



An Ishikawa Diagram for Innovation in Europe

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INNOVATION :

- Should be a proactive process to adapt to changes in the environment (new technologies, new markets, new competitors, new challenges, new economics and societal context) / **accelerator of change**
- Not only technological but also societal, conceptual, organizational, administrative
- It's not :
 - ✓ Creativity : a mindset needed in innovation as in many other fields
 - ✓ Discovery : e.g. an unknown physical phenomenon « *electricity* »
 - ✓ Invention : new way for realizing something e.g. « *dynamo* »
- It's the practical application of something new e.g. « *electrical distribution* »
- The link between research and innovation is not automatic nor direct ! *The « **European Paradox** »: good in research, bad in innovation.*

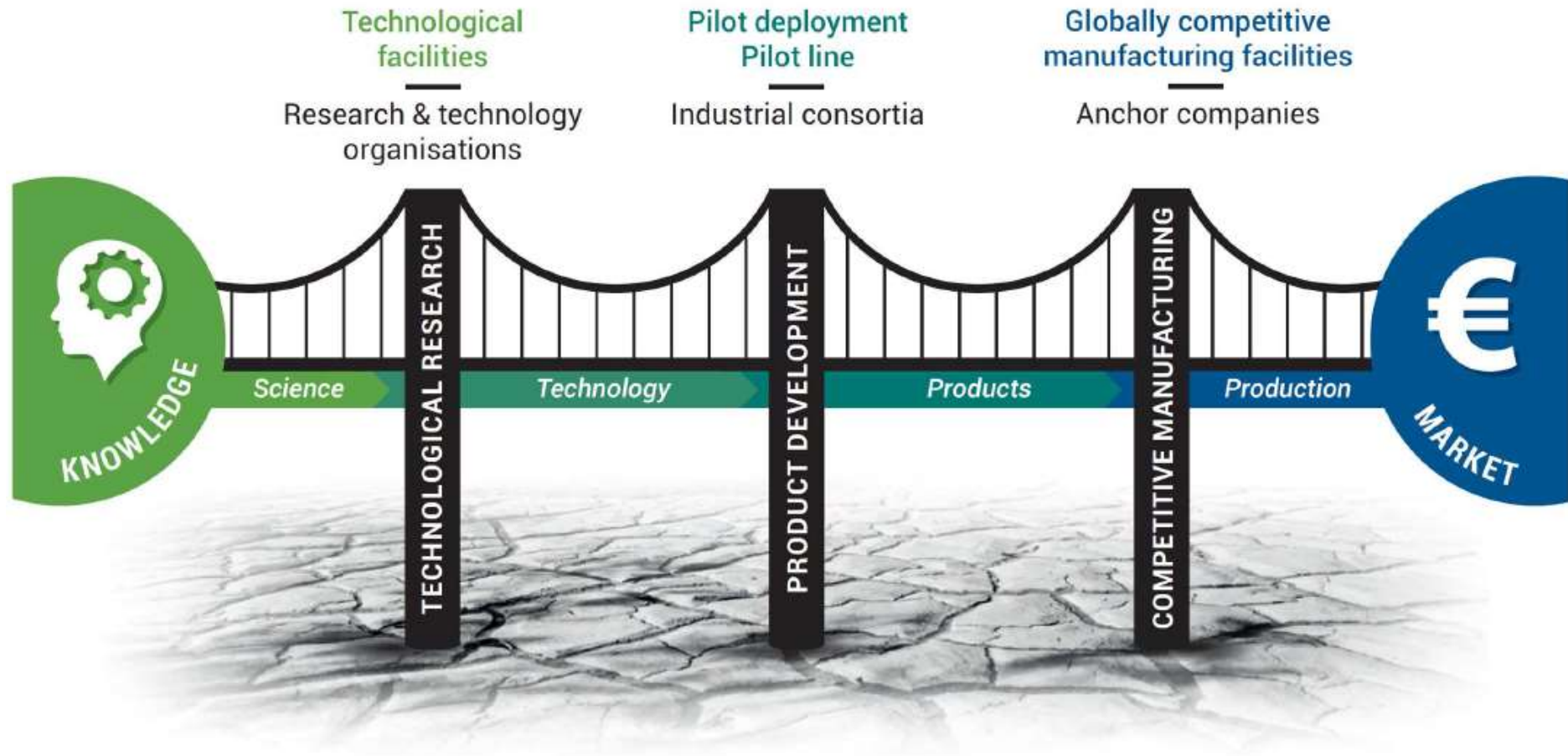
“Official” definition (Oslo Manual, OECD 2005)

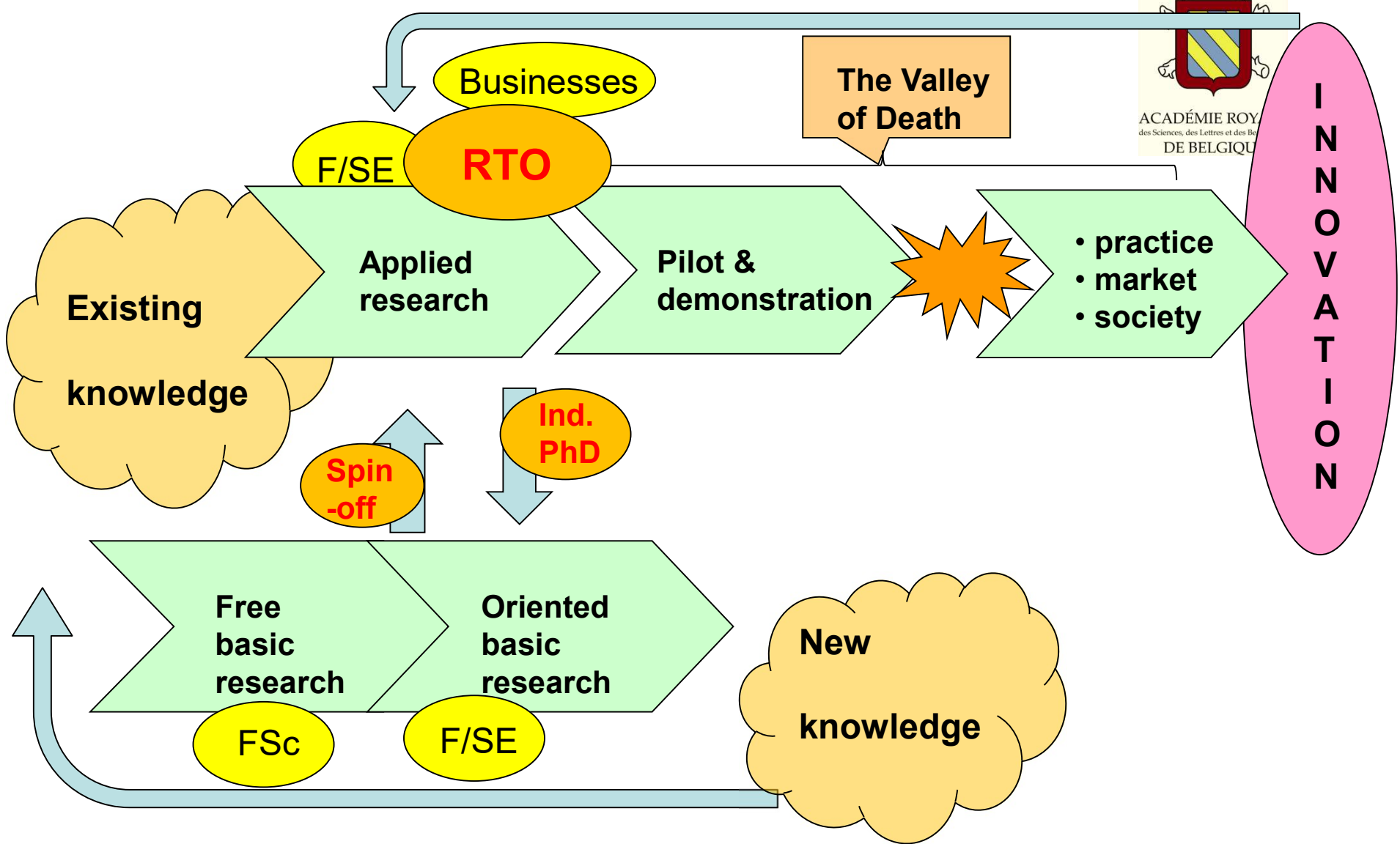
***Technological** product and process (TPP) innovations comprise implemented technologically new products and processes and significant technological improvements in products and processes.*

A TPP innovation has been implemented if it has been introduced on the market (product innovation) or used within a production process (process innovation).

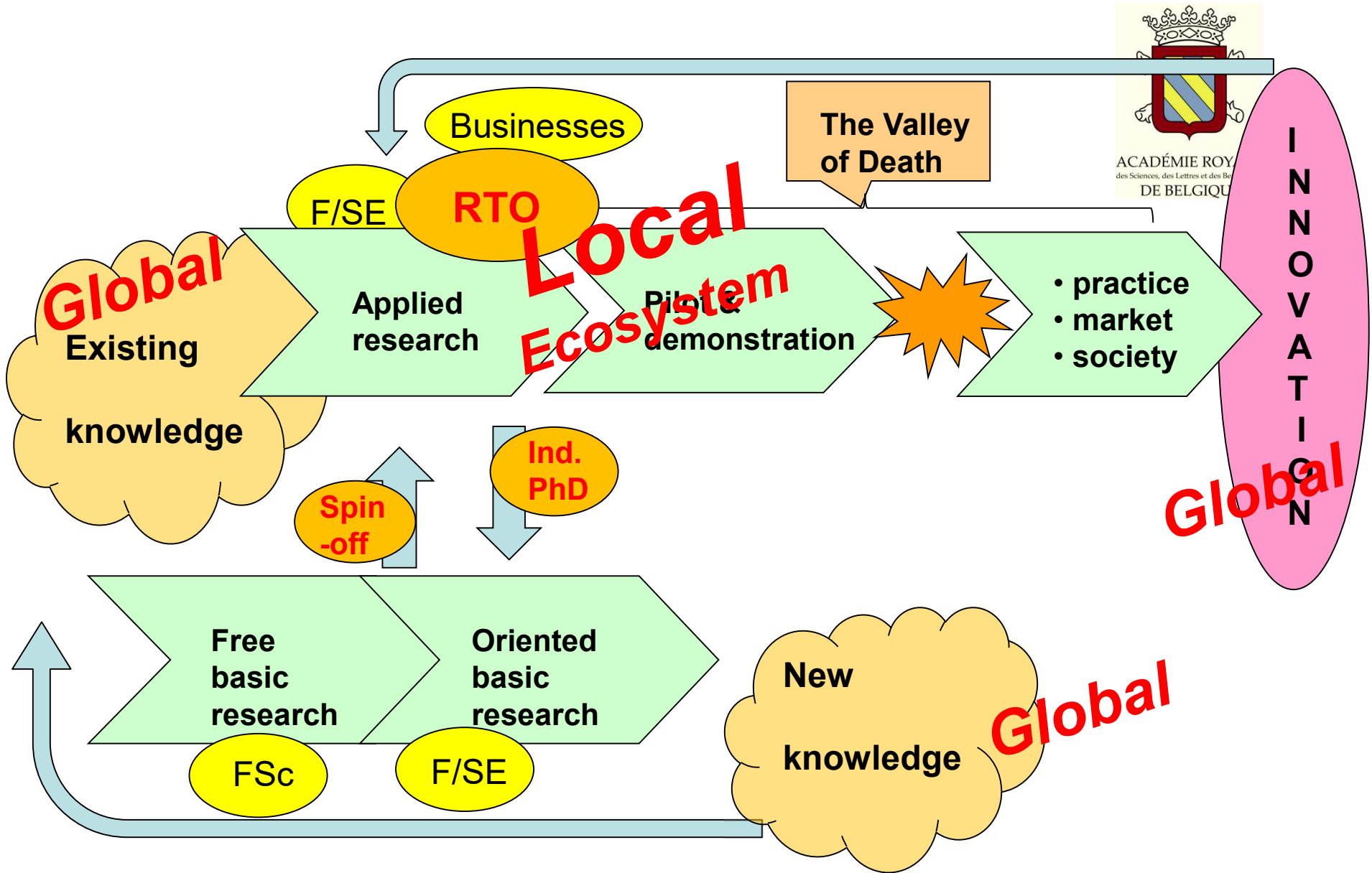
TPP innovations involve a series of scientific, technological, organisational, financial and commercial activities.

NB : The minimum entry is that the product or process should be new (or significantly improved) to the firm (it does not have to be new to the world).

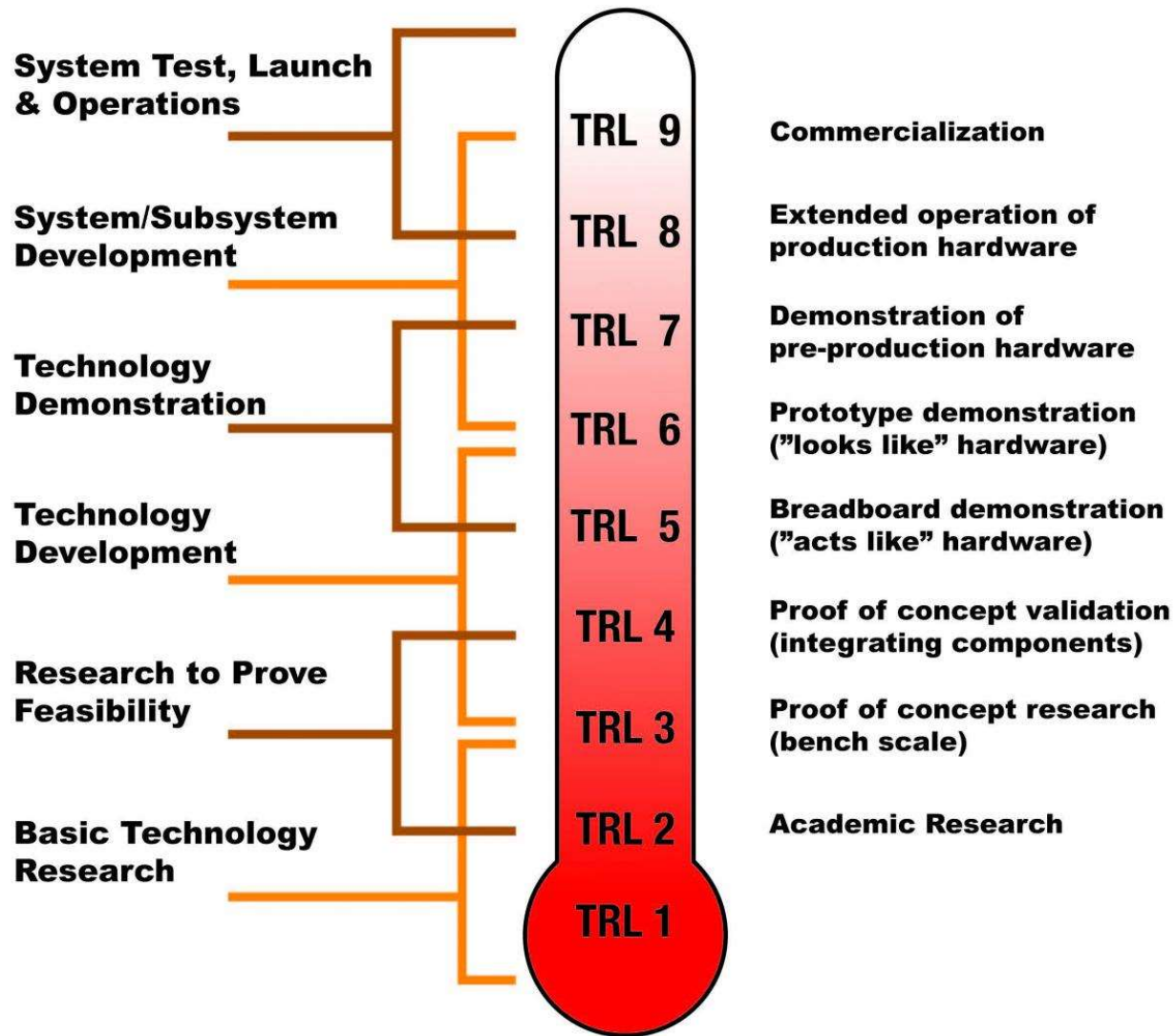


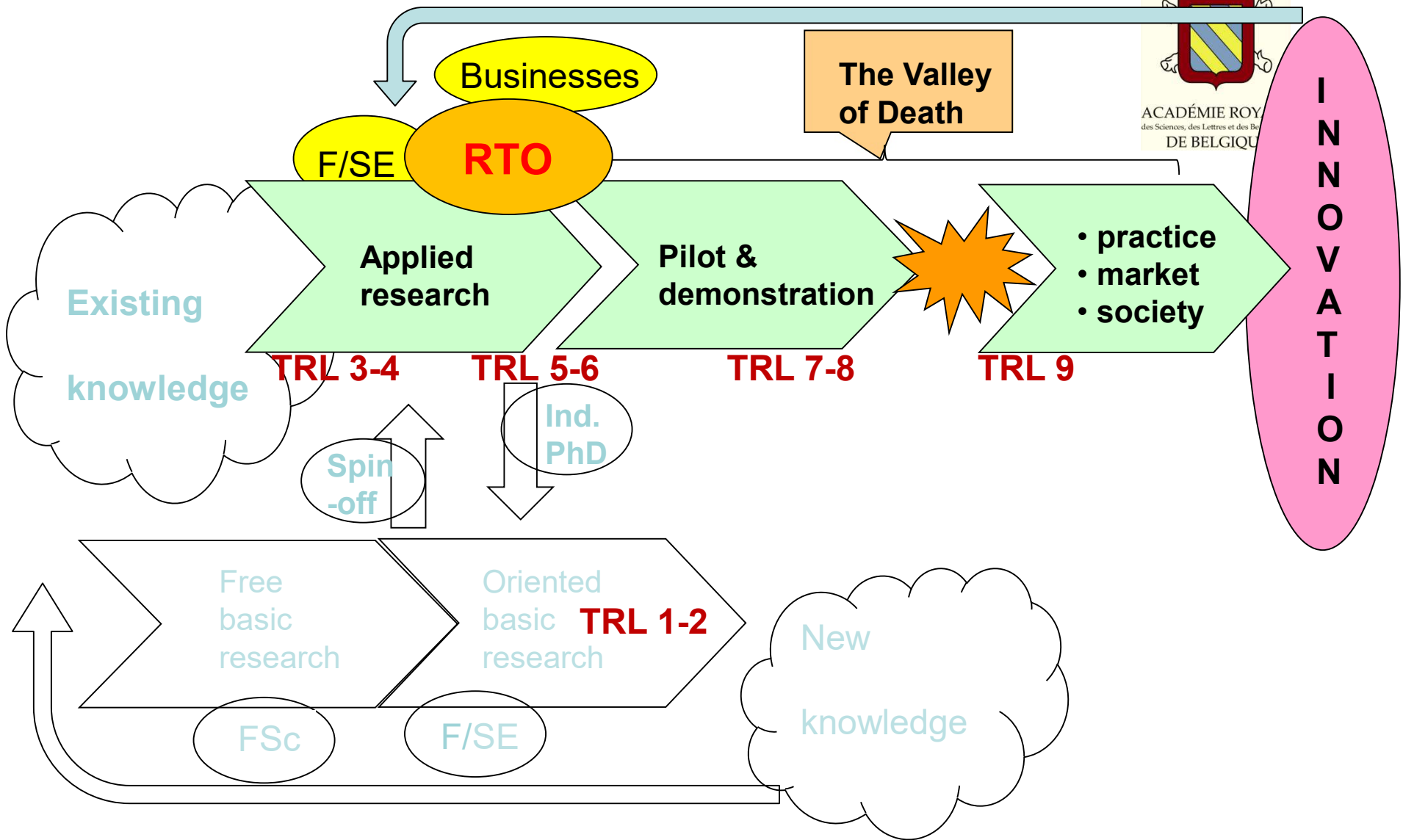


F/SE: Faculty/School of Engineering; RTO: Research & Technology Organisation; FSc: Faculty of Science



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What is **Responsible Innovation** ?



- Completely different from **Responsible Research** which is dealing with integrity (method, reporting, evaluation, reproducibility, incentives), open access etc.
- My own definition : ***An innovation can be considered as responsible if it is performed by fairly applying the best practices of corporate social practices and if it contributes to sustainable development.***
- It requires that CSR practices should integrate the 6 P global view and Responsible Innovation, it means that
 - A company should have a mission, where profit is not the main objective but a necessity for fulfilling this one.
 - At the final stage of the innovation process CSR should converge to ESG (Environment, Society & Governance).

