



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

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

Dydd Mercher, 20 Mehefin 2012
Wednesday, 20 June 2012

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

The 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
Yr Arglwydd/Lord Elis-Thomas	Plaid Cymru The Party of Wales
Alun Ffred Jones	Plaid Cymru The Party of Wales
Nick Ramsay	Ceidwadwyr Cymreig (Cadeirydd y Pwyllgor) Welsh Conservatives (Committee Chair)
David Rees	Llafur Labour
Aled Roberts	Democratiaid Rhyddfrydol Cymru (yn dirprwyo ar ran Eluned Parrott) Welsh Liberal Democrats (substituting for Eluned Parrott)
Kenneth Skates	Llafur Labour
Joyce Watson	Llafur Labour

Eraill yn bresennol
Others in attendance

Tracey Burke	Cyfarwyddwr Strategaeth a Gweithrediadau, yr Adran Busnes, Menter, Technoleg a Gwyddoniaeth, Llywodraeth Cymru Director of Strategy and Operations, Department of Business, Enterprise, Technology and Science, Welsh Government
Alastair Davies	Pennaeth Polisi Arloesi, Llywodraeth Cymru Head of Innovation Policy, Welsh Government
Pierre Godin	Cyfarwyddiaeth Gyffredinol Polisi Rhanbarthol Directorate-General for Regional Policy
Professor John Harries	Y Prif Gynghorydd Gwyddonol Chief Scientific Adviser
Dr Adrian Healy	Cydymaith Ymchwil, Prifysgol Caerdydd Research Associate, Cardiff University
Damien Périssé	Cyfarwyddwr, Cynhadledd Rhanbarthol Ymylol a Morol Director, Conference of Peripheral and Maritime Regions
Andrew Slade	Cyfarwyddwr, Polisi ac Ariannu'r UE (WEFO), Llywodraeth Cymru Director, EU Policy and Funding (WEFO), Welsh Government
Aled Thomas	Cyfarwyddwr, Hinsawdd—Cymunedau Arloesi a Gwybodaeth Director, Climate—Knowledge and Innovation Community

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

Kayleigh Driscoll	Dirprwy Glerc Deputy Clerk
Gregg Jones	Y Gwasanaeth Ymchwil Research Service
Siân Phipps	Clerc Clerk

Anne Thomas

Y Gwasanaeth Ymchwil
Research Service

*Dechreuodd y cyfarfod am 9.27 a.m.
The meeting began at 9.27 a.m.*

Cyflwyniad, Ymddiheuriadau a Dirprwyon Introductions, Apologies and Substitutions

[1] **Nick Ramsay:** I welcome Members and any members of the public to today's meeting of the Enterprise and Business Committee. The meeting will be bilingual. Headphones can be used for the 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 and other electronic equipment. There is no need to touch the microphones, as they should operate automatically. In the event of the fire alarm sounding, please follow the directions from the ushers.

[2] We have apologies from Julie James and Eluned Parrott. I am pleased to welcome Aled Roberts to this morning's meeting as a substitute for Eluned Parrott.

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

[3] **Nick Ramsay:** This is the second evidence session of our inquiry into the Horizon 2020 proposals, which are the European Commission's draft research and innovation programme that is due to come into force in 2014. The aim of the inquiry is to assess the opportunities for Wales from the draft proposals, particularly synergies between Horizon 2020 and EU structural funds, which we have looked at previously as a committee.

[4] I thank our four witnesses for being with us today. Starting with Alastair, would you like to give your names and positions?

[5] **Mr Davies:** I am Alastair Davies, from the chief scientist's department.

[6] **Ms Burke:** I am Tracey Burke, the acting director of strategy in the Directorate for Business, Education, Technology and Science.

[7] **Professor Harries:** I am John Harries, the Chief Scientific Adviser for Wales.

[8] **Mr Slade:** I am Andrew Slade, the new director of EU policy and funding in the BETS department.

[9] **Nick Ramsay:** Great. We have a number of areas on which we want to question you, so, rather than having any opening statements, we will get straight into the questions. Given that there are four of you, please do not be offended if I move things along at any point. Often, with a large number of witnesses, it can get a little difficult to manage. The first questions come from David Rees.

[10] **David Rees:** We are looking at the way in which we can provide a submission to the European Commission on how we see H2020 being beneficial to Wales and its research agenda. Before we do that, we need to look back a little at the previous process. How have FP6 and FP7 been achieved? The figures show that we are down in one sense, because we are at 2.26% of the UK figures, which is far less than we should be. Have they developed the

research capacity to go into H2020?

9.30 p.m.

[11] **Professor Harries:** I will start and then my colleagues can fill in more detail. First, I want to thank you for listening to us and inviting us here. The experience of framework programmes 5, 6 and 7—and I personally bear some of the scars myself—has been very instructive. We have learnt how to approach these things. One of the points is that, in our review of science in Wales, we do have a very strong feeling that we have to be a bit more streetwise in the way that we approach opportunities of funding. The science strategy goes into some of that. Framework programme 7 has opened our eyes to a broader range of research and capability than we have, certainly in Wales alone, and in the UK. However, the second point I want to make is that we could certainly do better.

[12] The Sêr Cymru programme, which we now have funding for and which I will be happy to speak about, provides new mechanisms for moving us on in Horizon 2020 from where we have been in the framework programmes. I can say more about that when and if you wish.

[13] **David Rees:** Some of my colleagues will obviously have questions on the science strategy. I suppose what I want to be confident about is that, on the basis of what we have learned from FP6 and FP7, and perhaps FP5 before that, we are able to develop policies that will take us forward. That also includes policies in the BETS department in one sense, as well as in the Welsh European Funding Office. Does WEFO have the expertise available now to support proposals for the final stages of FP7 and H2020 when that comes along? That is another issue we need to be aware of.

[14] **Mr Slade:** I think it is fair to say that we have also been learning through the process from experience, not just here in Wales, but across the UK and other member states, with regard to how to access these programmes. WEFO does not include particularly scientific expertise or other aspects of detailed sectoral expertise. We look for that from colleagues within the Welsh Government and we sometimes draw in advice from outside. There is a job of work for us to do in looking to the next programme period, including the Horizon 2020 work, to work out how best we pull that advice in and ensure that we have all the information we need to assist us with that work. However, WEFO is effectively a very specialised and very effective organisation in terms of handling grants, carrying out grant appraisals, activity claims and monitoring work and so on in terms of accessing funds. We will work with colleagues in BETS and across the Welsh Government, and out in the wider community in Wales, to make the most of these new opportunities, learning and drawing on the best in class experience across Europe. Ministers are very keen that we do that and draw on the learning of lessons across Europe on accessing these funds.

[15] **David Rees:** Are you confident that you are in a position to take those forward? You said that you are learning from it, but are you now in a position where you have learnt and are ready to go forward?

[16] **Mr Slade:** Yes, I am reasonably confident, on behalf of WEFO and in terms of what Ministers have said we should achieve in the next programme period, that we will maximise the opportunities wherever we can. It is not just about Horizon 2020. There is a range of other sectoral programmes that I think we should be looking to make more use of across Wales. Again, Ministers are very keen that we should do that and explore those opportunities. Horizon 2020 is clearly one of those opportunities.

[17] **Professor Harries:** We have some confidence now that, on the scientific front—I will use ‘science’ totally generally; I include everything in science—we know where our

strengths are and which programmes we want to see occurring, and there is a good match with the initial paperwork from Horizon 2020. There is also this other important point, which I will repeat, which is that the way you handle European programmes is very important and rather unique. You have to be streetwise and really understand how it is people get funding through this mechanism. With the new Sêr Cymru programme, we will be in a better position still to do that. Therefore, I am quite confident on those two things.

[18] **David Rees:** Are higher education institutions streetwise in that sense, and are they now working collaboratively?

[19] **Professor Harries:** Yes, they are, and they have shown great positivity when we have talked to them about Sêr Cymru and the fact that, for example, we propose to set up national research networks led by a director for each of the grand challenge areas. That person, and that office, will play a key role, which we have not had in the past, in organising people in the right way to address the opportunities for funding. I really believe and know that that is a crucial aspect of how we approach this, to answer your important question about how we can make sure that we will be able to benefit from the new opportunities.

[20] **David Rees:** May I just ask a question of BETS? On the small and medium-sized enterprise side of things, are there policies in place to encourage them? That will be the crucial aspect here in Wales—the involvement of SMEs in these proposals.

[21] **Ms Burke:** Absolutely. At the moment we are out to consultation on the innovation strategy and I am not sure if there will be further questions on that this morning. That is one way in which we are looking to see how we can improve access by SMEs and hear directly back from people. Alastair, did you want to come in here?

[22] **Mr Davies:** Yes, we are currently doing quite a wide consultation. I was up in north Wales yesterday at an event that we had some very good feedback from. We are trying to go out to the business community, universities and the third sector to make them more aware of what is coming on, but also to listen to their issues in participating in some of those programmes. That is a process that will go on over the next six months until the end of this year, and we are hoping that, by the time we have the final strategy, we will have some idea of how better to support the SME community in particular in participating in some of these programmes. There are support mechanisms available at the moment, so there is help for people to travel and meet partners internationally, and there is help with the preparation of bids and proposals. We are having a critical look at that to see whether it is adequate, the wrong type of support, or whether there are gaps there. This inquiry is very timely in that we are looking for ways to up our game, if you like, in getting greater involvement for Wales.

[23] **Nick Ramsay:** Keith Davies has some questions on the science strategy for Wales.

[24] **Keith Davies:** Beth yw rôl y strategaeth yn y maes hwn? Pa ddylanwad a ydych wedi cael ar y strategaeth? **Keith Davies:** What is the role of the strategy in this field? What influence have you had on the strategy?

[25] **Professor Harries:** To answer the question the other way around, I wrote the strategy, so I have to take the blame. I had a lot of help from my colleagues, and did a huge amount of trudging around Wales—which is a lovely place to trudge around—talking to universities, industry and so on. We did a very thorough review.

[26] I have already forgotten the first part of your question.

[27] **Keith Davies:** Beth yw rôl y strategaeth yn y maes hwn? **Keith Davies:** What is the role of the strategy in this field?

[28] **Professor Harries:** In this whole field, on the periphery of the European programmes are the UK national funding sources, and the arguments are similar for all of them. In the strategy, we have set a target of achieving a higher return, and a larger fraction of what the UK earns, either from UK research councils or, in this case, Horizon 2020. We believe that we have some of the capability in hand to do that. The strategy and its implementation are now going forward on the basis of introducing a number of activities. I will not go through them all because it is a very long-winded job, but the two primary ones are under a programme called Sêr Cymru—I am learning Welsh, but it is coming very slowly. We aim to bring in some new stars, as we are calling them for want of imagination, in chosen areas that we have selected as already being strong, or at least potentially strong, in Wales. The idea is to identify world-leading stars. We are not just talking about Wales, England, the UK or Europe, but the world. So, we may be making visits to California, Harvard and places like that to identify those people and discuss offers with them and what they will need. They will need a decent salary, some staff support and some kit—perhaps a big piece of kit, depending on what they do. However, we will talk to them about it. We will be trying to raise the standard, numbers and quality of research capability.

[29] The second major element is these things called research networks. For the three priority areas that we have chosen, we will form research networks that cross the whole of the country—that is, Wales. We could include places in England, and there is no reason to forbid that, but it will predominantly be in Wales. We will appoint a director who will be responsible for helping to formulate proposals when opportunities come along, helping to get them in and to get them approved. It will not stop there, but it will carry on through to the implementation. What is new about this? Consortia have formed in the past in Wales and they have generally, or in almost the majority of cases, self-destructed or exploded before getting to the key point. A story that has been told to me by several research council chief executives is that the difference now is that we want someone charged with the responsibility of seeing this thing through.

[30] So, those are the two areas. To answer your question, both of those parts of Sêr Cymru, have a direct effect on European funding as well as on UK funding.

[31] **Keith Davies:** A fydd yn meddwl dau beth, sef y bydd sefydliadau addysg uwch yng Nghymru yn fwy cystadleuol a'ch bod yn gweld eisiau ailstrwythuro i'w cael i weithio gyda'i gilydd? **Keith Davies:** Will this mean two things, namely that higher education institutions in Wales will be more competitive and that you see that there is a need for restructuring to get them to work collaboratively?

[32] **Professor Harries:** The competitive side of things is an important point, and I will address that first. We make the point clearly in our strategy that the real measure of being world class—and a lot of people tell me that they are world class, and some of them are right—is that you can win money under full, proper peer review, and that is tough. I work—well, I do not work there anymore, as I work here full time, but Imperial College London is my college. I have a track record of winning money there, and it is hard. If you go to any RC, for example, the success rate is one in 10, so it takes 10 applications to get one grant. At Imperial, my group has a track record of one in two and a half, so we are doing rather well, but that still means wasting one and a half. So, it is extremely hard. It is a chicken-and-egg situation. In order to raise our game and to get more money, we need better people, and in order to get better people, they have to be capable of competing in these peer-reviewed research competitions. That is what we are aiming for: to bring in people and to have consortia formed and led in Wales. We believe that, by building on the current expertise and excellence that we have in the way that we can with the money provided, we are targeting raising our income to what you would expect if you pro-rate by population, by number of scientists or by any parameter.

[33] **Keith Davies:** Efallai 'na' fydd eich ateb i hyn, yn dilyn yr hyn yr ydych newydd ei ddweud, ond a ydych yn gweld bod eisiau ailddyrrannu'r arian i'r pynciau gwyddoniaeth, technoleg, peirianeg a mathemateg yn lle'r dyniaethau a'r gwyddorau cymdeithasol, neu a oes ffydd gennych y byddwch yn cael yr arian ymchwil heb i Lywodraeth Cymru orfod symud arian?

Keith Davies: Perhaps your answer to this will be 'no' given what you have just said, but do you see that there is a need to reallocate money to the science, technology, engineering and mathematics subjects instead of the humanities and social sciences, or are you confident that you will get the research funding without the Welsh Government having to shift money?

9.45 a.m.

[34] **Professor Harries:** The aim of this exercise, in part, is to bring back more money than we add to the system now. We can certainly do that. We have the numbers in the documents, which indicate that if we go up to the 5% that is our population share, if we apply that to all income streams, we could get up to £80 million a year more, going directly into research. That compares with the £10 million that has, very generously, been volunteered by the Government. So, my answer is that I do not think that that puts any pressure on the allocation question. That is a larger question for the Minister, as is the earlier one that you asked, which I did not answer, about the status of the universities.

[35] **Keith Davies:** Yn y papur, dywedwyd bod ein harian ymchwil tua 2.2%, ac rydych newydd sôn am fynd lan i 5%. Beth yw'r amserlen ar gyfer hynny?

Keith Davies: In the paper, it states that our research money is around 2.2% and you have just talking about raising it to 5%. What is the timescale for that?

[36] **Professor Harries:** That is an excellent question. Forgive me, I did not mean to be rude. We have to keep on remembering—and I say this every time I speak—the timescales that we have to have in mind, even in a Government that is concerned with political timescales, which can be very short, as you know. We must remember that we cannot achieve anything unless we give it time, and a decade is the typical time. I stick by that.

[37] **Nick Ramsay:** David Rees, do you have any further questions on the science strategy?

[38] **David Rees:** I have one question. Can you tell me how much the thought of H2020 influenced the development of the science strategy?

[39] **Professor Harries:** It has had quite a considerable influence. In going into Science Wales and the Sêr Cymru programme, we have definitely seen a picture as a whole of our research programme being based on the UK research councils, of which Wales should be a proud and equitable partner—that is what we are after—plus whatever funding we can get from the European Union through structural funds, the framework programme, Horizon 2020 or the European Research Council. So, in preparing it, we have always had in mind—and this is what we have told Ministers and the Cabinet—how much we need to get anything off the ground. On top of that, we see two big sources of income that will bolster the whole income stream to research, one of which is framework programme 7 or Horizon 2020. So, it has always been there. Our intention is that, to reach the 5%, we will be increasing our percentage return from Europe. If we have the stars added to our current stars, and if we have the directors and the research networks, we have a reasonable chance of doing that.

[40] **David Rees:** Therefore, what is your engagement with the EU in that sense? You are clearly looking at the EU being a major aspect enabling you to achieve those targets, so what is your current engagement with the EU and with the EU's scientific officer?

[41] **Professor Harries:** I will pass this question on to others to respond in a minute. I know the EU's chief scientist, Anne Glover, very well. She was the chief scientist in Scotland until very recently. She is a good colleague and friend, and I have very close links with her. We exchanged a lot of information before she moved, because you can imagine that the devolved Scottish and Welsh chief scientists are a different kettle of fish from the chief scientists for all the departments in Whitehall. We found it convenient to exchange information and to give each other some help. So, I know her very well.

[42] As far as the EU councils, committees and structures are concerned, I personally have been a member of EU councils in the past, on framework programme 5, for example, and we will encourage more involvement. That is another theme in my strategy, namely that our people must do a little bit more of going out and being involved in the processes in the research councils in the UK and Europe, to become part of the machine and part of what defines the programmes. That action will lead to greater success automatically.

[43] **David Rees:** Clearly, you think that, in the past, we have not done that sufficiently well.

[44] **Professor Harries:** More can be done, certainly. There have been notable examples of successes and achievements. For example, Ole Petersen, head of the School of Biosciences at Cardiff University, is on the European Research Council. That is a huge success, and we want much more of that. We want more of our people sitting on the councils. Statistic: in the UK, there are seven research councils, with 89 seats in the top bodies, and we in Wales currently hold two. Last year, it was one, which was abysmal. We have to do better.

[45] **Nick Ramsay:** That must be a pretty fundamental part of promoting—

[46] **Professor Harries:** We need to get over this idea. A young professional scientist—and I am not pointing to myself, as I am not young anymore, but I am a professional scientist—has to understand that although it can be a pain in the backside because it takes a lot of time, being active in the peer-review process and working your way up the levels is part of being a professional. You will not find anyone from Oxbridge or, indeed, Imperial complaining about this chore, because they know damned well that it is part of being a successful scientist. So, we want more of that.

[47] **Mr Slade:** Just to add to that, on wider EU engagement, the Government recently published its EU strategy, which the First Minister launched a few weeks ago. That sets out how we would like to continue to increase our engagement with Europe and European institutions at all levels. In relation to what the Welsh European Funding Office does on structural funds, other aspects of European funding and the common agricultural policy, which I also look after, there are many and various contacts at ministerial level and with Commissioners. We had Commissioners over here relatively recently. Commissioner Hahn from the Directorate-General for Regional Policy was here. We have structured, formal and informal contact at official level. Coming new to the Welsh Government, my experience of talking to the European Commission—and I was out with the Commission last week—is that they think very highly of Wales and Welsh engagement in the European Union, not just in accessing support, but in being a part of the discussions that go on. That is in addition to UK engagement, where Ministers, colleagues and my teams regularly liaise with the other devolved administrations and Whitehall colleagues on all these issues, as well as being part of the relevant steering groups and policy formulation committees.

[48] **David Rees:** I have two points on this. Did you engage with the Directorate-General for Research and Innovation in that case, as well as with each other?

[49] **Mr Slade:** As a Welsh Government, we have contact with DG Research, although I have not met DG Research since taking up post, but I would normally expect that to fall on John and Alastair's side. To come back to your earlier question, Mr Rees, about the WEFO expertise, the European funding side is part of a much wider Welsh Government engagement internally across the different departments, but also with the outside world in its various forms. So, we would not necessarily be looking to formulate a WEFO strategy on science per se, because that would be entirely informed by what John and his teams are doing, and all the work arising from 'Science for Wales' and the new innovation strategy.

[50] **Professor Harries:** We have links with Brussels, and I met a significant number of senior officials during a very long day. Now that she is in post, my formal link is with Anne Glover. That is a well-used path, which I am sure will work.

[51] **Ms Burke:** To add to the point about links between 'Science for Wales' and Horizon 2020, the grand challenges in 'Science for Wales' are to have really good mapping across to the six grand challenges in Horizon 2020—and it is a bit of a grand challenge to try to remember all those grand challenges. However, I know that there are good linkages in the health area, particularly around energy and more so around advanced materials.

[52] **Keith Davies:** Roeddech yn sôn yn gynharach am y pwyllgorau ymchwil a bod cynrychiolaeth Cymru arnynt yn isel iawn. Ers ein cyfarfod diwethaf, rydym wedi cael ystadegau am bynciau STEM. O edrych arnynt, gwelwn fod dwywaith mwy o fechgyn na merched yn dilyn cwrs lefel A mathemateg. Mae'r ffigurau ar gyfer cemeg a bywydeg yr un peth, ond, mae saith gwaith yn fwy o fechgyn na merched yn dilyn cwrs ffiseg lefel A. A fydd y strategaeth yn gwneud gwahaniaeth i hynny? A fydd mwy o ferched yn mynd i'r pynciau STEM, yn enwedig ffiseg a mathemateg? Os ydych eisiau gwneud peirianeg, dyna'r ddau bwnc sydd eu hangen arnoch.

Keith Davies: You mentioned the research councils earlier and said that Welsh representation on them is very low. Since our last meeting, we have had statistics on STEM subjects. Looking at them, we can see that there are twice as many boys as girls studying mathematics for A-level. The figures for chemistry and biology are the same, but seven times more boys than girls study A-level physics. Will the strategy make a difference to that? Will more girls take the STEM subjects, particularly physics and mathematics? If you want to study engineering, those are the two subjects that you need.

[53] **Professor Harries:** In general terms, we need to do more to advertise our successes and stars—we have people who are clearly world class. However, in the two years that I have been in this post, I have not seen anywhere near enough engagement of those stars with young people. There are a number of top-class STEM outreach engagement activities for young people of all ages and across the country—Big Bang in engineering, apprenticeships and so on. It is quite a hotbed. We are doing a lot but we are not making a big thing of our successes. Under the National Science Academy banner, we start by asking what is going on at the moment. When I asked that question when I was first given responsibility for that task, no-one could tell me. We have now carried out the review. All of the information was there, but it was in separate people's minds. Volunteers, working for nothing, are doing a phenomenal job across the country—it is wonderful story. However, we need to find out what we are doing so that we can decide where we need to expand. We need to do a better job of advertising to our young people—through schools and outside schools—that science is a commendable, fascinating and rewarding career.

[54] **Alun Ffred Jones:** Rwyf am ofyn cwestiwn neu ddau am y berthynas rhwng y cronfeydd strwythurol a rhaglen ymchwil Horizon 2020. Pa rôl sydd i'r cronfeydd

Alun Ffred Jones: I want to ask a question or two about the relationship between structural funds and the Horizon 2020 research programme. What role is there for

strwythurol o ran datblygu capasiti ymchwil? structural funds in the development of research capacity?

[55] **Professor Harries:** They have an enormous role. As we move to Horizon 2020 from framework programme 7, that is becoming more of an allowed transition. I was going to use some physics terminology.

[56] **Alun Ffred Jones:** Please do not do that. [*Laughter.*]

[57] **Professor Harries:** We would say an allowed transition. Therefore, it will become more common as Horizon 2020 goes on. Structural funds must be used for building capability and infrastructure, and developing pieces of kit—which are sometimes very complex—that allow, support and maintain Horizon 2020 and work funded by the UK research councils to undertake top-class research. That is a complementary and acceptable relationship that, as I saw from reading the papers, has become even stronger through Horizon 2020. I am encouraged that it will be easier and more appropriate to use a combination of Horizon 2020 and structural funds in that way. Structural funds must not be used to fund front-line, high-level research—I think that that will be illegal anyway. That must be peer reviewed and must go through a tough, critical review of the detailed science before it receives funding.

[58] **Alun Ffred Jones:** A yw WEFO yn deall ei rôl a'i phwysigrwydd yn y broses hon o ddatblygu ymchwil? **Alun Ffred Jones:** Does WEFO understand its role and its importance in the research development process?

[59] **Professor Harries:** I will turn to Andrew but I will say one thing: we have already had a large number of meetings because we are trying to plan to intelligently use the opportunity of having these two sources of funding.

10.00 a.m.

[60] **Mr Slade:** I would entirely support that. One of the reasons for the creation of the group that I now head up in the Welsh Government is to maximise our understanding and use of European funds and to spread and harness expertise and get as much consistency and commonality into our approach as we can in order to strengthen that as we move forward. The research and innovation component of the new structural funds will be significant. For example, it is clear, from all of the work heading towards the Europe 2020 strategy for jobs, growth, innovation and the development of small and medium-sized enterprises, that that is writ large through the new programmes. It is worth remembering that we have done, and are doing, an awful lot through this current programming period—something of the order of €250 million of funding has gone into developing the research base in Wales, of the infrastructure that John was talking about as well as the downstream elements.

[61] You asked an important question about how structural funds could contribute. There are three ways: one relates to the infrastructure and kit and facilities and all of those things that John mentioned; another way relates to those downstream elements and how we take the products of research and innovation on to the next stage and engage with companies, including small to medium-sized enterprises, where there is this focus. There is a focus on SMEs in Wales in terms of the make-up of our private sector. The third way relates to the fact that we could do more to facilitate the process of accessing grants, namely spreading understanding and helping with bid writing and some other things, which is quite a time-consuming and expert business. However, I see that very much as being a more-than-the-sum-of-its-parts effort, because there is a lot of expertise across Welsh Government, out in the higher education institutes and elsewhere, including in the private sector, on which we can draw. It is not just a matter of WEFO being the sole purveyor and provider of advice, but pulling together that advice in a combined and integrated way. Perhaps Alastair would like to

add to that.

[62] **Mr Davies:** I agree with the points made by both John and Andrew. There is the research capability building, namely putting the star people in place and giving them the equipment and facilities to compete at a more elevated level. I am also glad that Andrew mentioned the downstream activities, which take the outcomes of that research and look at commercialisation opportunities by working with small and large businesses here in Wales, and structural funds are currently being used for such activities. That is another thing that we are critically examining at the moment in terms of whether we are doing that well enough and whether there are better ways of doing it. For example, should they be delivered through different channels, should it be a Government activity or should such work go out to someone else? WEFO has a huge amount of expertise on the European funding side of things and on managing large budgets, but the expertise on the science side and the application side sits elsewhere. We are currently working closely with colleagues from WEFO, jointly attending meetings and we are looking at how structural funds could perhaps be used to support that better in future.

[63] **Alun Ffred Jones:** Rydych yn creu darlun calonogol, nid yn unig o'r dyfodol, ond hyd yn oed o'r presennol. Fodd bynnag, y ffaith amdani yn y presennol yw ein bod yn ennill cyfran rhy isel o'r arian ymchwil. Hyd y gallwn weld—ac mae'r prifysgolion wedi cyfaddef hyn i ryw raddau—nid ydym wedi gweld ffrwyth yr ymchwil hwnnw o ran cwmnïau a swyddi sydd wedi gwneud gwahaniaeth yn yr ardaloedd. Felly, beth bynnag yw eich llwyddiannau, mae ffordd bell i fynd cyn y gallwn ddweud ein bod yn llwyddo yn hyn o beth. A yw hwnnw'n sylw teg?

Alun Ffred Jones: You paint an encouraging picture, not only of the future, but even of the present. However, the fact of the matter in the current situation is that we are gaining too low a proportion of research funding. As far as we can see—and the universities have admitted as much to a certain extent—we have not seen the outcomes of that research come through in terms of companies and job creation making a difference in those areas. So, whatever your successes, there is a long way to go before we can say that we are succeeding in this. Is that a fair comment?

[64] **Mr Davies:** Yes, that is a fair comment. We are certainly not there yet. It is a long-term gain. If you imagine a typical framework project: it will take you a year to apply, six months to negotiate the contract, there will be a three-year project, and then you will see the outcomes from that. We certainly have not been as successful in the past as we would have liked to have been. However, I think that there are examples of projects coming through and they are also applicable to the business side.

[65] **Professor Harries:** Also, there is the question of the scale of the proposals. I think that times have been changing quite fast over the last couple of years and, when I went around the research councils and talked to the chief executives when I first came, they were all saying the same thing, which was, 'We, in the UK, have got to get used to thinking more in terms of big, grand challenge problems and large consortia to deal with those problems, requiring multiple skills—chemists, physicists, mathematicians, engineers, social scientists and whatever it takes.' We have to grab that and instil in our scientists in Wales and the wider UK, but particularly in Wales, that this is the way of going forward. What we are trying to do through Sêr Cymru—I am sorry to keep coming back to that—is to put in place some new mechanisms, which are going to help us along that road.

[66] **Alun Ffred Jones:** Mae gennyf un cwestiwn byr, sy'n hollol ffeithiol. Rydych wedi sôn am yr isadeiledd lle rydych wedi defnyddio arian o'r cronfeydd strwythurol. A allwch roi enghreifftiau i ni o'r math o

Alun Ffred Jones: I have one brief question that is completely factual. You have mentioned the infrastructure for which you have used structural funds. Can you give us some examples of the kind of infrastructure

isadeiledd rydych yn sôn amdano?

that you are talking about?

[67] **Professor Harries:** The Low Carbon Research Institute is a combined programme, so it is a large programme in the sense that I talked about before, which has developed laboratory equipment—I will not go into the details—that you need to have in order to carry out that sort of work. It looks as though our scientists are not arguing strongly enough to get UK facilities into Wales. We are part of the UK and we actually jolly well deserve to win opportunities.

[68] I will give you an example. The Met Office was moved from Bracknell to Exeter about 10 years ago. I had a lot of friends working there; it is my field. There are 1,000 people there and 500 of them are really world class, top of the pile, PhD scientists in maths, physics, chemistry and so on. The competition shortlisted three places—two up north and one down in Exeter; I have forgotten where the other two were—but nowhere in Wales. I remember being involved in discussions and in my mind—I am at fault—there was no thought, ‘Well, why isn’t Wales going for this?’ Imagine the impact that that would have had, to have that dropped into any part of Wales you choose; it would have had a huge effect. What I am looking for is the ambition to go for big bits of kit, for facilities, but to go for them in the sense of winning money from Horizon 2020 while keeping a weather eye open so that, whenever the opportunities come up, it is being said in Whitehall, ‘Oh, there’s an opportunity, we might put this thing in Wales’ or ‘We might develop this idea in Wales’. So, we are facility light at the moment. We ought to be bidding for more.

[69] **Ms Burke:** Sorry, Chair, I know that we have moved on a tiny bit, but I did not have an opportunity to come in on the previous question about us possibly having rose-tinted glasses about our current performance. I think that we have been pretty honest in the consultation on the innovation strategy in saying that Wales is behind the strongest performers in the UK. We put the figures in about how Wales is performing and there is a clear recognition that it is through the better integration of policies and actions that we are going to increase our economic impact. That is why ‘Science for Wales’ was prepared and that is why we are consulting now on the innovation strategy and why we are trying to take views on the future of the European structural funds in recognition of that.

[70] **Nick Ramsay:** We have a number of supplementary questions: Aled Roberts first and then Dave Rees.

[71] **Aled Roberts:** A ydych yn poeni am gynigion presennol y Comisiwn Ewropeaidd ar gyfer cronfeydd strwythurol? Yr oeddech yn sôn am *advanced materials*. Ar hyn o bryd, mae llawer o’r gwaith sy’n cael ei wneud yn y gogledd-ddwyrain yn ymwneud â chwmnïau mawr, sef Airbus, General Motors a Cammell Laird. Mae cynigion presennol y Comisiwn yn awgrymu y bydd trefniadau tebyg gyda chwmnïau mawr yn cael eu gwahardd yn nwyrain Cymru. A yw’r Llywodraeth wedi gwneud unrhyw ddatganiadau i’r Comisiwn ar hynny? Mae safbwynt y Comisiwn yn seiliedig ar ymchwil sydd wedi cael ei wneud yn Ewrop. Mae’n credu bod y trefniadau gyda chwmnïau bach yn llawer iachach na gyda chwmnïau mawr. Fodd bynnag, yn y gogledd-ddwyrain, mae’r cydweithio gyda

Aled Roberts: Are you concerned about the European Commission’s current proposals for structural funds? You mentioned advanced materials. At present, a lot of the work that is being done in north-east Wales relates to major companies—namely Airbus, General Motors and Cammell Laird. The current Commission proposals suggest that there will be a ban on similar arrangements with major companies in the east of Wales. Has the Government made any statements to the Commission on that? The Commission’s position is based on research that has been undertaken in Europe. It believes that arrangements with small companies are far healthier than with major companies. However, in north-east Wales, the collaboration with major companies has brought many benefits, which include

chwmnïau mawr wedi arwain at lawer o bringing academics from Manchester to work
fuddiannau, gan gynnwys dod ag in north-east Wales.
academyddion draw o Fanceinion i'r
gogledd-ddwyrain i weithio.

[72] **Professor Harries:** Not just in the north-east; there are similar stories in Tata Steel, EADS and so on. I should ask an expert to contribute.

[73] **Mr Davies:** We are right to be concerned. The role of major companies is extremely important. We often talk about the economy of small and medium-sized enterprises in Wales, which is important, of course. However, SMEs usually end up somewhere in the supply chain of a larger company. I cannot answer in detail the point that you made. Colleagues in the advanced manufacturing and materials team will be keeping a closer watch on that in particular. We would certainly want to emphasise the important role of larger companies in the process.

[74] **Professor Harries:** Alastair has put his finger on an important point. There are popular items that come up from time to time, including SMEs, and they are important. However, we have to remember that they are a part of the continuum, and Wales needs the full continuum, so we need to be worried about all parts of that.

[75] **David Rees:** You mentioned that the ambition was not there previously in driving the agenda forward. With regard to the strategy for science and research and innovation, do you believe that the ambition is there to get the research done and that we are moving forward? I asked earlier whether we are in a position to move forward, but are we in a position to do so as equal partners to other places in England, rather than trying to catch up with where they are now, so that we will be in the same place as them in two years' time?

[76] **Professor Harries:** With regard to ambition, I was specifically saying that I was lacking ambition as much as anybody else, in not trying to capitalise on opportunities. There is a lot of ambition in Wales, believe me. Are we there yet? Yes, I think that we are. I tell people that I will not be so impressed by proposals to simply work together in Wales, although that is an important component. I will be much more impressed when we get proposals to work with the best in the world: with my college, Imperial College London; Cambridge University; Oxford University and the rest. We have some excellent collaborations going on at the moment. There is a brilliant collaboration between Cardiff University and Bristol University, called the Severnside Alliance for Translational Research, on translational medicine. That is going extremely well. There is a large number of other consortia. When we get to Horizon 2020, we will almost certainly be going forward in teams that include English, probably Scottish, and Welsh centres of excellence—it would be rare not to. It is like the rugby team: we need to be operating at a level where we are taken seriously and work in a proud way through making a contribution, and I think that we can.

[77] **David Rees:** I will go back to the question on synergies. Structural funding focuses on research, development and innovation. You mentioned the research and innovation strategy, which is a requirement in the proposals.

10.15 a.m.

[78] You also mention in your paper the difference between what I call blue-sky research and applied research. Could you talk us through how the research and innovation strategy deals with those separate elements? Which areas are you focusing on to get funding for either? Obviously blue-sky research would come under Horizon 2020, but where would you place applied research?

[79] **Professor Harries:** The question of blue-sky and fundamental research is an important one. Going back to the 'Science for Wales' strategy, we have identified the three priority areas, but we have these four strata lying underneath all of them, including digital economy and intellectual property. The idea is that fundamental research is vital because it is where you generate your top people—if you think about them coming up through the ranks—who have profound and original thoughts. They generally develop into the sort of people who we need to be our future stars, for example, future directors of institutes and future chief scientists and so on. So, it is an important part of being healthy and vigorous in our science in general. The question is: how do you divide up the cake? The European Research Council and some of the other research councils will tend to take front-line fundamental stuff. There is a clear pecking order and any scientist would know what the pecking order is in their field. It is pretty well covered from one extreme to the other. So, the ERC and perhaps Horizon 2020 and the research councils will include the more fundamental part in what they do. However, in the structural funds, it is quite clear that some of the applications, which may be quite expensive and may not be affordable even by pure research programmes, are more covered in that way.

[80] **Ms Burke:** I think that John has covered most of what I wanted to say.

[81] **Mr Davies:** That is another good and pertinent question, and I agree with what John says, namely that most of the blue-sky research will be taken up through the research councils and the excellent science pillar of Horizon 2020. However, one point that is clear in the new proposals for Horizon 2020, which is different from framework programme 7, is the fact that impact and innovation is written right the way through the document. So, at a European Commission level, it is far more interested in the applicability and the exploitation of some of this research than possibly it has been in some of the earlier programmes. I think that we also see that in the United Kingdom. The new research evaluation framework will have a large part of it predicated on the impact of research and although the research councils have a remit to support blue-sky research, they are becoming much more interested in applied research and co-funding research with bodies such as the Technology Strategy Board. For example, there are projects in Swansea, namely the STRIP project, and SPECIFIC, which puts coatings on steel. They are partially funded by a research council and partially by the Technology Strategy Board. So, we will see much more of that over the next five or six years.

[82] **Joyce Watson:** Continuing with that theme, I represent Mid and West Wales, and we talk about small and medium-sized enterprises, but I came across a medium-sized enterprise last year that wanted to grow its business. It wanted a knowledge-transfer programme; it did not know that that was what it wanted, but I told it as much. That is the point: the business did not know that it existed or how to apply for it. It had also done quite a bit of research in the new technologies to take that forward, to sustain it and grow it into the future, but it did not know how to access that either. I just happened to knock on the business's door, make an appointment and see where it was because it was the biggest employer, of 150 people, in a small town. That is significant for us. You are right to say that it was taking other SMEs, for example, microbusinesses, with it. So, my question is fairly obvious is it not, based on what I have said? Where are we going wrong, in the sense that people who want to grow, who desire to grow, and who have the ambition and wherewithal to grow, do not even know how to access any of that information? By chance, I knocked on the door of some people like this.

[83] **Nick Ramsay:** Who wants to take that question? *[Laughter.]* I see that Ms Burke will take it.

[84] **Ms Burke:** It is very disappointing to hear that a company of that size and significance within a local economy is not aware of what we do. There is something for us to learn there, in terms of how we promote and raise awareness of the support that is available from not only us, but others. There is quite a wide range of support for innovative—

[85] **Joyce Watson:** Is that the problem? I think that it is. There is a wide range of support but there is no central point, so people do not know where to start.

[86] **Ms Burke:** Certainly, some consideration has been given to having more of a one-stop shop and to tailor our programmes so that they are more accessible to companies. I think that you are right: there has been too wide a range of different types of assistance. If you are not networked into that, you do not know about it. We work with some companies very successfully, but that is because, in a sense, they know the programmes and how to access them. In the consultation on the innovation strategy, that is something that we particularly want to get to the heart of. I believe that Alastair has had some feedback from the workshops that he has been doing.

[87] **Mr Davies:** Yes. The situation described earlier is very disappointing. That kind of medium-sized, ambitious SME really is the sort of company that we should be hitting in Wales. That is where the growth is going to come from. It is the sort of company that possibly should be involved in FP7 projects looking to transfer knowledge from universities or other businesses. So, it is disappointing to hear that the company was not aware and that we have not got the message across.

[88] At the moment, we are doing a series of roadshows throughout Wales, where we are trying to ask people, as part of the consultation, what the barriers and difficulties are with the sort of support that is available. So, there is a chance for people to respond.

[89] **Nick Ramsay:** I wish to ask a stupid question. The roadshows will only work if people are aware that they are being held, will they not?

[90] **Joyce Watson:** That is the question that I was going to ask.

[91] **Mr Davies:** It is not a stupid question. It is a perfectly reasonable question. We know the people that we know. We have contact centres and one-stop shops. We have a list of about 600 people whom we contact and with whom we are active. I do not know whether representatives of the company that was described earlier are on that list. They certainly should be, and I would like to take steps to ensure that they are. I think that trying to reach out to people is an issue. We are doing the best that we can, but we have clearly not succeeded in this instance.

[92] **Kenneth Skates:** How do you get on that list?

[93] **Mr Davies:** The list is historical. It comes from the sector teams, previous interactions that we have had and previous grant recipients. In some senses, it is a list of people who already know that we are there. So, hitting the people who do not know that we are there is a big issue. We are trying to work through trade bodies, through the Confederation of British Industry, through the Federation of Small Businesses, and through local stakeholder organisations. Our ears are open, but it is difficult, and we will unfortunately miss some people. However, we are genuinely trying to hit as many as we can.

[94] **Nick Ramsay:** You need a roadshow to advertise the roadshow, perhaps. *[Laughter.]* Ken, would you like to come back in on this point? Before you do, I remind everyone that we have five minutes left of this session and a couple of questions to ask, so please keep the questions and answers as short as possible.

[95] **Kenneth Skates:** I wish to ask something very specific about knowledge innovation centres. To what extent are companies and educational institutions aware of knowledge innovation centres or communities, and what work is being done to promote them in Wales?

[96] **Mr Davies:** In terms of the knowledge innovation communities, I believe that John is involved in one of those projects at Imperial College London. Regarding the centres, there are centres throughout Wales. We have recently had a reorganisation where we have looked at how we can make those things available. Up in north Wales yesterday, a number of people from Bangor and Glyndŵr universities were making this exact point and stressing the importance of those centres. As we develop this strategy, I would expect that we would try to address that and try to get the message out.

[97] **Nick Ramsay:** Dave Rees?

[98] **David Rees:** No, I am okay thank you, Chair.

[99] **Nick Ramsay:** Okay, that helps my timekeeping. Byron Davies has questions on societal challenges.

[100] **Byron Davies:** No, we are talking about benchmarking.

[101] **Nick Ramsay:** My mistake.

[102] **Byron Davies:** I have heard you talk this morning about comparisons with England and so on. With regard to benchmarking and peer reviews of Welsh performance, what do you do to compare yourself with Europe and internationally?

[103] **Professor Harries:** There are many things that you can do. The most obvious and immediate thing that most scientists or engineers in research would do is go to publications and citations. When you go to an international level, including with the Americans, that is the quickest, easiest and probably the most accurate measure to benchmark quality. It is not measuring success rates on grants. It has nothing to do with money directly. It is the downstream end of the thing. You look at the number of publications, the quality of the journals, the citation index—how many times you are cited—and various other parameters. There is the H parameter, which tells you everything that you want to know about your research career by looking at the trends in your papers. That is a very common and powerful way of sorting out the wheat from the chaff.

[104] **Byron Davies:** Where do you think Wales stands internationally?

[105] **Professor Harries:** It is the same in every country in that it depends entirely on which subject you are talking about. I do not have the statistics to say what the fraction is, although we could probably derive it, but we have people who are really on the world stage. If, in my first year of reviewing the field, I had found that that was not the case I think that I would have handed in my resignation, not through pique but simply because there would be no point because there would be nothing to start with. However, we have a great deal of very high-level quality work. If you take the field as a whole, it is all pretty good. The research assessment exercise results are one way of measuring the quality, and they are very good in the bigger universities. However, we can still do better, and that must be the message to people. It is not that people have not done well, that they have been lazy or anything like that. That is not the case. There is a great deal of very good work going on; we just need more of it to get a critical mass so that we are then talking at the same table as the Oxfords, Cambridges and Edinburghs of this world. We are not far short of it in many areas. I could go through it in great detail—I will not because of the time—but, without being flippant—

[106] **Nick Ramsay:** You have one minute. [*Laughter.*]

[107] **Professor Harries:** The science strategy document has an appendix that is a

summary of work throughout Wales.

[108] **David Rees:** We are now looking at Horizon 2020. It has three pillars: excellent science, leadership and the societal side of things. Is the approach now being taken in these proposals putting Wales in a position where it can benefit from each of those three streams and where the strategies being put forward—the science and the research and innovation strategies—are going to allow us to benefit from those individual pillars in Horizon 2020 in a better way than in the past?

[109] **Professor Harries:** My feeling is that, yes, we can—we have a strong chance now that we are setting things up in the way that we want them to go.

[110] **Mr Slade:** I just wish to add that this process of integration at European level with regard to how the funds work with one another and how the different DGs operate alongside one another is absolutely replicated in the Welsh Government in terms of what Ministers want us to achieve in integrating the advice, the approach, the facilitation and the support for all of these schemes. Horizon 2020 is the theme today, but there are other sectoral schemes as well.

[111] **Nick Ramsay:** Great. Thanks, David. Thank you, Professor John Harries, Alistair Davies, Tracey Burke and Andrew Slade. Your answers have been most helpful to us. We will feed them into our inquiry into the Horizon 2020 proposals. Sometimes it can be quite a baffling array of information that we have to deal with and you have been really helpful in helping us to form our view.

[112] **Ms Burke:** If Members would like make contact with the company in question we can certainly follow that up.

[113] **Nick Ramsay:** That information would be very helpful. I now propose that we adjourn the meeting until 10.45 a.m. as we need to set up the video-conference link with Brussels for our next set of witnesses.

*Gohiriwyd y cyfarfod rhwng 10.30 a.m. a 10.42 a.m.
The meeting adjourned between 10.30 a.m. and 10.42 a.m.*

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

[114] **Nick Ramsay:** I welcome members of the committee back and also welcome our panel in Brussels—*[Interruption.]* Some more BlackBerry interference is coming from somewhere.

[115] **Mr Jones:** Mine is switched off now.

[116] **Nick Ramsay:** There is usually a hitch of some sort when we try to get a video link going, so it is not a big surprise. I thank the panel for being with us today. We are continuing, as a committee, with our inquiry into the Horizon 2020 proposals and how the Welsh Government can influence them. Can members of the panel in Brussels state their names and positions for the record?

[117] **Mr Jones:** I am Gregg Jones from the National Assembly for Wales European Union office in Brussels.

[118] **Mr Godin:** I am Pierre Godin. I am a policy analyst in the Directorate-General for Regional Policy in the European Commission.

[119] **Mr Thomas:** Good morning, my name is Aled Thomas. I am a director within Climate—Knowledge and Innovation Community.

[120] **Mr Périssé:** Good morning, my name is Damien Périssé. I am in charge of innovation and research in the Conference of Peripheral and Maritime Regions general secretariat.

[121] **Nick Ramsay:** We can place you now from our list. We have a number of question areas for you, and the first question is from Aled Roberts.

[122] **Aled Roberts:** Bore da. A yw'n **Aled Roberts:** Good morning. Is it possible bosibl i chi nodi prif nodweddion y for you to note the main features of smart strategaethau arbenigedd doeth os gwelwch specialisation strategies, please? yn dda?

[123] **Mr Godin:** Good morning. As a policy analyst in cohesion in the DG for regional policy, I can make a short presentation—I hope that I will not be too long, but usually it takes more time. The main objective of smart specialisation is not completely new. It has always been necessary to have a strategy for supporting the investment with cohesion policy. However, this time, we would like the strategy to be more focused, so that is why we coined the expression ‘smart specialisation’.

10.45 a.m.

[124] By this we mean a limited number of priorities, and these priorities, collected in the operational programmes, should be based on the competitive advantages of the region. The region should have a critical mass to be able to address these priorities. By this, we do not mean to select only one sector; we mean to identify the cross-cutting areas of different sectors in which the region has real advantages and could invest. That means having a good knowledge of the research potential, the industrial potential and the market needs in the region and outside it.

[125] Certainly, the regions should not work alone to prepare this strategy. It is first necessary within the regions to build a partnership with the different components of what we call ‘the triple helix’, by which I mean partners from the private and public side, partners from universities, research centres, businesses and public authorities from the different sides, which would be representatives from governmental offices or regional authorities dealing with research, with industry, with employment and with the economy and so on, along with areas outside those, in the private sector, from businesses and chambers of commerce, which, in some regions, play a big role.

[126] I could give you more detail, but in short, that is what we mean by smart specialisation. I would highlight that we certainly do not have in mind a narrow approach. ‘Specialisation’ may not always be the best word, because it can sometimes be misinterpreted by people thinking that it is a monothematic approach when that is certainly not the case.

[127] **Nick Ramsay:** Does Damien Périssé want to add anything to that?

[128] **Mr Périssé:** Yes, with pleasure. At CPMR, as Pierre said, smart specialisation is not completely new. For us, it is just a new way of expressing the idea that EU money should be used on the basis of a good strategy. It is the expression that DG regio is using now to stimulate this idea in the current context, but it is not something that is completely new.

[129] We have taken this approach, which is a new name for the same thing, and we

welcome this approach in the sense that we have started to use this concept for the regions, with the involvement of the European Commission, in order to update their strategies when that is needed. It is also good for those original EU policies to have a concept that can keep visibility for the work that they are doing to prepare for the coming programming period. Pierre did not mention it, but we could also say that the development of strategies for smart specialisation should be the occasion to think about co-ordination between different structural fund policies and European funding for research under Horizon 2020, which is the name for the new European programme for research. So, in designing smart specialisation strategies, we should also think about co-ordination between the different EU policies.

[130] The last comment that I would like to make about that is that we also focus on the limits of the approach. The first is that we should keep in mind that structural funds do not represent a massive amount of money in different regions. I would like to quote one figure: in the region of Brittany, for instance—I could quote other examples—each year, €1 billion is spent on research, which comes from public and private sources. That is the total amount of money that is spent on research and it involves everything that you can think about. So, it is roughly €1 billion. The structural funds contribute around €10 million each year to innovation and research. So, even if we welcome fully the approach followed by the Commission, we should bear in mind that this approach is not meant to change everything. It is more of a contribution; something that can add to the strategy that is in place, which is more influenced by the national or regional level—the biggest players in the regions that have spent more money. It is something that comes in a context and not something that pretends to change totally the context. That comment is about the decisions that are made on the level of investment in innovation and research and also the choice of project that will be funded. We have said, and the regions have said, in general, that these choices must be left to be operated nationally and by the regions. I think that the Commission would agree that smart specialisation is not a way for the Commission to try to make the choice instead of the regions or of the member states. So, it is a process that, in the end, leaves the regions and the member states free to decide on what they want to spend their money.

[131] **Nick Ramsay:** Damien, may I interrupt you there, because Aled Roberts has a couple of follow-up questions?

[132] **Aled Roberts:** Rydych wedi cyfeirio at Lydaw; pa ranbarthau neu wledydd yn Ewrop sydd wedi bod fwyaf llwyddiannus yn dilyn y strategaethau hyn? Wrth sôn am Gymru, pa gymorth sydd ar gael gan lwyfan arbenigaeth ddoeth i baratoi strategaethau o'r fath?

Aled Roberts: You have referred to Brittany; which regions or countries in Europe have been most successful in pursuing these strategies? In talking about Wales, what support is available from the smart specialisation platform in preparing such strategies?

[133] **Mr Godin:** Due to the fact that we know that this process of developing the smart specialisation strategy will be difficult, we have set up a platform in the Commission's joint research centre within the Institute for Prospective Technological Studies in Seville, Spain. The purpose is really to assist the member states and the regions in preparing this strategy. There is a steering committee to help and to advise on this platform, with representatives from the different directorates-general. By this, I mean that this operation of smart specialisation is not only an exercise within DG Regional Policy. It is an exercise in which all the relevant directorates-general from the Commission are involved.

[134] So, there is a steering team and there is also a mirror group with experts at the European level. For example, Kevin Morgan from Cardiff University is a part of this mirror group. It is a group of 15 people who can provide their expertise to the regions. The services provided by this platform are different. There is a website for sharing information, but this platform also organises meetings with the regions, and during these meetings, the regions may

exchange their views for developing a strategy. A guide for developing smart specialisation strategies has been published, and there are specific guides, for example, to connect universities to regional authorities, for broadband, for clusters and for business incubators.

[135] You would like to know which regions are good examples of smart specialisation, but I would say that it is difficult to select regions and to present them as the best examples. What we present in the guide for smart specialisation is that we say that the process of the smart specialisation strategy could be divided into six steps, and for each step that is described in the guide, we give examples of regions that are interesting. I can tell you briefly about these.

[136] The first step in making this strategy is to analyse the situation. On the analysis of the situation, we have the example of macroregions or cross-border regions, including parts of the Lander, parts of Germany, Aachen and parts of the south Netherlands. They have produced a good analysis of the situation and that is published in the guide or is accessible through the guide.

[137] The second step is to develop a partnership involving all the relevant partners. In planning, the region of Navarra has undertaken good work, especially in developing the transition from an industry-based economy to a knowledge-based economy. A lot of regions are faced with this situation, and what they have done in Navarra is quite interesting.

[138] The third step is to develop a vision for this strategy. In this case, the Flanders region in Belgium has done good work on a transformational policy approach, which is a good reflection of what is possible. That is also published in the same guide.

[139] The fourth step is about defining priorities, which is very difficult because it means that you have to make tough political choices. In Germany, the regions of Berlin and the surrounding region of Brandenburg have taken an interesting approach to defining these priorities: for example, they have identified biotechnology, ICT and optical technology, and, as a cross-sectoral priority, they have identified new materials. A question about selecting priorities that is sometimes raised is: if all the regions are interested in biotechnology, optical technology and all other key enabling technologies, how do you choose? It is not up to us to choose at EU level; we accept that the choice will be—

[140] **Nick Ramsay:** May I just interrupt you there, because one of our Members wants to ask a supplementary question on the basis of what he has just heard?

[141] **Lord Elis-Thomas:** Gregg will know that I have been an admirer of the Conference of Peripheral Maritime Regions of Europe for over 30 years. I would like to ask in particular about the question of establishing accurate data for regional participation in EU research programmes. Linked to that is the question that I am very interested in, on the analysis of Horizon 2020, where CPMR is arguing that there should not be a geographical allocation, but that there should be, and I quote from your paper,

[142] ‘a dynamic, inclusive and territorial definition of excellence’.

[143] I thought that that was a brilliant analysis and I want to know more about it.

[144] **Mr Périssé:** On the issue of FP data, the idea is to know how many projects were funded by the framework programme in a region, and also to know which players, such as universities or business, received money and how much they received. This is a very practical question that several regions have been asking for many years, including during the sixth framework programme between 2002 and 2006. Several regions had been asking the European Commission or their national authorities for figures. In both cases, the answer was that it was not possible to provide them with data for two reasons.

[145] The first reason was that it was technically very difficult to provide reliable data because of the so-called ‘headquarters effect’. It means that if you had a big research centre or a big university that undertook research activities in Wales, for instance, but had a headquarters in London, the project would be identified as being in London, so it would not be counted as a project involving Wales.

[146] The second reason was a political reason, meaning that it was not possible for the Commission, because it did not want to do that, to try to develop an accurate analysis of the participation in FP in different regions. It did not want to create a regional breakdown of participation because it would have opened up a discussion on geographical barriers and it would probably have shown some divides.

11.00 a.m.

[147] There is another argument relating to the confidentiality of financial data, because it is not allowed to publish the amount of money received by a single organisation, like a company or a research centre. So, there was this problem.

[148] We started to work in the CPMR with some regions that had prepared some studies about their own participation, for instance Flanders, Lower Saxony and Brittany, or Spanish regions like Catalunya and Andalucía. They had managed to develop data through very hard work, which meant asking to check the European data on the ground and so on. European data are the data that are accessible publicly or that can be taken from the national authorities. After a lot of difficult discussion with the national authorities a confidentiality agreement was signed for the use of FP data. This is from the back. We worked with regions that have managed to develop this type of study and then we maintained some discussions with the European Commission and saw the research of people working with Horizon 2020, who are in charge of developing data concerning participation in the framework programme. We saw them evolving and they helped us to develop some more analyses. They also made progress. The data concerning the participation in the seventh framework programme are better than the data concerning the participation in the sixth framework programme, so it is beginning to be easier to develop reliable data.

[149] However, there is still progress to be made. The European Commission is still not taking the initiative to publish a map of the participation in the framework programme, which is strange when we think about smart specialisation. When a region is developing its smart specialisation, one of the first questions that might come up would be about the participation of the businesses and the researchers from each territory in the framework programme. If we talk about the co-ordination of European policies—this is a very practical question—and if we were to tell the regions that they must co-ordinate their policies and their use of structural funds with European policies and the framework programme, we should at least provide them with concrete analysis of their performance in the framework programme. So, we are working on that. Discussions with the European Commission are going well on this, and they are really trying to—

[150] **Nick Ramsay:** Damien, may I interject? You were just talking about co-ordination; we have a set of questions on synergy and I think that it is probably an appropriate time for us to bring that into the mix. Alun Ffred Jones has some questions on synergies.

[151] **Alun Ffred Jones:** A allwch amlinellu’r prif newidiadau sy’n dod drwy’r rheoliadau newydd i gefnogi buddsoddi mewn ymchwil a datblygu ac arloesi, o gymharu â’r cyfnod 2007-13? **Alun Ffred Jones:** Can you outline the major changes implemented through the new regulations to support investment in research and development and innovation, compared with the 2007-13 period?

[152] **Mr Godin:** The main changes in the co-ordination between cohesion policy and Horizon 2020 will be the consequence of some new provisions—it could look like some technical details in some cases. Another change is this concept of a smart specialisation strategy, in which all the authorities dealing with all the EU policies should be involved, including research, enterprise, economic development and employment. They should be involved in the definition of these strategies. Then, there is a possibility to support the same project with different funds; that proposal has been made, so Horizon 2020 and cohesion policy could both support some very important projects for our regions. Another change will be the possibility of using the budget of one regional operational programme to support projects outside of the region, but with important benefits for the region itself. That is important in the case of research projects because it is necessary to have good partnerships in many projects—partnerships between different regions. A region could support partners outside of that region with its own money. So, more arrangements will be possible between the managing authorities to support research and innovation.

[153] **Alun Ffred Jones:** Efallai eich bod eisoes wedi ateb y cwestiwn hwn, nid wyf yn siŵr, ond a allwch amlinellu'r math o bethau y gellir eu hariannu gan ddefnyddio'r cronfeydd strwythurol i gefnogi ymchwil, datblygu ac arloesedd?

Alun Ffred Jones: Perhaps you have already covered this question, I am not sure, but can you outline the kind of things that can be funded using these structural funds to support research, development and innovation?

[154] **Mr Godin:** A lot of research and innovation activities may be supported by the structural funds. It is difficult to draw a demarcation line between what can be supported by Horizon 2020 and what can be supported by cohesion policy. Fundamental research would be more on the side of Horizon 2020 and research programmes. That which is closer to the market will be mainly supported by cohesion policy, but not excluded from Horizon 2020, which will also be able to support research and innovation in small and medium-sized enterprises. So, to simplify, you could say that some stages are more relevant for cohesion policy. For example, the construction of research infrastructure is expensive; it cannot be done under Horizon 2020 because it is too expensive. We sometimes call it 'upstream action', that is, support for the construction of research infrastructure. Other types of activities we sometimes call 'downstream action', and those aim to transform the results of scientific research into innovation projects through demonstration activities, for instance, building and testing prototypes. That could be done through cohesion policy.

[155] **David Rees:** If I can take that a little further, article 55.8 of the common provisions regulation legally clarifies the projects that can be supported by more than one EU funding programme. Does the European Commission have a particular project that could show us how that works?

[156] **Mr Godin:** Yes, we could imagine that there are different parts to one project. So, for instance, infrastructure and equipment would be supported by cohesion policy, the training of researchers for research activity could be supported by the social fund, and incoming mobility of researchers could be supported, for this specific project, under the Marie Curie Action under Horizon 2020. Those are a few examples.

[157] **David Rees:** Do the three pillars identified in Horizon 2020 create more of a possible conflict because the industrial leadership or social side of the pillars can also look at the commercialisation aspects? Therefore, will there be an overlap there?

[158] **Mr Godin:** I am not a representative of the Directorate-General for Research and Innovation, but I know that area quite well because it is my job to try to develop co-operation with it. As you said, there are three parts to Horizon 2020: excellence, industrial leadership

and meeting societal challenges. Certainly, it will provide more opportunities for joint support from Horizon 2020 and cohesion policy for all the activities that are closer to the market.

[159] **Kenneth Skates:** These questions are primarily directed at Aled Thomas. Could you outline how knowledge and innovation communities were established and how the various partners joined them?

[160] **Mr Thomas:** Yes, I can. To give you some background information, the EU set up the European Institute of Innovation and Technology in 2008 to drive innovation and entrepreneurship across Europe. One of the main ways for the EIT to turn its objectives into operational reality was to set up what are now known as KICs—knowledge and innovation communities—which are a relatively new concept. They are cross-border public-private partnerships, in effect. There was a call for proposals in 2009 to set up the first three KICs on three themes that are addressing societal challenges: sustainable energy, the future of ICT and climate change mitigation and adaptation—which is the one that I am involved in. It was a very open process, whereby an application had to be submitted to the EIT. The EIT held a series of information events and dissemination days to explain the calls. It was a process where actors had to work with partners across Europe to develop consortia.

[161] **Kenneth Skates:** How do they operate in practice on a pan-European and local level?

[162] **Mr Thomas:** They are quite distinctive: they are much more than conventional European projects, which tend to last two or three years. They are designed to be highly integrated. The KICs are established as legal entities and are expected to last up to 15 years. So, it is a very long-term horizon of activity. They are mainly structured around what are known as co-location centres, which are physical locations in different parts of Europe that bring together leading universities, leading companies, research centres and public authorities. The co-location centres are very much the infrastructure for delivering the KICs' activities.

[163] **Kenneth Skates:** Who are the key players in deciding who becomes a partner in a KIC?

[164] **Mr Thomas:** It is down to consortia developing from the bottom up. It is a matter of individual universities or companies working with existing or potential partners to develop a consortium that involves universities, companies—large companies or SMEs—and research centres. There is a very open process at the European level. There is a deadline for applications and then they are assessed by the EIT governing board, which makes the final suggestions and decisions.

[165] **Kenneth Skates:** Looking ahead, do you have any intelligence on how the future KICs are developing? Are there any specific KICs in which we, or Wales, should be taking an interest at this stage?

11.15 a.m.

[166] **Mr Thomas:** The EIT is part of the proposals for Horizon 2020. The EIT is part of the societal challenges pillar. It is recommended to have a budget of €2.8 billion over the 2014 to 2020 period. There are discussions ongoing with the European Parliament and the member states regarding the final budget for the EIT, as well as the KICs and the potential themes. The Commission is proposing to launch six new KICs in the future. The first three will be launched in 2014, and the proposal is to focus these calls on healthy living, raw materials and food for the future. There will then be a follow-up call in 2018, focused on creating KICs around urban mobility, added-value manufacturing and smart, secure societies. So, there is quite a broad range of themes there.

[167] In terms of how this links to the earlier discussion, I see KICs very much as a way of operationalizing and internationalising regional smart specialisation strategies. It is very much for the regions to work out what their key priorities are through the smart specialisation process, and then to see whether they can be internationalised with other European partners through a KIC.

[168] **David Rees:** To follow up on that, and you may well answer this in the positive anyway, do you believe that the development of the EIT and the KICs process has matured to a level where it can expand in the H2020 process, and can take on that huge, tenfold increase in the budget?

[169] **Mr Thomas:** It is difficult for me to answer that directly. When the EIT and the KICs were set up, they were set up as very new organisations. In terms of the climate KIC, we were established in 2010, so we are still a relatively new organisation. Clearly, there is a proposal from the Commission to significantly increase the EIT budget in the next period. I know that this is a big issue for discussion among member states and the European Parliament at the moment. In terms of the climate KIC, which is the KIC that I work for, I would be pretty confident that we could absorb a significant increase in funding over the next few years. Currently, we would like to do much more than we already can, given some of the budget constraints. That is my view as a representative of the climate KIC.

[170] **Nick Ramsay:** Dafydd Elis-Thomas, did you have any points that you wished to raise?

[171] **Lord Elis-Thomas:** No, I was more than satisfied with the answers that I got, except for one question. Does our colleague from the Conference of Peripheral Maritime Regions see a great opportunity, now that we have a regionalist as the President of France, to further the status of regions within European programmes generally?

[172] **Mr Jones:** Dafydd, the witnesses did not quite get the question, and so I will try to explain it.

[173] There has been a change of French President, and the new President is pro-regions. Dafydd is asking whether that is going to benefit regional participation in Europe generally, and the position and status of regions in Europe.

[174] **Mr Périssé:** This is a broad question. You may know that Jean-Yves Le Drian is the President of Brittany and of the CPMR and is now the French Minister of Defence and Veterans Affairs and therefore part of the French Government. His relationship with President François Hollande is very strong. I guess that President Hollande will be keen on promoting the role of the regions in France, at least. I do not know whether that will have consequences beyond that, at European level. That is to be seen. For instance, we will see how the French position on structural funds will evolve in the next months and we will know more about that.

[175] I would like to take this opportunity to mention a few final things in relation to the data concerning the framework programme. We developed the methodology for this in the framework for a European project that we developed. We have a draft methodology that is quite consistent. We should be able to circulate it in the next few days. We could pass it to you through Gregg, for instance.

[176] Regarding the question that was asked about the notion of excellence, the idea behind that was to say that we should not consider that there are structural funds on one side and the framework programme on the other side. We see the distinction between the role of structural funds on one side and excellence on the other side as a bit artificial because we think that not all projects funded by the framework programme are excellent and that many projects funded

by structural funds are excellent. Therefore, we are calling for stronger synergy also through the dynamic approach to excellence. By this we mean that Horizon 2020 could really try to pick up teams and organisations that are on the way to becoming more excellent. It can pay attention to those that are dynamic in time, in order to avoid providing money to stakeholders that are already very competitive and excellent and that would do the same thing even without European money. That is not to say that we are asking for a geographical breakdown of excellence. We are not asking for Horizon 2020 to be spread equally across Europe, but there should at least be something for all member states.

[177] A letter was sent by 10 member states from the eastern part of Europe, to be brief, explaining that Horizon 2020 is benefiting the wealthy parts of Europe more and saying that this should be thought about. They made a proposition, and we think that it is a political reality to use discretion as far as is appropriate

[178] **Nick Ramsay:** Thanks for that. Joyce Watson has a few questions now.

[179] **Joyce Watson:** Your last comment leads me quite nicely to my question. Do you have any views on the emerging positions within the Council and the European Parliament identifying any key areas where there is pressure for change to the European Commission's proposals?

[180] **Mr Godin:** It is difficult to say during these processes of negotiation in Council and Parliament. I am not part of the negotiation team. I have the impression that the situation is quite good, even if there are discussions on the technical rules. What was very important for cohesion policy was to be sure that it could be implemented everywhere across Europe. That will be the case because the question was raised some time ago. Also, the concept of smart specialisation, even if there are discussions about how to implement it, is, in my opinion, quite well accepted. On the principle of developing synergies between cohesion policy and Horizon 2020, we have discussions in Council and Parliament. We bring clarification of what it means in practice.

[181] I will just say a few words about excellence, because Damien has said something about it. Clearly, excellence is important, but we know that excellence is not everywhere and we want to do something about the role of cohesion policy to mobilise all the regions to improve the potential for research, industry and innovation. Sometimes, we say that cohesion policy is a stairway to excellence. I think that this expression has been accepted. It is also clear on our side that, when we support research, even excellent research, we always expect an economic effect on the region. We do not support research as such.

[182] **Mr Périssé:** I will make a short comment on that. On the negotiations concerning the regional policy for structural funds and the link with research, the first thing for us is to ask that the regional policy should benefit from a strong budget. That is very difficult to do, so any help is welcome to advocate this. Other issues that have direct consequences for innovation and research are conditionality and macroeconomic conditionality. Macroeconomic conditionality is the idea that structural funds in a given country or region could be cut in some way if it is the case that the national authorities are not respecting the macroeconomic rules at EU level, such as the stability pact, for example.

[183] We very much understand that it is a key priority for the European Union to ensure that the stability pact is respected, but macroeconomic conditionality should not be applied to structural funds, because regional Governments do not have a say or a choice when national budgets are adopted. This is an important political point, and it also links to innovation and research. If you imagine that funding would be extended in the field of innovation and research, in that case, there would be a problem between European institutions and national authorities. It is not good for the regional policy or the regions, since they are managing a

share of the structural funds in several countries.

[184] Concerning the negotiation on Horizon 2020, there are three points that I could quote. The first is the role of the regions in Horizon 2020—by ‘regions’, I mean regional Governments—and the possibility for them to participate directly in Horizon 2020. There is a programme that was successful over the past years, called Regions of Knowledge, which the European Commission is proposing to move from Horizon 2020 to the structural funds’ territorial co-operation programme. We do not think that that is a good idea, and many regions and other organisations for regions have asked for that programme to be kept within Horizon 2020. So, we are working on amendments about this in the European Parliament.

[185] Beyond that, the approach to excellence and the territorial dimension of Horizon 2020 was mentioned by the rapporteur of the European Parliament, namely Teresa Riera Madurell, who is a Spanish Member of the European Parliament. She mentioned that in her first working document on Horizon 2020.

[186] The last point concerning Horizon 2020 that I would like to mention is its marine and maritime dimension. We are very active on this with the objective of consolidating the budget that would be devoted to marine and maritime research through Horizon 2020—we can provide you with some more information about the amendments that we are trying to propose on that. We are closely collaborating with the main research organisations that are active in the marine and maritime field.

[187] **Nick Ramsay:** If you could provide us with that information, that would be great. Joyce Watson, do you have any more questions?

[188] **Joyce Watson:** I have a brief one. We are running out of time, so that will mean brief answers. Do you have any views on the timeframe for negotiations and can you identify any of the key stages and points where the National Assembly for Wales could seek to exert most influence?

[189] **Mr Godin:** On the timeframe for negotiation, we expect from the Commission side to have a decision at the Council and Parliament late this year or early next year. That is necessary to allow member states to present their national frameworks and operational programmes in good time to start in 2014. This means that member states and regions should not wait until a decision is taken on the proposals. They should start now with an analysis of the situation, even if they do not know 100% what the new provisions are. They can start working on an analysis to have a vision and develop partnerships for it.

[190] **Nick Ramsay:** We are coming to the end of the session, but Aled Roberts has a supplementary question.

[191] **Aled Roberts:** Are any other regions expressing concerns regarding the Commission’s proposals to prohibit linkages between higher education and large companies in convergence areas?

[192] **Mr Godin:** If I understand correctly, the question is about the support to large companies—

[193] **Aled Roberts:** It is about support for research projects that involve large companies. In 3(c) areas such as east Wales, there is a proposal by the Commission that funding should only be available for research projects involving SMEs.

11.30 a.m.

[194] **Mr Godin:** In the list of 11 thematic objectives, the first concerns strengthening research and innovation, but it does not exclude support to large companies. Of course, we expect the support to large companies that will be in the framework of clusters to have an impact on SMEs and the global economy of the region. That is why we can support large companies, because they contribute to the regional economy and have a spillover effect on SMEs.

[195] **Nick Ramsay:** Do any Members have any final questions?

[196] **David Rees:** I would like clarification of one point in CPMR's paper, where it mentions the headquarters effect on regional investment. We are looking at FP7 coming to a close, with some of it moving towards preparing for Horizon 2020. How serious is this headquarters effect across a wider European basis? You looked at Brittany, but how is it across a wider European basis?

[197] **Mr Périssé:** This headquarters effect comes back to the fact that companies or research organisations that have their headquarters in a capital city are involved in projects, and this project identified that they are being run in the capital city, instead of the regions where they are effectively implemented. This is affecting several regions in Europe. I quoted the example of Brittany, but I could have quoted the examples of Tuscany, Catalunya and Andalucia, of Ostrobothnia in Finland and other regions that are involved in the work that we are doing. I could even quote the example of Flanders, in Belgium. There are companies and research organisations in Belgium whose headquarters are in Brussels—so, the headquarters effect is in Belgium, too. The headquarters effect goes across Europe; it is not something that is specific to only a few regions.

[198] **Nick Ramsay:** Thank you. That brings our evidence session to a close. I thank our panel: Pierre Godin, Aled Thomas and Damien Périssé. I also thank Gregg for being with us today. It has been very helpful. We will feed the information into our inquiry into Horizon 2020.

11.33 a.m.

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

[199] **Nick Ramsay:** We continue our inquiry into Horizon 2020 and our next evidence-gathering session. I welcome our sole witness for this, the third session. You look quite lonely there. Would you like to state your name and your position?

[200] **Dr Healy:** My name is Adrian Healy, and I am a research associate at the moment with Cardiff University, specialising in regional innovation and the resilience of regional economies.

[201] **Nick Ramsay:** Thank you, Dr Healy, for being with us today. We are very grateful to you for taking the time to help us with our inquiry. We have a number of questions for you, the first of which is from Joyce Watson.

[202] **Joyce Watson:** Good morning. My questions are to do with smart specialisation. I was going to ask, as you may be able to answer this, what Professor Kevin Morgan's role as an expert adviser to the European Commission is and what he does on the smart specialisation platform. If you cannot answer, I will move on to another question.

[203] **Dr Healy:** I can give you something by way of an answer. First, Kevin Morgan sends his apologies that he cannot join you.

[204] Kevin Morgan is on the mirror group for the smart specialisation platform. That is a body of experts who are involved in giving the benefit of their experience and guidance to DG Regio at this stage and to the smart specialisation platform, which is based in Seville, as I am sure you all know, and which works as an extension of DG Regio in this field. Kevin Morgan's role in that has been twofold. First, there has been that giving of advice as a starting point about how the smart specialisation process might work in practice within regions, and so forth, drawing upon his experience of the field. However, more recently, he has also been involved in the peer review of regional innovation programmes for smart specialisation at a number of events that the smart specialisation platform is holding around different parts of the EU. Next week, in Cardiff, we are hosting the UK country event for the smart specialisation platform and DG Regio, where we have a number of speakers from the Commission and to which we have invited practitioners from Wales, England and Scotland to discuss the notion of smart specialisation. We are trying to bring that knowledge to Wales as well. So, I suppose that there are those three roles.

[205] **Joyce Watson:** That response might answer part of the next question. What does he view as the key stages in preparing a smart specialisation strategy in Wales—is what you have just mentioned one of them—and what would he like to see done to make us prepared for that, or what would you like to see done? You could answer on your own behalf.

[206] **Dr Healy:** Indeed, in both cases. There is a good starting point. 'Science for Wales' sets quite a good strategy basis at the moment. The notion of developing 'Innovation Wales' as a sister to that is also a good starting point. We need to know a little more about the strengths that exist in Wales in terms of taking forward science, research and innovation and turning that into economic growth at the end of the day. More significantly, there needs to be strong engagement with the various communities that are involved in this, whether they are in the higher education sector or, more importantly, within the business sector. There has to be a good element of building this from the ground, rather than just having a top-down process.

[207] **David Rees:** To follow on from that, in relation to smart specialisation, you have mentioned the regional innovation strategy and the Welsh science strategy. So, effectively, there are strategies looking at the strengths of an area in its business operation and what it can deliver. So, in a sense, they are considering where we are good and where we can take things forward. You mentioned practitioners coming down to your event; what sort of practitioners are they? Are they academics who look at strategy, or are they businesspeople working in specific fields where such smart strategies are in place?

[208] **Dr Healy:** With regard to the event next week, these are practitioners who are involved in developing strategies and who have developed strategies. Where we are at the moment is that we are saying that we need to get the process right and to understand how other regions do this. Wales used to be a leader in the field, with the regional technology programme and so on, which was done some time ago. We have dropped away from that leading role in Europe over the last 10 years. This is an opportunity to rebuild that position, to learn from others, and then to involve businesses and those who are involved in the practice of business and to turn this into economic opportunities.

[209] **Byron Davies:** Why do you think that has happened over the last 10 years?

[210] **Dr Healy:** I think that we have taken our eye off the ball somewhat. I do not know the reasons for that. It is noticeable, if we look at framework programme 7, for example, that, in Wales, we have not been as good at engaging with some of the territorial dimensions of FP7, whether regions of knowledge, regional research capacity, and so forth. We have been much better, where we have been good, in terms of the individual activities of individual academics. I suspect that we have put more attention towards our European regional

development fund structural fund programmes and have perhaps thought less about how we bring various dimensions together in a more overarching, strategic perspective. I would not like to go further than that at this stage. I do not know.

[211] **Joyce Watson:** Why do you think that that has happened? Do you think that capacity issues have driven that or one-dimensional thinking?

[212] **Dr Healy:** One of the challenges is to ensure that we have regional structures that are able to engage within these debates at a European level. In some respects, those independent, or semi-independent, structures appear to be missing at the moment, and we have not put anything else in place to take that forward. So, there is an interesting question here. When I talk to some institutions within Wales, and so forth, there is a challenge in looking from Europe back into Wales in terms of who we engage with. Who are the right people to be speaking to about this, and are there individual and independent initiatives coming forward at a regional scale that one can engage with and learn from others elsewhere in this area?

[213] **Alun Ffred Jones:** Rwyf am ofyn **Alun Ffred Jones:** I will ask a question in Welsh.

[214] **Nick Ramsay:** Sorry, I should have pointed out to Dr Healy that the translation is available on the headsets. You might need to switch it on, and turn it to channel 1.

[215] **Dr Healy:** We have it now. Thank you.

[216] **Alun Ffred Jones:** Efallai eich bod wedi cyffwrdd â hyn yn eich ateb blaenorol, ond mae'r canran o'r arian ymchwil o raglenni Ewropeaidd a Phrydeinig sy'n dod i Gymru yn gymharol fach. Yn eich barn chi, sut y gallwn wella ein perfformiad o ran ymchwil, datblygu ac arloesedd?

Alun Ffred Jones: You may have touched on this in your previous answer, but the percentage of research money from European and British programmes coming to Wales is relatively small. In your opinion, how could we improve our performance in terms of research, development and innovation?

[217] **Dr Healy:** Thank you for that. It is a very important question. Wales has a relatively low take of funding from FP7 and UK research programmes. As previous witnesses have said, a lot of that has to do with the structures of science, technology and research within Wales. The question is what we do about it. One of the first things that I think that we ought to think about is not just whether we can attract more science or research into Wales, but how we connect to excellent science and research outside of Wales. There is a lot of evidence that suggests that you do not necessarily need to have it all within your region, particularly if you are a small region; the key thing is to connect to those who have that knowledge, and to develop the capacity and ability to use that knowledge.

[218] That could be at two levels. It could be around mobility programmes—helping academics in Wales to access knowledge elsewhere, make the connections and create the opportunities for bidding for European programmes by having good networks for the future. It could be about attracting academics and researchers to Wales to bring their knowledge with them and build connections that they take with them afterwards. Most importantly, it could be about building the linkages between companies and knowledge outside of Wales.

[219] One of the challenges that we face around this is around the structural funds, where the boundaries are set very firmly for activities within Wales, and, in particular, within parts of Wales. We may want to think about a more strategic use of the transnational programmes, for example, which we are beginning to see happen. We may want to think about more novel instruments about how you can help firms and academics to access knowledge elsewhere.

[220] There are all those things that we can think about. The other aspect to that is that I have seen various aspirations for increasing the amount of money that Wales brings in through Horizon 2020, for example. These are important, but the key question is what we do with that money, rather than just having the money. However, we must not lose sight of the fact that just standing still will be a real challenge, because with austerity across Europe, European programmes become much more attractive to many more players. There has been a lot of infrastructure investment in the new member states in central eastern Europe over the last 10 years. They are catching up fast in terms of capacity and potential. We have to build much stronger networks if we are to engage within this process. We are looking at Horizon 2020, but so is everyone else. We are not going to get there quickly. We should also be thinking about the next seven-year programme thereafter. Sorry, that was a slightly longer answer.

[221] **Alun Ffred Jones:** Roeddech yn sôn am geisio cael cwmnïau i edrych y tu allan er mwyn sicrhau eu bod yn gallu cael mynediad i wybodaeth a chanlyniadau ymchwil. Pwy ddylai fod yn arwain ar hynny? **Alun Ffred Jones:** You mentioned trying to get companies to look externally to ensure that they have access to information and research outcomes. Who should be leading on that?

11.45 a.m.

[222] **Dr Healy:** Partly companies themselves, as well as business, universities and Government. One of the important things to say is that, while we think that the higher education sector is the only game in town, as someone once described it to me, in terms of research activities and so forth, Wales has a comparatively better performance than most British regions—if I may put it that way—in terms of SME access and engagement with the framework programmes, certainly framework programmes 5 and 6. Therefore, we should not overlook that element. Equally, under Horizon 2020, some of the elements that are targeted towards SMEs will only be for SMEs, so it will not necessarily be about university engagement. We have some very good SMEs within Wales. Often, or perhaps not often enough, they would have a look outside of the state. Perhaps we do not recognise those that do look outside of the state and we are kind of blind to that activity. I would suggest that there is an important role for universities in bringing knowledge into a region and connecting to their local business base, shall we say. There is also an important role for Government in terms of thinking about how to help firms access some of the novel instruments that are being put forward for Horizon 2020, around risk finance, for example, the SBIR proposals and so forth. However, there is also a role for business to play within this, to begin to ask, ‘How do we engage more strongly within some of these areas?’ Perhaps it is about just raising their awareness of opportunities and giving them access to contacts, proving that this is not a scary proposition in that respect. We have some good companies. Some of them are leading within these areas. We also need to work with that and not forget that they are actually very good in their own right.

[223] **Nick Ramsay:** How do you make them aware of those opportunities? You mentioned one particular strand.

[224] **Dr Healy:** This is off the top of my head, but I would probably think about it in two ways: first is demystifying some of this process, and thinking very seriously about whether European programmes are the right way for people to engage. It might be about developing access to trade fairs, for example, or setting up meetings between different sets of businesses. I heard you mention regions of knowledge as I walked in. They were some very interesting examples of activity, such as bringing together blue biotech companies, bringing companies from different countries together. That can also be very attractive for venture capitalists, because they have a bigger choice of potential investment. Rather than just coming to Wales, for example, they come and say, ‘We have Welsh companies, and Irish companies, and we

also have some Spanish ones'. However, companies also make connections between themselves. Other things happen. Much of this, unfortunately, is serendipity. You cannot plan it, but you have to create the conditions and the engagement, and things then move forward from there.

[225] From my experience, the one thing that you should not do is to say, 'Here is an awareness event about framework programme 7 or Horizon 2020 funding'. You will not get a company there on that basis. If you say that the event is about this technology or this business area and various ways in which that might be funded, you might get them interested. Equally—sorry, this is my final point on this—some of our structural fund rules make this more challenging. The notion that you must give a company seven hours of assistance in order to count it as an enterprise assist is worthwhile, because it means that they get decent, good-quality assistance. However, many companies do not need that amount of time to find out whether or not something is interesting to them in terms of funding programmes, but there is no incentive for anyone to engage on that basis. Therefore, we need to think about some of the perverse incentives that we are also setting up in that respect.

[226] **Nick Ramsay:** I was just thinking that you were more succinct than some in your answers, so I would not worry about your answers not being brief. You are doing fine. I asked that question because some previous witnesses talked about a roadshow, but then it is a matter of people being aware of a roadshow.

[227] **Dr Healy:** It is also about being aware of what businesses will engage with and what they are actually interested in.

[228] **Nick Ramsay:** To clarify, you have just said that there is no point in packaging it in a very technical way. Talking about FP6 and FP7 will not get their attention.

[229] **Dr Healy:** I do not think that they would be excited by it. I think that they will just think, 'What has this got to do with us?'

[230] **Nick Ramsay:** I am sure that you are right.

[231] **Kenneth Skates:** Would it make more sense to go into universities and engage with them to find out what companies they are engaged with—for example, with knowledge and innovation communities, to build potential consortia from existing ties that universities may have with business?

[232] **Dr Healy:** There are two parts to that question. One is knowledge and innovation communities, which is a particular discussion and I will say something about that in a moment. There is a lot of value in speaking to universities about the companies that they engage with. Equally, there is value in speaking with innovative companies—we can identify those from survey activity that has been taken forward and so on—about which universities they engage with. For example, we have some strong marine energy companies in Wales, many of which have connections with universities in England, Norway, Sweden and Finland. It does not matter where the knowledge comes from as long as the benefit is gained in Wales.

[233] In other cases, you want to build the science and innovation research base so that companies outside Wales can engage with it; it becomes an attractive proposition at that stage. So, past experience is a good thing in that respect. We must also bear in mind a need to keep building for the future—reseeding the field, as it were, rather than just playing on our past strengths.

[234] On knowledge and innovation communities—I presume that you mean the European Institute of Innovation and Technology structure?

[235] **Kenneth Skates:** Yes.

[236] **Dr Healy:** I led the evaluation of EIT for the European Commission, so I have a little knowledge about it. I think that it is important for Wales, but we should not get our hopes up too much for the next five or six years at this stage. That is because three knowledge and innovation communities currently exist and all three are based on strong pre-existing partnerships. They spent a lot of time without even knowing that EIT and KICs existed, because this has happened over the last 10 years. They have been building those sorts of relationships and forming core partnership connections and they have built on that practice. If we did not already have those pre-existing linkages, it would be hard to build a KIC.

[237] The other reason for being cautious is that there is already a lot of work going on among organisations and institutions across Europe, building towards the future KICs and, from what I understand, we are only just talking about it.

[238] **Kenneth Skates:** Have we missed the boat?

[239] **Dr Healy:** We have not missed it, but we should be cautious and think about what we want to achieve. There was a risk that we would leave this to individual universities and ask them what they wanted to do. That is a good thing in that it builds innovative capacity and entrepreneurial spirit. However, Wales should look at the notion of co-location centres within the KICs, which possibly means thinking about whether there are one or maybe two particular areas that we really want to focus on and put some strategic support behind—this is not just about the individual university engaging, but about Wales engaging, as an innovation territory. If you look at the three KICs that were established in the last round, at least two had some serious support from their regional and national Governments in terms of developing the bid and so on. You need that buy-in to make this work.

[240] We do not know what the future KICs will be. That may change; we know what we think they are going to be. However, the reality is that most things will fit into whatever titles come up. ‘Food for the future’, is one, which I heard reference to in previous committee evidence. It could equally have been called ‘biotechnology’. There are different ways of looking at these things. The same things fit into them—they are just packaged in a slightly different manner. The key point for Wales is to consider whether we can engage. We have not missed the boat, but we need to move—

[241] **Kenneth Skates:** So, should we focus on 2018 and not 2014?

[242] **Dr Healy:** Yes, I think that we should be thinking of going further ahead. My immediate thought is that, unless we have a good existing connection that we can just build onto, how do we build the connections into the KICs from Wales? That is what the EIT is not as strong on at the moment. There is real value to regions saying, ‘This is significant to our future development, this is some of the leading knowledge, it has access to international expertise and major company activity; how do we engage and make that valuable to our academics and our businesses over time?’

[243] **Aled Roberts:** You mention this preoccupation with structural fund boundaries and so on. I note the point that you made on the transnational stuff, but my understanding is that there is concern in Flintshire regarding the preoccupation at Commission level with SMEs and the fact that a lot of the current work being done, on advanced composite materials in particular, where there is joint work with the University of Manchester and other English universities, may fall foul of the new regulations and that that type of activity would not be allowed under the new structural funds round because the companies involved are large—we are talking about Toyota, General Motors and Airbus. When I asked that question to

Commission representatives, they said that there was no exclusion of that type of activity. So, I am a bit confused, because it has been raised as an issue of concern by economic development colleagues in Flintshire.

[244] **Dr Healy:** There is probably a practical answer and a technical answer to this. I will give you the experience of the past. There are some state aid rules that can make working with large companies challenging. However, particularly in this field of research and innovation, there are state-aid exemptions that you can gain, which make that absolutely possible and quite feasible. For example, in its Objective 1 programmes, Yorkshire and Humber obtained a state-aid exemption to work with large multinational companies. It is not unusual to do that. I do not know whether Wales has done the same and I do not know what will be happening in the future.

[245] I have done a lot of work with structural funds across Europe and at a European policy level. I was involved with advising a lot of the new member states as they were establishing structural fund programmes and one of the pieces of advice that I always gave them was that structural funds very rarely stop you doing things. There is a lot of room for manoeuvre and lots of ways of doing things, but you have to work out how to engage with those opportunities. You can take a very minimalist reading of the rules and regulations and say, 'We are not allowed to do that'. However, that is probably not the case. You probably are allowed to do it, but it may take you a little more effort. For example—again, this is slightly historical—in the past, if you were in an Objective 1 region, as it was at the time, and you wanted to bid for a framework programme, you could get a bonus from the structural funds for your framework programme activity. That was never used in Wales; it was never really used across Europe, because people did not know about it. People in Wales did know about it, but it was not acted upon at the time. There may be opportunities for that in the future, with all of the work that has been going on around synergies between ERDF and Horizon 2020. These opportunities are there; there is nothing to stop you working with large companies if the right structures and processes are put in place at the time, or to stop you making connections between structural funds and Horizon 2020, depending on how the rules are written at the time. The thing is to be constructive and proactive in how you engage with the possibilities, rather than simply saying 'We can't do that'.

[246] **David Rees:** Do you think that we are too risk-averse in that aspect and not even prepared to take the initiative and look at the opportunities that might be there for us?

12.00 p.m.

[247] **Dr Healy:** I think that it would be harsh to say that we are too risk-averse, in the sense that Wales is recognised by DG regio as having one of the strongest developments of innovative projects through the structural funds around research and innovation. I think that we have won three of the RegioStars awards, identifying us as a region of excellence. We are good at coming up with these ideas, but whether we do so at a programme level, I am not so certain. Perhaps we need to be a little more inventive at the programme level, and think about how these things knit together strategically, rather than about individual programmes. We have Horizon 2020, the convergence programme, competitiveness and the research councils as funding instruments, and we need to think, perhaps, about how these things come together in a more effective way. To come around to the opening questions, that is where the smart specialisation strategies need to come into their own.

[248] **Lord Elis-Thomas:** I am grateful for the frank way in which you have described the situation, based on your own experience and the advice that you have been given throughout Europe. If you were giving future advice to your own employers at Cardiff University and to the people that I do not directly employ at Bangor University—but I am part of the university's governance—what would you say to them should be their priorities? What do

you think that we, as a committee, should say to them and to the Welsh Government? I would think that gives you enough space.

[249] **Dr Healy:** That gives me an awful lot of space, or a lot of rope with which to hang myself. There are a couple of dimensions to it. One is what is in the universities' own interest. We should never overlook that dimension. They are individual institutions that have their own business strategies. My advice to universities in Wales is to engage with high-level science, where they are able to do so, and I would certainly give them very strong advice to assist their academics in developing networks, and facilitate that process as far as possible, particularly in wherever the strategic fields might be. I would probably suggest that they take a strong look at where they are really excellent, rather than where they think they are excellent, and to look at that at a European level and think about where their strategic alliances might be, in order to develop future funding opportunities. I would hope that those universities would also engage with local and regional businesses and civic organisations, to take the benefit of their knowledge out of the universities. Most academics that I know are keen to engage with others and they are very enthusiastic about the research that they do. If there are opportunities, they will take them. The question is where those opportunities emerge.

[250] In terms of a strategic approach to this, there are some challenging dimensions. If we look at where most of the funding for excellent research goes, it tends to be into Cardiff University at the current time. Under framework programmes 5 and 6—I do not know the figures for framework programme 7 at the moment—it was followed by Bangor University, then Aberystwyth University, and Swansea University was the fourth most significant in terms of access to research programme funds. That might change because of the investments in infrastructure that Swansea University has put in place over the last five years, but I do not know the latest figures.

[251] One of the challenges to that is that much of our structural funding is going into west Wales and the Valleys, as a convergence programme. That makes the role of Cardiff more challenging. Also, to come back to an earlier question, it makes those boundary challenges more real for organisations—Swansea University may be trying to work with companies in Shotton and Cardiff University may be trying to work with companies in west Wales and the Valleys. The academics will find their way around it, because they want to do this. One of the things that the Welsh Government should be thinking about is how to facilitate the process. While we need to balance the economy between west Wales and the Valleys and east Wales, it is a rather artificial division. It was drawn up for administrative reasons, particularly related to the structural funds. The Welsh economy needs an awful lot of help and support in its own right. We need to think about that larger picture, as well as the simpler structural funds picture. So, my advice to the Welsh Government would be to support universities, but also to start to think about that regional capacity, the institutional capacity for Wales as a whole, which, as I mentioned at the outset, we are perhaps missing at the moment. In terms of engaging with potential regions of knowledge initiatives or whatever may come forward in the structural funds, if this is going to become much more relevant as it comes under the DG Regio remit and moves away from the Directorate-General for Research and Innovation remit, where it was in the past under FP7, these are opportunities to engage and learn.

[252] Finally on this, there is a suggestion that developing institutional capacity for innovation may be funded in future under Horizon 2020, under the secure, innovative and inclusive societies strand. Again, that might be for secondments, exchanges of experience or a whole raft of things. It is fundamental that the Welsh Government is engaged in that process in some manner, if its remit is to develop this area as a strategic body for Wales as a whole.

[253] **David Rees:** To follow on from that point, we have a science strategy for Wales, and we have heard that the research and innovation strategy is out for consultation. From your comments, I assume that it is critical that we move those strategies forward as quickly as

possible so that we are in a position to understand where we are going and so that we can drive this forward.

[254] **Dr Healy:** Yes, it is. However, one says as quickly as possible, that it is better to do it well in the first instance. It has to be a strategy that has ownership and people engaging with it, so that it is not simply written from above, but really builds in those voices who are engaged in innovation, so that we will really understand how to transform the Welsh economy. In a sense, there are two dimensions to innovation. First, there is the technological element, which, I suppose, is what you see in 'Science for Wales' to a certain extent. It is very much a technological push with regard to getting the product and process out to market. That is very important. However, there is also an innovation culture. It is not all about what comes out of universities, research labs and so forth. A great deal of it, and much more of it, is about what we do as companies on the ground. Are we simply imitating others, innovating to keep up with the international market? That is good, and better than not innovating, but it is not really good enough. Or are we developing new approaches, new ideas and working with suppliers and the final consumer of our products, developing new ways of doing things? That is not always science based. It is often about just talking and finding new ways of doing things. We need to be working around those sorts of areas as well and trying to lift that culture of innovation more broadly. That is where ERDF could really come into its own, starting to make those sorts of jumps in performance.

[255] **Nick Ramsay:** In terms of different ways of doing things, we have taken evidence previously in the inquiry that suggested that if you had a Horizon 2020 project that had failed because the funding was not there, but that still had merits, you could use structural funding for that. You touched on this issue earlier when you spoke about using structural funds differently. However, do you have any views on that?

[256] **Dr Healy:** Yes, this came out of the synergies expert group, which reported 12 months ago or something like that. It was one of its suggestions. It has a lot of merit in the sense that one of the challenges that programme organisations linked to structural funds have is whether they are able to judge the technical and scientific merit of proposals that come forward. It is a positive in that sense. However, the difficulty I see with that in practice is that the framework programme or Horizon 2020 programme projects are based on international co-operation and collaboration. Can you do that with only one partner at the time? What failed applications may tell you is where you have strengths or willingness to engage, but you would not be able to fund the whole project because you are not able to do that due to the nature of structural funds as they currently stand.

[257] Therefore, there could be some practical limitations and I think that the challenge of getting six structural fund programmes all together to say, 'Yes, we'll all fund that from our different perspectives' would be mind-blowingly difficult at that stage. We need to be thinking in that way and asking how we can bring these programmes more closely together. In terms of the strategic dimension and the operational dimensions, that might be one approach, but it is not a panacea because I think that there will be some challenges in operationalising it.

[258] **Nick Ramsay:** That was interesting. Do Members have any other questions? I see that David Rees has one.

[259] **David Rees:** We have heard from Higher Education Wales that it believes that it has learned lessons and is now in a position to move forward, particularly in the final closing stages of FP7. Is that your impression?

[260] **Dr Healy:** That is not really a question that I can answer, to be honest. All I would say is that the final closing stages of FP7 are taking place now. So, whether HEW has learned

its lessons or not, that is kind of immaterial at this stage. It will be what it will be. The key thing is looking forward and making sure that we are putting things in place for the future. My own perception of this is that we should think about it in terms of individual universities. On the whole, I think that the universities are very good at engaging with European programmes, such as the framework programmes or Horizon 2020. Our best universities have had lots of engagement with these programmes—and I use the word ‘best’ in the sense of research excellence and in no other sense. They are very good. They are doing it, and they know what they are doing. As with all institutions, I am sure that some procedures could be improved, efficiencies could be made, and things could be made easier. I have heard evidence to suggest that the universities do not always know what is being applied for within their institutions. If I was an institution, that would scare me. However, that is another matter.

[261] We might be thinking now though—not just as institutions, but across Wales—about how we could make this work better in the future, and how we could bring things together. We have a number of cross-Wales collaborations. Could we help those research collaborations and institutes to develop their expertise and their opportunities to bid for funds more successfully? There is the co-fund initiative under the Marie Curie Actions. I have heard reasons why Wales does not engage with that. It will possibly be there next time, and I am fairly sure that it will be there under Horizon 2020. I evaluated the co-fund initiative for the Commission. It is learning lessons, but it is quite successful. To engage with that, we need to do it at a cross-Wales level. Again, there could be some novel mechanisms used to try to approach that issue, looking at it across Wales. That might help with the mobility dimensions and the networking of relationships with which we need to engage. I would say that there are some important issues at a strategic level in Wales—not just in relation to writing a strategy, but also about operationalising it—in terms of developing research and innovation capacity within Wales over the next seven to 10 years, rather than this just being about what the universities should do.

[262] **Keith Davies:** Sylwais eich bod wedi bod yn gweithio ym Mrwsel am dair blynedd, ac mae’n amlwg bod gennych ddigon o wybodaeth. Os ydynt am fod yn llwyddiannus, oni ddylai’r colegau gyflogi rhywun ar y cyd i weithio mas ym Mrwsel am gyfnod o ryw tair blynedd?

Keith Davies: I noticed that you worked in Brussels for three years, and it is evident that you have plenty of information at your disposal. If they wish to be successful, should the colleges not jointly employ someone to work out in Brussels for a period of, say, three years?

[263] **Dr Healy:** Probably not, to be honest. You would have to consider what the role of that individual would be, if they were based in Brussels. Welsh higher education already has very good representation in Brussels, which is very successful at providing knowledge and information to the higher education sector about what is going on within the European policy area. Yes, I worked in Brussels for three years; however, I was a director of a pan-European consultancy at that time. Therefore, I was practically engaged with research and advice around policy development within the EU, both at the European Commission level and within other member states. That gives me an interesting perspective on some of these debates. I then came back to Wales and did a PhD at Cardiff University on EU research and technological development instruments, which is how I know Kevin Morgan. That gave me the knowledge of framework programmes, structural funds and so forth, and I have continued with that in Cardiff.

12.15 p.m.

[264] Most officers who are based in Brussels and who are there in an information and advisory capacity are successful as channels of communication. They are engaged in the debates, but they are perhaps not engaged in a practical sense in the delivery of those policies and so forth. I would argue that the colleges may want to think about their relationship with

knowledge and advisory streams, whether that is through national contact points through Horizon 2020, as with the framework programmes of the past, or through representative bodies such as Higher Education Wales in Brussels, HEFCW or whichever structure it might be.

[265] I do not think that it would pay for colleges and universities to have individual staff out in Brussels. You would have two problems with that. You would lose efficiencies of scale, which are important, as it would cost money and you would not get a return. Also, it would dilute the Welsh voice in policy debates in Wales, and that can be a significant role for organisations such as Higher Education Wales in Brussels to play in this process in terms of selling Welsh strengths, Welsh initiatives and so on. It does that very well, but there is a question about whether more people can engage with that. It cannot just be Brussels coming in to Wales and saying, 'Here is an opportunity; do this'. There has to be a lot of people saying, 'We can go there and do that'. This is one of the big challenges for a lot of academics. They are enthusiastic, but they have many teaching commitments, they do not have a large travel budget in their own right, and finding the time and money to make a trip like that can be challenging. When I came out from a consultancy background, I found that quite interesting, because we would see that as an investment and we would just go and do it.

[266] **Keith Davies:** Should the Welsh Government be involved in supporting academics to go to other institutions more often?

[267] **Dr Healy:** There would be advantages if it were to do so. I do like the Sêr Cymru scheme that is being set up in terms of academics and so forth. That will mean high-level academics coming in—professors and so forth. I think that that is very valuable. There will be costs associated with it; those academics are going to need research teams to make these things work in practice, but they should bring contacts with them. Why do we not do something similar at a slightly lower level, by stimulating short-term mobility—three months, six months, maybe just a week at a time—to make some connections and contacts and develop some of these network linkages? The co-fund might be one way of doing it; other mobility schemes that would be done just within Wales could be an alternative. So, I think that there are opportunities there that one could think about.

[268] **Nick Ramsay:** Thank you, Dr Healy, for being with us today. Any concerns that we may have had about you being on your own today and unable to field some of the questions were very quickly dismissed. You have given us a lot of food for thought, and I thank you for your role here today. Your contribution will certainly figure highly in our inquiry.

[269] **Dr Healy:** Thank you very much for the invitation to join you. I wish you well with your inquiry.

[270] **Nick Ramsay:** With that, I close the meeting and remind Members that we will be in Wrexham for the visit to Glyndŵr University next week.

*Daeth y cyfarfod i ben am 12.18 p.m.
The meeting ended at 12.18 p.m.*