

Environmental Information Regulations 2004 (EIR)

Decision notice

Date: 4 July 2012

Public Authority: The University of East Anglia

Address: Norwich
NR4 7TJ

Decision (including any steps ordered)

The complainant made a request to the University of East Anglia (the University) for three items of information concerning tree ring research (dendrochronology). The University initially withheld all the information requested under regulation 6(1)(b) (information available to requester), regulation 12(4)(a) (information not held at time of request), regulation 12(4)(d) (material in course of completion) and regulation 12(5)(c) (intellectual property rights), but disclosed one of the items of information upon internal review. The University disclosed a further item of information to the complainant during the Commissioner's investigation, but maintained its reliance upon regulation 12(4)(d) and regulation 12(5)(c) with regard to the remaining item of information. The Commissioner considers that the University correctly applied regulation 12(4)(d) to the remaining information.

The Commissioner's Role

1. The Environmental Information Regulations (EIR) were made on 21 December 2004, pursuant to the EU Directive on Public Access to Environmental Information (Council Directive 2003/4/EC). Regulation 18 provides that the EIR shall be enforced by the Information Commissioner (the 'Commissioner'). In effect, the enforcement provisions of Part 4 of the Freedom of Information Act 2000 (the Act) are imported into the EIR.

Background

2. Tree ring dating or dendrochronology dates wood from archaeological sites and determines past climates. When a tree is cut concentric rings signify each year during which the tree grew and the thickness of the rings gives an indication of the weather conditions affecting the tree. Thick rings indicate years in which the climatic conditions for the tree were good, eg warm and lots of rainfall, whereas thin rings indicate the opposite. For this reason tree rings are useful in studies of global warming.
3. Tree ring data is published on the internet in the International Tree Ring Data Bank (ITRDB), which currently holds tree ring data from over 1500 sites around the world. The latter is maintained by the National Oceanic and Atmospheric Administration (NOAA) Palaeoclimatology Programme and World Data Centre for Palaeoclimatology and is freely accessible on the following website:

<http://www.ncdc.noaa.gov/paleo/treering.html>

Request and response

4. On 28 February 2011, the complainant emailed the University and requested information in the following terms:

'Climategate email 684. 1146252894.txt of Apr 28, 2006 refers to a tree ring composite identified as follows:

'URALS' (which includes the Yamal and Polar Urals long chronologies, plus other shorter ones).

Could you please provide me with a digital version of this series together with a list of all the measurement data sets used to make this composite, denoting each data set by ITRDB identification or equivalent. If any of the data is not in a public archive, please provide the measurement data.

It would probably simplify matters if you also provided the measurement data used for the 'URALS' chronology in a digital form'.

5. On 28 March 2011 the University responded to the request. It confirmed that it was withholding the information requested under regulation 6(1)(b) (information available to requester), regulation 12(4)(a) (information not held at time of request), regulation 12(4)(d)

(material in course of completion) and regulation 12(5)(c) (intellectual property rights).

6. Following an internal review the University wrote to the complainant on 18 July 2011. It withdrew its reliance on regulation 6(1)(b) and provided the complainant with some of the information requested (specifically a list of the sample identifiers used to produce the ring-width chronology known as Polar Urals). The University withdrew its reliance on regulation 12(4)(d) in respect of the list of all the measurement data sets used to make the URALS composite (chronology), including the ITRDB identifier or equivalent (the list of tree ring sites), but continued to apply regulation 12(5)(c) to this information. With regard to the information comprising the 2006 chronology ('the 2006 Chronology'), the University continued to withhold this information under regulation 12(4)(d) and regulation 12(5)(c).

Scope of the case

7. On 18 September 2011 the complainant contacted the Commissioner to complain about the way his request for information had been handled. The complainant confirmed that there were two items of information outstanding from his request. These were the regional tree ring chronology ('the 2006 Chronology') and the list of tree ring sites used in the 2006 Chronology.
8. During the course of the Commissioner's investigation the University provided the complainant with the list of tree ring sites used in the 2006 Chronology.
9. The scope of the Commissioner's investigation is therefore the 2006 Chronology and the University's reliance on regulation 12(4)(d) and regulation 12(5)(c) to withhold this information.

Reasons for decision

Regulation 12(4)(d)

10. Regulation 12(4)(d) states that:

For the purposes of paragraph 1(a), a public authority may refuse to disclose information to the extent that –

(d) the request relates to material which is still in the course of completion, to unfinished documents or to incomplete data.

11. In its initial response to the complainant, the University stated that the 1,001 composite data sets (the 2006 Chronology) and the lists of sites from which the data is drawn was created in 2006 as a 'first draft' of work that was intended to be carried forward and refined with a view to future publication. Whilst acknowledging that there had been some passage of time since the 2006 Chronology was created, the University advised that the CRU (Climatic Research Unit) had recently returned to the 2006 Chronology as part of a project funded by NERC (Natural Environment Research Council) which commenced in May 2010. The complainant was informed that this project encapsulates the 2006 Chronology and that it would be completed *'no later than October 2012'*. The University stated that the data would be revised in the near future the closer the project became to publication of papers based on the work in constructing the composites.
12. In its internal review decision, the University confirmed that the planned publication would include details of the methods used to produce the 2006 Chronology and alternative series for the region, and would discuss their uncertainties. The complainant was told that the 2006 Chronology which he had requested was, *'one of a suite of composite chronologies that are being used as part of a current research project'*. The University advised that the requested information would be available in finished form at the time that the results were published, which was expected to be no later than the date previously specified.
13. The University contended that a completed composite (the 2006 Chronology) was not just a series of data but includes the associated metadata descriptors, which would include formal written explanation of how the composite was derived and a candid critique of its value. In this sense, the University stated that the requested 2006 Chronology was not complete.
14. When making his request for an internal review, the complainant acknowledged that although, theoretically, tree ring chronologies are always 'works in progress', at certain points in time, such chronologies are 'photographed'. Otherwise, the complainant noted that, *'the implication would be that institutions could permanently withhold tree ring chronologies as always being 'work in progress', leading to an absurd result'*.
15. The complainant argued that a Urals regional chronology had been calculated as of April 2006 and that, *'subsequent statements by CRU clearly state that work on the regional chronology was discontinued'*. He contended that the 2006 Chronology had not been a 'work in progress' for years and that should CRU re-calculate the regional chronology in 2011 using the same or different lists of sites, such calculations

constitute new research and would not mean that the earlier work was still, 'in the course of completion', 'unfinished', or 'incomplete'.

16. The complainant also stated that the University had failed to consider the Commissioner's decision in the Queen's University Belfast case (FS50163282) and had made no attempt to show why a tree ring regional chronology and the associated list of sites should be treated any differently than the tree ring measurement data involved in that 2010 case.
17. In his complaint to the Commissioner of 18 September 2011, the complainant provided a detailed background to his request and submissions questioning the University's use of the exceptions applied to his request. The Commissioner has fully considered these submissions and with regard to regulation 12(4)(d), the complainant's main points were as follows.
18. The complainant questioned the veracity of the University's responses, essentially alleging that it was not true that it had had a past practice of archiving metadata (especially measurement data) or providing the same. He agreed that the archiving of measurement data is an essential component of proper publication of tree ring chronologies, but stated that for the University to claim that this had been the past practice of CRU was, *'untrue and mendacious'*.
19. In terms of the responses provided to him by the University, the complainant stated his view that these had been inconsistent. Specifically, whereas in its initial response the University had stated that the 2006 Chronology was only a 'first draft' and that the data 'will be revised in the near future', in its later internal review the University had stated that it planned to publish the 2006 Chronology as 'one of a suite of composite chronologies'. The complainant contended that this was a departure from the University's previous position and expressed his opinion that, taken together, the two responses, *'show that CRU had no intention, as of March 2011, of publishing the 2006 Regional Chronology in the proposed October 2012 article'*. He added that this was, *'an opportunistic ruse to delay disclosure'* until close to the final date for inclusion in the Fifth Assessment Report of the IPCC (Intergovernmental Panel on Climate Change).

20. The complainant also highlighted the fact that he had reminded the University of the Commissioner's Awareness Guidance No 3 ¹, (in respect of where a public authority argues that information is too complicated for the requester to understand or that disclosure might misinform the public because it is incomplete). The Guidance states that, *'neither of these are good grounds for refusal of a request. In an authority fears that information disclosed may be misleading, the solution is to give some explanation or to put the information into a proper context rather than to withhold it'*.
21. It was the complainant's view that *'on multiple grounds'*, and without even considering the relevant public interest arguments, it was *'abundantly clear'* that regulation 12(4)(d) was not engaged.
22. In detailed submissions provided to the Commissioner, the University expanded upon its rationale for maintaining that regulation 12(4)(d) applied both to the 2006 Chronology and its ongoing work analysing the information. The University explained that its research has been ongoing for a number of years, and various 'versions' of regional chronologies for the area have been produced as the work has developed, including different ways of selecting and processing measurement data to produce such chronologies.
23. The University provided the Commissioner with a summary of the research processes involved in dendrochronology and advised that in 2011 the University had reached the stage where it considered that its analysis of chronology construction methodology (needed for the Urals region) was of publishable standard. The University stated that it had produced many of the graphs that will be used in the manuscript and that it was working on the calibration of the chronologies to represent temperature. Therefore, the University contended that, *'the 2006 Chronology cannot be considered to be a 'completed product', since it is an inherent part of scientific research that is currently unfinished'*.
24. The University acknowledged and accepted that, *'this argument should not be used to withhold tree-ring chronologies endlessly, by arguing that they are always a 'work in progress''*. The University also sought to distinguish the present case from the Queen's University Belfast case, as

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http://www.ico.gov.uk/upload/documents/library/freedom_of_information/tailed_specialist_guides/awareness_guidance_3_-_public_interest_test.pdf

the information concerned in that case had been underlying raw data, namely, the tree ring measurements themselves, whereas the present request was for a tree ring chronology that is part of ongoing research that (in contrast to the raw data) is unfinished and incomplete information. The University suggested that, *'to apply the QUB decision to this matter would be the equivalent of stating that an unfinished symphony is 'raw data' because it is composed of notes which are simply individual bits of data'*.

25. Contrary to the assertions made by the complainant, the University stated that there was no basis for arguing that its refusal to disclose the 2006 Chronology was inconsistent with the publication record of the CRU. The University explained that its 2009 disclosure of the Yamal chronology (specifically cited by the complainant in his complaint), had been undertaken with the objective of *'rebutting incorrect and potentially defamatory allegations that the 2000 version of the Yamal chronology was not 'robust' and that CRU had deliberately selected tree-ring data to produce a preconceived and erroneous picture of tree ring variations in this region using those data'*. More importantly, within the context of the current exception, the University clarified that:

'The 2009 report was not unfinished or incomplete and it did not involve the development and application of new chronology construction methods. It follows that the 2009 release is significantly different from the chronology at issue in the current request, which represents a fundamental part of the research in which the University is currently engaged, specifically the development and application of new chronology constructions methods to overcome the challenges associated with the combined use of wider (i.e. from the Yamal Peninsula and the Urals) datasets from the 'greater Urals' region'

26. The University informed the Commissioner that it did not consider the 2009 report to be a formal publication as such on-line publication is not considered to be peer-reviewed and is therefore not citable by international assessment exercises such as by the IPCC, and not usually citable by articles in peer-reviewed scientific journals.
27. With regard to the Commissioner's Awareness Guidance No.3, the University clarified in its internal review that it was not arguing that the requested information was too complicated to be readily understood, but rather that the requested information, absent of a description of how it was created is incomplete. The completion of the work and the subsequent publishing of a description of its basis, would, the University stated, put the requested information in proper context.
28. Regulation 12(4)(d) is class based, therefore if information falls within the scope of the exception then the information will be exempt; there is

no requirement for the public authority to demonstrate prejudice or adverse effect, although there is still a requirement to consider the public interest.

29. Although the Commissioner has had sight of the 2006 Chronology, the information is by its very nature highly technical and complex. In cases such as this the Commissioner is necessarily reliant to a significant extent upon the representations put forward by the parties. Furthermore, cases involving climate change issues often attract vociferous argument and divergent views on either side of the debate. The Commissioner is not in a scientifically informed position to pass comment upon the background of this request within the context of the climate change debate and such matters lie outside his remit in any event.
30. The only issue for the Commissioner to decide upon, in terms of the applicability of the exception in question, is whether the 2006 Chronology is still in the course of completion, unfinished or incomplete.
31. In the Queen's University Belfast case to which the complainant referred in his correspondence with the University, the public authority put forward similar arguments in favour of regulation 12(4)(d) as the University has in this case. In that case the Commissioner found that the exception was not engaged, for, *'whilst the research utilising this data is ongoing, i.e. the analysis of the data, the data itself has already been collected and is therefore not unfinished or incomplete'*. In his request for an internal review, the complainant, referring to FS50163282, stated that the University, *'have made no attempt to demonstrate why a tree ring regional chronology and the associated list of sites should be treated any differently, nor, in my view, can such a distinction be plausibly argued'*.
32. The Commissioner would agree with the contention that the simple list of sites upon which the 2006 Chronology is based should not be regarded any differently than the raw tree ring data with which FS50163282 was concerned. Both are types of information which were completed at the time of recording and are therefore not covered by regulation 12(4)(d). It therefore follows that the University erred in originally withholding the simple list of sites from the complainant and whilst the Commissioner acknowledges that the University subsequently disclosed this information to the complainant upon advice received from the Commissioner, this specific information should never have been withheld under the exception in the first place.
33. However, the Commissioner considers that a tree ring regional chronology cannot correspondingly be regarded as akin to raw data, as contended by the complainant. This is because the completion of a

chronology is a process and the completed chronology, although created using underlying raw data, is not itself raw data of the type with which the Queen's University Belfast case was concerned. Whereas raw tree ring data is immediately 'captured' upon the recording of such information and cannot be regarded as being incomplete or unfinished, a tree ring regional chronology by its very nature entails manipulation of the underlying raw data and often the input of additional information or reference data. Until the process is complete, the chronology cannot be said to be finished or complete.

34. As the University stated in its internal review response to the complainant, *'we maintain that a completed composite (chronology) is not just a series of data but also includes the associated metadata descriptors; this would include formal written explanation of how the composite (chronology) was derived along with a candid critique of its value. In this sense the composite (chronology) that you have requested is not complete'*. As noted in paragraph 25 above, the University also advised the Commissioner why the 2006 Chronology can be differentiated from the 2009 report referred to by the complainant.
35. The complainant argued that the 2006 Chronology had not been a 'work in progress' for years and that any re-calculations in 2011 using the same or different list of sites would constitute new research. Even if it is the case that the University had not actively progressed the 2006 Chronology for some time until relatively recently, the Commissioner does not consider that such a hiatus automatically means that the 2006 Chronology must have been completed beforehand. The determining factor here is not one of time, but of process and at which stage of the chronology process this information was when requested by the complainant in February 2011.
36. The Commissioner is satisfied, based upon the responses provided to the complainant and the representations received from the University, that at the time of the complainant's request (and indeed at the time of this decision), the 2006 Chronology remained incomplete and unfinished as it was in an ongoing state of creative flux within the processes noted in paragraphs 22 and 23 above. The Commissioner considers that the 2006 Chronology will only be complete and finished (and thus no longer subject to this exception) once all the processes have been concluded and subjected to peer review. Until this cut off point, it is entirely conceivable that the chronology might need to be altered or amended, to a lesser or greater extent. Raw data such as tree ring data does not contain such mutability and can be distinguished as a result.
37. For the reasons given above, the Commissioner has found that regulation 12(4)(d) applies to the 2006 Chronology. He does however acknowledge the complainant's point about the inconsistency of the

responses provided by the University. It would have been helpful if the University had provided the complainant with a similar level of detail and clarification with which the Commissioner was provided in the University's written representations. Although sight of such information may not have altered the complainant's view that the 2006 Chronology is completed information, it would have better explained the application of this exception in this instance.

38. As regulation 12(4)(d) is a qualified exception, the Commissioner went on to consider the application of the public interest test to the 2006 Chronology.

Public interest arguments in favour of disclosing the requested information

39. In his internal review request, the complainant was rightly critical of the University for failing to acknowledge any public interest factors in favour of disclosure of the information requested. The Commissioner was disappointed that the University did not initially acknowledge even generic public interest factors in favour of disclosure and in its internal review only addressed those factors specifically highlighted by the complainant. Again, the University's later representations to the Commissioner provided more detail on the public interest test.
40. The complainant contended that disclosure of the information would clearly further the understanding of and participation in the public debate of issues of the day, the issue in this case being the understanding of climate change. The complainant noted that, *'it is difficult to contemplate an 'issue of the day' that better meets the criteria'*.
41. The complainant suggested that disclosure of the information may also contribute to scientific advancement of the understanding of the relationship between tree rings and climate.
42. In addition to the inherent public interest in promoting accountability and transparency, the complainant stated that previous inquiries into the conduct of CRU at the University (arising because of the 'Climategate' controversy) added particular prominence to these important public interest factors.

Public interest arguments in favour of maintaining the exception

43. In representations to the Commissioner, the University acknowledged and appreciated that there is a substantial interest around the world in climate science. However, the University suggested that with regard to unfinished and incomplete material, *'an important consideration for the Commissioner is in the timing of release'*.

44. The University contended that when the requested information is released as part of published research no later than October 2012, then, *'there will be transparency, openness, and all will be afforded the opportunity to view the research and the underlying chronology and to make comment upon it. Furthermore, the research will have been subjected to peer review in accordance with established practice in all branches of academic and scientific research. This process allows the research to be tested, validated, and reviewed so that the published work represents the best version of the work possible'*.
45. The University asserted that the disclosure of unfinished scientific work lacking an adequate description of the manner of production, will not contribute towards scientific advancement. It stated that this could only occur with a full description of the scientific work, the methodology employed, the caveats, the results and their interpretation.
46. In terms of accountability and transparency, the University argued that since the incomplete information did not include any reasoned explanations of the methodology used in the selection, then to release the information prematurely would not promote either public interest. It confirmed that reasoned explanations for decisions made will be included as part of the forthcoming publication when the work is complete.
47. The University also made a public interest case for a safe space for the completion of work of which the present request concerns, contending that:
- 'Academics must be free to follow the research process, including the creation of intermediate results, drafts of work, development of alternative methods of processing and analysing data, as the pathway toward publishing their findings and contributing to the advancement of scientific knowledge. They need to be free to do this without the need to defend intermediate work that is still ongoing, and they need to be free to publish their work in high-impact journals without this opportunity being damaged by prior release of material that goes against the journal policy'*.
48. Finally, the University argued that the 'final' version of any research output can be considered to be the most considered and 'correct' version in the opinion of the author(s) at the time of release and certainly the version that would be expected to be critiqued. The University added that, *'if early versions of scientific output were to be publicly distributed it is possible for extracts to be interpreted incorrectly or even vexatiously presented in a manner that could either inadvertently or deliberately misinform public opinion'*.

Balance of the public interest arguments

49. The Commissioner considers that there is a considerable public interest in climate science and understanding climate change. The disclosure of significant scientific evidence used in climatic research which would potentially further such understanding and advance the science surrounding it is of clear and strong public interest, particularly given its scope for affecting human activity on a global scale.
50. However, it is precisely because the public interest is so important that the Commissioner agrees with the University's suggestion that the timing of disclosure in this case needs to be carefully considered.
51. The disclosure of the 2006 Chronology at the time of the complainant's request would have perhaps added to the important wealth of scientific research and data surrounding climate science and dendrochronology in particular. But such disclosure in an incomplete or unfinished form could undermine and jeopardise the full value of the information. Inaccurate conclusions or erroneous extrapolations could be made from the material in its incomplete state and this would not only undermine the value of the information itself, but could also potentially prejudice the scientific rigour of ongoing climate change research as a whole.
52. The Commissioner considers that the public interest would not be served by adding further uncertainty or confusion into an area that has already attracted considerable controversy in recent years and which needs to be as accurate and evidence-based as possible if the public interest benefit is to be maximised.
53. Given the importance of the need for accuracy and informed understanding of climate change information and research, the Commissioner considers that the need for a 'safe space' in which academics can complete such work without having to prematurely defend or justify the findings/conclusions is an important public interest argument in favour of maintaining the exemption.
54. If the 2006 Chronology were to be disclosed in an incomplete state, without the associated metadata descriptors or the formal written explanations of how the chronology was derived, the Commissioner considers that the information's integrity and scientific worth would be undermined to a significant extent. This would not be in the public interest.
55. The complainant has argued that (in accordance with the Commissioner's stated Guidance) the University could disclose the 2006 Chronology in a contextualised format. However, the University has made clear that this is how the information will be disclosed in any

event, once it has passed through all the stages of the process and been subject to peer review. At that point, as the University has argued, there will be due transparency and openness and anyone who wishes to critique or test the information will be able to do so.

56. In his submissions the complainant has referenced the Muir Russell report (The Independent Climate Change E-mails Review of July 2010), his contention being that the findings of that report (into the 'Climategate' controversy) add weight to the public interest in disclosure of the requested information. However, in the context of the present case, the Commissioner finds that the following observation of the Muir Russell report (paragraph 31 on page 14 of the report) is of greater public interest relevance:

'We note that much of the challenge to CRU's work has not always followed the conventional scientific method of checking and seeking to falsify conclusions or offering alternative hypotheses for peer review and publication. We believe this is necessary if science is to move on, and we hope that all those involved in all sides of the climate science debate will adopt this approach'.

57. Whilst the Commissioner appreciates that not all of those who have an interest in challenging the work of the CRU at the University have access to or the resources for peer review and publication, he considers that the important public interest in generating debate about climate science and the methodologies employed, and putting the associated research to proof, is best served if the information in question has been presented in its most robust and clearly explainable form. In the case of the 2006 Chronology, this means that the information should be disclosed to the public in the completed and contextualised state which the University has confirmed it will be by October 2012.
58. The complainant has expressed doubts as to whether the University really intends to publish the information by the date specified and believes this to be a delaying tactic on the University's part. The Commissioner is not aware of any evidence to support such a contention, but given the written assurances which have been received from the University as to the publication date, he considers that any delay beyond October 2012 will need to be reasonably explained by the University if the withheld information is to remain exempt from disclosure by virtue of regulation 12(4)(d), if a further request was made.
59. Taking into account the public interest factors as a whole, and being particularly mindful of the timing of release of the information, the Commissioner is satisfied, for the reasons given above, that the public

interest in maintaining the exception outweighs the public interest in disclosure of the 2006 Chronology in its current incomplete state.

60. Having found that the information is exempt from disclosure by virtue of regulation 12(4)(d), the Commissioner has not considered the application of regulation 12(5)(c) (intellectual property rights exception).

Other matters

61. In supplemental submissions to the Commissioner, the complainant alleged that the list of sites disclosed by the University showed that the evidence which it had given on this topic to the Muir Russell panel was *'untruthful and/or deceptive'*. The complainant suggested that this increased the public interest in disclosure of the 2006 Chronology.
62. It is not the Commissioner's role to investigate the accuracy or otherwise of the evidence given to the Muir Russell review. If the complainant's allegations (which are strongly denied by the University) have any substance, then the allegedly incriminating information (the list of sites) is now in the public domain and open to public scrutiny and analysis. The Commissioner does not consider that the complainant's allegations add any support for disclosure of the 2006 Chronology.
63. Although the Commissioner was not required to reach a formal finding as to the list of sites (because this information was disclosed by the University during the course of the Commissioner's investigation), it should have been clear to the University at a much earlier stage (before the Commissioner's involvement), that the list of sites, being raw measurement data, could not validly be withheld under regulation 12(4)(d). The Commissioner acknowledges the cooperation of the University in subsequently deciding to voluntarily disclose this information to the complainant, but the failure to do so within 20 working days of the complainant's request was a breach of regulation 5(2).
64. Given the presumption in favour of disclosure of environmental information, it is essential that the University ensures that it only withholds from disclosure information which it is entitled to by virtue of the regulations.

Right of appeal

65. Either party has the right to appeal against this decision notice to the First-tier Tribunal (Information Rights). Information about the appeals process may be obtained from:

First-tier Tribunal (Information Rights)
GRC & GRP Tribunals,
PO Box 9300,
LEICESTER,
LE1 8DJ

Tel: 0300 1234504

Fax: 0116 249 4253

Email: informationtribunal@hmcts.gsi.gov.uk

Website: www.justice.gov.uk/guidance/courts-and-tribunals/tribunals/information-rights/index.htm

66. If you wish to appeal against a decision notice, you can obtain information on how to appeal along with the relevant forms from the Information Tribunal website.
67. Any Notice of Appeal should be served on the Tribunal within 28 (calendar) days of the date on which this decision notice is sent.

Signed

Steve Wood
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