Brexit must preserve advisory networks

Policymakers in charge of the United Kingdom's withdrawal from the European Union have a duty to maintain benefits of collaboration, says **James Wilsdon**.

Faced with the compound uncertainties of Brexit, the attention of the UK science community has understandably focused on two big-ticket items: mobility and money. But there's a third 'm' that will demand close attention as the negotiations on the exit process — officially triggered this week by invoking Article 50 of the Lisbon Treaty — get under way: the machinery of scientific, technical and regulatory advice. Fuelled for decades by pan-European cooperation, the smooth running of this machinery at a UK level may stutter or fail altogether in crucial areas such as clinical trials, air quality, food standards, nuclear safety and the regulation of new technologies.

The United Kingdom's new Department for Exiting the European Union has earmarked 57 policy areas that will be significantly affected by Brexit. In some of these, the United Kingdom depends on EU-wide networks of expertise and regulatory oversight; in others, the relationship is one of mutual interdependence. This is all about to change. Now that the Article 50 gun has fired, the next step will be a Great Repeal Bill, which will transfer applicable EU laws and regulations. Decoupling structures for scientific and technical advice can, at first glance, seem deceptively simple. In many areas, UK institutions map onto EU counterparts: the UK Food Standards Agency (FSA) coexists with the European Food Safety Authority (EFSA), the European Medicines Agency (EMA) with the UK Medicines and Healthcare products Regulatory Agency. Why not shift responsibilities from Brussels to London and let us Brits get on with the job?

The difficulty is that UK–EU networks of expertise, guidance and oversight are complementary, and have developed in tandem over many years. Generations of British scientists and experts have shaped EU frameworks, and vice versa. Around every issue that is codified in law or regulation there exists a softer sphere of influence, information exchange and standard-setting.

So in animal health, EFSA has a major role in coordinating data and evidence about emerging livestock diseases on behalf of all EU states. The United Kingdom benefits from being part of a network of EU reference laboratories, which coordinate surveillance, risk assessment and epidemiology on a range of transboundary diseases, such as foot-and-mouth disease and avian influenza. And the FSA has drawn heavily on EFSA's meta-analyses and sophisticated protocols around risk and uncertainty.

In the life sciences, the United Kingdom's 3% share of the global pharmaceutical market is dwarfed by the EU's 25%. This brings significant benefits from regulatory harmonization through the EMA (which — for now — has its 890 staff headquartered in London). The Association of the British Pharmaceutical Industry warns that, if EMA licensing were no longer to apply in the United Kingdom, British patients seeking access to innovative treatments could face delays of up to a year.

In environmental protection, an inquiry by the UK Environmental Audit Committee published in January estimates that up to one-third of EU legislation will be difficult to transpose into UK law. And those protections — for wildlife, habitats and biodiversity — that can be transferred through the Great Repeal Bill will then be detached from underpinning sources of expert advice, no longer updated, with no UK body to enforce them.

Over time, the United Kingdom can build up new advisory and regulatory capacity. But this won't be quick or easy. And there are a handful of areas in which the reliance on EU-wide structures is especially acute.

The nuclear research community was particularly alarmed by January's unexpected announcement that Brexit would also require UK withdrawal from the European Atomic Energy Community (Euratom). Among Euratom's responsibilities are nuclear safety standards and non-proliferation. Through its supply agency, it also oversees the market for medical radioisotopes. Many scientists are now calling for the Euratom exit to be decoupled from the Brexit timetable, because its functions simply can't be replaced by 2019, as mandated by Article 50.

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A further issue is ensuring that UK policymakers have access to the best available evidence and advice to support Article 50 negotiations. Here there have been calls from the House of Commons Science and Technology Committee for the new Brexit departments to appoint chief scientific advisers. Ministers have said only that they are considering this.

It is particularly important for the new Department for International Trade to draw scientific advice into negotiations, to underpin consumer protection and environmental standards — and to avoid any hint of a UK race to the regulatory bottom in pursuit of new markets, as advocated by the more gung-ho supporters of Brexit.

These changes can, of course, cut both ways. Regulatory gaps may become an opportunity to cut red tape. Forced withdrawal from EU expert networks might create domestic opportunities for some. In optimistic moments, some scientific leaders suggest the United Kingdom could become a test bed for more flexible approaches to new technologies and treatments. But for now, these questions sit a long way down the list of issues that must be resolved in 24 months. And attention to them is patchy, under-resourced and paralysed by high politics. For the sake of UK — and European — science policy, this must change fast. ■

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