

All-Party Parliamentary Group on Science & Technology in Agriculture

Notes of a meeting held on Monday 6 June 2016,
Committee Room 12, Palace of Westminster

Impact of the Precautionary Principle on EU Innovation

Present:

Members

Mark Spencer MP (Chair)
Earl of Lindsay
Lord Boswell
Lord Taverne
Carolyn Bacon (pp Jo Churchill MP)

Guest Speakers

Mark Titterington, Head of Corporate Affairs EAME, Syngenta AG
Dr David Parsons, Principal Research Fellow, Cranfield Institute for Resilient Futures, Cranfield University
Maurice Selg, Senior Vice President, Edelman Intelligence

Stakeholders

Steve Knight, USDA; Penny Maplestone, BSPB; Zoe Davies, nabim; Alice Turnbull, Bayer; Sophia Abbasi, BBSRC; Luke Gibbs, Syngenta; Mike Wray, Fera Science Ltd; Mark Buckingham, Monsanto; Stephen Ruckman, Cambridge Environmental Assessments; Hugh Oliver-Bellasis, GWCT; Mark Pettigrew, PepsiCo; David Leaver, BIAC; Phil Botham, Syngenta; Anthony Keeling, Elsoms Seeds; Richard Whitlock, RTW Ltd; Paul Rooke, AIC; Ed Mortimer, G's Fresh; Paul Hammett, NFU; Keneth Chinyama, FDF; Andrew Mayer, BASF; Sean Ryan, Defra; Matina Tsalavouta, Rothamsted Research; Chris Peters, Sense About Science; Daniel Pearsall, Group Co-ordinator

1. Welcome & Introduction

Mark Spencer (MS) welcomed Members and stakeholders to the meeting and briefly introduced the topic for discussion, noting that it was extremely appropriate to be discussing the precautionary principle (PP) given the current debate taking place in Europe over glyphosate, neonicotinoids and GMOs and the potential impact on EU agricultural progress and competitiveness. But MS noted that concerns over the PP, first introduced into EU law as part of the Maastricht Treaty, were not confined to agriculture, and the meeting therefore provided a timely opportunity to understand how application – or misapplication – of the principle was impacting research and innovation across a range of industrial sectors.

2. Guest speakers

[Please note that speakers' slide presentations are available to download via the meetings section of the All-Party Group web-site at www.appg-agscience.org.uk]

Mark Titterington, Head of Corporate Affairs EAME, Syngenta AG

Mark Titterington (MT) noted that the PP had evolved significantly since it first emerged towards the end of the 1980s as a policy instrument focused on environmental protection, and its application and interpretation today represented a critical issue of concern for the process of innovation regardless of the sector.

Over the past 30 years the PP had been included in a number international treaties and declarations beginning with the Montreal Treaty in 1987, the Rio Declaration on Environment and Development of 1992, and the EU Maastricht and Lisbon Treaties of 1992 and 2007 respectively.

Within Europe, the PP had originally been conceived to ensure a high level of environmental protection across the diverse regions of the EU, based on the principle of preventative action and that environmental damage should be rectified at source and the polluter forced to pay – set out in guidance issued as a communication by the European Commission in 2000.

Since then, however, MT noted that the PP had come to influence and inform much of EU policy, including in areas not related to the environment such as human and animal health, and through its application in case law had become general principle of EU law.

MT stressed that Syngenta as a company was not opposed to the precautionary principle – indeed it would be difficult to argue that the original definition and objectives of the principle or its interpretation in terms of the guidance set out by the Commission in 2000 were unreasonable.

However, it was clear that EU application of the PP was inconsistent and did not always follow Commission guidance, particularly in relation to agriculture on issues such as GM crops and neonicotinoid pesticides. Indeed its application appeared to become more inconsistent according to the degree of political controversy or sensitivity involved.

Rather than focusing exclusively on these agricultural examples, however, MT considered that it was instructive also to consider the use of the PP in other research-based sectors, and to gain an understanding of how the public views the principle, and to seek to catalyse a new debate around the value and objectives of the PP and its future application.

MT explained that this was why Syngenta had commissioned independent research from Cranfield University to examine how the PP is applied across a range of different industrial sectors, and the extent to which the Commission's guidance is followed, and from Edelman Intelligence to investigate how the general public understands the precautionary principle and how perception differs depending on the level of risk and benefit involved.

MT added that this was not a Brexit issue, since the application of the PP was as relevant to EU members as to non-EU countries who trade and interact with the EU.

Dr David Parsons, Cranfield Institute for Resilient Futures, Cranfield University

David Parsons (DP) explained that the starting point for Cranfield's research into the use of the precautionary principle in EU law and case law was reference to the principle in the Maastricht Treaty, signed in 1992.

DP noted that building the PP so prominently into the principles of environmental law was unique to the EU, although Maastricht left the PP undefined, leaving scope for debate and differences of opinion over how it should be interpreted. Indeed research conducted in 1999 had identified 19 different versions of the precautionary principle in use – DP referenced two examples, from the Rio Declaration on Environment and Development in 1992 and the Wingspread statement, from an international conference held 1998, to highlight the diverging emphasis and interpretations, from weak application in Rio to strong application in Wingspread.

DP explained that the EU Commission Guidance on the Precautionary Principle issued in 2000 was intended to provide clarification in the context of these widely diverging interpretations. This extended its application from potentially dangerous effects on the environment to include animal and plant health, and while the guidance stated that the principle should be applied 'where scientific evidence is insufficient, inconclusive or uncertain', DP suggested that the qualifying

requirement for 'indications through preliminary objective scientific evaluation that there are reasonable grounds for concern' argued against indiscriminate or arbitrary use of the PP.

Similarly, the Commission guidance stipulated that measures taken under the PP should be consistent with other overarching principles of EU law in terms of proportionality, non-discrimination and consistency, and included reference to the need to weigh up other factors than simply the risk or threat – eg the potential costs and benefits of action vs inaction – as well as the ability to assign responsibility for producing the scientific evidence needed for a comprehensive risk assessment. Importantly, the guidance also made it clear that measures implemented under the PP should be subject to review, based on new or updated scientific information.

Cranfield's review of the use of the PP in EU law had identified 40 directives and 32 regulations in which the PP is cited (although mainly appearing only in the recitals), as well as 41 Council or Commission decisions and 109 European Court of Justice rulings. The topics most frequently involved were environmental protection and policy, public health, food, agriculture and animal health.

Focusing on a sub-sample of each of these policies, decisions and court judgments invoking the precautionary principle, DP explained that the Cranfield research sought to establish whether there was consistency between examples, and in turn whether the interpretation and application of the PP was consistent with the Commission guidance.

The findings suggested that Council and Court decisions were reasonably consistent, drawing on precedent from other cases and referring specifically to the Commission's guidance. This resulted in decisions tending towards weaker or more moderate precaution, eg rejecting country-specific bans on fortified foods, alleged carcinogens and GMOs on grounds of lack of sufficient evidence, while in one case additional restrictions on creosote were upheld in the Netherlands based on 'credible evidence' of harm in the local marine environment. A stronger degree of precaution was identified in one case relating to the export ban on British beef in response to BSE because of severe potential harm to human health despite scientific uncertainty about the causal link.

In relation to EU directives and regulations, however, DP indicated that the research had revealed a much greater degree of inconsistency in applying the PP and referencing the Commission guidance. Cases studied ranged from weak precaution, eg requiring firm evidence of harm to support restrictions on certain flavourings in food, to more moderate precaution, eg allowing provisional restriction of hazardous substances in electrical equipment subject to review of new evidence, to a very strong degree of precaution, eg banning GM crops unless proved safe through field trials, and imposing bans on pesticide application machinery where evidence was insufficient for accurate risk assessment.

In conclusion, DP suggested that while the PP remained one of the foundations of EU environmental and public health law, the conditions for using it were poorly defined and with inherent ambiguities. While the Commission guidance of 2000 had sought to resolve some of these inconsistencies, the Cranfield research concluded that although EU legal judgements and regulatory decisions were reasonably consistent in their interpretation of the PP, this was not the case in EU legislation, which rarely allowed for full consideration of costs and benefits, did not always provide for review in light of new scientific evidence, and tended towards a stronger degree of precaution in more controversial or politically sensitive cases.

Maurice Selg, Senior Vice President, Edelman Intelligence

Maurice Selg (MS) explained that Edelman Intelligence had been commissioned by Syngenta to conduct social research among consumers in the UK, Germany and France to test public

awareness of and attitudes towards the Precautionary Principle, as well as exploring views on the clarity of the Principle and the consistency of its application.

Involving a total of 66 consumers in London, Paris and Frankfurt, and conducted in a series of six qualitative triad groups followed by six focus groups, the fieldwork was carried out from December 2014 to January 2015. Using a range of examples including GM food, fracking, climate change, the Ebola crisis and mobile phones, the following simple explanation of the Precautionary Principle was provided - *a term which means that when there is a potential risk, and where scientific evidence might not be complete, we should err on the side of caution i.e. we should avoid doing something* – and participants were tasked with role-playing from the perspective of Government, business and NGOs.

The findings revealed a generally limited awareness of the Precautionary Principle, although on discussion the underlying ethos and motivation behind the Principle - to protect citizens and provide more time for research to be conducted - resonated with all audiences, who also acknowledged the potential economic risks and consequences of such delays.

Participants considered that risk was inevitable, but needed to be well understood to be accepted. The research suggested that across all three markets, context and circumstance were key factors in the perception of any risk. However, in the UK and Germany, respondents looked to the benefit of doing something vs. the risk of doing something, whereas in France, the respondents also considered the risk of not doing something.

Perceptions of risk also depended on individual circumstances, eg if there was nothing to lose, there was more likelihood of taking a gamble (eg being in a life-threatening situation would increase the likelihood of taking a drug with unknown side effects).

MS suggested that consumers sought full transparency of information, whether from government, businesses, NGOs or media. Being well informed had an impact on whether a consumer would take a risk or not. In the UK and France, GPs were mentioned as trustworthy sources of information. People were also information-savvy, looking to the Internet for information, scientific research and to compare different sources. Consumers also wanted to have their voices heard when it came to government policies and business activities – being listened to gave them satisfaction that their opinions were influencing decision-making at a higher level.

In terms of accepting risk, consumers were more likely to take greater risks themselves than let others around them, such as their children or family members, be exposed to such risk, while there were also different levels of vulnerability and risk was perceived to be greater for certain groups (eg children, older people, pregnant women).

Since some degree of risk was inevitable, the focus group research also highlighted the importance of risk management. It was understood that a range of decision makers should be responsible for assessing and managing risk, with voices heard from all institutions in addition to independent experts (free from economic or political motive). In an ideal situation, they would want all parties to be assessing risk and ensuring a certain level of safety for them but they wanted to have the final decision.

Respondents acknowledged the lack of consistency in applying the Precautionary Principle, noting that some cultures, eg Scandinavian countries, were more risk averse while others, such as the US, were viewed as more risk-taking. Developing economies were also viewed as likely to accept a higher degree of risk.

Given these national and cultural variations, it was suggested that decisions should be taken at a local level. UK respondents were generally unaware that the application and interpretation of the precautionary principle was determined at EU level.

3. Questions and discussion

The following key points arose during discussion:

Lord Taverne expressed concern that EU science and innovation had suffered tremendously through the misapplication of the Precautionary Principle, which confused hazard and risk and failed to take account of the overwhelming scientific consensus on issues such as GMOs. He highlighted the importance of looking at the evidence, and suggested that the PP should only be applied where scientific evidence indicates that the risks outweigh the benefits.

Lord Boswell noted that the PP had been applied initially in relation to CJD and BSE when there was genuine scientific uncertainty over the potential impact on the human population, with estimates of mortality varying at one stage by a factor of 1,000. But he also emphasised the importance of having effective review mechanisms in place to re-evaluate the application of the principle over time, and also to take account of the opportunity cost of applying the principle, otherwise it would become self-fulfilling.

A key consideration raised during discussion was the level of public trust in scientists, whether people fully understood the concept of risk, and how NGOs had successfully used differences in scientific opinion to exploit and distort the original intention of the PP. It was noted that scientists came from different backgrounds - eg NGOs, industry, Government, university - and scientific evidence was often used selectively by scientists from all backgrounds to defend or promote a particular perspective. This posed a particular challenge in identifying the single scientific body or point of reference which could be trusted by all parties to provide a sustainable basis for technological development and innovation.

The success of NGOs in using social media to influence public opinion on particular issues was also highlighted, and MT agreed that industry had not competed effectively, responding to issues rather than being on the front foot. He acknowledged that businesses could do more to build consumer trust and credibility through improved transparency.

Mike Wray of Fera Science also emphasised the need to communicate the benefits of technology and innovation more effectively, and to demonstrate that where the PP represented an unwarranted barrier to progress there were often serious economic consequences for society.

As a counter-balance to the PP, Andy Mayer of BASF highlighted efforts by research-based businesses across Europe to promote adoption of the innovation principle as an integral component of the EU policy-making process.

Lord Lindsay emphasised the importance of effective risk communication, which often took place through the filter of media and NGOs with a vested interest in not differentiating between hazard and risk. He noted that this was particularly the case for Government and Government scientists, and highlighted examples of different approaches taken in relation to the regulation of food dyes and control of avian influenza to underline the importance of transparent and effective public communication.

Concluding the meeting, Mark Spencer MP thanked speakers and attendees for their contribution to a stimulating and informative session.