

# THE MACPHERSON REVIEW – PROGRESS AFTER 5 YEARS

In March 2013 the [Macpherson review](#) gave recommendations on best practice principles for quality assurance for analytical models in government. These models can be used to influence and take key investment and policy decisions and it is crucial the limitations and the reliability of their output is clearly communicated.

It's now five years since the review. In this article we examine recently published information about what has been achieved.



Chris Paterson

In the context of analytical models, quality assurance (QA) is the processes applied to ensure the models and their outputs are fit for purpose and the risk of material error sufficiently low. QA can be implemented in many ways, for example thorough testing and independent review, but in his review for HM Treasury Nicholas Macpherson found that there was benefit in a planned, systematic approach to ensuring key models are as reliable as possible. The review found encouraging signs of QA practices but there was variation in how it was undertaken. Its eight recommendations focussed around creating the right environment, establishing clear processes and publicly reporting this. They aim to extend best practice across the whole of government.

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## What has happened since the Macpherson review?

The Macpherson review led to lots of immediate activity. Some departments published their lists of Business Critical Models which were assessed and their quality assurance mechanisms evaluated. We look at what has been done since the review was published in 2013.

In 2014, GAD [reviewed early progress](#) against the recommendations. We did this by assessing the annual reports of the 19 central government departments examined under the 2013 review. This analysis provided an objective measure of how well departments were progressing with implementing the recommendation.

Macpherson [published a detailed progress review](#) in March 2015 looking at how the departments were putting the 8 recommendations into practice. This review showed a much more detailed picture and found significant progress in the time since the original report, and set an expectation that departments would continue to improve and incorporate best practice.

Since these appraisals departments have continued to publish tools and guidance to help in meeting Macpherson's recommendations.

- A cross departmental working group assembled to work on analytical quality assurance published [The Aqua Book](#) in March 2015. This draws together existing practice from across departments and best practice from analysts across analytical professions. It is intended to help and provide advice to those implementing the recommendations from the Macpherson review and to promote analytical quality. The working group have also since released a series of supporting documents, such as QA logs.
- In March 2016, the National Audit Office published its own structured, flexible [approach to reviewing models](#). It is based on the approach the National Audit Office themselves use to review public organisations' models.

## How have things changed since 2014?

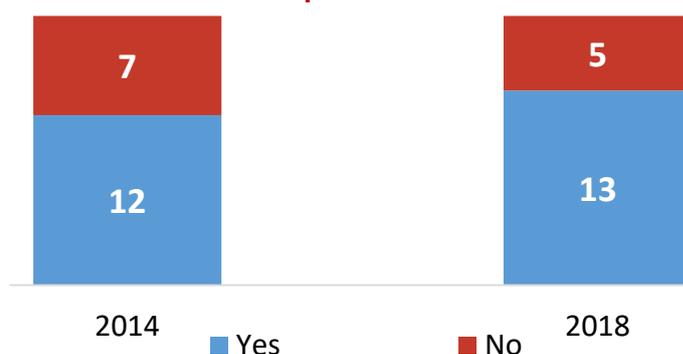
To get a more up to date picture of what progress there has been across government, we have repeated our previous analysis. We have used the 2016/17 Annual Reports for the same government departments we looked at in 2014. (Note: there are now 18 departments rather than 19 due to the merger of BIS & DECC to form BEIS). We again checked these publicly available financial statements for:

- confirmation, in their annual report, of an appropriate QA framework being in place (Macpherson recommendation 4);
- public availability of an up-to-date list of business critical models (Macpherson recommendation 4); and
- confirmation of guidance being in place on how they will ensure they have effective processes to underpin appropriate QA across their organisation (recommendation 6).

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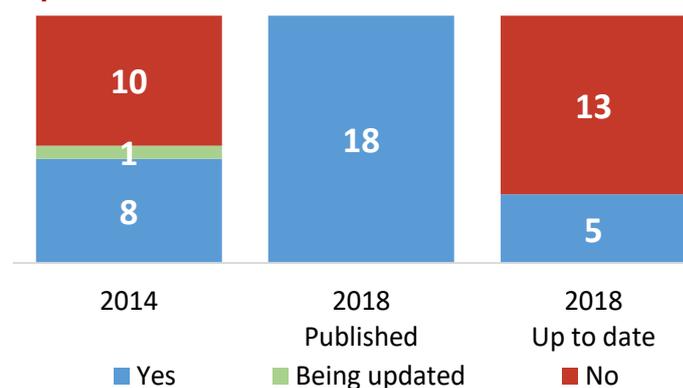
## Does the annual report confirm that there is an appropriate QA framework in place?

The departments' Annual Report information on having an appropriate QA framework in place has shown a slight improvement in the past four years. We know from Macpherson's more detailed progress report that five departments had an amber rating or lower in 2015 on this measure and this information doesn't support a story of improvement in this area. Whilst departments may have the framework in place, the Macpherson recommendation is clear that this should be stated in the Annual Report.



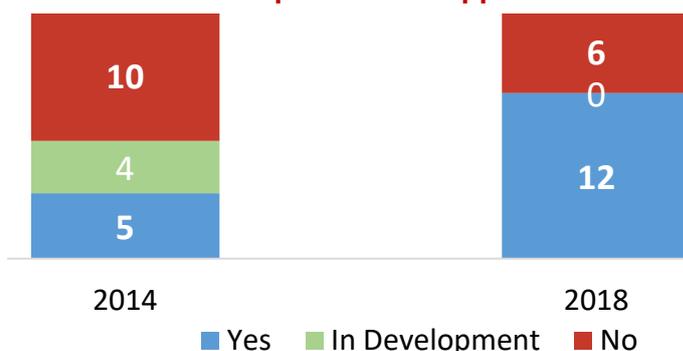
## Does the annual report state there is a publicly available up to date list of business critical models?

All departments have now published a list of business critical models, a big step forward compared to 2014 when fewer than half of them had yet done so. However when looked at in more detail, 13 of the 18 departments haven't updated this list since 2014. It may be that for these departments the 2014 lists still represent an accurate picture but this is unlikely to be true for all of them.



## Does the annual report state there is clear guidance and documentation in place on its approach to QA?

There is also an improvement in the number of departments stating they have clear guidance and documentation in place on their approach to QA. However there are some departments who are yet to meet the recommendations in this area.



Although it is highly relevant, information published in annual reports does not give a complete picture. Outside of the annual reports there are many examples of good practice from some departments such as:

- producing their own framework on top of the guidance given in The Aqua Book
- producing and publishing templates
- regularly publishing lists of their business critical models
- publishing guidance on how they deal with business critical models and have implemented recommendations from the Macpherson review
- collaborating to look at how to communicate uncertainty to senior decision makers (an initiative GAD is also participating in)

## What next?

In his 2015 progress update Macpherson concluded that the responsibility of the Accounting Officers for their department's models, and duty to publish information on this in their annual reports, would drive progress until all recommendations are met. We can see that progress has clearly been made towards this since 2014 but this needs to continue for this conclusion to be satisfied.

## Further information

GAD provides a range of services on QA issues, from review of individual models to departmental processes. If you address QA as part of your role we may be able to help.

If you would like to discuss the [use of models in decision making](#) or any other aspect of QA at your department, please get in touch with your usual GAD contact.