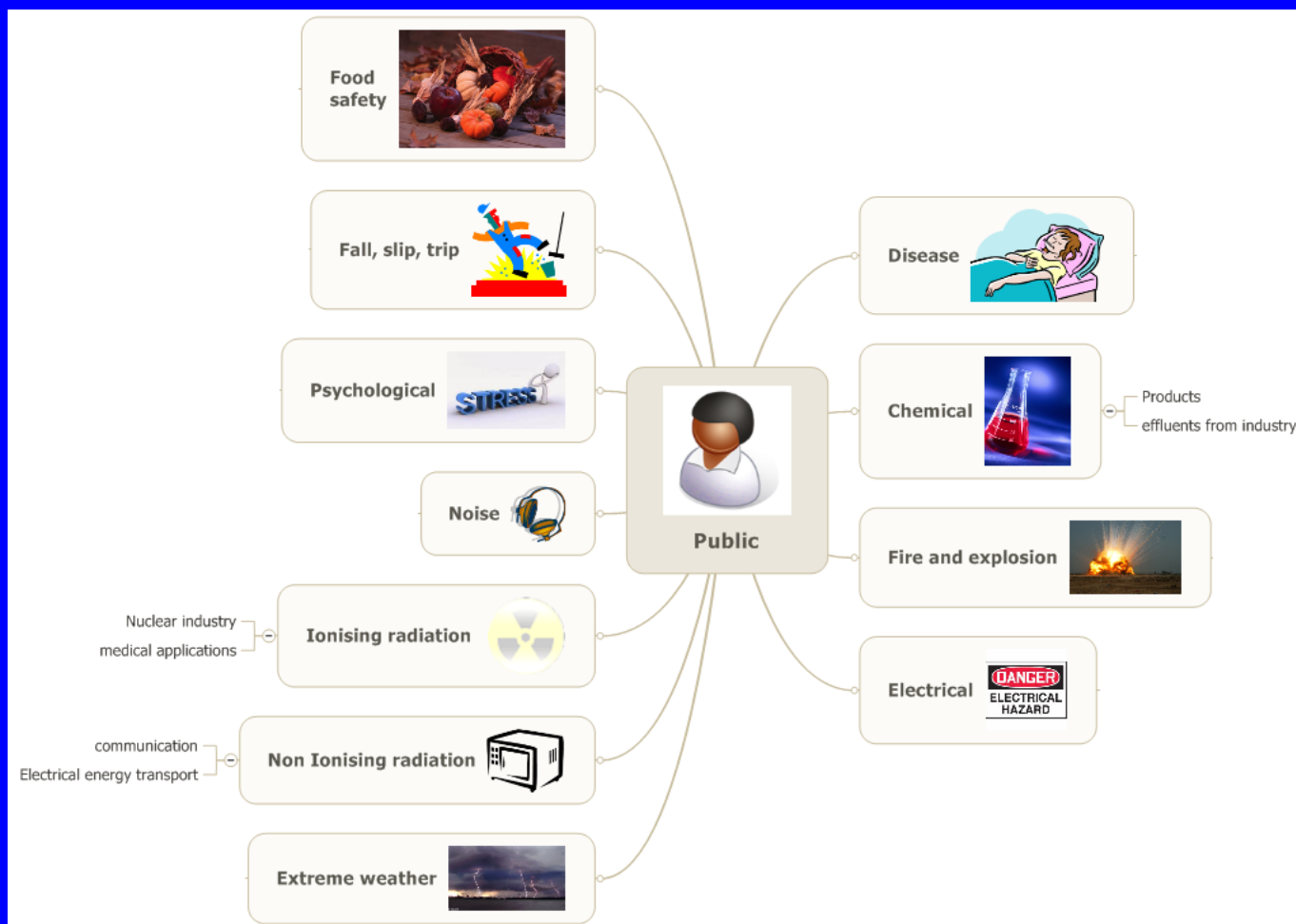


Risk to the workers





Risk to the public and the environment



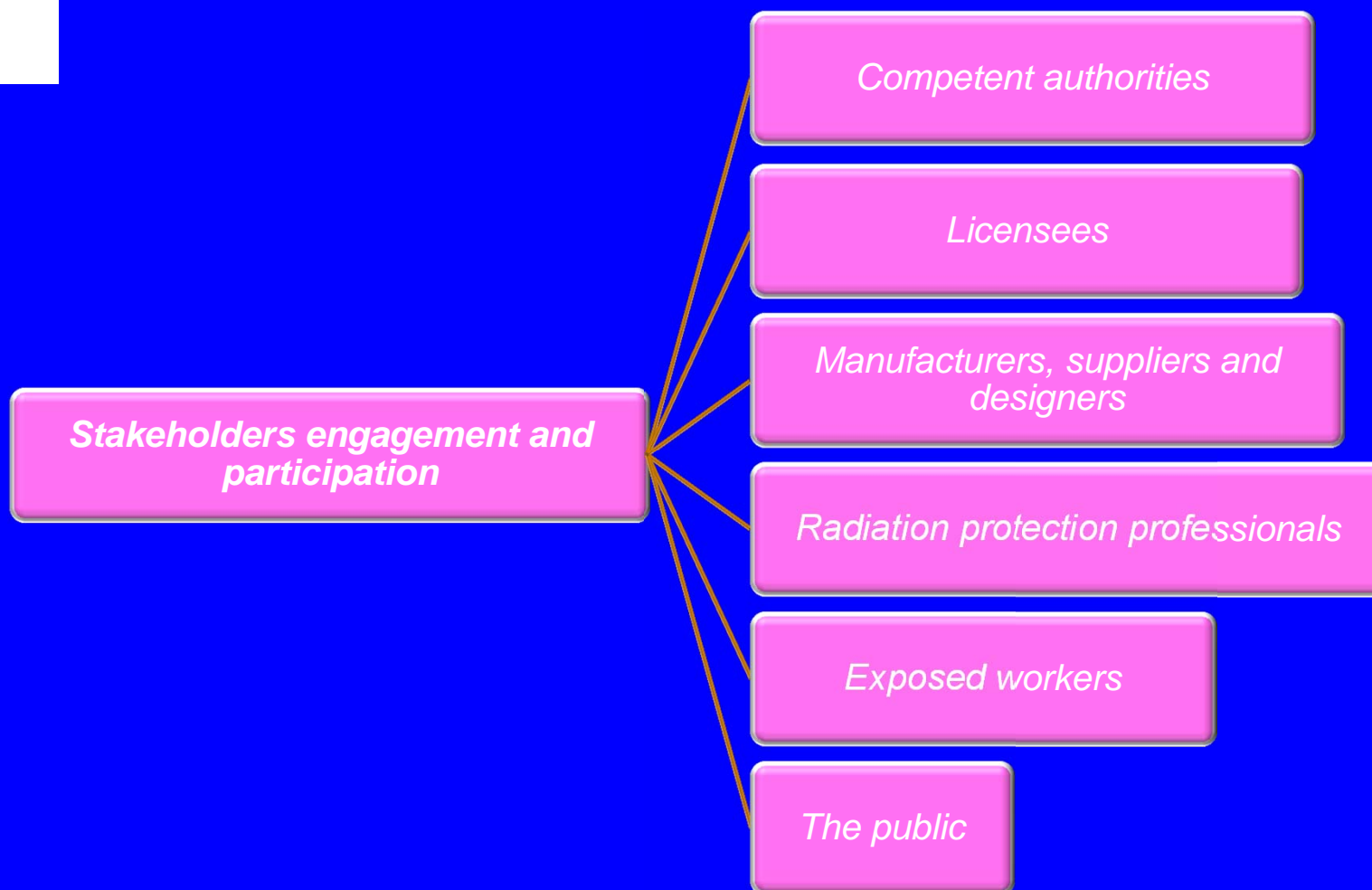


Ionising radiation

- Ionising radiation is part of the risk spectrum related to human activity
- How can we manage the risk in all exposure situations, existing, planned and emergency ?
 - Recommendations ICRP
 - Justification
 - Optimisation
 - Dose limits
 - Guidance by International Organisations
 - National legislation
- Good practices for the protection of the workers
- Good practices for the protection of the public
- Safety cultures to manage the risks
 - Industrial safety culture
 - RP culture
 - ALARA culture (at the heart of RP culture)
 - Security culture



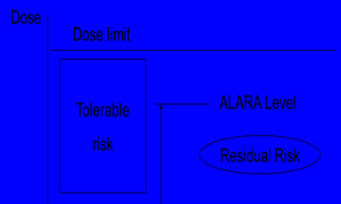
Education and training of the stakeholders





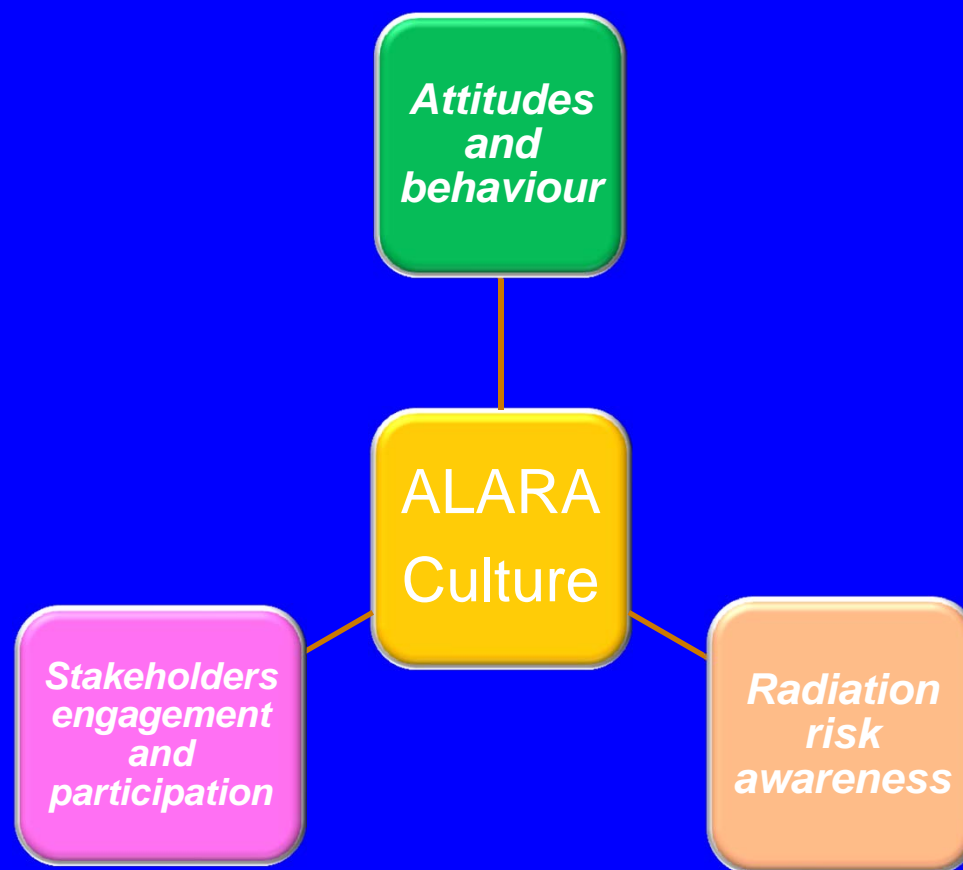
European
ALARA
Network

ALARA is an obligation of means
and not an obligation of results



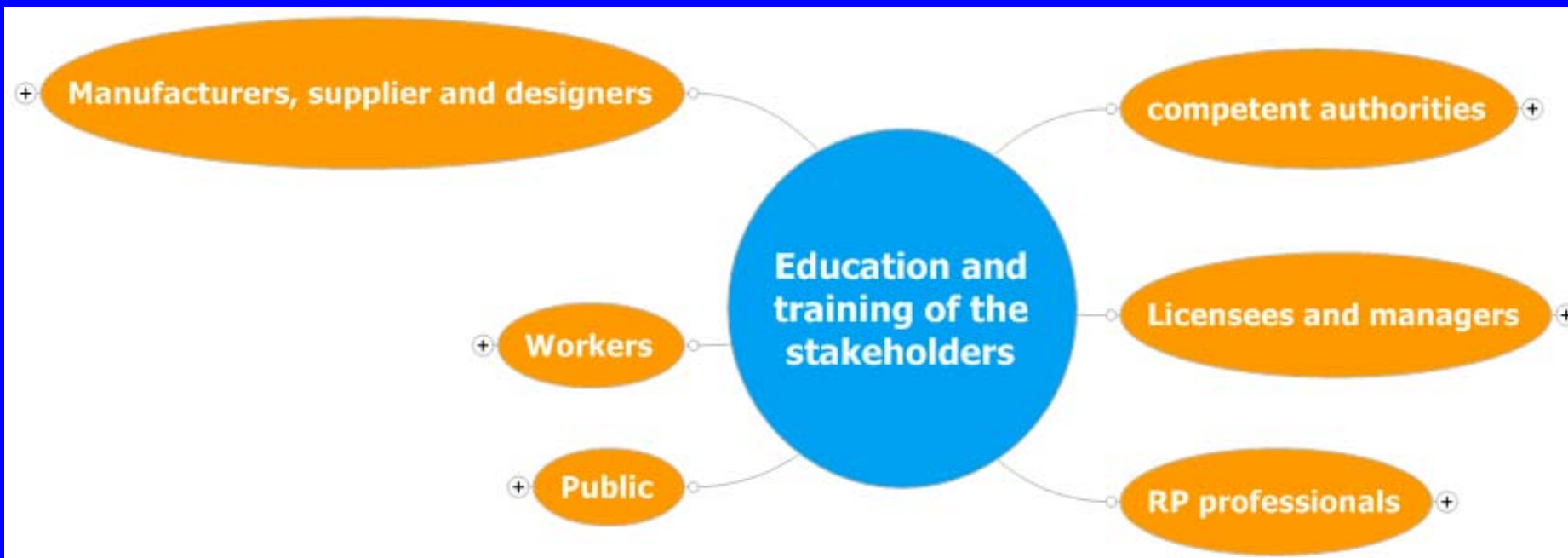


Synthesis of the main Elements of ALARA culture





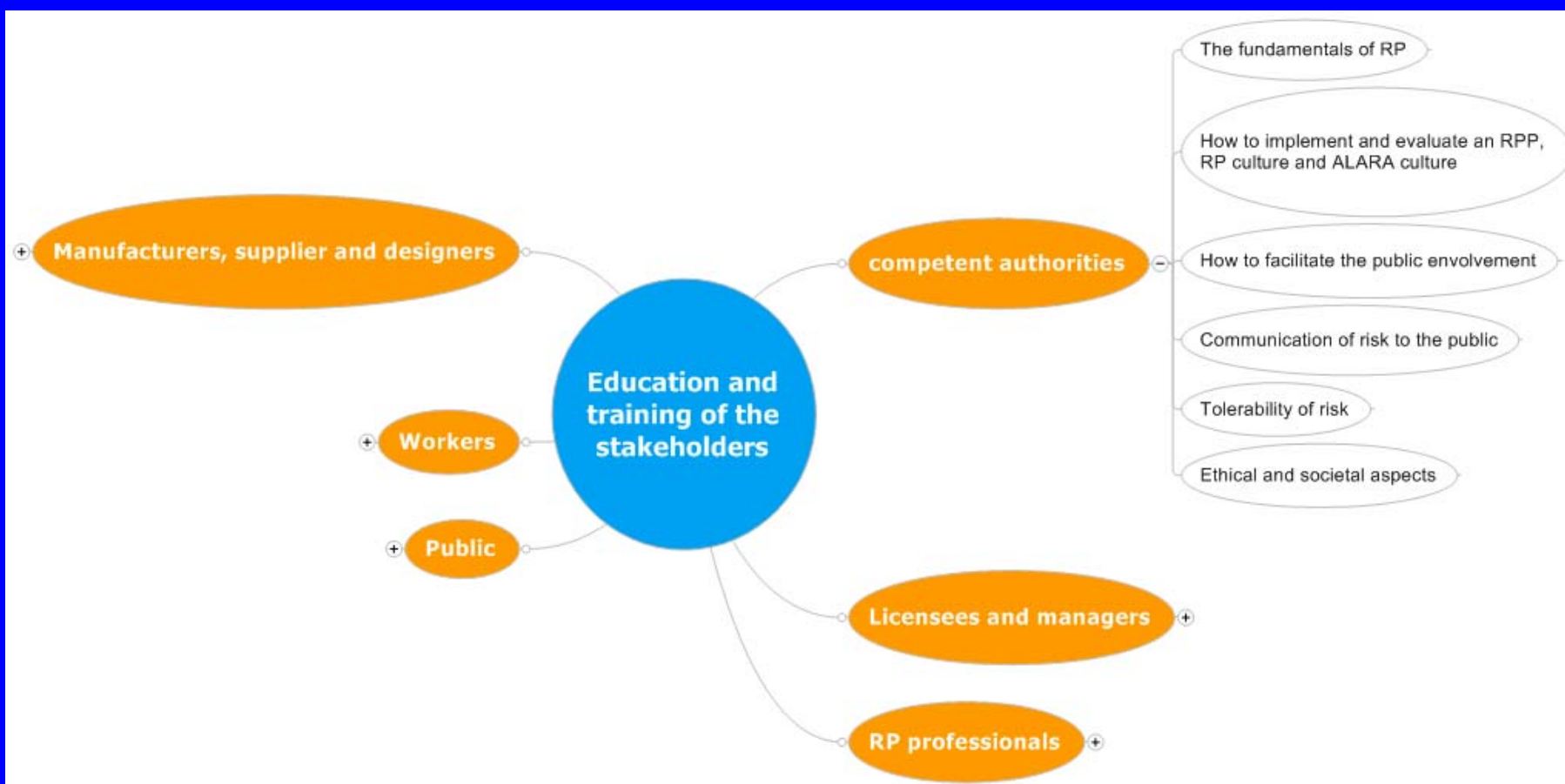
Education and training of the stakeholders some reflections





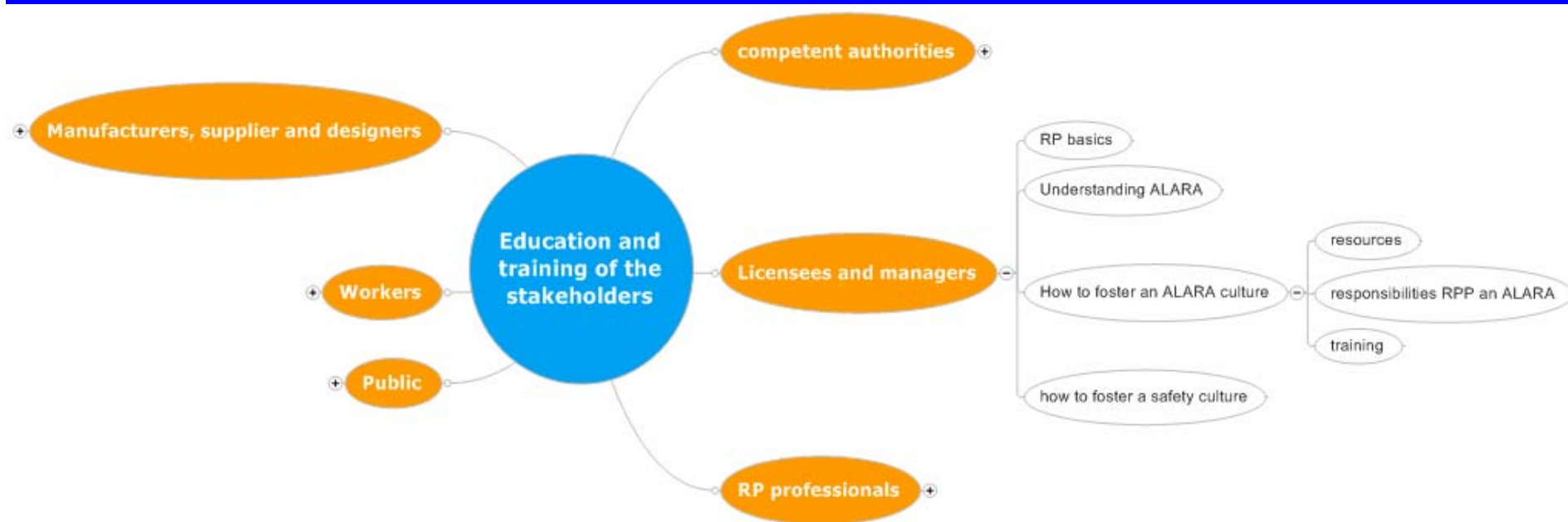
European
ALARA
Network

Competent authorities





Licensees and managers



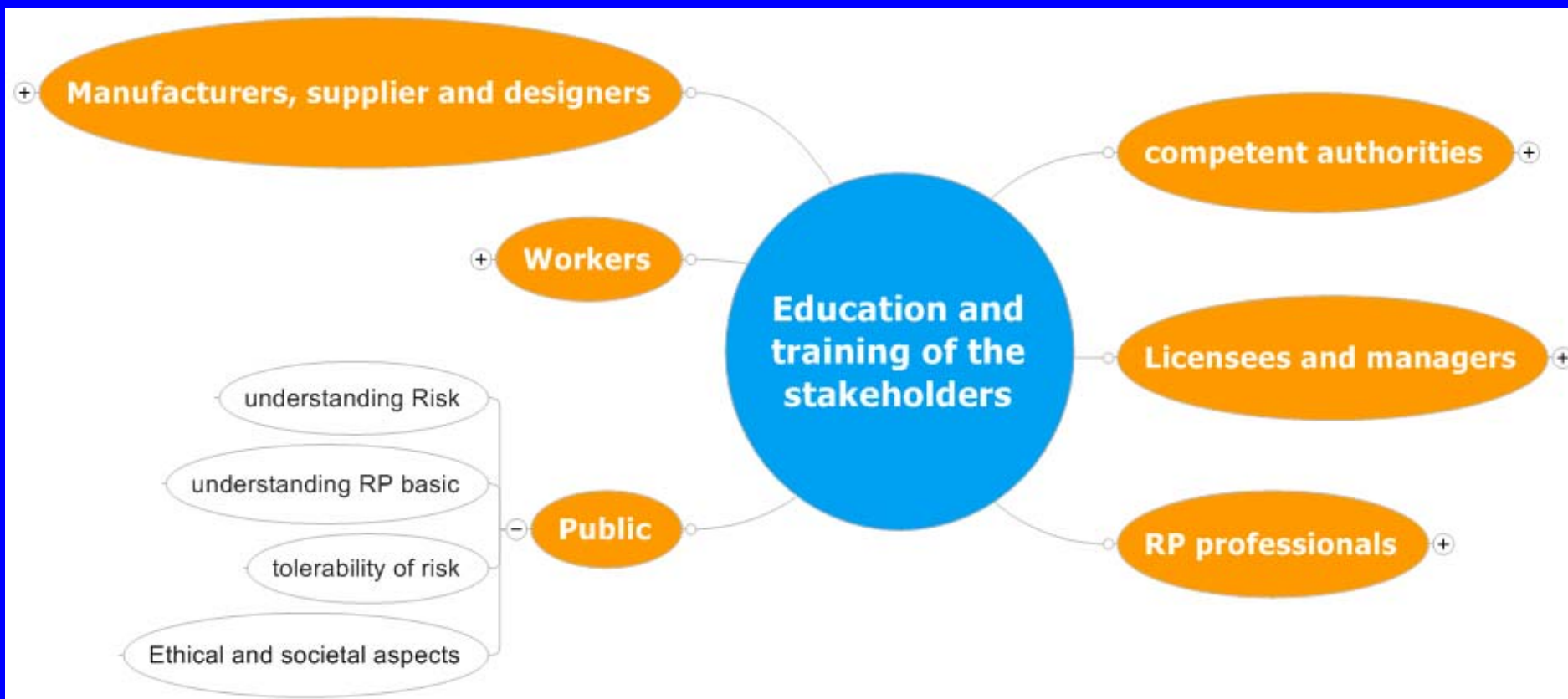


RP professionals



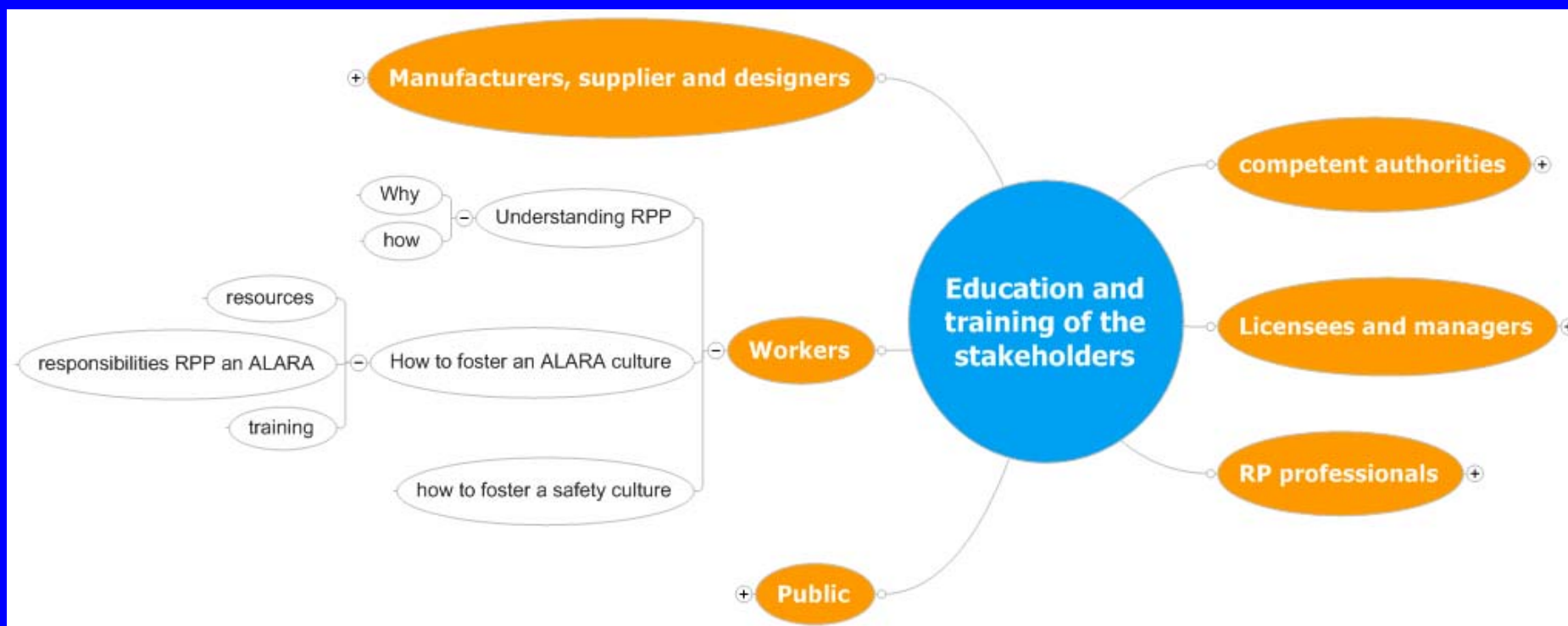


Public



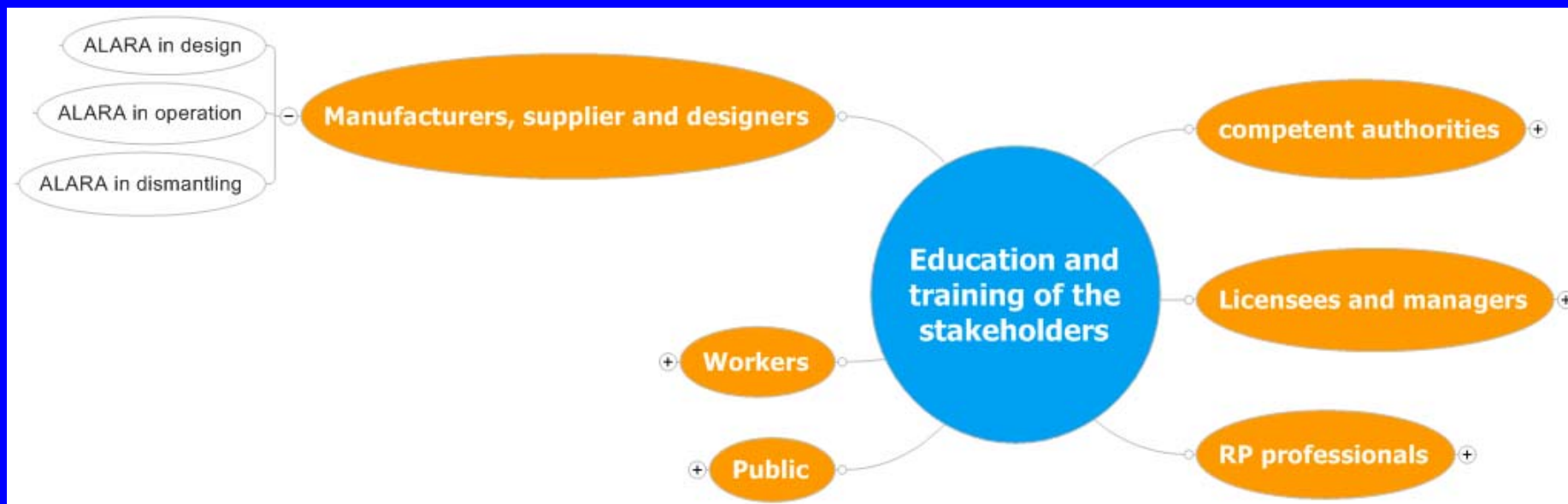


Workers





Manufacturers, suppliers and designers





Conclusion

- All human activities meeting economic or social requirements includes an element of risk
- The risk needs to be managed
- ALARA is a means to manage the risk
 - Precaution
 - Evolution of scientific knowledge
 - Responsibility
 - Limited resources,(ionising radiation is one of the risk)
 - Concept of residual risk
 - Transparency
 - The means and the rationale to implement the management of the risk can be verified by the stakeholders
- ALARA in RP training
 - The stakeholders need to understand the ALARA approach and its purpose
 - The training should be adapted to the perspectives of the stakeholder