There is never a dull day in science policy. But in autumn 2015, this exceeded all our expectations with the Spending Review, the Nurse Review and the Higher Education Green Paper being released within a few weeks of each other and providing more questions than answers. As is often the case the reports are focused on high level changes with finite detail on how these will work still to be agreed.

The science and engineering community feared big cuts to the Department of Business, Innovation and Skills (BIS). However, when it received a 17% cut instead of the previously discussed 25-40% there was a sense of relief in the air. But just how good is this news?

The community was also happy to hear the Government’s appreciation of science and commitment to invest £6.9 billion in capital and protect today’s £4.7 billion resource funding in real terms (‘real terms’ means the funding will be adjusted according to inflation, while ‘flat cash’ would provide the same amount without any inflation-proofing). This isn’t the big increase in investment in science that the community had been asking for and it doesn’t bring us much higher up in comparison to other G8 countries, but it hopefully marks the start of a period of sustained support for science and innovation.

In addition to BIS, the Department of Health (DoH) and the Ministry of Defence (MoD) are the other two major investors in UK research and development. The Government has committed to dedicating 1.2% of its defence budget to science and technology over this Parliament. Health research is also looking at several big new projects including: £250 million for the 100,000 genomes project, a £150 million Dementia Institute, £400 million investment in the Public Health England to address global threats such as Ebola and £1 billion towards the Ross Fund to tackle malaria (partnered with the Bill and Melinda Gates Foundation).

While these big investments to fight common healthcare problems such as dementia are very welcome, the detail explaining which budgets these investments will come from is not yet clear. School science is also facing tough times, with increasing concerns about a shortage of science teachers. Last year, 50,000 teachers left the profession, while an additional 500,000 pupils are due to start school over the next five years. Figures released by UCAS in August 2015 revealed major shortfalls in trainee teacher numbers across many subjects for the current academic year, including biology. Therefore, the announcement to provide an investment of over £1.3 billion up to 2020 to attract new teachers into the profession, particularly into Science, Technology, Engineering and Mathematics (STEM) subjects is greatly welcomed.

The point that raised the most eyebrows was certainly the Nurse Review with Chancellor George Osborne commenting: “I want to thank [Paul Nurse] for the excellent report he has published this week – and we will implement its recommendations.” These will certainly include the introduction of a new body, Research UK, which will work across the seven councils, with a single Chief Executive at the top. While increased coordination between the councils is welcome, how the funding will be allocated is not yet clear. The Spending Review also states that the Innovate UK budget will be maintained in cash terms, with increased funding for catapult centres and some existing grants will be replaced with loans. This has led to concerns across several sectors of UK industry, particularly pharmaceuticals, with fears that the switch to loans could reduce support for research and development in the UK, particularly for SMEs, with potentially damaging consequences for innovation across life sciences.

Other issues to address will include how the increase in funding for Catapult Centres will impact on the rest of Innovate UK’s funding and how the new research body will keep innovation funding separate from other research funding. And then there is the proposed Ministerial Committee that would work with Research UK. This raised a lot of concerns among the scientists as it potentially contradicts the Haldane Principle that says that it should be researchers who decide the research funding not politicians. Again, if it is about the science community engaging more with the Government, then under right leadership this might be a good idea. It will all depend on what influence and power over the research funds will be given to the Committee.

To say that this is a season of change might be an understatement. The devil may well be in the detail so it will be crucial for the science and engineering community to stick together and make sure that the proposed changes support research innovation, encourage talent and help the UK to remain a world leader in science.