

# Trust Conclusions on the Executive Report on Science Impartiality Review Actions

July 2014

## Introduction

The BBC Trust has undertaken a number of reviews of the impartiality of the BBC's coverage of specific topics. The Trust chooses subjects which pose challenges for content producers and where sensitivities and current controversies can make editorial decision-making complex.

In 2010 the Trust decided to review the accuracy and impartiality of BBC science coverage. As the Trust noted at the time:

“Scientific developments have the capacity to directly affect us all significantly. Debates relating to everything from climate change to medical advances to DNA technology feature prominently in our public discourse. And ethical, policy and funding questions associated with science arouse strong emotions. As a consequence they often strike at the core of sensitive editorial issues. So it is vital that the BBC's audience enjoys science coverage of the very highest standards.”

The Trust commissioned an independent report from Steve Jones, Emeritus Professor of Genetics at University College London, together with content analysis from the Science Communication Group at Imperial College London. The report found that BBC content was generally of high quality and was exemplary in its precision and clarity. But the report and content analysis also highlighted certain shortcomings. These included a lack of contact and co-operation between science programme makers across BBC divisions; an over-reliance on a narrow range of external information sources; and, concern about the appropriate application of editorial guidelines on “due impartiality” in science coverage. The BBC Executive accepted the recommendations. The review, published in 2011, including the Executive response can be found at:

[http://www.bbc.co.uk/bbctrust/assets/files/pdf/our\\_work/science\\_impartiality/science\\_impartiality.pdf](http://www.bbc.co.uk/bbctrust/assets/files/pdf/our_work/science_impartiality/science_impartiality.pdf)

A follow-up report from the Executive was published in 2012 with Trust conclusions.

[http://downloads.bbc.co.uk/bbctrust/assets/files/pdf/our\\_work/science\\_impartiality/science\\_impartiality\\_followup.pdf](http://downloads.bbc.co.uk/bbctrust/assets/files/pdf/our_work/science_impartiality/science_impartiality_followup.pdf)

The 2012 Executive report pointed to considerable work with journalists to improve co-operation and understanding. Overall, the Executive's work had been positive. There was still some further work to be done and the Trust said:

“There are some areas where progress can only be properly assessed in the long-term or where progress has been slightly slower than expected. The Trust has therefore asked the Executive to report back ...with an account particularly of:

- Progress on gender balance for contributors and presenters;
- Feedback and effect on output of the new science training workshops;
- Effect of the science seminars;
- Progress in widening the range of universities and institutions across the Nations and regions that are used to source stories and contributors.”

## Trust Conclusions

Licence fee payers expect the BBC to meet the highest standards of impartiality and accuracy. That applies as much to science as it does to the world of politics and policy. This is an area where the BBC must excel in its mission to inform and educate and entertain. The UK is a world leader in science and part of the BBC's function must be to keep the public informed of advances in scientific thinking and about the ethical and policy dilemmas posed by scientific research. The BBC's ongoing work to implement the findings of the original 2011 review is an area of concern and interest to the Trust and it welcomes this latest report on progress.

### Workshops, seminars and giving due weight to opinions and facts

The coverage of science by the BBC continues to be a hotly debated issue. One of the key findings of the report which still resonates today is that there is at times an:

"... 'over-rigid' (as Professor Jones described it) application of the Editorial Guidelines on impartiality in relation to science coverage, which fails to take into account what he regards as the 'non-contentious' nature of some stories and the need to avoid giving 'undue attention to marginal opinion'. Professor Jones cites ... the existence of man-made climate change as [an] example of this point."

This is a matter of training and ongoing shared editorial judgement. The Trust notes that seminars continue to take place and that nearly 200 senior staff have attended workshops which set out that impartiality in science coverage does not simply lie in reflecting a wide range of views, but depends on the varying degree of prominence (due weight) such views should be given.

The Trust wishes to emphasise the importance of attempting to establish where the weight of scientific agreement may be found and make that clear to audiences. The Trust also would like to reiterate that, as it said in 2011, "This does not mean that critical opinion should be excluded. Nor does it mean that scientific research shouldn't be properly scrutinised." The BBC has a duty to reflect the weight of scientific agreement but it should also reflect the existence of critical views appropriately. Audiences should be able to understand from the context and clarity of the BBC's output what weight to give to critical voices.

The BBC has developed excellence in science broadcasting, and generalists who may be unfamiliar with these areas and where the weight of scientific agreement may lie should make the most of the resources of the BBC – for example its Science Editor, the BBC's science experts and the workshops and seminars discussed in the Executive report. Judging the weight of scientific agreement correctly will mean that the BBC avoids the 'false balance' between fact and opinion identified by Professor Jones. The Trust welcomes the Executive's decision to hold a further course this year for staff who may not have been in position at the time of the previous workshops and as a refresher on a complex area.

### Contributors and presenters

The Trust welcomes the work that has been done by the Executive to bring more women on air and online as presenters and as guests. The examples given for gender suggest a real advance in the use of female scientists since the 2011 content analysis by Imperial College. This is a priority area for the Trust and it is rewarding to see work that has been

done begin to bear fruit. The imbalance shown by the original context research was concerning.

For example

- Less than a third of presenters and narrators of non-news programmes in the sample were women; for single-topic programmes, only a quarter were women.
- Of the twenty Horizon episodes in the sample, only one was presented by a woman scientist.
- Less than a quarter of the contributors in BBC news items in the sample were women. For contributors who appeared to have scientific expertise, the proportion of women dropped further to about 17%.

In some respects the original content analysis reflected a gender imbalance in those who adopt a scientific career (eg in mathematics) but this is an area where the Trust expects the Executive to strive to bring to licence fee payers expert women's voices on scientific issues. The BBC Academy's Expert Women's training days and the resulting database have been extremely worthwhile initiatives.

### **Widening the range of universities and institutions**

In his original report Professor Jones remarked that:

"Many of those in the three devolved capitals ... were struck by the preponderance of interviews given by people from within the 'Golden Triangle' of science delineated by Oxford, Cambridge, and London. The Content Analysis supports their view: just one of the top seven organisations that acted as a source for broadcast news – the University of Edinburgh – was outside that part of the UK. For non news presentation of science, too, almost half of all programmes had contributions from within the famous triangle. Only two universities of the top ten sources (the Universities of Manchester and Bristol) fell outside the South East of England. Certainly there is a concentration of scientific activity in that region, but there was a strong feeling of undue representation of its scientists, perhaps because they are easily accessible."

The content analysis by Imperial College noted that:

"Of the 35 universities given as the affiliation for contributors to broadcast items, 22 were in England and one in Scotland. Similarly, of the 57 universities given as the affiliation for contributors quoted directly in the online items, 22 were in England and five in Scotland. In addition, five English universities, two Scottish universities and one Welsh university were referred to by name in the online reports without including a direct quote from a member of the university. Of the 20 online items referring to Scottish universities, five had a primary location on the Scotland website. No contributors were identified as belonging to Northern Irish universities in either broadcast or online items, nor were any Northern Irish universities named without including quotes in the online reports. However, it should be noted that there are many more universities in England than in the other UK nations and all but four of the twenty Russell Group universities are located in England."

The Trust considered that there was a real risk that the BBC was not reflecting the width and excellence of scientific research that occurs across the UK and which is a vital part of the UK's contribution to the world. This is why the Trust asked the Executive to take active steps to widen the range of institutions and universities it draws on.

Trustees note that the impact of the BBC's move to Salford has expanded the use of interviewees from the North of England and that there are also examples of interviewees from a range of universities including Northern Ireland, and active attempts to source university research from outside of the South East. This is an area where the BBC, with bases in the Nations and Regions, can bring stories to a wide audience that may inspire and educate and inform the next generation of scientists.

## Executive Report to the Trust

### Progress on gender balance for contributors and presenters

We have worked hard to improve the on-air gender balance across our services and programmes.

The Radio Science unit has ensured that it has found many more female guests. Each of the recent runs of The Life Scientific has consisted of an equal number of men and women. Its efforts were recognised when the programme was shortlisted for the Women in Science and Engineering (WISE) Awards in 2013.

There are also two new female presenters on the Inside Science team – Dr Lucie Green and Professor Alice Roberts.

On television, Dr Maggie Alderin-Pocock has been appointed to a lead presenting role on The Sky At Night. Other appointments include Dr Uta Frith (Horizon, BBC2), Felicity Aston (Cloud Lab, BBC2), Dr Saliyeh Ahsan (Trust Me – I'm A Doctor, BBC2) and Lucy Cooke (Talk To The Animals, BBC1).

Horizon has widened both the number and range of female scientists participating in its programmes. It now records the gender of those contributing in its "programme as completed" paperwork.

It has proved easier to achieve parity in some areas than in others. There were an equal or greater number of women in programmes such as Dinosaurs – The Hunt For Life, The Truth About Personality, and What's Killing Our Bees? But the search for female scientists continues in other areas, such as physics and mathematics, where the number of male scientists (and applicants to university) is still higher.

BBC News has also stepped up its efforts to interview female contributors on science-related subjects on all its platforms. In the last few months, these have included (with BBC News Online references):

Professor Karen McComb, University of Sussex: <http://www.bbc.co.uk/news/science-environment-24754682>

PhD researcher Katie Edwards, University of Liverpool and Chester Zoo: <http://www.bbc.co.uk/news/science-environment-22441199>

Dr Orly Razgour, now at the University of Stirling: <http://www.bbc.co.uk/news/science-environment-23519015>

Dr Zanna Clay, Emory University: <http://www.bbc.co.uk/news/science-environment-24494230>

Dr Ellen Singer, University of Liverpool: <http://www.bbc.co.uk/news/science-environment-22017800>

Dr Tracey Newman, University of Southampton: <http://www.bbc.co.uk/news/24364637>

Chia-Jung Tsay, University College London: <http://www.bbc.co.uk/news/science-environment-23717228>

Professor Giovanna Mallucci, Professor, Department of Cell Physiology and Pharmacology, University of Leicester: <http://www.bbc.co.uk/news/health-24462699>

Professor Rachel Mills, University of Southampton: <http://www.bbc.co.uk/news/science-environment-22546875>

In January 2013 the BBC Academy helped to launch the Expert Women initiative, a series of training days for female experts with specialist knowledge in areas where women tend to be under-represented in the broadcast media, including science, technology and medicine.

The Expert Women events were developed by the BBC Academy and Broadcast magazine in response to the magazine's campaign to highlight and address a proven lack of on-screen female experts. They have since had support from BBC Diversity, BBC North, Creative Skillset, Channel 4, Sky, ITV and the wider broadcast industry.

Research has shown that women are more likely than men to consider themselves "not expert enough" when asked to contribute or comment on radio and television. Expert Women aimed to address this issue by offering support to female experts who would like to be specialist presenters or contributors.

A new database of contributors based on the Expert Women participants was made available to BBC News teams in January 2014. Seventy-six of them are from a science background including general science, medicine, natural sciences, engineering, mathematics, space and technology.

The News Channel is a major user of the database and is improving its gender balance for contributors and presenters on science. Rebecca Morelle and Victoria Gill now both feature regularly across the output as correspondents.

The gender equality champion at the University of Cambridge, Professor Dame Athene Donald, led a debate at the BBC's inaugural 100 Women conference in October 2013 on why there are so few women working in science and technology.

At the same time we feel there has been more of a drive within the scientific community to help represent women more equally on air.

In summary, we believe we have made important steps towards improving the gender balance of presenters and contributors.

### Feedback and effect on output of the new science training workshops

The College of Journalism reports that the feedback on the science workshops was largely positive. Nearly 200 people took part in the sessions at Band 10 level and above.

There were special sessions for producers and editors in non-news radio programmes such as Woman's Hour and You & Yours.

The key point the workshops tried to impart is that impartiality in science coverage does not simply lie in reflecting a wide range of views, which may result in a 'false balance'. More crucially it depends on the varying degree of prominence such views should be given. In this respect, editorial decisions should be guided by where the scientific consensus might be found on any given topic, if it can in fact be determined.

While it is difficult to assess the exact impact of the new science workshops on output, we believe that the nature and volume of this training has been of great benefit to editors and producers in their daily decision making, particularly in complex or controversial areas such as climate change.

We aim to repeat the course this year so that further editorial staff can attend, including new arrivals.

### Effect of the science seminars

We believe the seminars have played an important role in improving the quality of our coverage.

There was an in depth briefing for key editors and correspondents organised by the College of Journalism ahead of the Intergovernmental Panel on Climate Change (IPCC) report on climate change, which was published in September.

This consisted of a briefing from senior members of the IPCC, a panel discussion involving three climate change scientists representing a range of views and an internal discussion about the editorial implications for our output. We think this made a substantial contribution to balanced and proportionate coverage of the IPCC report.

BBC programme makers have also attended a science forum which dealt with "The World According to Generation Z" hearing from, among others, two Cambridge University lecturers - Shailaja Fennell on "Someone else's century? Africa, Asia and development" and Julian Allwood on "Engineering with both eyes open".

They also heard from the Professor of History and Director of the Centre for History in Public Health at the London School of Hygiene and Tropical Medicine, Virginia Berridge, on "Health and habits: the past is the future?" and Visiting Professor at the Grantham Research Institute on Climate Change and the Environment, Michael Jacobs, on "Future prosperity: what economics can and can't do".

Our overall ambition is to create the space for BBC commissioners and producers to engage in conversations with specialists and academics about longer-term trends, exploring the intersections between science and technology, economics and society.



**Progress in widening the range of universities and institutions across the Nations and regions that are used to source stories and contributors**

The Radio Science unit continues to interview scientists from all over the UK. While it chooses contributors on merit and on their area of expertise, Inside Science has recently included researchers from Aberdeen, Bristol, Leicester, Queens University Belfast, Reading, and Liverpool.

Programme teams in Salford are reaping the benefit of the academic resources in their region.

The location of Media City means that a number of scientists and academics based in the north have been able to appear on BBC Breakfast - for example, Professor Dominick Spracklen, environmental scientist at Leeds University; Dr Charlotte Evans, lecturer in Public Health Nutrition at the University of Leeds; and Jim McVeigh, Reader in Substance Use Epidemiology and Acting Director at the Centre for Public Health at Liverpool John Moores University.

The programme also regularly uses astrophysicist Professor Carole Mundell from Liverpool John Moores, Professor of Space Physics Jim Wild from Lancaster University and Jennifer Gupta from the Jodrell Bank Centre for Astrophysics.

BBC News Online reporters from the Nations and regions continue to cover scientific research from universities in their areas. Science reporter Mark Kinver, who is based in Salford, has visited the universities of Manchester, Sheffield, Liverpool, among others, to try to unearth news stories and features from their research departments.

We believe therefore that we have made substantial progress in widening the institutional range of contributors across our coverage.