



Cynulliad Cenedlaethol Cymru **The National Assembly for Wales**

Y Pwyllgor Menter a Busnes **The Enterprise and Business Committee**

Dydd Iau, 14 Mawrth 2013
Thursday, 14 March 2013

Cynnwys **Contents**

Cyflwyniad, Ymddiheuriadau a Dirprwyon
Introduction, Apologies and Substitutions

Ymchwiliad i Horizon 2020—Sesiwn Dystiolaeth
Inquiry into Horizon 2020—Evidence Session

Ymchwiliad i Horizon 2020—Sesiwn Dystiolaeth
Inquiry into Horizon 2020—Evidence Session

Cynnig o dan Reol Sefydlog Rhif 17.42 i Benderfynu Gwahardd y Cyhoedd o Weddill y
Cyfarfod
Motion under Standing Order No. 17.42 to Resolve to Exclude the Public from the Remainder
of the Meeting

Cofnodir y trafodion hyn yn yr iaith y llefarwyd hwy ynddi yn y pwyllgor. Yn ogystal,
cynhwysir trawsgrifiad o'r cyfieithu ar y pryd.

These proceedings are reported in the language in which they were spoken in the committee.
In addition, a transcription of the simultaneous interpretation is included.

Aelodau'r pwyllgor yn bresennol **Committee members in attendance**

Byron Davies	Ceidwadwyr Cymreig Welsh Conservatives
Keith Davies	Llafur Labour
Alun Ffred Jones	Plaid Cymru The Party of Wales

Eluned Parrott	Democratiaid Rhyddfrydol Cymru Welsh Liberal Democrats
Gwyn R. Price	Llafur (yn dirprwyo ar ran Joyce Watson) Labour (substituting for Joyce Watson)
Nick Ramsay	Ceidwadwyr Cymreig (Cadeirydd y Pwyllgor) Welsh Conservatives (Committee Chair)
David Rees	Llafur Labour
Kenneth Skates	Llafur Labour

Eraill yn bresennol**Others in attendance**

Yr Athro/Professor Phil Bowen	Cyfarwyddwr, Ysgol Beirianeg Caerdydd, Prifysgol Caerdydd Director, Cardiff School of Engineering, Cardiff University
Dr Adrian Healy	Canolfan Uwchefrydiau Gwyddorau Cymdeithasol, Ysgol Cynllunio Trefol a Rhanbarthol, Prifysgol Caerdydd Centre for Advanced Studies in Social Sciences, School of City and Regional Planning, Cardiff University
Genevra Kirby	Cydgysylltydd Cenedlaethol ar gyfer FP7 yn y DU, yr Uned Gwybodaeth ac Arloesi Rhyngwladol, yr Adran Busnes, Arloesi a Sgiliau National Co-ordinator for FP7 in the UK, International Knowledge and Innovation Unit, Department of Business, Innovation and Skills
Steve Ringer	Pennaeth Tîm Rheoli'r Rhaglen Fframwaith, yr Uned Gwybodaeth ac Arloesi Rhyngwladol, yr Adran Busnes, Arloesi a Sgiliau Head of Framework Programme Management Team, International Knowledge and Innovation Unit, Department of Business, Innovation and Skills

Swyddogion Cynulliad Cenedlaethol Cymru yn bresennol**National Assembly for Wales officials in attendance**

Siân Phipps	Clerc Clerk
Rhodri Wyn Jones	Dirprwy Glerc Deputy Clerk
Anne Thomas	Y Gwasanaeth Ymchwil Research Service

Dechreuodd y cyfarfod am 1.00 p.m.

The meeting began at 1.00 p.m.

Cyflwyniad, Ymddiheuriadau a Dirprwyon
Introduction, Apologies and Substitutions

[1] **Nick Ramsay:** I welcome Members and our witnesses by video link from London to this afternoon's meeting of the Enterprise and Business Committee. The meeting is bilingual. The headphones can be used to hear simultaneous translation from Welsh to English on channel 1, or for amplification on channel 0. The meeting is being broadcast and a transcript of the proceedings will be published. I ask Members to turn off their mobile phones. I also remind Members and witnesses that the microphones will operate automatically. In the event of the fire alarm sounding, please follow the directions of the ushers.

[2] We have received three apologies for absence this afternoon, from Julie James, Dafydd Elis-Thomas and Joyce Watson. We are expecting Gwyn Price, who has agreed to substitute for Joyce Watson.

Ymchwiliad i Horizon 2020—Sesiwn Dystiolaeth Inquiry into Horizon 2020—Evidence Session

[3] **Nick Ramsay:** This is the final session of the committee's stage 2 inquiry into Horizon 2020. I welcome our witnesses, who have been sitting patiently in London while the video link was successfully established. Welcome to the committee. Would you like to give your names and positions for the record, please?

[4] **Mr Ringer:** Yes. Good afternoon, everyone. My name is Steve Ringer. I head up the framework programme management team in the international knowledge and innovation unit of the Department for Business, Innovation and Skills.

[5] **Ms Kirby:** Hello. I am Genevra Kirby, and I am in Steve's team. I am also the national co-ordinator for FP7 in the UK.

[6] **Nick Ramsay:** That is great; thank you. We have a number of questions for you, so I propose that we move straight into those. Eluned Parrott has the first question.

[7] **Eluned Parrott:** Just to begin with, I wonder whether you could give us a broad-brush idea of the role of the UK Government's FP7 team in terms of the services and activities that it is responsible for.

[8] **Mr Ringer:** The Department for Business, Innovation and Skills, through the international knowledge and innovation unit, leads on the UK's negotiation of the framework programme for research and development. Consequently, we are leading on the negotiation of the new Horizon 2020 programme. We have four teams working to that end. We have a split responsibility for co-ordinating negotiation on the various component parts of Horizon 2020. In support of that co-ordination we have set up sub-groups with leading policy officials and devolved administration representatives, and throughout the last two years we have supplemented that closer input from those experts on a number of consultations. We have not held a public consultation as such, but we did launch a call for evidence two and a half years ago. That kick-started the department's gathering of information on what we would want to see and what our priorities would be for the successor programme. Therefore, it was prior to the Commission's proposals, which came out just over a year ago.

[9] **Eluned Parrott:** To what extent do you see the role of the team as a supporting role reacting to the needs of the individual universities and businesses; and to what extent are you proactively going out there to try to put together and stimulate new partnerships?

[10] **Mr Ringer:** Are we talking about Horizon 2020 in particular or our ongoing activity?

[11] **Eluned Parrott:** I am wondering what your role is currently in the FP7 round and how you are preparing, perhaps, to change that going into Horizon 2020. Are you happy with the way that things are working now, or are you going to look to change your focus?

[12] **Mr Ringer:** In terms of helping UK participants or would-be applicants, there is much that we did in FP7 that we are quite pleased with. The review that we undertook last year into support services required for Horizon 2020 nevertheless did identify some weaknesses, including weaknesses with the national contact point structure that we had in

place, which was to a large extent made up of part-time individuals. We saw some weaknesses with the national website; we changed the basis of that halfway through the FP7 programme, and essentially shoehorned it into a system that was initially designed for another purpose. That did not work quite so well.

[13] We identified some weaknesses in the extent of co-operation and collaboration between the various support providers across the UK. That would be including the national contact point network, the Enterprise Europe Network, the knowledge transfer networks and, until their demise, the regional services that the regional development agencies put in place. There was not as much co-operation and co-ordination with that, which, overall, hindered everyone's ability to make maximum use of the interest that would-be applicants had in the programme.

[14] So, what are we doing to address that? As a result of the review we took forward last year on the technology strategy board, we have identified a need to increase the national contact point resource so that, essentially, you have full-time resource for each component part of the Horizon 2020 programme, accepting that the final shape of the programme has not yet been finalised. We are working more closely with the TSB on the implementation of the national contact point network. The intention, agreed with the TSB, is that the national contact points dealing with the areas of most relevance to industry in Horizon 2020 will be employed by the TSB and will thereby enjoy the benefits of closer links with the TSB technologists, the knowledge transfer networks and the Enterprise Europe Network, which has a particular responsibility towards SMEs. We have increased the NCP resource to mostly full-time, though the area is mainly of academic interest—that is, the national contact points that BIS itself will be funding. In addition to the TSB and BIS NCPs, there will also be one or two NCPs funded by other Whitehall departments. In addition to that, we will also be expecting the devolved administrations to continue their practice of having their own individual regional contacts, which will be fully integrated into the NCP network. The remit that the NCPs will have will include a greater requirement to engage in awareness-raising activities and more targeted regional activities where there is an opportunity to do so. There will also be a remit, perhaps not enshrined in agreements with the NCPs, but an expectation that there will be better links between the NCPs and those people engaged in organising and managing structural fund opportunities.

[15] **Eluned Parrott:** Thank you; that is very comprehensive in terms of the tactical changes that you anticipate. Do you think that, at a strategic level, there has been too much of a tendency to sit back and expect potential applicants to come to the support that is available, and that, on that strategic level, there will be a change of drive and a change of focus from BIS in terms of proactively stimulating and encouraging new applications from new applicants?

[16] **Mr Ringer:** We will be taking that forward with the technology strategy board. As I said, the remit the national contact points would have primarily, along with other support players, will be to go out there. We are putting more resource into funding the national contact points, so there will be more money to allow them to be more proactive than they were able to be for the framework programme. Quite what they do, and how they target particular parts of the UK and particular sectors, will depend in large part on the nature of the calls for proposals. One would expect that the activities they would engage in, and the way they would pursue those activities, will change from year to year. Of course, this is a new system, so I would imagine that there will also be lessons learned in the first year or two about how to do things better, which will benefit subsequent years.

[17] **Eluned Parrott:** Finally from me, following on from that point, can you clarify what level of engagement you have with the devolved administrations, for example with the new Horizon 2020 unit set up in the Welsh European Funding Office by the Welsh Government?

[18] **Mr Ringer:** We have extensive contact with the devolved administrations. We have devolved administration representation on the Horizon 2020 steering group and project boards, with the steering group being chaired and attended often at director general level. We have devolved administration representation on the sub-group that I lead on with regard to negotiating the rules of participation in framework programmes, which covers funding, IP handling and the like. We have devolved administration representation—and good attendance, it has to be said—at our regular framework programme network meetings, which is the main forum that we have for engaging with stakeholders and, of course, officials on European research policy proposals, including frameworks. There will, of course, be ad hoc contact, as there has been on a variety of issues as they arise.

[19] **Nick Ramsay:** Thank you both. The next question is from Keith Davies.

[20] **Keith Davies:** Byddaf yn gofyn fy nghwestiynau yn Gymraeg. Prynhawn da. A allwch egluro a oes gofynion a bennir gan yr Undeb Ewropeaidd ar gyfer darparu gwasanaethau cymorth i'r aelod wladwriaethau gyda'r nod o hwyluso neu gefnogi cyfranogi FP7? A yw'r gwasanaethau hynny yn orfodol neu'n wirfoddol?

Keith Davies: I will be asking my questions in Welsh. Good afternoon. Can you explain whether there are specific requirements in the EU for providing support services to the member states with the aim of facilitating or supporting participation in FP7? Are those services compulsory or voluntary?

[21] **Mr Ringer:** I will ask my colleague Genevra to answer that. She is the national contact point co-ordinator and has been working quite closely not only on taking forward the requirements of FP7, but with the Commission on developing the requirements for authorising project activity.

[22] **Ms Kirby:** Within the current framework programme, we have a guidance document that officially outlines the remit of NCPs in member states: awareness raising, support for applicants' proposals and suchlike. In Horizon 2020, there will be similar guidance. For the latter part of last year, we were working with the Commission on drawing up draft documentation for this, which is similar to what we do at the moment, so it is a general remit that member states are expected to provide nationally for applicants in their country. However, the finer detail is up to member states as to how it is delivered, how it is networked across, the more detailed services that it will provide and whether it is focused on specific areas. Generally, there is an expectation that we will have national contact points across all the various programmes and initiatives within Horizon 2020.

[23] **Mr Ringer:** Following that, it should be said that these requirements that are in place for FP7 and will be in place for Horizon 2020 will leave a certain latitude for member states to develop a network that is best suited to national needs. We saw, from looking at how various member states did this for FP7, quite a variation in how those member states set up national contact point networks. Some countries were able to put a great deal of resource into that, while others put not very much in at all. We have not identified any great correlation between significantly higher resource leading to a significantly higher participation rate, which is one of the things that you would have expected. We looked into that as part of the review. In addition to the national contact point network, the Enterprise Europe Network will also have its own remit and there will be a Commission requirement that the national contact point network liaises sufficiently with the EEN.

1.15 p.m.

[24] **Keith Davies:** Diolch am hynny. **Keith Davies:** Thank you for that. We heard

Clywsom y bore yma sut y mae Iwerddon yn cefnogi busnesau a phrifysgolion yno. Clywsom fod nifer fawr o asiantaethau yn dod at ei gilydd yn Iwerddon a bod y Llywodraeth yno yn eu hariannu'n eithaf hael. Y cwestiwn sydd gennyf i yw: sut y mae Llywodraeth y Deyrnas Unedig yn cymharu, yn gyntaf ag Iwerddon, ac, yn ail, â'r gwledydd mwyaf eraill, fel Ffrainc a'r Almaen? A ydym yn cymharu o ran yr hyn y maent yn ei gefnogi?

this morning how Ireland is supporting businesses and universities there. We heard that a great many agencies are coming together in Ireland and that the Government there is providing generous funding. The question I have is: how does the UK Government compare, primarily with Ireland, and, secondly, with the other larger countries, such as France and Germany? Do we compare with regard to the support that they provide?

[25] **Mr Ringer:** I cannot comment on what the other countries' plans are for Horizon 2020; very little is known about that just now. As for how the UK compares with other countries on FP7, we may have identified—I cannot remember off the top of my head which countries these were—countries that have put more resource in than the UK has. However, there were also countries that put in far less. So, the UK did not stand out as being at one end of the spectrum or the other.

[26] **Nick Ramsay:** Diolch, Keith. We have a question now from Byron Davies.

[27] **Byron Davies:** Good afternoon to you. My question relates to the national contact point. Could you clarify the funding structure for national contact points? Are they supported through technical assistance that may come out of the Horizon 2020 budget, or will the UK Government provide some or all of the finance? Or will the devolved administrations, including the Welsh Government, make any contribution to this?

[28] **Mr Ringer:** The intention in implementing an NCP network for Horizon 2020 is for it to have technology strategy board funding meeting the cost of employing the national contact points that it will have. That comes out of the existing budget for the technology strategy board—it is not additional money; it is a reordering of priorities within the TSB. The same is the case for BIS's funding of the national contact points that we will be supporting, in that it comes out of the existing science budget. It is not additional money; it is a reprioritisation.

[29] I cannot at the moment comment on what the nature of the funding will be in one or two other departments that will continue to provide their own national contact points. I am thinking of the Department of Energy and Climate Change, for example, which will continue to support the NCP that accompanies the energy part of the framework programme.

[30] The devolved administrations' funding of contact points is a matter for them. It is not something that I know very much about.

[31] **Byron Davies:** Could you perhaps provide some clarity about the process by which these NCPs are nominated?

[32] **Mr Ringer:** We will be discussing with the technology strategy board over the next few days and week or so the detail of the recruitment process that the board will launch to employ the NCPs that it will be looking after. BIS will undertake its own consideration of who might best provide the national contact points covering the areas that it will support. At present, that support is coming from the research councils and from the UK Research Office based in Brussels, which is funded by the research councils and by membership subscriptions.

[33] There is a likelihood that we will go to them first for views on whether they wish to continue to provide that support. An issue will be whether those people have increased the

hours they can devote to the work, from half-time at the moment to mainly full-time. We will, in parallel to that, consider how much wider we may have to go to ensure that we get the right people.

[34] As we reflect on the quality of the service that we have received under FP7, we have been largely happy with the quality of the work, allowing for the fact that, in most cases, it is part-time work. So, there is some thinking to be done in all of this over the next few days and weeks. We will, of course, be discussing this with all of our contacts, including the contacts we have in the devolved administrations.

[35] **Byron Davies:** Okay. I think that you have, perhaps, anticipated my supplementary question, which was on the types of organisations that, typically, you would expect to undertake this role.

[36] **Mr Ringer:** We currently have NCPs covering the areas of interest mainly to academia, and NCPs that are provided by the research councils. In many senses, that is natural enough, and no particular problems have come out of that in areas where, perhaps, there is equal business and academic interest in the part of the framework programme in addition to the established national contact point, which sits under contract to the technology strategy board at the moment. If the research council, for example, felt the need to add its own NCP to supplement that support, we expect that that will also be a feature of Horizon 2020. There will be a core group of NCPs that are provided for in the agreement we have with the technology strategy board. The individuals concerned, of course, have yet to be identified. However, in addition to that resource, we leave open the opportunity to other Government departments, devolved administrations, or other entities to add to that at their own cost. We will aspire, as we are able to, to fully integrate those additional NCPs or people into the NCP network.

[37] **David Rees:** I would like to ask a couple of supplementary questions. If the Welsh Government decides that it wants another NCP, does it have to discuss and negotiate with BIS to identify the role that that NCP would have and how it fits into the network?

[38] **Mr Ringer:** We intend to be as open as we can be as, for example, the technology strategy board's recruitment process allows us to be in terms of the requirements we will place on NCPs. We do not place any requirements on devolved administration NCPs—that is a matter for you—but we will ensure that you are fully networked with us and we will share the requirements with you, and you may make use of those as you see fit.

[39] As to what might come out of thinking that you might like an additional NCP, we are very open to discussing with you the kind of focus that might best benefit you or best benefit the network as a whole. For example, you might have in mind that an additional NCP resource in Wales will focus on partnering up Welsh businesses or universities with other UK researchers. It may be that we can offer some thinking on how that might be best taken forward. You do not need to get agreement from us about adding to your national contact point resource. As and when you feel you want to do that, we are happy to discuss with you options for making the most of that resource.

[40] **David Rees:** I would like clarification on just one point. We understand that there is one NCP in Scotland; is the Scottish Government responsible and accountable for that?

[41] **Mr Ringer:** Would you like to answer that, Geneva?

[42] **Ms Kirby:** Yes, it is. We invited it at the start of FP7 to nominate a regional NCP for FP7 as a contact point for anyone in Scotland looking for assistance through the framework programme to support framework programme 7. It made that nomination in a way that was

similar to the way in which we did it with Wales and Northern Ireland.

[43] **David Rees:** Thank you for that. There is a regional co-ordinator in Wales, is there not? Who is that person accountable to?

[44] **Ms Kirby:** The regional co-ordinator in Wales is in the Welsh European Funding Office, as of January this year. Previously, there was someone within the Department for Business, Enterprise, Technology and Science in the Welsh Government.

[45] **David Rees:** I have another question on the employees of the NCPs. You indicated that they are mainly part-time at this point in time, and that they might become full-time as you move forward. What expertise do these individuals have? Are they academics, business people or civil servants? What skills do they bring?

[46] **Ms Kirby:** They are a mixture of people, depending on whether the NCP focus is on industry, academia and such like. A few have been Government officials at some point during their lives, and others have been in business and have been previous applicants of framework programmes in earlier generations. They have a broad remit, collectively.

[47] **Mr Ringer:** The current FP7 national contact points are also nominated as experts to the FP7 programme committees, so they are deemed by the policy leads to have a fair amount of technical expertise and background to provide technical support to the policy official in the programme committee.

[48] **David Rees:** Shall I move to my other questions?

[49] **Nick Ramsay:** I think that Eluned Parrott has a brief supplementary.

[50] **Eluned Parrott:** No, that has been asked already.

[51] **Nick Ramsay:** Okay. Would you like to move to your next questions, David?

[52] **David Rees:** What criteria are used to identify where an NCP is located? There is one in Scotland and 48 in England, so what criteria are used as to where they are located?

[53] **Mr Ringer:** I think the figure in England is around 38.

[54] **David Rees:** We have incorrect figures, then.

[55] **Ms Kirby:** We have just over 30 at the moment—perhaps 32—that are nominated in the UK as national contact points. Other than the regional national contact points that are based in the devolved administrations, we do not have any regional bias.

[56] **Mr Ringer:** We have NCPs dotted around the country. There is no need for them to live in any particular part of the country. As we look to the implementation of the support structure for Horizon 2020, and looking particularly at the NCPs that the technology strategy board will employ, there is an expectation that all of the NCPs will spend at least a limited amount of time in Swindon at the technology strategy board. These are people who are going to be out and about a lot. It matters little where they live in the country, especially when taking into account the modern technology that we have access to.

[57] **David Rees:** It was my error because I read the numbers wrong; the figure is 31.

[58] You spoke earlier about the NCPs helping people when calls come in for requests. Do they do anything proactively to identify and lead calls, or are they just responsive?

[59] **Mr Ringer:** If I understand you right, you are asking whether they have influence on the work programme that establishes the call for proposals. Is that correct?

[60] **David Rees:** Yes.

[61] **Mr Ringer:** They do not have a direct influence, but indirectly very probably in many instances. The national contact points have close working relationships with the policy lead, whether that is in the Department for Business, Innovation and Skills or another Whitehall department. It is the policy lead that will represent the UK in the relevant programme committee where the work programme is discussed before it is adopted. So, there is very little, if any, direct input from NCPs, but there will often be indirect influence through the working relationship with the policy lead. They should be in a position to build on the intelligence that the policy lead has, because they are receptive to the views of the research communities, who have priorities that are feeding back to them from business contacts and university contacts, and who have had concerns expressed that earlier focuses were felt to be not quite right. So, all that intelligence can feedback from the NCP to the policy lead, and therefore to the UK's representation on the programme committee.

[62] **David Rees:** You hold quite a lot of data and statistics on FP7 projects. Have you undertaken a review of NCPs and have you done any analysis as to the correlation that exists between the success of a project and the activities or proactivity of any NCPs?

1.30 p.m.

[63] **Ms Kirby:** No, we have not. I have spoken to Imelda from Ireland on several occasions about this, and I know that they do some, but their numbers of proposals and success rates are vastly different to ours. With regard to making some correlation between the numbers of proposals that go in—a lot of them do not go in via consultation with the NCPs; they go in independently—although I have the ability to see who has put in the proposal, there are just such vast numbers that to make that link to all our NCPs is not an easy task and is extremely time-consuming.

[64] **Mr Ringer:** I should also say that the requirements placed on the NCPs supporting FP7 did not place any management return requirements that would help us to analyse such things. We are mindful of this and we will be discussing with the TSB indicators that we might introduce to the NCP requirements, which will make it easier to do the kind of analysis you have just asked about. However, we have not had the basic information on which to do that analysis for FP7.

[65] **David Rees:** So, in your future quality control, you are not putting in KPIs to look at how this is going to work?

[66] **Mr Ringer:** Sorry, can you repeat that?

[67] **David Rees:** In the future programmes, to manage the quality side of issues, are you going to introduce KPIs so as to have a better picture on that?

[68] **Mr Ringer:** Yes, key performance indicators. I have an issue with acronyms; they do not always jump out at me. We have had early discussions with the TSB about key performance indicators and there are more discussions to be had.

[69] **David Rees:** Do you have any at the moment to look at the quality of the work?

[70] **Ms Kirby:** The one that we have used as a good example recently is the security

NCP. Previously, a policy official was doing it on a part-time basis, but, in the last two years, we have had a dedicated security NCP and we have seen a significant increase in success and participation from the UK, particularly from small and medium-sized enterprises, within the security programme. Obviously, that has supported our move forward and that is a full-time post as well, but that is probably the only one where we have had a clear example of a significant increase by increasing the resource of an NCP.

[71] **Mr Ringer:** If I might add a personal thought—this is not necessarily something that we will eventually agree to—it occurs to me that there may very well be opportunities for NCPs to go back to that context a year or two hence as part of an unofficial survey, I suppose, but maybe not quite a survey, and ask for feedback on how helpful the service has been, whether the entity applied to the programme, was it successful in applying and would it attribute any part of that success to the advice and support it got. I imagine that that sort of thing might be possible, but, as I said, that has not yet been decided and we still have discussions to hold with the TSB.

[72] **Nick Ramsay:** Alun Ffred Jones, are there any outstanding issues on national contact points that you would like to ask about?

[73] **Alun Ffred Jones:** No, they have been answered.

[74] **Nick Ramsay:** Ken Skates is next.

[75] **Kenneth Skates:** I know that you have talked at length already about Horizon 2020, but could you indicate what sort of involvement the Welsh Government has in the process or the preparatory work for Horizon 2020?

[76] **Mr Ringer:** I will add slightly to what I said a little earlier about the fora in which the devolved administrations are represented. The very first large activity that embraced the devolved administrations, as well as every other sector of the UK, was the call for evidence that we launched in October 2010, I think. This was prior to the Commission's proposals for Horizon 2020, and was really a means of building up the UK position on priorities for the successor programme, which we were still referring to at that point as FP8. Since then, we have had regular meetings of the Horizon 2020 steering group, which is chaired by our director general; it has representation from Wales as well as from the other devolved administrations. We have also had meetings of the Horizon 2020 project board, which, if you like, is the executive arm of the steering group, dealing with more practical issues in the negotiation. Again, that has devolved administration representation on it.

[77] The framework programme network—the main forum that we have for liaising with policy officials and stakeholders on EU research policy development—is regularly attended, either physically or over the phone, by usually more than one Welsh delegate. Wales has input into those meetings and has responded on documentation, which is sent out to that network for comment on an ad hoc basis. I also mentioned the stakeholder group that has been supporting me on the negotiation on the rules of participation—the IP eligibility criteria and that sort of thing. Again, there has been Welsh input into that.

[78] My colleagues, who find themselves dealing with hot issues related to Horizon 2020, will, almost on a daily basis, go out to the framework programme network in its entirety for comment. More often than that even, the network will be passing out information as the negotiations—and not just the negotiations on Horizon 2020, but negotiations on the multi-annual financial framework—develop.

[79] **Nick Ramsay:** Do any Members have any further questions?

[80] **Eluned Parrott:** I wanted to query an issue relating to performance management and central co-ordination of the NCPs. I am a little concerned about whether or not you have any control over how well they are working from the centre. What performance management and monitoring techniques do you have available to you to monitor a very disparate and dispersed set of contact points?

[81] **Mr Ringer:** They are only quite so disparate and dispersed in one sense under Horizon 2020 given that a fair number of them will be employed by the TSB—those people being under direct TSB management. The other NCPs will be largely under BIS management, like my colleague here, Geneva. Overall, Geneva is the national co-ordinator and part of that monitoring and control will rely very heavily on the relationship that we will have with the technology strategy board. We already have had a good relationship over the last year as we have taken this review forward. Geneva, would you like to add anything to that?

[82] **Ms Kirby:** Only to say that we do collect monitoring data from them—certainly, for the NCPs that BIS is responsible for, they report through to us. So, we see quarterly monitoring outputs from them. TSB does a similar thing for the 10 or 11 NCPs that it is currently responsible for, and we see copies of activities that they have participated in; we get that on an ad hoc basis, I would say, from other Government departments that currently fund their own NCPs—Steve mentioned DECC, and DEFRA has a similar monitoring operation going on. However, they are all slightly different and compiling them is not regularly achieved. However, moving forward, we are working collectively to put in place a monitoring system across the whole system of NCPs.

[83] **Mr Ringer:** It can also be said that Geneva in particular is in regular contact with the relevant policy official, whether they be in BIS or in other Government departments. Checking on how satisfied they are with the NCP service as they see it is one of the checks.

[84] **Nick Ramsay:** I think that there is one very brief final question for you, if you can get it in in 10 seconds, David.

[85] **David Rees:** I wanted to clarify something that you mentioned. NCPs may be supported by other departments—you mentioned DEFRA and DECC as two other departments that have them. Are you responsible for the overall co-ordination of all NCPs? One of the issues that many people complain about is a lack of joined-up discussions between Government departments sometimes.

[86] **Mr Ringer:** Geneva is the national co-ordinator, but we also organise regular network meetings where we get as many of the NCPs and other support players around the table as possible.

[87] **Ms Kirby:** I am in regular contact with all the NCPs and policy officials. As Steve said, we try to have a quarterly network meeting with the NCPs, including devolved administrations and regional contacts. In the run-up to this review, we had more regular meetings with them. We are co-ordinated. To the outside world, it might not look as though we are co-ordinated, but, internally, we are.

[88] **Nick Ramsay:** The clue is in your title, ‘national co-ordinator for FP7’, but thank you for that clarification, Geneva. I thank Steve Ringer and Geneva Kirby from the UK’s Department of Business, Innovation and Skills for being with us today. It has been really helpful in helping with our evidence session.

[89] **Mr Ringer:** It has been a pleasure, thank you.

[90] **Ms Kirby:** Thank you.

1.41 p.m.

Ymchwiliad i Horizon 2020—Sesiwn Dystiolaeth Inquiry into Horizon 2020—Evidence Session

[91] **Nick Ramsay:** I welcome our witnesses for the final evidence session in this afternoon's meeting of the Enterprise and Business Committee. Would you give your names and titles for the record, please?

[92] **Professor Bowen:** I am Phil Bowen, director of the school of engineering in Cardiff University.

[93] **Dr Healy:** I am Dr Adrian Healy from the school of planning and geography at Cardiff University.

[94] **Nick Ramsay:** Great. Thank you for being with us today. I am sorry that your name plate is wrong, Professor Phil Bowen. It was an oversight. If you had a very long name, you would understand it going off the end, but there was no excuse in this case. Thank you for understanding. We have a number of questions for you, so I suggest we go straight into those. The first question is for Dave Rees.

[95] **David Rees:** I have a question for Phil Bowen in the first instance—I have a reason as to why. We have had a lot of discussions about contact points and other approaches in developing FP7 projects and proposals. How have you found the support structures for developing FP7 proposals in your arena?

[96] **Professor Bowen:** For the FP7 I have been involved in, it has been more about the fact, which we will come to later, that we are involved with the right networks at an industrial level. In a way, it is the outside world approaching you, if you like. In terms of the way in which I would handle it in the school, we engage with the research and commercial division at the university and it interfaces with the Government or the Assembly. That is my route through for support. Others may have other experiences, but, for the FP7 we have been involved in, that has worked for us.

[97] **David Rees:** Have you had any involvement with the network specific to your area?

[98] **Professor Bowen:** Network with regard to—

[99] **David Rees:** The national contact points, which are basically network-led. I know that you would have, Dr Healy, that is why I am asking Professor Bowen first.

[100] **Professor Bowen:** I have to say, I have not had a great deal of involvement.

[101] **David Rees:** So, it has been at an administrative level.

[102] **Professor Bowen:** Yes, it has been at the administrative level. As I said, the fact that we have engagement with good European networks anyway is the salient point.

[103] **David Rees:** I purposely asked Professor Bowen first, because I knew his answer might be different, because you answered this last time, Dr Healy.

[104] **Dr Healy:** What I would add is that we are bidding for an FP7 project at the moment and have been involved with a national contact point. The project is in the social sciences and humanities field. From our experience so far, the national contact point has been very helpful.

As the gentleman was saying, it is quite a reactive service. We have approached it at times when we needed help, assistance and advice. We have used the research and commercial division in Cardiff University and have also spoken to the national contact point when it has a better level of knowledge. We have never found a problem with it. It has been extremely helpful.

[105] **David Rees:** You have approached them, and we seem to get the impression that the lead is coming from either academia or industry. Does industry also approach you in the first instance to come up with ideas and concepts that they want to push and pursue?

1.45 p.m.

[106] **Professor Bowen:** Yes, that is my experience. If you are engaged enough on the European scene, not exclusively, but a lot of the time, it is easier if it is the European partners that you engage with. For example, we have a long-established working group with Enel, the power generator in Italy, and we build up proposals with it. When you are discussing things, it is more of an embedded relationship.

[107] **David Rees:** Do you find, therefore, that the collaborative proposals are far stronger cases to pursue and take forward, particularly collaborative proposals across other regions? You just mentioned Italy.

[108] **Dr Healy:** If you are going to bid into FP7 or Horizon 2020, you must have partners in other countries at that stage. Just to echo what Phil was saying, if you do not have those embedded partnerships already formed, you are not in a very good place for making a bid at the current time, in that sense. You cannot really put together these sorts of partnerships simply when a call comes out. You have to know who the best are and whether you are the best, but also you have to know whether the best are willing to work with you. You must have that quality in order to engage with these programmes.

[109] **David Rees:** Have you had that support, looking at developing those networks via European offices? I know that Higher Education Wales has an office in Brussels, there are Welsh representatives in Brussels and there is also the UK research office.

[110] **Professor Bowen:** In our case, it is less so; it is certainly on a relatively infrequent basis. I am not sure whether we are the best example, because the networks in Europe, in an industrial context, are pretty well established. One thing that I have noticed in some of these consortia bids is that you will find that one thing that we do less well is that we do not tend to do so much with our home, Welsh industries. Referring to the Italians again—and Ansaldo is another company that we currently work with—they will have their local university and they will be very protective of it. In my experience, we do not seem to have cracked that as well as some other countries.

[111] **Nick Ramsay:** We need to move on, but I neglected to mention at the start of this session that we have taken evidence from Dr Adrian Healy earlier in this process. So, thank you for returning. We met with you, Professor Bowen, on our very helpful visit to Cardiff University. It is good to see both of you again. The next question is from Byron Davies.

[112] **Byron Davies:** Bearing in mind that we have met before, and I remember exactly what you said before, do you think that sufficient work is being undertaken in Wales to give priority to engaging in EU research programmes? I am thinking in particular of the Welsh higher education sector.

[113] **Dr Healy:** That is a very large question in many ways. Engaging in EU research programmes is seen as being significantly important for most Welsh universities. Most Welsh

universities would point to the support that they provide to assist their academics within that. Is enough support being provided? I think that there would be a question to my mind of the types of support that might be provided from that. One hears a lot about offering grants for travel and so on to help people engage with these collaborative networks and partnerships. That could be very helpful, and perhaps not quite as much of that is done as might be within the universities, but that is the universities' responsibility, and perhaps they see their resources better spent elsewhere.

[114] From my side, I echo what Phil was just saying. You lay the foundations for these collaborative partnerships a long time before you actually build the networks themselves. Perhaps more could be done at the university level, through some form or another, of helping academics to form early-stage links of a more concrete nature. From my experience, a lot of the projects that I see are seen as one offs, and I do not see the legacy and the capacity being built, necessarily. I do not see whether Phil agrees.

[115] **Professor Bowen:** That is a valid point. Legacy is of huge importance in this area, of all forms of European funding. That has to be nurtured as well. When you are involved in consortium projects, the reason that people want to come back to you is that you have a reputation for delivering. Projects are difficult when you have 20-plus partners, but it is about being understanding and co-operative when you hit the rocky times. So, if you are working with international partners who do not know you that well, and you help each other out and work to make the whole project work, that is respected in future invitations.

[116] **Byron Davies:** What about the Welsh Government? Could it do more to help?

[117] **Professor Bowen:** In terms of what we were discussing earlier, travel is an issue, in terms of funding; having to travel from Wales to Brussels is not the most helpful. On a European technology platform, I am involved in a particular area, which can sometimes be quite expensive. Trying to keep that going—appreciating the benefits of it—both at a Welsh and an institutional level, is still not easy in terms of time and money. As Adrian said, you could argue that that is the university's issue and that that is its business, but if there was any support in that direction, that would help.

[118] **Dr Healy:** You also have to be aware of what the support might be for, because when we talk about FP7 and Horizon 2020, as academics, we quickly slip into the collaborative and co-operative research area, but there is clearly an awful lot more to framework programme 7 and Horizon 2020 than the collaborative research programmes. Within the research strand, the intellectual excellence area, for example, we have the European Research Council and the collaborative wards and so forth. You have the societal challenges and the industrial leadership strand. There are things in there, such as research infrastructures, for example, which might be of a more strategic nature. There are things like the joint programming initiatives that are coming forward and so on, which might be of a more strategic dimension. Some of the societal challenges might be more strategic.

[119] So, if one were talking about where support comes from, you might want to be looking at those different dimensions of Horizon 2020 coming forward and asking what we are trying to achieve with this. Is it simply more research with more research outputs? At which point, you might be looking for support that would take the value of that out into the local economy, trying to transfer the knowledge or whatever it might be. It might be about trying to build some strategic areas of activity, which might be through research infrastructures, through joint programming and bringing knowledge from other places. We are then going to connect into mobility funds, research funds and so forth. So, I think that there are two levels. I would say that the Welsh Government perhaps did not have a role in terms of individual academic mobility, but in terms of strategic activity, yes, I would think that it does.

[120] **Keith Davies:** Rwyf am ofyn fy nghwestiwn yn Gymraeg.

Keith Davies: I will ask my question in Welsh.

[121] Rydych yn sôn am fuddsoddi er mwyn datblygu gallu ymchwil yng Nghymru. Cyn i Horizon 2020 ddod, dylem fod yn barod. Rydych wedi dweud hynny. Os nad ydych yn cydweithio'n barod, ni fyddwch yn ennill. Felly, mae'n rhaid inni edrych ar ffyrdd o ddatblygu ymchwil yng Nghymru, trwy flaenoriaethu a thrwy sicrhau, rywsut neu'i gilydd, bod digon o gyllid ar gael.

You are talking about investing in order to develop research ability in Wales. Before Horizon 2020 is implemented, we should be ready. You said this earlier on. If you are not already collaborating, you will not win. So, we have to look at ways of developing research in Wales, by prioritising and ensuring, somehow, that we have enough funding.

[122] **Professor Bowen:** Yes, coming in at a low level and trying to enhance our performance in terms of funding, as Adrian says, is difficult. The clever money would be on trying to do more at the strategic level, because when you get on to these—technology platforms might have had their day—you are feeding directly into the strategies that decide where the money is allocated, and you get early notification. So, it is difficult. I think that that would be an easy way of getting in from the bottom up, without trying to facilitate industrial engagement with academics, but how do you do that? That does not seem like an easy route to me.

[123] **Keith Davies:** Y peth cyntaf a glywsom y bore yma oedd yr hyn sy'n digwydd yn Iwerddon. Mae'n debyg bod y Llywodraeth yn Iwerddon yn rhoi arian i mewn i sicrhau bod pobl yn cydweithio â'i gilydd, i gymharu â'r hyn sy'n digwydd yn y fan hon, efallai, lle nad ydym yn mynd ar yr un trywydd.

Keith Davies: The first thing that we heard this morning was what is happening in Ireland. It seems that the Government in Ireland is putting money in to ensure that people co-operate with each other, in contrast to what is happening here, perhaps, where we are not taking the same route.

[124] **Dr Healy:** May I add to that? There are two parts to this. The first is that we are not necessarily bad at research; we are actually quite good at some elements of research, and we spend, not enough, but a reasonable amount of money on it. Perhaps we do not focus on some of the strengths that we have. Phil is humble, in the sense that he has just told me that we operate two of Europe's research infrastructures at Cardiff University. I did not know that. I ought to have known that, but I did not. Cardiff University has not, to my mind, been good at selling that in terms of identifying where strengths lie. So, there are some things that we do well; we can see that and we can build on that. That is partly what the Commission's notion of smart specialisation, which we pick up in Wales, is about, in terms of building on our strengths so that we make some choices.

[125] We could possibly do more, like Ireland, on promoting collaboration, but we are quite good at collaboration. Ireland was coming from a very low base and perhaps that is what it needed to do at that stage. Some of the evidence that you took in your previous inquiry identified that we are quite good on Marie Curie awards, the mobility of academics and on young researchers from outside Wales—other parts of Europe—coming into Wales. Those are good things, but the question to my mind is what we do with that afterwards, when they leave and go back to their other universities. Are we maintaining those networks? Are we building on those networks? I do not think that collaboration is an issue for most Welsh and UK academics. There are some minor issues, but the biggest one is to ensure a sustained collaboration through which you can develop certain real valuable outputs over a long period of time as well. In that sense, simple collaboration grants and mobility funds, which the Irish have taken forward, have a value, but one might be thinking more in terms of early-stage

research grants that pay small amounts—it is almost proof-of-concept funding at an academic level—to develop initial networks of researchers around a project. It might be quite small sums of money.

[126] **Nick Ramsay:** So you are saying that it might be that this is too simplistic. You are looking at collaboration that will deliver something sustainable.

[127] **Dr Healy:** I would hope so, yes.

[128] **Kenneth Skates:** However, surely, you cannot create those lasting relationships without the individual collaborative projects, or can you? If you can, how do you go about doing it?

[129] **Dr Healy:** You need the individual collaborative projects, but I am saying that simply putting in a mobility or travel grant is not enough. It is better to have that kind of collaborative project that works outside of Wales and the UK, so you are encouraging the collaboration with European partners through which these things may build later.

[130] **Professor Bowen:** One potential avenue here in terms of funding is that there are industrial European networks out there. For example, we moved into a new field about six or seven years ago in the gas turbine area, which is not a cheap mechanism, but we joined the European turbine network. That is an organisation that was set up to go chasing European funding through the framework programmes, and it represents most of the sector. To join that costs a substantial amount, as does attending and engaging with that. We were new to the sector, and that allowed us into that arena. We were able to present our wares and to engage with the major companies in that field. So, it might be that, rather than looking at one-offs, if you could involve with—

[131] **Keith Davies:** Fodd bynnag, yn ôl y ffigurau sydd gennym, mae Prifysgol Caerdydd yn gwneud yn arbennig o dda. Mae hanner yr arian wedi dod i Gaerdydd. Rydym yn sôn am rwydweithiau cenedlaethol gwyddoniaeth Cymru a bod eisiau eu tynnu at ei gilydd, ond rwy'n credu ein bod ar ei hôl hi o ran cael pobl i weithio gyda'i gilydd. Beth allwn ei wneud am hynny? Rydych wedi gwneud yn dda yn ôl y ffigurau sydd gennym, gan gael hanner yr arian, ond mae gweddill Cymru gennym i'w hystyried.

Keith Davies: However, according to the figures that we have, Cardiff University is doing very well. Half of the money that has come in has come to Cardiff. We are talking about national science networks for Wales and that there is a need to draw them together, but I think that we are lagging behind in getting people to work together. What can we do about that? You have done well, according to the figures that we have, in securing half the money, but we have to consider the rest of Wales.

[132] **Professor Bowen:** As I said, there are collaborative organisations. To refer to my experience, looking at the bioenergy technology platform that I am involved with, I am trying to bring in the strength at Aberystwyth in this area, in Institute of Biological, Environmental and Rural Sciences, as well. However, sometimes it is not an easy fix, but you are there and you are trying to keep a Welsh perspective on things and bring other areas of strength into play.

2.00 p.m.

[133] **Keith Davies yn parhau:** A ydyw'n dod yn ôl atom ni, felly, fel Llywodraeth, a bod rhaid inni gael rheolau, ac os ydym yn mynd i gefnogi rhywbeth, ein bod am weld cydweithio rhwng y prifysgolion yng

Keith Davies continues: Does it come back to us, therefore, as a Government, that we have to have rules, and if we are going to support something, we want to see collaboration between the universities in

Nghymru?

Wales?

[134] **Professor Bowen:** I am not the biggest fan of that, no. [*Laughter.*]

[135] **Dr Healy:** With all due respect I think that that would be a retrograde step in the sense that framework programme 7, Horizon 2020 and so forth are set up as exemplars of research excellence. The value in it is collaborative research at a European level, with the best researchers working with the best researchers wherever they might be. Setting up internal collaborations can have value when that raises the overall level of the quality of what you are trying to engage with at that stage, or the capacity that you are creating. Simply enforcing collaboration as a means of trying to move activity around a territory is often not a good way forward, because you dilute the value that you have and, in the end, no-one benefits from it. It is better to say, 'There are certain areas of specialist expertise that we have developed: they may be in Cardiff, but they may be elsewhere as well'—one looks at where the strengths are—and we encourage collaboration at a European or global level at that scale, but we will also try to put in place alternative mechanisms through things like the structural funds, for example—and this is where some of the synergies might come in—in order to drive that knowledge through to the benefit of the Welsh economy more generally'.

[136] **Nick Ramsay:** So, collaboration, but not for collaboration's sake, and other factors have to come in.

[137] **Dr Healy:** Absolutely.

[138] **Nick Ramsay:** We are heading towards the halfway mark, yet we still have a lot of questions to ask, so I want to move things on. Ken has the next question.

[139] **Kenneth Skates:** I think that it has been answered pretty well, Chair.

[140] **Nick Ramsay:** If Ken is content, we will move to David Rees's question.

[141] **David Rees:** Byron Davies mentioned legacy and you also talked about legacy. I think that Dr Healy gave us some interesting thoughts about what the legacy could be: working with industry to be able to support the development, particularly in your situation where you have industry based in another country, the immediate legacy will not come to Wales. Sometimes, there seems to be some outside-the-box thinking in the legacy. Have you seen much evidence of outside-the-box thinking in the legacy of the FP7 programme from the Welsh Government?

[142] **Dr Healy:** The short answer to that has to be 'no'. I am not entirely certain as to the extent to which the Welsh Government looks at individual FP7 projects and thinks about the value of the activity that may come from that. I think that that is very much left to the universities or the researchers themselves, or to the companies that are involved in FP7 projects.

[143] Legacies can be project related, in the sense of what comes out of it in terms of a commercial activity or an output or something like that. However, more often than not, I would argue that the legacy here are things that you build up in terms of skills, capacity and long-term collaborative networks, in the sense that you can then engage for other purposes. If you fail to maximise that legacy, you leave places out because you are not building into other parts of Wales, for example. What also happens—and I think that academics are guilty of this as much as anyone else—is that you are interested in the project, you do the project, you get the output and then, basically, you move on to the next thing. I think that we are failing as a sector, in that sense, to generate longer term and sustainable value out of the various projects that are taken forward. It is not just the Welsh Government in that instance.

[144] **Professor Bowen:** It is a very interesting point. I had not thought of that, actually, but it does not seem a bad idea to actually look at the outputs of framework programmes, maybe at a Welsh Government level, and look at what the potential is for broader benefit. I am pretty sure that it does not happen at the minute, as Adrian outlined, but there may be mileage in that.

[145] **Nick Ramsay:** Much as I am loath to interfere with the individual style and flair of committee members, I remind Members, particularly in these shorter evidence sessions—and we have had a fair few witnesses today—of the need to be succinct. It is easier for me, and it is also easier for our witnesses. That was, by no means, an introduction to Eluned Parrott's next question. [*Laughter.*] It genuinely was not. As it is your first contribution in this session, Eluned, you can have some free rein.

[146] **Eluned Parrott:** Thank you, Chair; that is very kind. We have patches of real excellence in Wales, but it is that transferability across the country, and the transferability deeper in the economy, where we perhaps are not getting as much out of the research programmes as we might like. Whose responsibility is it to be showing leadership here? Do you think that the universities, applicants and networks are going to provide you with leadership in the future, or is a much more strategic response required from Government?

[147] **Professor Bowen:** I suppose I would side with the fact that there should be less Government and more being done from an academic perspective. I am not sure, in my experience, that European programmes encourage internal pan-nation activity. If you look at the way in which these programmes run, it is difficult in a way to bring in partners from your home country. It is not impossible, but generally they are looking for collaboration across other countries. So, yes, on the one hand I am saying that you have to leave it to the individuals, but on the other hand, it is not an easy task, given the way that the framework programmes are structured.

[148] **Eluned Parrott:** Do you think that the kind of support that we have offered as a nation to potential applicants has been perhaps too parochial to be attractive and successful on a European basis?

[149] **Dr Healy:** Can you explain what you mean by 'parochial'?

[150] **Eluned Parrott:** Do you think that we focus too much on looking inwards at how we can encourage collaboration within Wales, and has that acted as a barrier to collaboration outside Wales?

[151] **Professor Bowen:** It sometimes feels like that, so I would say 'yes'. As I mentioned earlier, I am very keen to try to engage partners within Wales wherever possible, but, likewise, you have to engage on a European level. That is not meant to be said in an arrogant way; it is just the way that the thing is constructed.

[152] **Dr Healy:** In the sense of the different ways that you could do this through different programmes, taking a single programme approach is problematic in the first instance. Within Wales, we have certainly been very focused on the internal collaboration route, as you say, and that has had some positives, in that it has helped to build the profile of Welsh academic activity in some areas. The Low Carbon Research Institute would be an example of that in some of those fields—it offers a platform on which to operate on a wider stage. Some of the reasons for that internal collaboration have been because of the way that the activities have been funded, such as through the structural funds, for example. There are wider opportunities now emerging through the structural funds, and more particularly with the territorial co-operation programmes, for external activities linking Wales with other parts of Europe and so

forth, and one should take advantage of those, build on the platform that has been created and move on at that stage. So, we could do more to look outside and build links back into Wales, but we have to make sure that the benefits of that are felt within Wales afterwards.

[153] **Professor Bowen:** I think that is a better model: to use structural funds to look at internal collaboration and then seek out synergies to take that forward to Horizon 2020. That sits a lot more comfortably with me and the experience that I have had.

[154] **Eluned Parrott:** Finally from me, one of the significant barriers to people applying for European funding is the perception of it and how complex and difficult it is. Whose role is it to communicate about Wales's success? You say that you do not think that your own university has done that as successfully as it might. Is this something that is appropriate on a national level, with leadership from Government, or, again, is this something that the universities themselves could take ownership of?

[155] **Professor Bowen:** I think that it should be a bit of both. Certainly, it resides in the first instance with the university, I would say. You can see that there could be a lot of benefits from the Welsh Government taking a lead in that.

[156] **Dr Healy:** One of the hardest things to ask a university is, 'What are you best at?'. Most universities will tell you dozens of things. That is a challenge for the university at that stage, but it is a challenge that perhaps universities should be helped to meet.

[157] **Nick Ramsay:** Surely you can narrow it down more than that.

[158] **Dr Healy:** One would have thought so.

[159] **Nick Ramsay:** To say that you are best at a dozen things seems to defeat the object.

[160] **Dr Healy:** We did some work once in one of the English regions in a separate area, and the universities felt challenged when they were asked to identify the three things they did best. When we were in Poland last week, the academics identified 200 specialisms.

[161] **Nick Ramsay:** Alun Ffred Jones, show us what you are best at.

[162] Alun Ffred Jones: Byddaf yn gofyn cwestiwn yn Gymraeg am un peth. Mae'r ffigurau yr ydym wedi eu cael o Iwerddon a'r Alban yn awgrymu bod y ddwy wlad hynny yn perfformio llawer iawn yn well nag yr ydym ni o ran y rhaglenni ymchwil sydd wedi bod—FP6 a FP7. A allwch roi eich bys ar y rheswm am hynny?	Alun Ffred Jones: For one thing, I will be asking a question in Welsh. The figures that we have received from Ireland and Scotland suggest that both those nations are performing far better than we are in terms of the research programmes that have been—FP6 and FP7. Can you tell us why that is the case?
---	--

[163] **Dr Healy:** As I have not seen the figures, it is difficult to know what the differences are, in that sense. In Scotland, I presume that this is done on the basis of research and development spend as a proportion rather than population or other criteria. If one looks at Wales, you see that its take from framework programme activity matches pretty much proportionately its R&D spend profile. So, you could say that it is performing to average. However, it is much below its population per capita size. The problem there, to my mind, is a lack of R&D activity, rather than underperformance in the framework programmes per se. However, without knowing what your figures are, I cannot say where that comes forward.

[164] Scotland has one or two extremely good universities—that is one thing that one might highlight—particularly in the fields of engineering, medicine, and so forth, which are

traditionally high takers under the framework programmes. So, it could be something to do with sectors of activity as well as levels of R&D activity. In Ireland, there has been a very big push since about FP4, I think, to stimulate levels of engagement in framework programme activities. Ireland and Spain, as I recall, are two of the success stories in that respect.

[165] The question that you might also be asking is whether the Irish have gained the benefit to their economy out of that increased level of activity. There is a famous saying within the world that I work in that spending more money on research basically just buys you more research. If you do not get the economy going as a result, then the value of having more papers cited and so forth is pretty minimal. So, there is another question that you would want to ask: are the economic benefits of that being felt? We can always try to drive up levels of applications and so forth, and I think that that would have benefits in Wales as volumes are problematic as a whole, but that comes at a cost. Framework programmes have a high failure rate. I think that Cardiff's success rate is something like one in 10—around 10% to 15%. For the one that we have just won, there were 12 bidders. Unless you are in the top three, you will have quite a lot of costs against you every time you lose those sorts of things. So, once again, you do not just want to go into this simply to try to drive up applications, because it will come at a cost and your money might be better spent elsewhere at that stage. However, Ireland certainly had a very strong strategic push for a period of time.

[166] **Alun Ffred Jones:** Yn dilyn ymlaen o hynny, a dilyn hefyd sylwadau'r Athro Phil Bowen, rydych yn dweud, efallai, nad yw'r cyswllt rhwng yr ymchwil yn y brifysgol a diwydiannau cynhenid ddim bob amser mor gryf ag y dylai fod, neu y gallai fod, yng Nghymru. A oes esiamplau da o arfer da yn y maes hwnnw yng Nghymru? Os oes, yn eich profiad chi, beth ydynt?

Alun Ffred Jones: Following on from that, and following the comments made by Professor Phil Bowen, you said that, perhaps, the linkage between the research carried out at universities and indigenous industries is not necessarily as strong as it should be, or could be, in Wales. Are there any examples of good practice in that area in Wales? If there are, in your experience, what are they?

[167] **Professor Bowen:** In terms of the context of European programmes, I am struggling, to be honest. That may be because we do not have many large industries that tend to engage with this level of activity, and the smaller companies that we generally have in Wales, as cited in the documentation, face a large bureaucratic and administrative overhead that probably means that they do not engage as much as you might like them to. So, I think that it is difficult to find.

[168] The other thing that I am aware of is that some of the larger companies—and this does not explain why there might be a regional difference—such as BP decided at some point not to get involved in European programmes because of the administrative effort. Likewise, some universities make similar decisions. I am not saying that that happens in Wales, but I know that, at one point in Cambridge, academics were not encouraged to get involved in framework programmes because of the administrative burden and the lack of overhead, if I can put it that way.

2.15 p.m.

[169] To come back to your earlier point, one thing you need to be aware of in terms of engineering—and this has been cited in relation to the lack of EPSRC funding compared with the other regions—is that we are well below critical mass in those areas and in engineering and science in particular. If you look at engineering, for example, on a quality basis and on the last research assessment exercise, you could argue that we outperform Scotland and Northern Ireland. If you then look at the number of people—the engineers and others working in that area—on the critical mass, we are well below. So, the numbers do not stack up. Again, you need to be a little careful with the numbers, and you can separate quality and critical

mass.

[170] **Dr Healy:** May I just pick up on your question on links to industry? I think that that is a significant issue, and it does not apply just to FP7 and, in the future, Horizon 2020; I think that it applies to a lot of large research grants as well. It should be remembered that all FP7 projects, if I am correct on this, have a requirement for dissemination. There is a requirement to make your activities publicly available and accessible. The question is whether academics are doing that with a local industry or whether they are doing that to other audiences elsewhere. I think that, too often, the answer is 'not to local industry'. That may be because a local industry is not receptive, or it may be because academics have other interests, but it is an area where attention ought to be paid.

[171] **Alun Ffred Jones:** Yn olaf, fe wnaf i ofyn y cwestiwn yr oeddwn i fod ei ofyn. Mae uned Horizon 2020 yn cael ei chreu yn Swyddfa Cyllid Ewropeaidd Cymru; a ydych yn credu bod hynny'n syniad da? **Alun Ffred Jones:** Finally, I will ask the question I was supposed to ask. A Horizon 2020 unit is being created within the Welsh European Funding Office; do you think that that is a good idea?

[172] **Dr Healy:** It depends on what it is going to do, at the end of the day, and how it will add value to the activities that are already present and ongoing in the UK or in Wales. There is a European enterprise network in Wales, which offers advice and support to SMEs, for example, on things like FP7 and so forth. I do not know what the quality of that is like, but it is there for the moment. There are UK national contact points, and they offer advice and support with very specialist knowledge, very often, to anybody who wants to contact them at that stage. So, I suppose the question is: what would the WEFO unit add to that? It certainly will not be involved in administering Horizon 2020 funds, because those will be administered at the European level. Will they have the specialist knowledge to be operating and offering advice, or will they be offering guidance that might already be offered by universities in Wales at that stage? I think the question will come down to what the unit will actually offer. To me, that would be the crucial question.

[173] **Alun Ffred Jones:** Good answer.

[174] **Nick Ramsay:** It all depends on what it does—you cannot argue with that. Keith Davies, I think that you have the next question.

[175] **Keith Davies:** I have asked my questions, thank you, Chairman.

[176] **Nick Ramsay:** Okay. Do any other Members have any other questions? If not, I shall ask a closing question. Okay; it is down to me, then.

[177] If you had a free hand to introduce whatever measures you could, with the full backing of everyone needed to sanction them, what two or three actions would you take now to support effective engagement in Horizon 2020 from Wales—if you had a magic wand?

[178] **Professor Bowen:** I think that it relates to the point that we have already made: we need to operate at a higher level on the strategic front. So, one action would be to get more engagement with some of the deep-rooted activities in Europe, for example, technology platforms. I have been involved in those, and I see the benefits of those. Then there are research infrastructures, which Adrian mentioned earlier—I think that Wales is seriously missing out on that front. If we have facilities that stand on the international stage, then we need to make more of them. Also, collectively, we could promote ourselves better. Again, this is a point that we referred to earlier—that is, pulling out the strengths, propagating them and selling them better, either at an institutional level or a Welsh level, and then pulling through the other academics to get them engaged, because of the benefits.

[179] **Dr Healy:** I would echo everything that Phil has just said. Also, we could perhaps look at collaboration grants for practical projects that are more easily accessed—that is, quite small-scale ones that people can build networks around. We need to think very seriously about the new opportunities in territorial corporation programmes, in particular because that encourages international collaboration. We also need to start looking to the future rather than to the most immediate call that is on the horizon. One of the discussions in the last inquiry session was around knowledge and innovation communities, linked to the European Institute of Innovation and Technology. As I said at the time, the next call, which is due in 2014, is too soon for Wales to benefit from, but one ought to think about the call in 2018, which is around advanced manufacturing, more or less. The TSB has a call out at the moment around advanced manufacturing as well, and I would be thinking about how we can join all of these things up to start building strategic capacity for key points in the future that will build upon Welsh strengths and expertise.

[180] **Keith Davies:** Efallai y byddech yn methu ag ateb y cwestiwn hwn, ac rwyf yn cytuno â'r hyn mae Adrian yn ei ddweud am feddwl am y dyfodol, ond mae gennym gynllun o'r enw Sêr Cymru i ddod â'r bobl orau i mewn i'n prifysgolion, felly, lle rydym arni ar Sêr Cymru, achos byddai'n bwysig, o ran edrych ar Horizon 2020, bod y bobl gennym yng Nghymru i weithio arno?

Keith Davies: Perhaps you will not be able to answer this question, and I agree with what Adrian said about thinking about the future, but we have a scheme called Sêr Cymru to bring the best people into our universities, so, where are we on Sêr Cymru, because it would be important, in terms of looking at Horizon 2020, that we have the people in Wales to work on it?

[181] **Professor Bowen:** I am not sure. I think that we are in the middle of the process of making appointments with Sêr Cymru, so I am not sure that we are in a good position to comment on that. I am not aware of any further detail.

[182] **Dr Healy:** I have not seen any appointments being made yet under Sêr Cymru. It is a very important point. The only thing that I would add to that is that we have traditionally always been very reliant on horizontal measures. Sêr Cymru does not focus on any particular area; we allow these things to emerge from the grassroots, which is a very positive thing, because it allows things to emerge. However, we may want to encourage activity in one or two key areas as well to strengthen that process at the same time.

[183] **Professor Bowen:** Sêr Cymru is a good initiative, but we could point to some of the experiences that we have had of taking risks with younger academics who have the potential. You need to take a bit of a risk in taking them on; we have one young professor in the School of Engineering, Stephane Bordas, who is a professor in his early thirties and won the European Research Council award, which is the real blue chip award. So, there is something to complement the Sêr Cymru programme that universities need to take on board in carrying and managing that risk and identifying the stars out there for the future.

[184] **Dr Healy:** As a final point, simply having star academics in place is not enough on its own; you also need the capacity that they can work around, to build upon and to exploit the opportunity that that provides. That may be another area where you look for the synergies with structural funds or other activities.

[185] **Nick Ramsay:** Returning very briefly to the question that Alun Ffred raised about the new unit in WEFO, I heard what you said about it perhaps having benefits or not, depending on what is in the unit. I do not think that you suggested what you might like to see the unit do, or, on the flip side of that, is there anything that you would not want the unit to do and that you think would be counter-productive?

[186] **Dr Healy:** Okay, let us start with what I do not want the unit to do; I have not really given enough thought to this, but I will just give you my perspective.

[187] **Nick Ramsay:** It is not your role to tell us what it is doing, but I am interested in your opinion before the unit is set up.

[188] **Dr Healy:** I am always willing to put my head in a noose in this sense. *[Laughter.]* I would be very worried if the unit within WEFO simply duplicated activities that were already being done well elsewhere, simply to provide a Welsh perspective. I do not think that that is necessarily helpful in the current world. We can get good advice from many places. If academics or businesses are not willing to take advice at a national level, are they really ready to collaborate on a European scale? So, I do not think that a local perspective is a good enough rationale for what WEFO might do. As it currently stands, I do not believe that WEFO has a huge role in Horizon 2020, because it has largely been an administrative body to date. In a revised format, WEFO could potentially have a role, in terms of providing some strategic guidance, bringing things together and acting as a facilitator around activities, and perhaps acting as a broker around activities by the Higher Education Funding Council for Wales, by universities and others who may be involved in this area to try to make some of those linkages between different programmes such as the structural funds, Horizon 2020 and the TSB activities as well. That would be a very different role to what WEFO has traditionally done; it would be a role around research and innovation and economic exploitation—not a development role, but a communication role, perhaps.

[189] One of the things that strikes me, when I look around, for example, at the INTERREG IIIB programme around the Atlantic area, which supports research with Welsh universities in marine energy, is that the structural funds within Wales are supporting research among Welsh universities in marine energy and there are other programmes that Welsh universities are using, and it is kind of down to serendipity as to whether these come together. Occasionally, individuals—Swansea University is quite good at this around marine energy—bring the community together. It should not be down to those individuals; there should be ways of doing this more strategically than that. That may be a role that WEFO could play if it had an overview of programme activity across a whole range of different funding sources at that stage. That is where I would perhaps see the wider value of WEFO, particularly if it was then able to help find some mechanisms for taking that knowledge out into Wales, building capacity and helping to facilitate the exploitation of that over time.

[190] **Nick Ramsay:** That was a very comprehensive answer; I am glad I returned to that question. Thank you. I thank Professor Phil Bowen and Dr Adrian Healy, both from Cardiff University, for that evidence in our session looking at Horizon 2020. That has been very helpful.

[191] **Dr Healy:** Many thanks for the invitation.

[192] **Nick Ramsay:** It was good to see you again.

2.27 p.m.

**Cynnig o dan Reol Sefydlog Rhif 17.42 i Benderfynu Gwahardd y Cyhoedd o
Weddill y Cyfarfod**

**Motion under Standing Order No. 17.42 to Resolve to Exclude the Public from
the Remainder of the Meeting**

[193] **Nick Ramsay:** I invite a member of the committee to move a motion to exclude the public from the remainder of the meeting.

[194] **Byron Davies:** I move that

the committee resolves to exclude the public from the remainder of the meeting in accordance with Standing Order No. 17.42(vi).

[195] **Nick Ramsay:** I see that the committee is in agreement.

Derbyniwyd y cynnig.

Motion agreed.

Daeth rhan gyhoeddus y cyfarfod i ben am 2.27 p.m.

The public part of the meeting ended at 2.27 p.m.