



## PRECAUTION AND RISK MANAGEMENT – MODERN ISSUES –

### HIGHLIGHTS NOTE 03

#### PRECAUTION AND DECISION-MAKING

Over the last 10-15 years, substantial numbers of risk management decisions have been made using various forms of the Precautionary Principle. These provide important insights into the potential strengths of this approach, and its limitations.

Proponents of the Precautionary Principle argue that its use has resulted in higher levels of protection of citizens and the environment, as well as more equitable regulatory outcomes. Precaution were, broadly speaking, a superior risk management option. These claims are contested and are, moreover, difficult to demonstrate.

In contrast, **evidence from the concrete implementation of the Precautionary Principle in the EU highlights a number of serious weaknesses that limit its effectiveness**. Specifically, when mis-applied, the Principle:

- **fails to properly consider costs and benefits**  
– Costs of 'false positives' tend to be overlooked. These include economic losses, restricted freedoms, and the loss of existing health and environmental benefits. Societal gains tend to be poorly considered as well, making it difficult for citizens to assess regulatory effectiveness.
- **It encourages the amplification of fear, perceptions, and concern** – In response, decision-makers shift resources away from established problems and towards unproven, but high profile, social concerns, leading to negative effects on health and well-being.

- **It undermines the evidence-based approach to policy-making** – This occurs when the Principle is used without extensive and rigorous procedural controls, weakening the link between science, evidence, and action, and delivering ineffective regulatory decisions.
- **It increases administrative discretion and the politicisation of decision-making** – This leads to reduced predictability, greater opacity, and increased opportunities for 'regulatory capture' by interest groups of all types, including NGOs and activists. This erodes confidence and undermines the 'climate' for investment in innovation. Governance is weakened as well, because due process standards are not observed and it becomes difficult to identify the rationale for government action.
- **Its effects are irreversible** – Whilst many forms of the Precautionary Principle claim that its use is provisional and that, as a result, new science can lead to a revised assessment of risk, in practice its application is difficult to reverse. Its use tends to bring investment in affected technologies to an end. Allocation of capital ceases and innovation comes to an end.
- **It institutionalises risk aversion throughout regulatory decision-making** – Over time, the Principle leads to the use of non-scientific approaches to risk assessment, placing undue emphasis on unsubstantiated harms, and favouring restrictions.
- **In its stronger and more aggressive forms, it paralyses risk management and jeopardises efforts to Better Regulation** – The Principle may halt technological innovation, and, because of unjustified restrictions, trigger the emergence of new, unintended risks ('risk-risk').

## ERF OBSERVATIONS

For over a century, the concept of precaution – the idea of taking preventative action in advance of harm – has informed the development of government strategies to manage risks to human health, public safety, and the environment. *Supported by scientific evidence and an understanding of costs and benefits, the precautionary approach has enabled governments throughout the OECD area to design effective risk management strategies for complex problems that, moreover, take account of differing levels of scientific uncertainty and social acceptance of risk.*

The form of precautionary risk management that has emerged in the EU is based on a formal 'Principle, which seeks to institutionalise the use of precaution throughout the decision-making process. The Precautionary Principle forms part of the EU Treaty. It has influenced the design of legislation, as well as the outcomes of individual risk management decisions.

A number of factors explain this development. Citizens are becoming increasingly concerned about potential harm (hazard), most notably those posed by new technologies, rather than established nature, magnitude and consequences of risk. Alongside this, some influential groups argue that existing risk management tools, based primarily on rigorous, evidence-based processes, are too slow to provide effective protection against emerging threats to health, safety, and the

environment. Within this context, the concept of a Precautionary Principle is attractive. It appears to institutionalise preventative action by governments and to promote anticipation of long-term threats, particularly those that may lead to irreversible or catastrophic harms.

To many citizens and governments, a Precautionary Principle, as a tool for managing complex, modern risks, seems to be a statement of common sense. *The problems lie, however, in implementing it. Evidence from its use by the EU, and by other governments throughout the OECD, suggests that, as a mechanism for ensuring high quality regulatory decisions, it is flawed.*

*Policy-makers and opinion-formers need to develop a greater understanding of the impact of its structural weaknesses on the effectiveness of the Precautionary Principle as a tool for managing risk.* This is paramount if the concept of precaution is to continue to play an appropriate role in protecting citizens and the environment from harm.

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Richard Meads, the European Risk Forum's Rapporteur, wrote this Highlights Note. However, the views and opinions expressed in this paper do not necessarily reflect or state those of the European Risk Forum or its members.