

Introduction and key messages

1. University Alliance believes that the fundamental purpose of a university is to help people to become intelligent and active citizens who can make a positive contribution to the world. Equipping students with industry, professional and entrepreneurial skills to gain the graduate jobs that already exist, to create their own businesses and to adapt to a changing labour market is an important part of this. Excellent teaching, geared towards industry and the professions, is therefore at the heart of what we do. We therefore welcome the Government's focus on teaching excellence. We also see value in creating a national benchmark for quality to protect the reputation and brand of a major export industry. Such a benchmark should ensure that new entrants will further strengthen the standing of UK higher education.

Teaching Excellence Framework

2. The proposals in the Green Paper, set as they are within a wider programme of reform and during a period of austerity, are ambitious. But we support the aims and, in our response, have thought seriously about how best they could be achieved. We therefore make the following recommendations.

Timing

- The Government should implement the Teaching Excellence Framework (TEF) in phases and allow time – and political room - to evaluate how it operates in practice and to make adaptations as required.
- In particular, differentiation of fees tied to achieving different levels of TEF is problematic. It should only be introduced when the assessment system has been tested in practice and shown to be fair and to drive a culture of continuous improvement within institutions.
- Similarly, any decision to expand the system to make judgements at disciplinary or departmental level should only be made once more is known about how much resource is required to deliver the TEF.

Metrics and awards

- The metrics should be contextualised and benchmarked and greater weight should be given to the “additional evidence” provided by universities to demonstrate “teaching excellence” in line with their particular missions than to the metrics.
- TEF awards at level 1 should reflect baseline quality as determined by the established system of quality assurance. Award levels above that should reflect breath of excellence across a range of different factors.

Information

- BIS should commission research into what information is most useful to students when making decisions about where to study. Some work on this has been done by the UK Funding Councils and by the HE Public Information Steering Group, but more is required. Too much information can be confusing for applicants, so the emphasis must be on collecting and presenting information in the most useful way.

Widening Participation

3. We strongly welcome the Government’s commitment to increasing access for students from under-represented groups and to ensuring good outcomes for these students. The Prime Minister’s target to double the proportion of those from disadvantaged backgrounds progressing into higher education by 2020 sends a clear and helpful signal of the importance of this. As universities that typically have around 40% of our intake from these groups, we are committed to ensuring they get an excellent student experience and are well-prepared for a graduate career. We are largely successful in doing this and are the only group of universities that are above benchmark for both access and retention/progression. Nevertheless, we recognise that there are significant incentives in the system that drive universities towards pursuing students from well-represented groups. We are not convinced that the proposals within the Green Paper as they stand will be strong enough to counter-act these and are concerned that they may drive greater concentration of students from under-represented groups in one part of the sector. We therefore recommend that:
 - Government should retain student opportunity funding at a meaningful level and should target it at those institutions that have a proven track record in delivering for this group of students.
 - The Access Agreement mechanism should be strengthened and, through new guidance, the Director of Fair Access should be encouraged to be tougher on institutions that don’t meet their benchmarks.
 - The Office for Students should be required to monitor the way in which the system as a whole (Access Agreements, widening participation performance indicators and the TEF) is driving institutional behaviour.

Regulatory Landscape

4. The current higher education and research landscape reflects a time when the majority of funding came to universities as grant funding. As this is no longer the case, it is sensible to review and reorganise the functions of the regulatory and funding bodies. In doing this, we think the following principles should be followed:
- There should continue to be a body (which could be part of the Office for Students) with responsibility for overseeing universities as institutions. It should monitor their financial health and be in a position to smooth any exits or potential exits from the system. As there is likely to be less T-grant to distribute among more institutions in the future, this body could distribute this. This would create helpful separation from BIS and would make it clear that decisions had not been influenced by any inappropriate political considerations.
 - The system should recognise the positive interplay that can exist between research and teaching within the same institution. This can be done by ensuring that significant credit is given to evidence of research-enhanced teaching within the additional evidence provided by universities as part of the TEF. There should also be explicit duties for the bodies which allocate QR and T-grant to collaborate on research and scholarship-led teaching and support for research students.
 - The principles of funding excellence wherever it is found on the basis of peer review through a dual support system should be hard-wired into the system. If QR funding is moved, there should be statutory or structural protection for it as a separate fund from the funding given to and administered by the Research Councils.
 - Support for knowledge exchange and innovation activities was not directly addressed in the Green Paper. Nevertheless, this is important for building UK innovation capacity – particularly in SMEs. In particular, support for mobility between academia and industry which helps develop a workforce with the innovation skills to drive future growth should be retained.

Question 1:

a) What are your views on the potential equality impacts of the proposals and other plans in this consultation?

1. We are pleased that the Green Paper is concerned to ensure that as wide a range of people as possible can benefit from higher education. However, its proposals must be considered in the context of parallel funding changes such as converting student maintenance grants to loans, reducing Student Opportunity Funding, cuts to Disabled Students Allowance, changes to the funding arrangements for Nursing and Allied Health Professions, and rising fee levels. These may impact negatively on the ability of students with protected characteristics to participate in higher education on an equal footing. This should be carefully monitored to ensure any adverse effects are minimised.
2. At our universities, we want to ensure that the support we provide to disabled students is part of a holistic support package offered to all, which links with other parts of the institution such as student success frameworks and mental health services. The obligation to contract out Non-Medical Help services, as currently proposed, will add an additional layer of complexity for both students and institutions. It also raises a question about where the equalities duty lies – with the university, with the third party or at the discretion of the DSA funding stream? We urge the Government to use the non-medical helper charter, which offers auditable criteria to assess provision, to inform any changes.¹

b) Are there any equality impacts that we have not considered? If so, please provide any further relevant evidence.

3. We recognise that, in recent years the Government has made concerted efforts, and with considerable success, to improve the participation of young, full-time undergraduates from disadvantaged and low participation groups. We now need an equally strong focus on mature and part-time students, both of which are more likely to have protected characteristics (and to come from disadvantaged backgrounds). It will also always be the case that part-time and/or mature students' choices may be limited since they have existing connections and commitments close to where they live. This will be highly relevant for how these students make decisions and how they should be supported to realise their opportunities. It is essential that the current decline in part-time modes of provision is reversed if we are to plug skills gaps and drive productivity.
4. We know that finance is a barrier and are pleased to see the ELQ list extended in the recent Comprehensive Spending Review as well as the extension of postgraduate loans to those over 30. The Government should also consider giving the proposed Office for Students a clear role in monitoring equality both within the sector as a whole and within individual institutions and providers.

¹ <http://www.nmhproviders.co.uk/#!nmh-charter/c1481>

Question 2: How can information from the TEF be used better to inform student and employer decision making? Please quantify these benefits as far as you can.

5. The higher education system is based on student (not employer) choice. In a liberal democracy, it is unlikely that we would want to change that. Consequently, employer choice must be achieved through convincing students that it is better for them to take courses that are likely to prepare them well for a graduate career. Employers might incentivise students to take particular courses by paying all or part of their tuition fees or creating degree apprenticeships. The TEF should reward universities that work with employers in programme design and delivery – for example through engagement in mentoring, placements, real-world projects, curriculum design and research collaborations with teaching links. However, we still have relatively poor understanding of what drives student decision-making. The TEF will collect a significant amount of additional information. The Government should commission research to better understand how this could best be used to help prospective students make good decisions. The Teaching Excellence Framework may support this by, over time, developing a common evidence base using metrics that can then be examined systematically.
6. The Government should bear in mind that it is likely that league tables based on TEF outcomes will be produced by third parties. This could provide an opportunity to give employers as well as students better information about the distribution of teaching excellence across the sector. It is therefore very important that there is clarity about what TEF is actually measuring and what each level of TEF indicates. This clarity should be developed through a technical consultation with the sector, students and employers. As the TEF develops, possibly moving to subject level, it has the potential to become an even more powerful information tool. However, this will increase the cost and complexity of the exercise. Government will have to find the appropriate trade-off between complexity and usefulness. This is likely to be done best by making incremental changes and monitoring each additional burden carefully.
7. We would also welcome greater clarity about how institutions should demonstrate compliance with CMA guidance.

Question 3: Do you agree that the ambition for TEF should be that it is open to all HE providers, all disciplines, all modes of delivery and all levels? Please give reasons for your answers.

8. TEF should be developed with the aspiration that, in time, it should be open to all HE providers, all disciplines, all modes of delivery and all levels. This is likely to encourage the whole sector to aim for teaching excellence and protect the international reputation of UK higher education. It is also more likely to lead to innovation in teaching and methods of delivery than giving preferential treatment to any one particular model. It is, however, important that the TEF is

robust and credible and it is likely to be better to implement it in stages, testing how the metrics and processes drive behaviour in practice, before rolling it out in its widest form.

9. This will mean phasing the TEF in over time – which could be in respect of which providers are in the scheme, which modes and levels of provision are covered, and the extent to which it operates at the institutional or disciplinary level, depending on technical possibility and confidence in data and process. For example, testing teaching excellence for postgraduates in new providers may be a very different challenge from testing the same for full-time undergraduates in established universities. In general, proceeding carefully and testing that the framework is useful, fair and robust at each stage is likely to be the best approach.

Question 4: Where relevant, should an approved Access Agreement be a pre-requisite for a TEF award? What other mechanism might be used for different types of providers?

10. Access Agreements have played an important role in encouraging providers to reach out to under-represented groups and to put in place support to help them succeed. They should remain a pre-requisite to charging above £6,000 in fees – and consideration should be given to strengthening the power of the Director of Fair Access to encourage universities to be more ambitious.
11. If the TEF is intended to recognise and reward widening participation performance, (which we think it should) and student profile is to be taken into account when making TEF judgements (which we strongly recommend), then it makes sense for Access Agreements to be a pre-requisite for TEF entry.

Question 5: Do you agree with the proposals on:

a) what would constitute a 'successful' QA review?

12. If an institution is 'meeting UK expectations' in relation to our broadly agreed quality assurance regime, it should be considered to have achieved a "successful" QA review. Both Higher Education Reviews (HER) and Institutional Reviews for England and Northern Ireland (IRENI) should count as successful reviews for TEF level one. In the early roll-out phase, the most recent successful review of some institutions will predate the HER process and be issued under the older Institutional Audit process. This should count as a "successful" QA review.

b) the incentives that should be open to alternative providers for the first year of the TEF?

13. The incentives should be open to alternative providers with specific designation or their own DAPs, and further education colleges with significant provision at level 6.
14. However, where alternative providers have franchise arrangements, it would be helpful to understand whether the TEF outcome for a franchise partner will have any repercussions for

the awarding university and to consider whether these are reasonable and whether they are likely to discourage universities from entering into, or continuing with, franchise arrangements.

c) the proposal to move to differentiated levels of TEF from year two? Please give reasons for your answer?

See answer to Q8.

Question 6: Do you agree with the proposed approach, including timing, assessment panels and process? Please give reasons for your answer.

15. The proposed timetable is ambitious. The Government should make contingency plans for the possibility that appropriate metrics and differentiation will not be established for higher TEF levels in time.
16. Expert panels are an important part of the process. Given the diversity of the sector and the limited value of the best available proxies, it is essential that there should be an element of judgement by people qualified to assess whether a university is providing excellent teaching. These panels must be independent from Government and there should be a process for moderating judgements and for appeals. In the interests of transparency, panel judgements in each of the TEF theme areas should be published. There should also be a transparent process for bringing new metrics into the TEF and clarity about which body has the power to make decisions about which metrics will be used.
17. Our preference would be for a TEF award to be made on a rolling basis and to last 3 years unless an earlier review is triggered by an institution seeking a higher award or because concerns are raised formally about its teaching quality. QAA's Concerns Scheme sets out a helpful process for stakeholders to raise concerns. This will provide a reasonable balance between cost for institutions, dynamism and the desire to provide students with up to date information on which to base their decisions.

Question 7: How can we minimise any administrative burdens on institutions? Please provide any evidence relating to the potential administrative costs and benefits to Institutions of the proposals set out in this document.

18. There is, at the heart of these proposals, a trade-off between the fairness of the process in a highly diverse sector and the cost to institutions. Given the consequences for institutions in terms of the ability to raise fees and reputation, we would err on the side of ensuring a fair process – but the costs to institutions will need to be carefully monitored.
19. There are some simple actions that will help. For example linking QA and TEF metrics and processes so there is no duplication. In due course the Quality Code could be revised to align more closely to the proposed theme areas.

20. Similarly, many institutions already operate internal processes for monitoring and driving up teaching excellence. For example, many universities already run an internal “TEF” to help identify areas of excellence and areas that need some attention. It would be helpful if the TEF could be set up in a way that would support universities using it for their internal processes and/or developing existing internal processes to meet the TEF’s requirements, rather than starting from scratch. Ministers and officials developing the TEF are very welcome to visit universities within the Alliance group to understand how they do this.

Question 8: Do you agree with the proposed approach to differentiation and award as TEF develops over time? Please give reasons for your answer.

21. Given that one of the purposes of the TEF is to enable prospective students to differentiate between institutions, it is important that there should be multiple award levels, and we support this. However, there will need to be clarity about what each of the levels indicates.

22. It is important for sending accurate signals about the quality of the UK higher education system overseas that any institution with a successful QA review, should receive Level 1. The messaging around the TEF should make it clear that higher levels represent real excellence rather than that failure to achieve them suggests poor quality.

23. One possible approach might be to link TEF award levels to the number of themes in which an institution demonstrates excellence. So, once an institution had achieved its baseline Level 1 on the basis of its QA review, it would achieve a Level 2 if it significantly exceeds the QA standard on two themes, Level 3 if it does so on three themes and Level 4 if it does so across all four themes. This structure would:

- Be clear, simple and transparent
- Allow for institutions to play to diverse strengths
- Provide greater relative stretch between award level 1 and 2 than between level 2 and level 3, or level 3 and level 4; this may help to ensure that any award above level 1 is recognised as an example of distinction
- Allocate the highest levels of award for breadth of excellence, rather than for acutely strong performance in specific metrics that may be ‘gamed’
- Be potentially more amenable to future application at the disciplinary/departmental level within institutions than other approaches

24. By contrast, we would have concerns about creating differentiation on the basis of relative performance of institutions on metric scales, even with benchmarking for student profile, as this would be likely to lead to wasteful and frustrating ongoing contention about those metrics, perverse conclusions that do not muster confidence, and widespread gaming effects.

Question 9: Do you agree with the proposed approach to incentives for the different types of provider? Please give reasons for your answer.

25. It is essential that a mechanism is found to allow universities to raise fees to reflect the increase in real costs in the HE sector which are still rising at a much higher rate than general inflation in the economy. We are pleased that the Government has found a way to do this. There are, however, risks associated with linking the rise in fees to the TEF. We will work with Government to ensure that system works as well as possible and risks are mitigated.
26. The greatest risk is that an institution gets caught in a spiral of decline. For example, an institution that does less well on the TEF would not be able to raise its fees. Consequently, it would have less money to invest in facilities, staff development etc. As many students don't have a choice about where to study – they can only realistically go to a university near their home - this is a real problem where there isn't a wide choice of local universities.
27. We accept that linking TEF awards to fees would be a significant incentive for universities– particularly over time and if inflation rises back to target. We are not fully convinced that the benefits outweigh the disadvantages and there may be more effective incentives. If fee increases are to be linked to TEF, this should be done on the basis of achieving Level 1 in the first instance. The creation of greater variation in fees dependent on achieving different levels of TEF should only be introduced if the Government can demonstrate that enabling significant differentiation between universities on the basis of fee level would help students identify the best university for them.

Question 10: Do you agree with the focus on teaching quality, learning environment, student outcomes and learning gain? Please give reasons for your answer.

28. Yes, the proposed themes seem right. Given the complexity of assessing teaching excellence within such a diverse sector, it makes sense to give universities the opportunity to set out their different approaches. The themes provide a reasonable opportunity to talk about inputs, outputs and outcomes – all of which will help build a rounded picture.
29. For example, Learning Gain is notoriously difficult to measure. The HEFCE pilots should help but they, of course, have only just begun. This may mean that institutions may have to rely more heavily on input/output measures until better metrics have been developed. It may be sensible to phase assessment of learning gain in over a longer period, following more detailed research and testing of different concepts.
30. In the context of potential restructuring of research funding, we think it would be very helpful if the Government sent a clear signal that it recognises and values research-enriched teaching. One way of doing this is by requesting institutions to provide information on how they are doing this as part of the 'teaching quality' theme. There is no evidence that using proxies like performance in the REF or amount of research funding achieved would provide sufficient indication that research is actually improving teaching.

Question 11: Do you agree with the proposed approach to the evidence used to make TEF assessments - common metrics derived from the national databases supported by evidence from the provider? Please give reasons for your answer

31. The proposed approach provides a sensible balance between identifying common and quantifiable data to enable comparison and recognition that these are imperfect proxies and will require contextualisation. Over time an impact statement system could be developed to go beyond simple context statements. These could draw on testimony from the employers that universities work with and include reflections from graduates several years after graduation so that they can reflect on the link between what they learned and the development of their career. In the meantime, we offer the following comments:

- Assessment should recognise both the student demographic and the institutional “narrative” i.e. how things have changed or are changing to strengthen teaching excellence. Consequently, data should be examined on a trends / time-series basis, not in relation to single academic years. This will allow for patterns to be identified and for aberrations to be excluded. In the assessment process these procedures could still be weighted to give more importance to more recent data.
- The DHLE 6-month recording period is not long enough to measure successful employment outcomes, particularly for graduates whose natural career path is freelance and who may have to take non-graduate jobs until they can build up their portfolios. We recognise that this must be balanced with the need for data to be timely and would suggest exploring the feasibility of collecting employment data one year after graduation.
- It would also be sensible to look again at what constitutes a ‘graduate job’.
- Accreditation by Professional and Statutory Regulatory Bodies (PSRBs) should be recognised as good evidence across all four themes. PSRBs typically operate accreditation requirements that exact very high standards in teaching and learning environments for relevant courses, so as to ensure graduating students meet the required standards for professional practice, which in most cases will be registration with the relevant external regulatory body. This would clearly be important evidence for TEF assessment panels to consider.

- Issues arising from reporting particular metrics such as staff-student ratio and staff time spent teaching must be put in context using self-evaluation. Staff coming directly from industry into higher education may not have teaching qualifications – but may have excellent experience to share. For example, many practice-based programmes are best delivered at least in part by practitioners who teach for a small proportion of their time. This offers students valuable real-world insight directly linked to their academic study. If the TEF drove universities to only employ staff with teaching qualifications, students on some courses might miss out. Such effects could also change the dynamic and value of programmes delivered in partnership with employers in a negative way – it will be crucial to foresee and avoid these problems.

Question 12:

a) Do you agree with the proposals to further improve access and success for students from disadvantaged backgrounds and black and minority ethnic (BME) backgrounds? Please give reasons for your answer.

32. The Green Paper recognises the important role universities play in supporting social mobility and it is right that they should be encouraged to support access and success for disadvantaged groups, thereby giving the widest possible range of people a stake in the UK's economic success.
33. The proposals to improve access and retention are extremely ambitious and we welcome the focus on progression and the student lifecycle, supported by the extension in the CSR of tuition fee loans for part-time, postgraduate and 19-23 year olds at levels 3 and 4, and 19+ year olds at levels 5 and 6.
34. Spending decisions on SOF mean institutions will be under pressure to meet the cost of widening participation in greater proportion from tuition fee income. This means they have less money to spend on other activities that enhance the student experience. In a competitive market a university that invests more in widening participation and less in student experience may fare worse in the metrics used to assess quality, which may in turn have a detrimental impact on their league table ranking – a powerful driver of university action. There is a risk that incentives to focus on improving access and student success may conflict with other incentives in the system such as league tables and research standing. In the future, this will need to be taken into account in the course of the process of developing Access Agreements.
35. At Alliance universities, on average, 40% of our students come from disadvantaged groups. We find that an embedded, whole institution approach to retention and success is essential in order to capture all students who might benefit. Through this approach our members achieve considerable success: University Alliance is the only group of UK institutions that performs above benchmarks for both intake measures of social mobility (percentage of state school,

lower socio-economic groups and POLAR3 students) and output measures (completion rates).² These factors must be taken into account in the broad sweep of policy and spending decisions, including in taking forward the Green Paper's proposals and in detailed allocation of remaining SOF resources.

36. There should be more explicit focus on students living at home, commuting a long way to university or with caring responsibilities, who may find it difficult to engage with the full university experience. The full experience means participating in things like extra-curricular activities that provide vital social and cultural capital but may be held outside of core hours, when students need to be at home or fulfilling additional commitments. To address this the Government could incentivise the sector to allow credit transfer to other providers that may be closer to a student's home or more convenient to get to as their circumstances change. This would require some adjustment to the current accountability measures for retention, to allow recognition for where universities help a student to move because it supports that student to achieve his or her greatest potential. There are also acute problems for students who are rooted in their locality in the event of provider failure or withdrawal from that area, and these effects should be monitored by regulators.
37. Where metrics are used, data must be considered in the context of the type of university and their mission. In identifying where interventions are most successful we should look at graduate jobs but, in time, the Government might also consider looking for measures of labour market resilience, which could provide a longer-term picture of the impact university activities have on their students.

b) Do you agree that the Office for Students should have the power to set targets where providers are failing to make progress? Please give reasons for your answer.

38. We strongly support the need for targets to widen participation. However, institutions should set their own targets – with robust challenge from the Director of Fair Access. This promotes institutional buy-in to the process, encourages institutions to be more ambitious and ensures that the targets are relevant to the specific challenges of the institution.

c) What other groups or measures should the Government consider?

39. More emphasis could be placed on part-time and mature students. While we have seen positive steps in the CSR there is more that could be done. Please see Question 1.a) and b) for more detail.

² Participation of under-represented groups in HE: UK domiciled young full time first degree students and Non-continuation following year of entry: UK domiciled young full time first degree entrants. HESA performance indicators 2013/14

Question 13:

a) What potential benefits for decision and policy making in relation to improving access might arise from additional data being available?

40. Collecting more data offers a good opportunity to identify interventions that have helped (or hindered) access and progression. However, any measures must be benchmarked against an institution's particular demographic in order that the data should not disincentivise those institutions that already undertake the majority of widening participation activity. Regional employment and rapidly changing career opportunities should also be taken into consideration when looking at the quality of graduate outcomes. For example, Teesside University achieves an 88.1% employment and further study rate six months after graduation in a city where the employment rate for all people of working age is 62.6% (a local premium of 25.5%).³
41. More data should also enable us to broaden the scope of our investigations into 'what works'. For example, there has been a big focus on bright poor students gaining access to selective universities but evidence suggests that for those achieving 3 As at A-level 95% will go on to higher education. This is compared to those with 3 Cs where 80% will go. The progression rate is 41% for those with BTECs.⁴ If efforts are focused solely on those with the strongest academic attainment, this is not likely to lead to the most effective targeting of limited resources.

b) What additional administrative burdens might this place on organisations? If additional costs are expected to be associated with this, please quantify them.

42. There will inevitably be additional costs associated with additional requirements (and this is true of all the measures proposed in the Green Paper, not only those in this section). The costs are hard to quantify as they will be different in every university, depending on what internal processes they already operate, their student profile, and other factors. It will be important to look at costs and benefits in the round – if the processes are useful, well-designed, and bring benefits to institutions as well as to the overall system, then additional costs will be less of a concern.

Question 14. Do you agree with the proposed single route into the higher education sector? Please give reasons for your answer, including information quantifying how the potential cost of entry would change as a result of these proposals.

43. The current system for entry into the HE sector is complicated and involves a large amount of duplication. Streamlining the processes and reducing the burden of resource is welcome to

³ DLHE 2013/14, Percent of full-time first degree leavers who were employed, studying or both, ONS annual population survey 2014-15 - Middlesbrough

⁴ http://www.hefce.ac.uk/media/hefce/content/pubs/2015/201503/HEFE2015_03.pdf

encourage new entrants. Allowing providers to apply only for the levels they want will create efficiency.

44. Care must be taken to ensure the system and processes are robust and detailed enough to guarantee that applicants prove both quality for prospective students and value for money on the public investment in any student loans.
45. A very large number of level 4-8 qualifications on the QCF are missed by both the current and the proposed system. These qualifications are not currently regulated (ACCA qualifications etc). There could be an opportunity to bring these within the regulatory umbrella.

Question 15.

a) Do you agree with the proposed risk-based approach to eligibility for DAPs and university title? Please give reasons for your answer.

46. It is very important that the quality of a UK degree is protected and that sub-standard providers are not given university title or the power to award degrees. Although we accept that there should be a right to strip sub-standard providers of university (or university college) title, or degree awarding powers, in reality doing so may have a detrimental impact on the reputation of the sector as a whole and, crucially, on the value of the degrees that students have received from such places – which must be a concern to a Government as well as to the HE sector. It is therefore better if title and/or DAPs are not given to providers that do not have a strong track record.
47. Having said that, we would welcome a risk-based approach. The current system provides an all or nothing outcome. A risk-based approach would bring some gradation to the process and allow providers to request only the right to make awards at particular levels or in relation to certain subjects. It would also reduce the burden on providers who have a strong track record of providing high-quality provision. Nevertheless, the “regular monitoring” should remain regular – and the frequency of review should initially err on the side of caution.
48. The process should involve regular dialogue between providers and the Office for Students and involve a great deal of rigour. Understanding the governance and financial information should be prioritised. In particular relation to university title, it will be important that any provider awarded university status operates as a university in the diverse UK HE system in every sense, through the full range of learning and teaching, research, knowledge exchange, outreach, volunteering, support for schools and colleges, peer review, external examining, and so on; all these activities – funded and unfunded – play a part in defining what it is to be a university. If an institution is called a university it must be recognisable as one.

b) What are your views on the options identified for validation of courses delivered by providers who do not hold DAPs?

49. Of the three options, we believe that the Government approving, endorsing or contracting existing bodies with DAPs to operate as central validating bodies is the most feasible. These organisations would already have the experience and expertise necessary to ensure the degrees they validate are of a high standard and safeguard students' interests.
50. There may be some issues around the validation contracts the validating body already holds, and ensuring the body is acting to promote competition – but these are manageable problems. It may also be that some students, particularly international students, come to view a 'state validator' as being preferable to other validated degrees.
51. The optimal solution would be for the Government to identify several established HEIs that would be willing to provide this national awarding function. This avoids the emergence of a single 'state awards body', creates contestability in the 'validation market' and ensures providers who do not get on well with one validator or feel they obtain poor value for money can move to another. The Open University has some relevant experience in this area as the statutory CNAA records holder, and the Government should engage with the OU to determine whether they would be willing to act in this capacity. The Government should also look for a small range of other candidates, to avoid monopoly and ensure choice.
52. We would recommend strongly against OFS becoming a validation body. The office, being responsible for promoting student interests, ensuring quality, possibly some funding, possibly institutional assurance / sector health assurance, and also regulating providers, would be likely to run into substantial conflicts of purpose within the organisation. It would also require the office to take on a fairly burdensome role, one which would require significant investment of time, resources and personnel.
53. We would not recommend a solution where non-teaching bodies be granted DAPs. These bodies have no prior experience in validation and as such would be required to build up this expertise. More importantly, experience in teaching is important to make good judgements in assessment and appeals processes. Rigorous and resource intensive processes would be required to regulate and review these bodies, as their makeup would be significantly different to those bodies who currently have DAPs.

Question 16. Do you agree with the proposed immediate actions intended to speed up entry? Please give reasons for your answer.

54. Any action to improve the rate of entry to the HE sector should ensure that the sector's overall world-class reputation and students' best interests are protected. The three proposals suggested do not appear to have any detrimental impact on the quality or thoroughness of the regulation and as such should be welcomed. There is a question as to whether the HER and QAA processes inform one another – or if they're separate enough to run in parallel.

55. Introducing a probationary designation period, where the validating partner carries out in-year monitoring and quality assurance would require a high degree of external regulation and monitoring by both OFS and QAA. This is something some institutions may not wish to carry out due to the resource burden.
56. Any changes to the current process should still include separate HER-AP (QAA) and Course Designation (HEFCE) steps. This twofold regulation helps to ensure the system is thorough and safeguards the sector from reputational damage.
57. Reducing the track record of financial performance from three years to two years would give a severely limited view of sustainability over time. This would represent less than one academic cycle and would introduce unnecessary risk, both for the sector and the prospective students. If anything, the requirements on demonstrating financial robustness should be strengthened – not only in relation to simple balance sheets and income and expenditure, but also in relation to the underpinning structures of ownership and governance of the body, and the use or proposed use of any exotic financial instruments. All of these factors may be pointers towards long-term stability, or instability, and the system should have enough rigour to understand them fully.
58. Multi-year course designation should only be introduced for providers who have a strong track record of success in delivering provision. Multiple years of meeting or exceeding their benchmarks on continuation/retention rates should be a key metric for measuring this. We would also recommend light-touch monitoring of these providers and any agreements revisited if any problems arise or if standards fall. These multi-year designations should be retained for only the most successful institutions.
59. Any student number control increases should be linked to strong performance and record of success. Linking to the TEF seems ambitious at this stage, as the design and implementation schedule for TEF is still very unclear, so this should not be explored at this point.

Question 17. Do you agree with the proposal to introduce a requirement for all providers to have contingency arrangements to support students in the event that their course cannot be completed? Please give reasons for your answer, including evidence on the costs and benefits associated with having a contingency plan in place. Please quantify these costs where possible.

60. CMA guidance on best practice should be followed by institutions, and evidence of non-compliance should be a negative factor in TEF judgments. Providers should be required to have their own contingency plans and agreements to ensure confidence in the sector is protected; these could feature as criteria within the ‘student outcomes’ theme of the TEF (i.e. ‘arrangements for protecting positive student outcomes’).
61. Universities should not be forced to pay into a scheme to protect the most ‘at risk’ providers – successful providers should not be punished by others who may be failing. While desirable in principle, there are considerable risks of adverse outcomes such as greater risk-taking by

providers who may feel they can do so because others have committed, ex-ante, to underwrite their risks.

62. However, stronger processes should be developed to protect the sector's reputation and the students from failing institutions. In addition, the OFS should be empowered to operate a fast-acting case-based intervention scheme to bring in support from relevant institutions where a specific provider fails (in whole or part – and this needs clear definition). There is precedent for such action, and this could be developed into an established scheme.

Question 18:

a) Do you agree to the proposed changes to the higher education architecture?

63. Broadly, we support the proposed changes. It is becoming increasingly necessary for the higher education sector to have a reformed regulatory regime that can better cope with increased dynamism within the sector, increased risks for students, and increased pressures on institutions and providers. To that end, the OFS should be given explicit duties to monitor the overall health and sustainability of the sector.

b) To what extent should the OFS have the power to contract out its functions to separate bodies?

64. In general, the OFS should be permitted to contract out any of its functions as it sees fit, though it must remain accountable for the overall performance of those functions if they are so delegated. It is also important to understand that on many issues, universities will only want to deal directly with OFS not a plethora of sub-contractors, which limits the scope for delegation. There could be provision made for the Secretary of State to have powers to direct the OFS to retain (or recover) specific functions or aspects of those functions.

c) What functions should the OFS be able to contract out?

65. Any functions, subject to the possibility of Government direction to retain them.

d) What are your views on the proposed options for allocating Teaching Grant?

66. We favour option 2. This option will enable OFS more freedom of manoeuvre in determining detailed allocations to meet sector needs; the question pre-supposes that all funding will be formula-based, but this is not necessarily the case and indeed a higher proportion of funding within the remaining 'T-grant' will likely need to be allocated for project-based activities or to meet acute contingencies that arise. Option 2 is also more consistent with current practice. While recognising that central government should set high-level priorities, we would be concerned that option 1 may diminish the important separation of institutional funding decisions from central government.

Question 19: Do you agree with the proposal for a single, transparent and light-touch regulatory framework for every higher education provider.

67. Yes, provided the framework is designed for, and capable of coping with, substantial diversity with the system of providers, provision, and students.

Question 20: What steps could be taken to increase the transparency of students' unions and strengthen unions' accountability to their student members.

68. Students' unions are accountable on one hand to their members, who can influence their direction through a range of means (some of which are established in statute), and on the other hand to the governing body of the institution to which they relate, and which substantially funds and supports them.

69. In practice the balance is a fine one and is highly context-sensitive; the best position is to empower governing bodies in institutions to support democratic development in their students' unions, and resolve any issues that arise, on their own terms. This settlement works well in Alliance universities, and we regard it as an issue of institutional autonomy.

70. We would not advocate any change to the law on students' unions or a change in the formal accountability framework around them – instead we would advocate a duty on the OFS to carry out research into and give independent advice to institutions on students' unions and how to locally drive improvement in their systems of governance and accountability to their student members.

Question 21:

a) Do you agree with the proposed powers and duties of the OFS?

71. The proposed powers and duties of the OFS are generally appropriate, however:

- The proposed duty on quality and TEF unhelpfully combines baseline quality assurance with above-baseline excellence awards (TEF). It would be better to state two separate duties on the OFS to 'provide for basic quality assurance' with the duty to 'give awards where appropriate for teaching excellence', because this helps to clarify that these are two distinct (though related) functions, and would make it easier to make them subject to separate guidance from central government, including separate handling of any restrictions on sub-contracting arrangements.
- We would not give the OFS duties and powers to validate programmes, although we would give it a duty to secure validation arrangements within the sector that are open, competitive, and maintain rigorous standards; including a power to direct bodies with DAPs to cease external validation

- We would moderate the power to require providers to meet conditions to protect students in the event of course closures so that it is clear that a. an institution has the right to determine what courses it runs, b. no ex-ante payments should be required into an external assurance scheme.
- In recognition of the importance of a holistic approach to teaching, research, knowledge exchange and sector sustainability, we would give the OFS a duty to collaborate with Research UK and to establish a standing committee on research and scholarship-led teaching.
- We would not give the OFS the power to give directions to institutions; it could have a more limited power to give warnings and to make direct representations to key officers outside the executive of the institution. If there must be a power to give directions, then it must be qualified by very clear provisions as to its application, and safeguards against intrusive usage.

b) Do you agree with the proposed subscription funding model?

72. We support a subscription funding model, however:

- Subscriptions should not be expected to cover the whole cost of the OFS. While some functions are clearly in institutions' interests (not least in areas where there may be existing subscription schemes that could be combined or rolled-up with OFS subscriptions), there is just as clearly a wider public interest in good regulation. Some functions should therefore be funded by Government.
- It is imperative that all institutions and providers pay subscriptions on an equitable basis and there are no exemptions or loopholes. In addition we would add a caveat to the power to charge subscriptions to the effect that the subscription cost faced by any single institution should be reasonable and proportional to its income.
- We would place a duty on the Secretary of State to periodically arrange for audit of OFS on a reasonable costs / value-for-money basis, in addition to its own normal financial audit.

Question 22: Do you agree with the proposed powers for OFS and the Secretary of State to manage risk?

73. Broadly, yes. The powers outlined are reasonable and proportionate in the construction, although we would reserve the power to inspect to OFS and specifically not give such powers to BIS or any part of central government – as, though they would no doubt be used only in extremis, the symbolic power for a government minister, through his or her officials, to make forced entry into higher education institutions, is both unnecessary and would send the wrong message internationally.

Question 23: Do you agree with the proposed further deregulatory measures?

74. Yes. It would be helpful to increase the flexibility for institutions to make changes to their structures of governance and to increase the speed with which amendments can be made. We would support reform in this area, and agree that the OFS should be the primary scrutineer and external authority for amendments to governing documents. Many of our members are Higher Education Corporations; we would support new flexibility for institutions to change their legal form, subject to appropriate security for long-term public investment made in them.

Question 24: In light of the proposed changes to the institutional framework for higher education, and the forthcoming Nurse Review, what are your views on the future design of the institutional research landscape?

75. Sir Paul Nurse's Review of the Research Councils re-affirmed the importance of funding excellence wherever it is found, dual support and the Haldane principle for the UK's research system. We welcome this. It also presented far-ranging suggestions for the future landscape of the research system. We address these here under four broad categories:

- The establishment of Research UK as an overarching body
- The governance of Research UK and its relationship to central government
- The relationship between Innovate UK and Research UK
- The relationship between the distribution of QR and REF function (currently in HEFCE) and Research UK (also relates to Question 25 on dual support).

The establishment and functions of Research UK

76. It is sensible to encourage greater join up between the Research Councils, with other government funded R&D and to integrate some Research Council functions. This will bring further efficiency and a simplified landscape, whilst retaining the expertise of separate research councils for different research communities and agility. However, each individual Research Council should have the freedom to organise its activities to best meet the needs of its disciplinary areas.

77. We welcome the suggestion that a large common Research UK fund could support context-driven, problem-focused and interdisciplinary research (also known as "Mode 2" research). This should be supported by a new peer review college drawn from experts across the sector. This would improve the notoriously difficult assessment of multidisciplinary research, and develop the UK's Mode 2 capabilities.

78. Sir Paul Nurse recognised that high quality research occurs in lots of places and is often more innovative away from conventional, research-intensive environments.⁵ Research UK must

⁵ The Nurse Review, p. 6.

address the issue that Research Council project funding does not yet reach excellence wherever it is found. The review noted that the funding portfolio should be balanced with smaller project-type awards sitting alongside large centres of excellence. This should help support and fund excellence wherever it is found. This oversight body should help councils to improve their reach by using further evidence that is available, including REF results and where businesses choose to invest, to allocate block-grant funding.

79. We support the suggestion of an advanced analytical function within Research UK, to capture the full detail of expertise across the sector to be used alongside REF results. The strategic function of Research UK must support diversity “in researchers, approaches and locations”, as Sir Paul urges, to maintain and systematically increase research capacity in the UK.
80. Research UK must be prepared to have an open and inclusive discussion and, when appropriate, allow flexibility in approaches. It is proposed that Research UK operates common ways of working, but taken in combination with recommendation in the Dowling Review to simplify the landscape, this may lead to an over-simplified and less effective funding system. For example, Dowling recommends that all councils should move to block grant funding for knowledge exchange through Impact Acceleration Accounts.⁶ This type of funding mechanism is inappropriate for the AHRC and the interactions with the research community in the SME creative industry sector, for example, which better suit cluster-based knowledge exchange activities.

The governance of Research UK and its interface with central government

81. The Research UK CEO and Board must represent the diversity that underpins the UK’s strength in research, including personal, disciplinary and institutional backgrounds. It is not sensible to specify a particular disciplinary background for the Chair, Chief Executive, or other senior officers. Appointing senior officers with a range of industrial experience would also be a valuable asset.
82. Governance structures within Research UK should also include representation from industry, to help with strategic decisions that will leverage private investment and create alignment for market opportunities.
83. Creating a Ministerial Committee responsible for oversight of Research UK provides a good opportunity to integrate, consolidate and extend the research efforts of other government departments beyond the Department for Business, Innovation and Skills. As well as respecting the Haldane principle, policy for science must be representative for the breadth of disciplines which inform policy, which includes social sciences and arts disciplines. The membership and terms of reference for any such Committee Board (or a renewed Council for Science and Technology) must be reviewed to ensure a remit that reaches beyond STEM.

The relationship between Innovate UK and Research UK

⁶ The Dowling Review, Recommendation 17.

84. Innovate UK's current remit complements Research Council support for fundamental and applied research. Innovate UK is business-facing, and its funding explicitly supports near-to-market research and innovation activities which stretch far beyond the commercialisation of research. It helps businesses to bridge the so-called 'valley of death' and supports new and innovative companies. Crucially, it helps foster mobility between industry and academia through support for collaborative R&D and the Knowledge Transfer Partnership scheme which increase the capacity of businesses to innovate. Ultimately supporting the innovative skills in our labour force is the way that the UK will increase its productivity. Higher Education Innovation Funding (HEIF) is the vital supply-side complement to increasing innovation capacity in the UK.
85. Innovate UK has a different primary client base to the Research Councils and it is essential that a discrete business-facing organisation and identity is retained and sufficiently funded to support the growth of new and rapidly innovating companies. Businesses choose to invest their money in a range of research institutions with the most useful research, and with broader knowledge exchange expertise that helps them grow their businesses.
86. To retain the benefits of a clear, business-facing innovation agency with a range of support for business and innovation, it may be simpler to keep Innovate UK separate from Research UK, although working closely together on research commercialisation. If integration is pursued, Research UK should be reconceived as "Research and Innovation UK". This integrated organisation could be a powerful force for increasing the innovation capacity of the UK. However, following Sir Paul's description of his model for the research councils as 'one university with seven faculties', Innovate UK must not be relegated to the role of 'tech transfer office for the research councils'. Innovate UK must continue to prioritise its portfolio in relation to business need.

The relationship between QR-REF and Research UK

87. Quality-related (QR) funding for research is an essential part of the UK research system. Whereas project-based responsive-mode funding allows strategic investment in pre-defined areas of competitive advantage, QR allows rapid and responsive investment in niche and risky areas which may prove to be the market opportunities of the future. Currently, QR funding in England accounts for around one third of the science budget, compared to two thirds through research councils and other research bodies. This balance of funding is appropriate and should be safeguarded. Primary legislation may be necessary to enact the recommendations of Sir Paul Nurse and proposals in the Green Paper. We would urge Government to use this opportunity to secure a dual support system in statute.
88. Research councils have responded to the pressure to reduce bureaucracy and cost by funding a smaller number of 'priority' institutions, including the calculation of funding based on previous research council funding levels, resulting in significant levels of concentration. Funding on historic levels of funding works against a dynamic research system, and has been

shown to deliver diminishing returns.⁷ Research power (quality and scale) in Alliance universities according to REF 2014 is 7.4%, which attracts the equivalent level of QR funding. Conversely, research council funding to Alliance universities is 2.0%.

89. Although not within the original scope of his review, Sir Paul concludes that there are arguments for moving English QR research funding and the REF function (currently in HEFCE) into Research UK. As outlined above, we are concerned about the artificial division of the research funding and analysis functions from those relating to teaching and knowledge exchange. The REF/QR functions would not sit well within the OFS as drawn in the green paper, even if it had a broader than purely regulatory role for ensuring sector sustainability (which we recommend). Yet the functions would also not sit well within Research UK, because:
- There would be a risk that governance structures in Research UK may align naturally to the more concentration-centric approach historically associated with research councils, and thus lead to a ‘creeping concentration’ through unexpected policy change around the REF, that may be quite subtle but make a substantial difference in funding terms.
 - Research council funding operates on a UK-wide basis, and it would be essential to ensure strong representation of Scotland, Wales and Northern Ireland in the governance of Research UK; whereas QR funding is devolved, and this would not be an appropriate governance structure for QR in England.
90. We therefore believe the optimal solution taking into account all the factors would be to establish a completely separate body for operating the REF and distributing QR funding; ‘Research Excellence England’ (REE). Given that the budget for QR is more than twice the size of that for the most highly funded research council (circa £1.6bn for QR versus circa £800m for EPSRC), it would be entirely reasonable for this funding to be handled within a separate body. Given that most of the costs associated with operating QR are attributable to the costs of running the REF, these will be identical wherever the functions are located, so placing them in a separate body would only be marginally more expensive – with costs easily recovered by making more extensive use of REF results to inform other block grant funding. REE should also be charged with the allocation of HEIF funds to support knowledge exchange – the third mission of universities.
91. This body, if established, could operate within the Research UK ‘family’, with its line of accounting passing through Research UK. Yet it would retain administrative and distributional control over QR funds – in the same way that it is envisaged independent research councils will retain control of their own budgets. The overall strategic balance of funding for all the bodies in the ‘family’ would be determined by UK ministers, as is effectively currently the case; Research UK would focus on overall strategy and supervision for value and accounting, but have no power to transfer funding between bodies, or to direct the detail of their funding policies. The board of REE would be drawn only from England, solving the devolution issue.

⁷ Jean-Michel Fortin and David J Currie (2013) Big Science vs. Little Science: How Scientific Impact Scales with Funding, PloS one, 8 <http://dx.doi.org/10.1371/journal.pone.0065263>. See also [Faye Taylor \(2015\). Evolve. Connect. Succeed. Funding a healthy research and innovation ecosystem. University Alliance.](#)

92. Structural separation would allow other opportunities. To preserve a close relationship between teaching and research, and alignment of aims across those domains (such as around sector sustainability), the Office for Students and Higher Education (as we propose) and REE could each appoint two of their senior officers to the other's board. The two bodies could also be charged with explicit duties to collaborate on matters such as research and scholarship led teaching and support for research students.

93. This structure would:

- Ensure statutory, structural recognition of the dual support system for the long-term.
- Secure strategic integration of teaching, research, knowledge exchange and sector sustainability in England.
- Be equally or less costly overall.

Question 25:

a) What safeguards would you want to see in place in the event that dual funding was operated within a single organisation?

94. If the Government decides to proceed with a model in which English QR is placed within Research UK itself, we would welcome a further discussion (in addition to the expected technical consultation) on how it may be possible to establish the key features of our outline structure within a single corporate body approach; in general terms this may be possible through use of statutory committees, statutory posts and other similar devices. Independence from Government should be maintained to ensure the rigour of the research excellence evaluation process.

b) Would you favour a degree of hypothecation to ensure that dual funding streams, along with their distinctive characteristics, could not be changed by that organisation?

95. Yes.

Question 26: What are the benefits of the REF to a) your institution and b) to the wider sector? How can we ensure they are preserved?

96. The REF is an important and valuable part of the UK research system. It has driven up standards and helped to define and identify the wide distribution of research excellence in the UK at a granular level. The REF currently acts as a USP for UK research and leverages inward investment, as businesses are attracted to invest in quality research which has been robustly validated. To ensure a dynamic system a REF exercise must continue to operate on a peer-review basis at frequent intervals to discourage complacency.

97. Although 94% of the cost of REF falls directly on the HE community (primarily universities),⁸ Alliance universities believe that the benefits significantly outweigh its costs. In fact, REF-related expenditure is seen as a core contribution to university management systems. As well as the ability of the REF to identify true excellence wherever it is found, universities use the REF to drive performance, develop staff and to make strategic research investments in their institutions. These strategic investments have ensured that Alliance universities are the most dynamic part of the UK's research system, with 21% growth in research power between the 2008 and 2014 assessment exercises (5 percentage points above sector average).
98. The REF is often cited as a costly exercise, yet it is the cheaper element of dual support. The direct cost of REF 2014 to the funding bodies was £14M over six years and £246M to the HE community as a whole, totalling 2.4% of the research funding budget informed by REF.⁹ In comparison, the full cost of peer review for responsive mode project funding has been calculated at 12.6% of the Research Council budget spent in universities.¹⁰ As described below, more use should be made of the REF results to drive further efficiencies, including for Research Council block grant allocations.
99. The impact component of REF 2014 and research council Pathways to Impact have helped shift academic culture towards communicating and considering the social value of research. The wider impact of research must be retained as a vital characteristic of research assessment to justify public expenditure. Support for blue-sky discovery research must also be maintained, as this will provide the foundation for the applied research and impact in 10-30 years' time.
100. To maximise the value of the REF exercise, research councils should make more extensive use of REF results to calculate block grant funding. Non-responsive block grants operated out of the research councils should also use REF results to inform their allocation. Some research councils already use REF GPA average scores as a quality threshold and more extensive use of the REF results to determine non-responsive allocations offers an efficient and competitive demand management mechanism.¹¹

Question 27: How would you suggest the burden of REF exercises is reduced?

101. In the context of fiscal pressures, it is right that we should consider ways to reduce wastefulness and inefficiencies in the system, as long as the underpinning principles of seeking and supporting excellence in the system are maintained. This requires creating a system that rewards dynamism and diversity, and does not incentivise universities to operate a binary

⁸ Technopolis. REF Accountability Review, p. 7.

⁹ [Technopolis \(July 2015\). REF Accountability Review: Costs, benefits and burden. Report to the four UK higher education funding bodies.](#)

¹⁰ [RCUK \(October 2006\). Report of the Research Councils UK Efficiency and Effectiveness of Peer Review Project, p. 38.](#)

¹¹ For example, the ESRC requires a REF score of 3.0 GPA or above for a research unit to qualify for application into its current Doctoral Training Partnership competition.

system for staff contracts, forcing staff into 'teaching only' or 'research only' pigeonholes, which would affect the ability to deliver research-informed teaching to students.

102. The robustness of existing metrics as an effective research assessment tool is a matter of concern.¹² Carefully chosen metrics may help reduce some of the burden of REF – both for outputs and environment – but should not replace peer review. As with the TEF, contextualisation of metrics will be essential which may bring further burden; likewise data collection may also bring additional costs, including investment in research management systems, so an appropriate balance needs to be struck. We look forward to working with Lord Stern and the steering committee on their review into the REF.

Question 28: How could the data infrastructure underpinning research information management be improved?

103. Improvement of the data infrastructure underpinning research information management requires a coordinated, sustained, national approach. This should build on significant progress in collaboration on Open Access and Open Data. As Jisc have detailed, there are three routes for improvement:

- a. enhanced system interoperability, to underpin further development of national information sharing services (Gateway to Research, NCUB's brokerage tool), requiring greater transparency and data sharing from funding councils;
- b. increased policy harmonisation across major funders and sector bodies (in particular between Research Council and REF criteria) to reduce burden and complexity; and
- c. long-term investment delivered through sustainable funding models. Investments into the national infrastructure should recognise the funding challenges that all universities face in the modern research environment,¹³ by not over-concentrating resources, thereby creating a more level playing field for UK institutions and a more dynamic research base.

¹² James Wilsden (July 2015). The Metric Tide. Report of the Independent Review of the Role of Metrics in Research Assessment and Management.

¹³ Sheridan Brown, Rachel Bruce and David Kernohan (March 2015). Directions for Research Data Management in UK Universities, Report commissioned by Jisc.