Governance of "nuclear revival" in Finland, France and the UK: a comparative analysis of the processes of argumentation and deliberative institutions

Current research at the Sussex Energy Group

This project compares the governance of nuclear power in three countries, which have recently made a commitment to build new nuclear power, and are at different stages in the development of their radioactive management policies. Finland is constructing the first third-generation nuclear power station (European Pressurised Reactor - EPR) in the Western world, and has advanced plans for the long-term disposal of high-level radioactive waste. France decided in 2004 on the construction of an EPR in Flamanville, and recently announced its decision to build another EPR in Penly. Its plans for the disposal of radioactive waste build on a solid legal framework aimed at a final decision in 2015. While no new plants are yet in construction in the UK, the government is undertaking measures to facilitate new-build in the near future. The multi-stakeholder Commission for Radioactive Waste Management (CoRWM) provided a number of recommendations on ways of long-term disposal of nuclear waste.

The evolution of the governance on nuclear power in these countries has two key aspects in common:

- nuclear power has experienced a 'revival' and is increasingly portrayed as a solution to the problems of climate change and energy security, and
- they have implemented a range of participatory and deliberative mechanisms of planning and decisionmaking, in response to past failures of 'technocratic' planning to bring about the needed consensus, in order to remedy the loss of public trust in the governance of science and technology, and in response to international pressures.

Despite these similarities and the increasing internationalisation of nuclear policies (e.g. liberalisation of energy markets, and harmonisation efforts in the areas of nuclear safety and waste management), the trajectories in the three countries have to an extent followed their own logics. This variation can be attributed to differences in national energy and security policies, but also to country-specific political cultures, respective roles of experts and civil society, and political contingencies.

Research questions

This research will analyse the evolution of the debates, institutions and decisions concerning nuclear power and nuclear waste management in the three case study countries over the past decades, with particular attention to the various mechanisms through which legitimacy and credibility are constructed. The project seeks to better understand the relative importance of the context-specific and 'universal' factors in the shaping of the debates and the social construction of legitimacy. Four specific questions will be addressed:

- how have the arguments and priorities in debates and decision-making on nuclear power and radioactive waste management evolved in the post-War era?
- which have been the major similarities and differences in the evolution of the deliberative institutions of planning and decision-making?
- to what extent have the deliberative institutions influenced decisions and the quality of democracy?

 which factors can explain the above similarities and differences between the three countries?

The research

The project has two distinct elements – a descriptive and an explanatory one. The **descriptive part** will focus on two themes in particular:

- the relative weight of different arguments in the debate – notably those relating to transparency, economics, climate change, energy security, safety and security, 'reversibility' and 'retrievability' in radioactive waste management; and
- the evolution and influence of the deliberative, participatory mechanisms of planning and decision-making.

The project first traces the evolution of the 'nuclear debates' in the three countries, seeking to identify the key shifts in the dominant themes, the argumentative strategies of the key players, and the similarities and differences between the countries. Secondly, the project analyses the participatory and deliberative mechanisms of planning and policymaking implemented in the case study countries. These mechanisms range from consultative committees. Environmental **Impact** Assessments, and debates organised at the national level. The analysis addresses two questions:

- what are the similarities and differences in the form and underlying drivers behind the deliberative and participatory institutions in the three countries?
- to what extent have the deliberative processes actually influenced decisions concerning nuclear energy and the quality of democracy?

The *explanatory part* of the project builds on the descriptive analysis, and seeks to explain the similarities and differences between the countries. In particular, it tries to establish the ways in which the factors operating at the international level (e.g. internationalisation of markets, regulatory harmonisation, climate change and security of supply concerns) are translated into national policies through the argumentative processes shaped by country-specific characteristics, and the interaction between 'hard' factors such as economic and political interests interact with the 'soft' discursive processes.

Policy outputs

By examining the factors shaping the public acceptability of nuclear installations, public trust in governance of science and technology, and the success of deliberative mechanisms, the project seeks to provide policy-relevant insights into the potential viability of nuclear projects under different national and local conditions.

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¹ Reversibility refers to the ability to potentially reverse decisions or processes, whereas retrievability denotes the ability to potentially retrieve entire waste packages.

