

## Petitions Committee

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Meeting Venue:

**Committee Room 1 – Senedd**

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Meeting date:

**24 February 2015**

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Meeting time:

**09.00**

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Cynulliad  
Cenedlaethol  
Cymru

National  
Assembly for  
Wales



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### Agenda

MeetingTitle

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- 1 Motion to elect temporary Chair**
- 2 Introduction, apologies and substitutions** (Pages 1 – 28)
- 3 Discussion of evidence session on 3 February 2015 – P-04-597**  
**Protect the future of Funky Dragon, the Children and Young**  
**People’s Assembly for Wales** (Pages 29 – 49)
- 4 New petitions**
  - 4.1 P-04-617 Stop the Wholesale Hiving off of Public Libraries to the Voluntary Sector (Pages 50 – 53)
- 5 Updates to previous petitions**

### Health

- 5.1 P-04-408 Child and Adolescent Eating Disorder Service (Pages 54 – 59)

- 5.2 P-04-553 A full and independent investigation in to the health risks of wireless and mobile phone technologies in Wales including all schools (Pages 60 – 87)
- 5.3 P-04-586 All NHS Wales staff to be Paid at Least the Hourly Living Wage Rate of £7.65. (Pages 88 – 89)
- 5.4 P-04-601 Proposed Ban on the Use of e-cigarettes in Public Places (Pages 90 – 94)
- 5.5 P-04-603 Helping Babies Born at 22 Weeks to Survive (Pages 95 – 101)
- 5.6 P-04-608 Inquiry into the Welsh NHS (Pages 102 – 104)

### **Natural Resources**

- 5.7 P-04-422 Fracking (Pages 105 – 127)
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- 5.10 P-04-605 Save the Cwmcarn Forest Drive from Indefinite or Permanent Closure (Pages 136 – 145)

### **Education**

- 5.11 P-04-458 Keep Further Education in the Public Sector (Pages 146 – 147)
- 5.12 P-04-566 Review the School Admissions Code (Pages 148 – 151)

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### **Culture Sport and Tourism**

5.18 P-04-539 Save Cardiff Coal Exchange (Pages 170 – 173)

### **Communities and Tackling Poverty**

5.19 P-04-573 Call on the Welsh Government to Investigate the Residential Leasehold System in Wales (Pages 174 – 176)

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## **P-04-597 Protect the future of Funky Dragon, the Children and Young People's Assembly for Wales**

### **Petition wording:**

We, the undersigned, call on the National Assembly for Wales to urge the Welsh Government to protect the future of Funky Dragon, the Children and Young People's Assembly for Wales by restoring core funding. Wales must have an independent, youth led, publically funded, national platform for children and young people, democratically elected at a local level, to give voice to their views and opinions and to hold the Welsh Government to account. The national platform must be empowered to work with all elected members to further children and young people's issues and to report directly to the United Nations Committee on the Rights of the Child as Funky Dragon did so successfully in 2008.

Funky Dragon still believes that:

1. Young people, democratically elected at a local level, should have a National Platform to voice their views and opinions.
2. That platform should be called The Youth Assembly for Wales.
3. It should be able to work with all Elected Members including Assembly Members and Members of Parliament to further young peoples issues.
4. It should be supported to allow Welsh young people to report directly to the United Nations Committee on the Rights of the Child.

The UN Committee on the Rights of the Child, in commenting on the last UK State report stated: Concluding observation 33. That governments' 'Support forums for children's participation, such as the United Kingdom Youth Parliament, Funky Dragon in Wales and Youth Parliament in Scotland should be implemented.

**Petitioner :** Catherine Patricia Jones

**First considered by the Committee:** 23 September 2014

**Number of Signatures:** 1,212 electronic signatures and 429 paper signatures. Total 1,641

**Sesiwn Dystiolaeth: P-04-597, 'Diogelu dyfodol Draig Ffynci, Cynulliad  
Plant a Phobl Ifanc Cymru'**

**Evidence Session: P-04-597, 'Protect the future of Funky Dragon, the  
Children and Young People's Assembly for Wales'**

[3] **William Powell:** We move now to agenda item 2, which is the evidence session on the petition P-04-597, Protect the future of Funky Dragon, the Children and Young People's Assembly for Wales. As Members will recall, this petition was submitted by Trish Jones of Funky Dragon. We first considered it back on 23 September, and it had collected 1,641 signatures. We look forward to welcoming our witnesses shortly.

[4] Bore da. Good morning, all. Welcome to this meeting of the Petitions Committee, addressing petition P-04-597 on the future of Funky Dragon. I'd appreciate it if you'd briefly introduce yourself for the record and also to check that everything's working correctly.

[5] **Ms Williams:** Right. I'm Catriona Williams, chief executive of Children in Wales.

[6] **Mr Janes:** I'm Ed Janes, development officer for participation with Children in Wales.

[7] **Ms Hill:** And I'm Lynne Hill, one of the policy directors at Children in Wales.

[8] **William Powell:** Excellent. Well, you're all most welcome. My colleague Joyce Watson is going to kick off straight away with questions, if

that's in order. Joyce.

[9] **Joyce Watson:** Thank you. Good morning, all. I want to ask questions around the independent peer-led platform for children and young people and whether you agree, because we've had evidence from Funky Dragon, where they've said, and I quote, that,

[10] 'Wales has become the only country in Europe not to have an independent youth parliament.'

[11] **Ms Williams:** Right. I think one of the issues, really, is around what is an independent youth parliament. If it's an elected body from young people that is representative across Wales, and also if the governance of the organisation is young-people governed—I'm very familiar with Funky Dragon; I actually helped to write the constitution many years ago, in the beginning, and we've been involved throughout—then Wales hasn't got that independent body that is governed by young people and is an elected body.

[12] **Joyce Watson:** Okay. So, I want to explore, then, whether Children in Wales's work with children and young people is intended to be an independent, youth-led, national platform for children and young people.

[13] **Ms Williams:** Right. The situation for Children in Wales was that, for many years, we were core funded to do all of our activity, which is the sort of national body to put forward the voices of the children and families sector, and, as the years have gone by, obviously, children and young people's voices have been part of that—the participation agenda in Wales has developed hugely over the past 20 years, really—and so, as far as we're concerned, we bid to the only grant scheme that was available to us to bid to, which was the children and families delivery grant scheme. And within



that, at the time we bid, I was quite hopeful that we could do a partnership, with Funky Dragon as a partner, but fully understanding that each organisation is very independent. And the philosophy of a peer-led organisation, I am familiar with that, because I did take it to the Charity Commission myself, all those years ago. A young-people-led body couldn't possibly be what we were, because we have trustees who are from the professional sector, as well as opportunities for young people, but we're not, you know, definitely young-people governed, because a parliament and, say, 16 to 25-year-olds running an organisation is different. I'm co-chair of Voices from Care with young people, and that structure is young people led, because, at the annual general meeting, the young people have all the power.

[14] **Joyce Watson:** So, do you think—and this is the final question from me—that there is a need for a platform, as Funky Dragon has stated?

[15] **Ms Williams:** Where we're at the moment is that the young people from Funky Dragon have asked to meet with us, and they've had a very difficult time, let's face it, over the past few months. We were keen, because, across Wales, as I say, the participation agenda has developed so much that we very much welcome the approach. We want to talk. I think, because Wales is a small country, we need to all work together to get something that is going to work, because, I think, when Funky Dragon started, there was no division between Assembly and Government, and I think that is one of the things that we now—. It's a good time to have a look at how we work together, because, in some specific instances, if you've got a very minority vulnerable group that needs a lot of support to give their voices, it's inevitable—and perhaps Lynne could mention young carers—that it's only a smallish group that would be consulted by various bodies.

[16] I think the point that we're at is: we know what we bid for, we're giving the support to both the sector, the professionals—. We've got four strands in our work: the voice of young people; support to professionals to

be able to properly engage young people, in other words the skills of how to do it; then we've got the sector's voice, in terms of the workers; and then we've got the representation of what everybody's saying into Government. So, there are four bits to our bid, and so, for instance, if there's an inquiry into young carers, that group of young carers—. We've got over 200 organisational members in touch with children, and they may be asked by the Assembly to give evidence, they may be asked by local government to give evidence and they may be asked by Welsh Government to give evidence. So, I think it's timely for us to be coming together with other groups to actually look at what's best now.

[17] **William Powell:** We're grateful for that. Would you like to contribute at this point, Ms Hill?

[18] **Ms Hill:** I can certainly give you an example of how we work with particular groups like young carers. We've been doing that work for probably the past eight to nine years now, in that we work with the workers on a regular basis and then we've been very fortunate that Welsh Government have supported opportunities to enable young carers to come together, to identify what the issues are for them as a group and to work through how they would want to present those issues. Over the years, we've had regular meetings with Gwenda Thomas, when she was Deputy Minister for health and social services, and they went to meet with her and presented the work that they'd worked up. We were always very clear that what they talked about were the issues for young carers, not, 'This is my story'. It was about saying, 'This is a piece of work that we've done across Wales. We've brought together all these views and these are the key issues for us'.

[19] I have to say, at the last meeting, one of the young carers raised issues about local pharmacies and having challenges in collecting medication, which has been a long-standing issue for young carers. Understandably, pharmacists want to be careful who they give it to, but it

does cause real problems for some families. As a result of that meeting, Welsh Government officials then worked with the royal college of pharmacists to sort of begin to tease out an agreement, which was really, really great for the young carers, and they actually got a letter back from the Deputy Minister saying that.

[20] So, there's a whole process for a relatively small, although a growing, number of young people who care. There's a whole process there about supporting that voice through. We've also done pieces of work like producing videos for them, or leaflets for them, which are still being used. They were very heavily promoted through the carers strategy, saying, 'These are young carers' issues; they mirror the needs of adult carers, and these are where their particular needs are different'. So, that's just an example of the work we do.

[21] **William Powell:** That's helpful. Thank you. Russell George.

[22] **Russell George:** Thank you. Good morning. The Minister's view is that funding awarded to Children in Wales is to fund a national participation model. That's his view. Is that your view as well?

[23] **Ms Williams:** It is a national participation model. It's not an assembly in terms of the model that Funky Dragon was based on. At the time we bid, we thought that Funky Dragon was still going to be there. I think Lynne has demonstrated a very small group. Ed could give examples of more universal engagement. So, in terms of Government, and influencing Government in particular, although we are having discussions with the Assembly about what the young people's youth engagement in the Assembly is doing, because there will be times when we work together, ours is a national participation model, but it's not an organisation, and I think that's the difference. I don't know, Ed, if you want to say—

09:15

[24] **Mr Janes:** Yes. I think, because you have the Funky Dragon model of participation—the kind of youth Assembly, which is a fantastic model of participation—the model that we have is also a model that we believe will work and that is national, but it is set out in a different way. So, the model that we have focuses on Children in Wales doing work in schools, Children in Wales doing work in empowering the local forum work that's being done by forums—some of the fantastic work that's being done already in the local youth forums and in national youth organisations, as well as with groups like young carers and young disabled people that we've done before, and looked-after children as well. Then, it is using that and, kind of, empowering that work and recognising that work by feeding it into the Welsh Government and then backing that up with the meetings that we want to be arranged with Ministers. So, the bid also included us running meetings between young people and Ministers each year, with the idea being that those young people would have been involved in the different priorities, locally, and then have the chance to, kind of, make sure that it's being fed into the national manner.

[25] **Russell George:** Right. What I wanted to just also clarify is that, last summer, talking about the grant funding that you had and what it was being used for, on your website, you had a statement saying,

[26] 'For clarification, this project is not funded to deliver a National Youth Assembly for Wales.'

[27] I wonder if you could just talk to what was behind that statement, so we can understand that.

[28] **Ms Williams:** I think it was exactly—. I think what I've said previously that it's not an elected body of young people who are, sort of, being politically active, as it were, in terms of representing the nation. I mean, we have got partners, as well as our own organisation: we've got ProMo-Cymru, which, in terms of universal engagement of children and young people—. CLIConline has many, many hits and, for instance, we've just put a poverty video onto that to promote a discussion amongst, hopefully thousands, but certainly hundreds of young people, for them to be able to contribute their views there. But it isn't—. I think, the main point is it's not linked to democracy and representation—that's how, as an assembly, we view it—but we are bringing together groups at national level. And also, we've got a model where we've got four regional links to the youth forums, and also we've got our own links to member organisations already that work with a whole range of children and young people.

[29] So, we're trying to get that sort of loop, for instance, with the child poverty work in Welsh Government. We're in discussions about how we can have an ongoing relationship between children and young people and the policy makers there. So, I think the key difference is it's not an elected body of representatives from each part of Wales. But I think that's probably the discussion that now needs to take place, because, to be honest, the funding was hugely reduced; there wasn't, in terms of this grant round, the funding that had previously supported both Children in Wales and Funky Dragon together: it was virtually half. So, we bid for what we could deliver and I think that's the—. But, it is a model that contributes to national Government policy development.

[30] **Russell George:** Okay. I've got one last question and I'm conscious that two of my colleagues want to ask questions as well, so it doesn't need a long reply, but I was just curious to know, in your view, who is responsible for ensuring that young people in Wales are also represented at the UK Youth

Parliament and also on a European level.

[31] **Ms Williams:** Ed can talk to that.

[32] **Mr Janes:** Thank you. So, that's traditionally been supported by Funky Dragon. Last year, Children in Wales received funding from the Welsh Government as well as John Bercow, through the British Youth Council, to take or to accompany a group of young people from Wales specifically for last year. We're currently in—. Well, the agreement was that it was for last year specifically, with the idea that it would then be looked at in future. We're currently putting together a more detailed report. We've put together a summary, initially, and now we're putting together a more detailed report about the event, about the opportunity, and what the young people got out of it. So, we've been consulting with them, we've been asking them, and we're just putting that report together at the minute.

[33] **Russell George:** It would be useful to have a copy of that report, wouldn't it, Chair, for our committee, if it's available?

[34] **Mr Janes:** Yes, okay.

[35] **Russell George:** Thank you.

[36] **Mr Janes:** So, that includes the opportunity and what it was like, but also, bearing in mind that it was put together at quite late notice and with a specific amount of funding, we've also asked them to kind of comment on the opportunity, but also how they felt—you know, if they felt there could be more support and more of a process in the run-up to the event, where they could get together and have a chance to kind of discuss

some of the topics and have a chance to get to know each other so that it's more of an ongoing process rather than what we had, which was a meeting a couple of weeks before, where someone from the British Youth Council came out to introduce the work but also to talk through the security and some of the processes around it and then, two weeks later, the actual two-day trip and two-day event.

[37]       **Bethan Jenkins:** Sorry, can I just clarify? Are you carrying on with that work? You say you're talking to young people now about how it worked; I'm just conscious that you say that you're not an assembly or an elected body, so I'm just curious as to if it's continuing and on what basis you would want to continue it, given that you've just explained earlier that you're not that type of organisation.

[38]       **Mr Janes:** Well, that report—. Well, we very much—. That was the first time we'd done it. I led it, I very much enjoyed it, and I think we would be interested in doing it again. The report that we're putting in will be used to decide, I guess, if Wales takes part in it this year and in the future, and whether there will be more, you know, and what the funding will enable us to do that we get for it. We have been working with participation officers and youth forums from all of the local authorities around the future of it. They are very interested in us continuing to do it. Essentially, we are waiting for a decision, but we're also looking at ways to build it into the work that we are doing, the young Wales work, the core work, and whether the campaigns that have been taken on in the wider UK could be built into the campaigns and the priorities that we're going to be doing in Wales. So, it's still being worked out, basically, but the report that we're putting in will be used to work out the best way forward.

[39]       **Ms Williams:** Perhaps I could just add to that: basically, it was not within the grant that we were given. I saw Funky's evidence and they're quite right, they hadn't had funding before to do it, which we were. It was very

much a sort of last-minute, extra piece of work, which we were very pleased to do, but, obviously with devolution as well, you know, if there's only one of the topics that's Wales relevant that they're discussing, and two or three are totally to do with England policy, there is an evaluation and I believe that the funding that the Minister gave for this last round, on the basis of the report we give, that will be reviewed by Welsh Government. But, on who's responsible, I think that's this Parliament and Government interface, which is, I think, underlying the whole of this discussion.

[40] **William Powell:** Yes. We're very grateful for the candour of those answers. It seems to me that your organisation has been put in quite a difficult position, which is not of your making, and that you've obviously stepped up to the plate, particularly in the context of the international work, which obviously wasn't within the remit. I realise that the arrangements are still at an early stage, but could you give an estimate as to how many children and young people per year will be directly involved in the participation model that you've outlined?

[41] **Ms Williams:** Well, I'll hand over to my colleagues. The one thing we'll say is that we're hoping to hit the target in terms of the electronic, social media, click online to as many thousands of youngsters in Wales as we can get engaged. And through the school work, we're hoping to move that along. I think then it's almost like participation isn't one thing; there're lots of different levels to it. We started from the position of understanding that there were quite a lot of the most vulnerable, most disadvantaged children who weren't able to get their voice heard. And so there's more in-depth work there. So, I don't know if Lynne and Ed would like to add—.

[42] **Ms Hill:** I think if I start off and Ed will come in as well. Certainly, at the moment, we are working with all the participation workers and the youth forums across Wales. We have established a team of workers who are making links regionally, so each participation network forum has a link to us,



and we have—. I know we have meetings established with all 22. They haven't all gone through yet, because we started that discussion actually the first week of January; we met with them and talked in great detail about the plan, and they were really on board about engaging. So, there is, first of all, an opportunity for the statutory bodies. Now, there's a bit of a challenge in Gwynedd, because apparently Gwynedd do not have a youth forum at the moment. So, we're looking at how we engage there, but we actually have an office based in Gwynedd and a worker based there who knows the area very well, so we will be making sure—and she also does some work around the youth service—so we'll do that. So, we started that work.

[43] We obviously have—. We've identified that we will do six pieces of work in schools. I think we want to be very clear that that doesn't just mean six schools; that means six pieces of work around different issues, around different concerns. And that will obviously address a very wide age range, because we know that our work is actually, you know, from 0 to 25, not solely youth, although we are very aware that there's a youth sector that feels and felt that they weren't sure where their voices would be heard. So, we need to make sure that we're very clear in supporting them, but we also want to be working in primary schools, looking at where younger people are. We have membership with, and very good links with, all the pre-schools, so there may be pieces of work around pre-school issues and so on. So, we need to be able to spread that sort of work.

[44] Alongside that, as I say, we have a longstanding relationship with young carers. We have a long history of working with young disabled people, and there's been lots of work around that. Last Saturday, we did a training event in Wrexham for young people from across north Wales to be doing a piece of training around understanding the United Nations Convention on the Rights of the Child and knowing their rights and expressing their rights. So, we've got those pieces of work going on, as well as then links with our partner organisations, such as Voices, Barnardo's, Action for Children and Tros Gynnal, so we can link with those as well.

[45] So, in terms of numbers, the answer is 'I don't know', but we estimate we will reach a wide range of people both across the age ranges and across their experiences.

[46] **William Powell:** That's very helpful. I think it's come across loud and clear how deep your experiences of serving the needs of some minority and hard-to-reach and disadvantaged groups are, but, given that when you bid for funding last time round you weren't aware that Funky Dragon wouldn't be on the pitch in terms of its activities, what measures have you been able to put in place or you are intending to put in place to ensure that you are also catering for the needs of the mainstream, as well as the groups for whom you have the particular expertise?

09:30

[47] **Ms Williams:** I'll hand over to Ed in a minute, but I think there are some topics that come through from all groups—bullying, for instance, is one. And I think one of the things in our bid that we were very keen to do was to make sure that there was an impact and an outcome for children and young people through that. So, for instance, the connection between—. I mean, it's widespread. The first children's commissioner raised bullying as a big issue for children. It comes through from all of our groups. Either it's hate bullying, or it's bullying in schools or whatever. So, as a topic identified by children and young people, that's a chunk of work that will be very universal. We have a worker who is linking with some of the forums, but she is also pulling together the workers on anti-bullying work and we're in the policy groups in Welsh Government. So, I'll hand over to Ed, but that's one, like children's mental health; there are some issues that have come through in the past from Funky Dragon, but also from our groups. Children who are hard to reach are not necessarily different in terms of the bigger issues that

affect all children.

[48] **Mr Janes:** I mean, I would say that all the work that's going on in schools is going to be—. Well, unless we decide to do some work in special schools, all of the work in schools will be with mainstream children and young people. The work with the youth forums and the specialist groups: at the minute, the work we're doing in the youth forums is to go out into each one, find out what the local issues are and that will shape the priorities for the work. So, so far, we've been going out and we've been hearing about issues such as bullying, which has come up in all of them, mental health, and rural transport as well. So, all of those ideas, again, are coming from mainstream children and young people that are in youth forums, and then, as well as that, we will look to continue what we've done before in terms of looked-after children, young carers and disability as well. So, we are very much catering for both. And then, as well as that, at the minute, we are developing the young Wales website for the project or for the programme of work. We are developing social media and other methods for young people that maybe aren't in the schools and the forums and the specific groups that we work with—other ways for them to engage with the project as well. So, I think we have—you know, I'm confident that we will have—a programme of work that will bring in the universal children and young people in the mainstream, as well as the groups that we've maybe in the past more traditionally worked with.

[49] **William Powell:** Okay. That's reassuring. I'm conscious that my colleague, Joyce Watson, has been showing great patience before coming in. I have a final question for you for now, and that is whether you've given any consideration to a process of electing young people from across Wales to create some form of representative body, and also an issue that's come up in recent days, which is whether you've been involved in any consultation around the impacts that flow from the recent decision by Welsh Government to radically reduce the funding available to the young farmers movement within Wales, given their particular involvement in the same area of work.

[50] **Ms Williams:** I think, to answer the first question, it's sort of repeating in a way what I said at the beginning that we think it's timely and we have—. You know, we needed to be very sensitive to how upset a lot of the young people were in Funky Dragon. So, we've been in close contact with trustees there, and they now are feeling that it's timely for us. Also, Ed and I have met with Kelly, who's based in the Assembly, in terms of youth engagement. We think it's timely to have a get together to really have a look at whether there is an elected gap. But what we're doing at national level, in the interim, is building a group that is going to advise the whole of our work. Now, that's not elected—that's not an elected structure. I think it's interesting because there are different levels. I mean, I've done a lot of European work and the European youth forum, which is the umbrella, is actually sort of quite old young people; it's between 16 and, in some countries, it is 30-year-olds. There's a difference, and we're actually covering, as Lynne said, zero to 25, basically. So, we want the voices of children and young people. So, that elected model is a youth model, and so I think we feel it's the time to talk with others.

[51] Ed, do you want to come in?

[52] **Mr Janes:** The one thing I would say is, in meeting with participation officers and youth forum workers, it's something that they are still very interested in. We are looking at ways of even bringing together young people on a regional level, or maybe, when we hold—well, looking at potential ways of doing it. But, I guess the one thing that we know is the residential approach that was previously done by Funky Dragon isn't something that we can really achieve, to be honest, with the funding that we have.

[53] **William Powell:** Understood, yes.

[54] **Mr Janes:** That doesn't mean that we don't like—it doesn't mean that we don't support the idea of, like, an Assembly approach to participation; that's not the case at all.

[55] **William Powell:** But you are just constrained financially, effectively, yes.

[56] **Ms Hill:** I was going to say, I think also, what we find now is that many of the local services are also constrained financially, and I think undertaking residential work with young people takes a huge commitment from local staff, and there are often challenges around the time, the travel. It would be a challenge for us on the current project funding, but it would also be a challenge, I think, for many of our partners.

[57] **Ms Williams:** And I think that sort of goes on to your second question, really, that one of the concerns we have across Wales—well, we have two concerns, actually—is the impact on children's organisations per se, in terms of funding, but also particularly on the participation work in many organisations. Because, you know, it is a little bit of a soft target, unfortunately, at local level as well, in terms of the participation workers, to get good participation, proper, linked to the—and we haven't mentioned the participation standards. We are working with the participation workers now to update—not to change, but to update—and get those out there. But, to actually deliver on those standards at local level, there's got to be the capacity in the organisations—you know, the maintained and the non-maintained organisations—to be able to do the full cycle of informing, working with, listening to children and young people, feeding back, et cetera. That capacity does need to be strengthened, and we certainly have been looking at that.

[58] **William Powell:** Thank you very much. Bethan Jenkins.

[59] **Bethan Jenkins:** Just quickly, because I'm conscious we've already run out of time. When Funky Dragon came in, they said that they were concerned about the fact that the Welsh Government, rather than young people, would be identifying the issues that would go out to be discussed, and they were very concerned about that because they were wanting to set the agenda. So, I just wanted your brief response to that.

[60] **Ms Williams:** Yes, I mean, I think, probably, in fairness to Funky Dragon, they would only have seen what was written down in, sort of, bold on a chart. I think the way it works really is, clearly, what we've been funded to do is to support good policy development in Welsh Government. But, for instance, we wouldn't go out to children and young people, and say, 'This is the latest consultation from Welsh Government; what do you think of it?'. It's more a case of children and young people—and you are probably best speaking to this than me, Ed—identifying what, locally, are really issues to them, and then us—. For instance, if bullying comes up, that means that there's something that can be taken into policy developments across Welsh Government. But, there will be some priority issues that are sort of both Welsh Government priorities—like poverty—and children and young people's issues as well, which marry. I think part of our job is to prioritise what's going to make the best impact—or the young people to prioritise with us.

[61] **Mr Janes:** As I've said already, we are going to each youth forum. We've been to some already, as Lynne has mentioned, and there are others that we have yet to go in to and we will be doing in the next few weeks. With all of them, we're finding out what their local issues are. Things like mental health, bullying and transport are all coming up, and they will be the basis, with the youth forum work as well as the specific groups like young carers—. Local issues will be the basis of the national priorities that we take on.

[62] **Bethan Jenkins:** Okay. I'm just concerned, for the record as well, as with Funky Dragon, this will be going back to one place and not getting out—to the Welsh Government but not to anywhere else, and that's been my criticism of Funky Dragon previously. You know, how does that go up from the youth forum to not only the Welsh Government but the wider institution of the Assembly? So, hopefully, your discussions with the Presiding Officer can lead to a wider-based input to what young people are doing. But, just quickly, because I didn't think I was satisfied with the answer, before we end, when you did apply for the children and family grant scheme, you were clearly aware of the situation with Funky Dragon, because, obviously, you were discussing with them. I just want to understand, because I don't think I understood fully from Funky Dragon's response either, where the communication—if it did; I don't want to put words into your mouth—broke down, as in why they did not then fully engage with you putting forward a plan, because, for me, as a person outside of all of this discussion, it would have made much more sense for them to have been on board at that stage so that they could have built in that representative Assembly side in conjunction with your participation side to complement each other. Now I feel that the elected side is very much on the back foot, and that's what I think we're all concerned about in Wales at the moment.

[63] **Ms Williams:** Yes, thank you for that. I mean, I think, firstly, we're very concerned to work closely with the Assembly, and I think Welsh Government has said that is a good idea—so, in terms of our grant, within that, working with the Presiding Officer. And also, I think it's inevitable that the same groups of children and young people will be supported by us to give evidence in committees as well, particularly those who need more support. Our members, Barnardo's, Action for Children, and our partners, Tros Gynnal, Voices from Care—we'll all be supporting children and young people to give their views, and the wider results we'll put in the public domain. Any of the universal responses to social media campaigns and so on—that will be information available to the Assembly.

[64] I can remember clearly, you know, it was a matter of principle for the young people in Funky Dragon that they—. There was one meeting that I instigated with the chief executive of Funky Dragon, and I said, ‘Look, clearly, there’s only one project going to be funded; we should do this together’, and he said, ‘It’s a matter of principle that we are young people-led, and we don’t really want to be getting so close to an organisation.’ I have to say, in terms of Children in Wales and Funky Dragon, our relationship, long term, has been really good. One of my policy directors has been the chair. You know, it’s been a very difficult situation. But, as a matter of principle, from their point of view, they felt that their youth-led autonomy—. They might be being pushed into a merger, which, actually, wasn’t the case, but their youth-led autonomy was possibly going to be compromised.

[65] **Bethan Jenkins:** But there’s nothing now at all, that’s the thing—

[66] **Ms Williams:** I know, I know.

[67] **Bethan Jenkins:** I mean, it’s all with the benefit of hindsight, of course, but, at the moment we do not have that national elected body for Wales, which is a massive shame really.

[68] **Ms Williams:** I think, on a positive note, certainly the young people on their board—it’s still there as a sort of vestige of an organisation—. That’s where the talking is, and, I think, you know, together we’ve got quite a good opportunity. I mean, actually, one model, going on for many, many years—. Perhaps it is, you know, timely to have a look at what’s best for Wales, because we are small and we do need to work all together so that the voices of young people get into each institution.



[69] **William Powell:** I think that's a really positive note on which to end. It's been a very useful evidence session from our perspective to gain greater insights into actually what lay behind the events of last summer and early autumn. We will provide you with a full transcript, which I think, in the context of the discussions we've been having, is particularly important, so that you've got the opportunity to check that for accuracy, and also Members, at an early future date, will have the opportunity to consider the evidence that we've just heard. So, thank you very much indeed for coming this morning and for your contributions. Diolch yn fawr.

09:45

# Agenda Item 4.1

## **P-04-617 Stop the Wholesale Hiving off of Public Libraries to the Voluntary Sector**

We call on the Deputy Minister for Culture to accept, with immediate effect, recommendation III of the Expert Library Review of Public Libraries in Wales 2014 (Proposed changes to public library services should only be progressed following the production of costed options). Furthermore, he should now advise all local authorities in Wales that this requirement will be effective for proposed changes announced after the date of publication of the Expert Review (22 October 2014) as well as proposals announced before that date, but where a period of public consultation ends after 22 October 2014. This action is required to halt the flood of proposals by the Vale of Glamorgan and other local authorities in Wales to hive off our Public Libraries to the voluntary sector, without giving due consideration to alternative options.

**Petitioner :** Adam Riley – Save Rhoose Library

**First considered by the Committee:**

**Number of Signatures::** 66

**Ken Skates AC / AM**  
Y Dirprwy Weinidog Diwylliant, Chwaraeon a Thwristiaeth  
Deputy Minister for Culture, Sport and Tourism



Llywodraeth Cymru  
Welsh Government

Eich cyf/Your ref P-04-617  
Ein cyf/Our ref KS/00088/15

William Powell AM  
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3 February 2015

Dear William,

Thank you for your letter of 20 January regarding the petition received from Adam Riley concerning Recommendation III of the Expert Review of Public Libraries in Wales which I launched in October 2014.

This recommendation relates to a need to produce costed options for any future provision of public library services by a local authority.

My officials at CyMAL have distributed copies of the report and its recommendations to all local authorities in Wales. Representatives from all the authorities have attended an event to disseminate information regarding the report.

In light of the petition, I will write to all local authorities, drawing their attention to this specific recommendation of the Review Report as an example of good practice in undertaking reviews and public consultation on local library services.

Yours ever,

**Ken Skates AC / AM**  
Y Dirprwy Weinidog Diwylliant, Chwaraeon a Thwristiaeth  
Deputy Minister for Culture, Sport and Tourism

## **P-04-617 Stop the Wholesale Hiving off Public Libraries – Correspondence from the Petitioner to the Clerking Team, 17.02.15**

Dear Kayleigh

Many thanks for your email from last week. I am very pleased to hear that my petition is to be considered. You asked for my comments in light of recent correspondence. They are as follows.

I am pleased to hear that the Culture Minister is to write to all local authorities, but slightly disappointed to hear that the requirement for costed options appears to be regarded as only an example of good practice, as opposed to a requirement, or as an example of best practice.

The Expert Review was, I believe, published in October 2014. The Culture Minister said in December that he was in agreement with the recommendations, one of which was that all consultation on significant changes to library provision should be done in light of the production of costed options. If the Minister was in agreement with that recommendation I do not see why he could not have written to public authorities three months or more ago, telling them that they should produce costed options. What really concerns me is that the Expert Review will not stem the flow of authorities looking to hive off library provision to the voluntary sector. Since the publication of the Expert Review we have had a number of other council consultations, including the Cardiff case where public opinion appears to have seen off Cardiff Council's ill thought out proposals, at least for the next 12 months. The point is that the Government should be playing a part in seeing off such proposals by requiring them to come up with costed options, not relying on public opinion to force the Councils' hands.

While the Government delays making it a requirement to produce costed options, where the Minister apparently agrees with such a recommendation, this is making it easier for Councils to take the lazy option and close libraries in the name of cost savings, knowing full well that research indicates that such libraries would never re-open. This is a time for the Government to be taking decisive action in support of local library services wherever it can. Telling local authorities that producing costed options is an example of good practice is not what I feel the Expert Review panel would have had in mind for this recommendation. Nor does it appear to implement the panel's recommendation that it be implemented with immediate effect.

Many thanks

Kind regards

Adam Riley

# Agenda Item 5.1

## **P-04-408 : Child and Adolescent Eating Disorder Service**

### **Petition wording:**

We call on the National Assembly for Wales to urge the Welsh Government to fund the Child and Adolescent Eating Disorder Service in Wales to the same degree as the Adult Eating Disorder Service in Wales.

It has come to my attention that there is a disparity in funding between Adult Services and Child and Adolescent Services as regards funding for Eating Disorder Treatment. At the present time Adult Eating Disorder Services receive £1 million per year from the Welsh Assembly, as well as 4 specialist trained provider groups.

Sadly research points to the fact that Eating Disorders, especially Anorexia Nervosa, are predominantly first experienced around puberty. Historically puberty was around 12-15, however, puberty is becoming younger and therefore statistics are beginning to show the prevalence of Anorexia Nervosa starting at younger ages is apparent. Bulimia Nervosa is generally a disease with an onset age of 18-25, however as with Anorexia this may differ from person to person. The fact that in both disorders, and indeed all diagnosable Eating Disorders, early intervention is the key to a quick recovery, therefore preventing long term financial implications for the WAG, makes this plea more pertinent.

I therefore implore the Assembly to consider this a priority for debate and to mend this disparity by giving equal finances and services to the Child and Adolescent Eating Disorder service in Wales as already given to Adult EDS.'

**Petition raised by:** Helen Missen

**Date petition first considered by Committee:** 17 July 2012

**Number of signatures:** 246

## **P-04-408 Child and Adolescent Eating Disorder Service – Correspondence from the Petitioner to the Committee**

Dear Committee

It is now a year since I came to give evidence with regard to my petition; and I am grateful for your on going commitment to seeing change as regards to the disparity between the funding provided for Child and Adolescent Eating Disorder Services in comparison to the Adult Eating Disorder Service.

I am grateful to chair for the enquiry into Child and Adolescent services, Ann Jones, response to your letter. I am only sorry that we were not in time for her to consider this evidence at the time of the enquiry. It may have proved useful.

Only yesterday Norman Lamb brought mental health and the need for early intervention to the forefront of the media and public's mind. He also highlighted the disparity between mental health referrals to specialist services, and physical health referrals. He went on to say that the on going length of time between GP and specialist intervention is in a chronic state in the UK. With this in mind he spoke of how the length of time causes a huge and ongoing strain on the health system, due to illnesses becoming more entrenched as time passes, and therefore harder to treat. He promised to make changes.

It seems to me that he has echoed all of my sentiments over the past two or more years.

Within these last two years many more children have been diagnosed with an eating disorder. Many more families have been thrown into the turmoil of trying to keep their children alive, with little or no specialist support. Families, as well as health providers, and ultimately sufferers of eating disorders have been put under an enormous strain.

Early intervention remains the best provision in the treatment for eating disorders, if caught early and treated by specialists the outcome is good. The length of time 'in the system' is reduced and the long term effects (be they mental or indeed physical) take the strain off the health service.

Mr Drakeford has been helpful in his provision of extra funding for mental health services in the South of Wales, as well as his recent promise of pouring millions into

health in Wales generally. He has spoken of putting an eating disorder specialist in place in South Wales for CAMHS, and is in favour of bringing the New Maudsley treatment in as standard throughout Wales; which I applaud.

It remains that Mr Drakeford has never actually admitted to, nor explained the funding disparity between Adult and Child and Adolescent services.

It remains that £1 million is given, and safeguarded, for the specialist provision of eating disorder services throughout Wales for adults, but not for children and adolescents.

It remains a fact that eating disorders generally begin around puberty, and if not treated successfully with early intervention and specialist psychological and nutritional help, will then go on to have a chronic, life threatening illness that remains into adulthood.

It remains a fact that eating disorders have the highest mortality rate of any mental illness, be this from suicide, heart failure or malnutrition. The long term effects of eating disorders are osteoporosis, heart problems, renal and liver dysfunction, infertility to name a few.

These facts remain.

Mr Drakeford's stance has moved very slightly towards understanding this, but as yet he has not jumped whole heartedly into the issue that I have raised.

I would still like to keep pressure applied at the highest level, as I see this of the utmost importance. Children and Adolescents with eating disorders, either already confirmed or in the future, should be treated promptly with specialist care and the chance to walk free of these debilitating, life threatening illnesses before they become entrenched. Before they become a part of the 'strain' on the health service.

It is the entrenchment of these illnesses that make the difficulties for treatment providers. It is the early intervention that potentially hands the sufferer the golden ticket to a life. A life not entrenched in the thoughts, actions and long term health problems that come from a lack of early response.

Norman Lamb also seems to agree with my prior correspondence where I have posed the physical versus mental disparities of services by comparing eating disorders to broken legs or heart attacks. I would never expect to keep turning up



to my GP with any child of mine who might have a broken leg, I would expect prompt referral to an orthopaedic surgeon. The GP has a certain degree of knowledge, but not the expertise for treatment. Neither would anyone be happy, if on suffering a heart attack, they were not referred immediately to a cardiologist.

It really is the same with mental health, and especially eating disorders. I can't change it, spell it differently, nor dress it up in any other way!

Adults with Eating Disorders may well have suffered since their childhood and adolescence, but this may have been prevented with better resources at the beginning of their illness. We are ultimately letting down future generations by not changing the way care is provided here in Wales for eating disorders.

Thank you once again for keeping this petition alive. I hope that eventually children and adolescents with eating disorders will be seen as a financial viability, not a commodity to keep adult services functioning.

Helen Missen

Sent from my iPad

**17 February 2015**

Dear Petition committee,

I realise that it is the 17th, and I haven't sent any further arguments/musings to back up or reinvent my petition plea.

However, this is one of many pieces of up to date research that are being produced worldwide. (Please see below) It demonstrates that the longer an eating disorder is left untreated, the harder to treat and more entrenched the illnesses become thus reinforcing the need for early intervention.

This only underlines further the need for funding and specialist care early in the diagnosis of an eating disorder.....childhood and adolescence being the prime area of need.

I cannot, as I say, reinvent my petition plea. However, I can keep badgering Mr Drakeford to wake up and smell the proverbial coffee!

Without early intervention and specialist help, eating disorders become entrenched and last long into adulthood, making the work of the adult services long and arduous, and mostly difficult. The likelihood of recovery becomes less the longer these illnesses are left without the specialist care they require.

As with a swimming pool (bear with me), the ease of recovery from death is somewhat aided by being in the shallow end. The deeper the water: the harder it is for the rescuer to hold the drowning person above water, or for that person in difficulty to swim alone to safety.

Once again, I suggest that the money I am asking for would be well spent in the treatment of eating disorders at CAMHS level across Wales.

Mr Drakeford should be relieved that I haven't started asking for more than is given to adult services year on year!

Perhaps I should be asking for rebate for the money not invested from 2009 to the present day to be invested now? In my reckoning there is a deficit of £6 million unpaid against that invested in adult eating disorder services. Tempting!

If only the foresight had been there then! Many of the adults now being treated may not still be in the service as they may well have had the early intervention required to prevent the chronicity of these illnesses.

I cannot reinvent my plea, but I do stand by it. Mr Drakeford, in my innumerate reckoning, still owes Welsh children £750,000 per annum, for the treatment specifically of eating disorders throughout the rest of Wales.

This would bring the funding to the same as is provided for adult eating disorder services year on year throughout Wales.

Until he sees the error of this shortfall I shall keep asking for it, and I suggest that the petition committee does not let this matter lie dormant. Lives are and will be lost and ruined.

The divide so easily established by the Welsh government, is not so discriminatory in the choice of where a child might geographically live in Wales when first diagnosed.

Thank you for hearing this again. Please do contact me if you would like me to put further pressure onto the government.

<http://www.medicalnewstoday.com/releases/289144.php>

Helen Missen

Sent from my iPad

## Agenda Item 5.2

### **P-04-553 A full and independent investigation in to the health risks of wireless and mobile phone technologies in Wales including all schools**

#### **Petition wording:**

We call on the National Assembly for Wales to urge the Welsh Government to conduct a full and independent investigation in to the effects of Electro Magnetic Fields created and emitted by wireless technologies, phone masts, mobile phones and other frequency emitters and domestic appliances on the health and general well being of humans and the natural world. There is now an enormous body of evidence demonstrating that the bombardment of modern traffic in electro magnetic fields can be harmful, causing DNA and cellular damage, having an impact on immune function and causing an increased risk of cancer and a loss of fertility – with children being especially susceptible to these threats.

#### **Additional Information**

The Council of Europe, World Health Organization, International Agency for UK Trades Union Congress (TUC), European Environment Agency, International Commission for Electromagnetic Safety and the Russian, German and Israeli governments are all asking for these health risks to be addressed and for practical measures such as hard wiring in schools to be introduced instead of Wi Fi. The Welsh Government could also lead in this area and protect the future health of all Welsh citizens by conducting their own independent research as well as consulting with independent organisations such as Powerwatch and WiFiinschools who provide a vast amount of research and strongly advise that the precautionary principle be followed.

**Petition raised by:** Cymru Sofren / Sovereign Wales

**Date Petition first considered by Committee:** 13 May 2014

**Number of signatures:** 11



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# Immunohistopathologic demonstration of deleterious effects on growing rat testes of radiofrequency waves emitted from conventional Wi-Fi devices

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## KEYWORDS

Carcinogenesis tests;  
Infertility;  
Internet;  
Oxidative stress;  
Wireless technology;  
Testes

**Abstract Objective:** To investigate effects on rat testes of radiofrequency radiation emitted from indoor Wi-Fi Internet access devices using 802.11.g wireless standards.

**Methods:** Ten Wistar albino male rats were divided into experimental and control groups, with five rats per group. Standard wireless gateways communicating at 2.437 GHz were used as radiofrequency wave sources. The experimental group was exposed to radiofrequency energy for 24 h a day for 20 weeks. The rats were sacrificed at the end of the study. Intracardiac blood was sampled for serum 8-hydroxy-2'-deoxyguanosine levels. Testes were removed and examined histologically and immunohistochemically. Testis tissues were analyzed for malondialdehyde levels and prooxidant–antioxidant enzyme activities.

**Results:** We observed significant increases in serum 8-hydroxy-2'-deoxyguanosine levels and 8-hydroxyguanosine staining in the testes of the experimental group indicating DNA damage due to exposure ( $p < 0.05$ ). We also found decreased levels of catalase and glutathione peroxidase activity in the experimental group, which may have been due to radiofrequency effects on enzyme activity ( $p < 0.05$ ).

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# Use of laptop computers connected to internet through Wi-Fi decreases human sperm motility and increases sperm DNA fragmentation

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**Objective:** To evaluate the effects of laptop computers connected to local area networks wirelessly (Wi-Fi) on human spermatozoa.

**Design:** Prospective in vitro study.

**Setting:** Center for reproductive medicine.

**Patient(s):** Semen samples from 29 healthy donors.

**Intervention(s):** Motile sperm were selected by swim up. Each sperm suspension was divided into two aliquots. One sperm aliquot (experimental) from each patient was exposed to an internet-connected laptop by Wi-Fi for 4 hours, whereas the second aliquot (unexposed) was used as control, incubated under identical conditions without being exposed to the laptop.

**Main Outcome Measure(s):** Evaluation of sperm motility, viability, and DNA fragmentation.

**Result(s):** Donor sperm samples, mostly normozoospermic, exposed ex vivo during 4 hours to a wireless internet-connected laptop showed a significant decrease in progressive sperm motility and an increase in sperm DNA fragmentation. Levels of dead sperm showed no significant differences between the two groups.

**Conclusion(s):** To our knowledge, this is the first study to evaluate the direct impact of laptop use on human spermatozoa. Ex vivo exposure of human spermatozoa to a wireless internet-connected laptop decreased motility and induced DNA fragmentation by a nonthermal effect. We speculate that keeping a laptop connected wirelessly to the internet on the lap near the testes may result in decreased male fertility. Further in vitro and in vivo studies are needed to prove this contention. (Fertil Steril® 2012; ■:■-■. ©2012 by American Society for Reproductive Medicine.)

**Key Words:** Laptop computer, Wi-Fi, sperm quality, fertility, sperm DNA fragmentation

In recent years, the use of portable computers (laptops, connected to local area networks wirelessly, also known as Wi-Fi) has increased dramatically. Laptops have become indispensable devices in our daily life, offering flexibility and mobility to users. People using Wi-Fi may be exposed to radio signals absorbing some of the transmitted energy in their bodies. Portable computers are commonly used on the lap (1–3), therefore exposing the genital area to radio frequency electromagnetic waves (RF-EMW) as well as high temperatures (3, 4).

Infertility is a common worldwide condition that affects more than 70 million couples of reproductive age (5). It has been suggested that male fertility has declined during the past several decades (6). Such decline has been attributed to the direct or indirect exposure to certain environmental factors such as RF-EMW (7).

Extremely low frequency magnetic fields can initiate a number of biochemical and physiological alterations in biological systems of different species (8–12). Many of these effects have been associated with free-radical production

(13, 14). Free radicals are causative factors of oxidative damage of cellular structures and molecules such as lipids, proteins, and nucleic acids. Free radicals react with polyunsaturated fatty acids in cell membranes promoting a process called lipid peroxidation. In human spermatozoa the presence of unesterified polyunsaturated fatty acids is causally associated with the induction of reactive oxygen species (ROS) generation and lipid peroxidation (15). Damage may occur at the membrane level, leading to immotility and cell death, or at the DNA level. DNA integrity is essential to normal conception. Sperm DNA fragmentation has been associated with impaired fertilization, poor embryonic development, high rates of miscarriage, and increased incidence of morbidity in the offspring, including childhood cancer (16, 17). It has been proposed that genetic and

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C.A. has nothing to disclose. A.M. has nothing to disclose. C.A.S.S. has nothing to disclose. G.F.D. has nothing to disclose.

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## Modulation of wireless (2.45 GHz)-induced oxidative toxicity in laryngotracheal mucosa of rat by melatonin

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**Abstract** It is well known that oxidative stress induces larynx cancer, although antioxidants induce modulator role on etiology of the cancer. It is well known that electromagnetic radiation (EMR) induces oxidative stress in different cell systems. The aim of this study was to investigate the possible protective role of melatonin on oxidative stress induced by Wi-Fi (2.45 GHz) EMR in laryngotracheal mucosa of rat. For this purpose, 32 male rats were equally categorized into four groups, namely controls, sham controls, EMR-exposed rats, EMR-exposed rats treated with melatonin at a dose of 10 mg/kg/day. Except for the controls and sham controls, the animals were exposed to 2.45 GHz radiation during 60 min/day for 28 days. The lipid peroxidation levels were significantly ( $p < 0.05$ ) higher in the radiation-exposed groups than in the control and sham control groups. The lipid peroxidation level in the irradiated animals treated with melatonin was significantly ( $p < 0.01$ ) lower than in those that were only exposed to Wi-Fi radiation. The activity of glutathione

peroxidase was lower in the irradiated-only group relative to control and sham control groups but its activity was significantly ( $p < 0.05$ ) increased in the groups treated with melatonin. The reduced glutathione levels in the mucosa of rat did not change in the four groups. There is an apparent protective effect of melatonin on the Wi-Fi-induced oxidative stress in the laryngotracheal mucosa of rats by inhibition of free radical formation and support of the glutathione peroxidase antioxidant system.

**Keywords** Melatonin · Larynx · Trachea · Oxidative stress · Wireless devices

### Introduction

Wireless devices usages in industrial, scientific, medical, military and domestic applications, with potential leakage, of such radiation into the environment have increased by leaps and bounds in past decade [1]. From being a luxury and limited to the wealthy, wireless devices especially near 2.45 GHz is indispensable in daily lives [2]. However, every technological advance and its overuse possess possible adverse effects [3].

Exposure to electromagnetic radiation (EMR) induces degenerative effects via two ways, namely directly or indirectly. Direct effects of EMR induce production of reactive oxygen species (ROS), including superoxide anion, hydrogen peroxide, and hydroxyl radicals. The ROS contribute to tissue and DNA damages [1]. Exposure to 2.45 GHz EMR causes an increase in lipid peroxidation levels and a decrease in the activity of enzymes that prevent or protect against lipid peroxidation in tissues [4, 5]. The human cells have nonenzymatic and enzymatic antioxidant systems against degenerative effects of ROS. Glutathione

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## Effects of Selenium and L-Carnitine on Oxidative Stress in Blood of Rat Induced by 2.45-GHz Radiation from Wireless Devices

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**Abstract** The levels of blood lipid peroxidation, glutathione peroxidase, reduced glutathione, and vitamin C were used to follow the level of oxidative damage caused by 2.45 GHz electromagnetic radiation in rats. The possible protective effects of selenium and L-carnitine were also tested and compared to untreated controls. Thirty male Wistar Albino rats were equally divided into five groups, namely Groups A<sub>1</sub> and A<sub>2</sub>: controls and sham controls, respectively; Group B: EMR; Group C: EMR + selenium, Group D: EMR + L-carnitine. Groups B–D were exposed to 2.45 GHz electromagnetic radiation during 60 min/day for 28 days. The lipid peroxidation levels in plasma and erythrocytes were significantly higher in group B than in groups A<sub>1</sub> and A<sub>2</sub> ( $p < 0.05$ ), although the reduced glutathione and glutathione peroxidase values were slightly lower in erythrocytes of group B compared to

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# Provocation study using heart rate variability shows microwave radiation from 2.4 GHz cordless phone affects autonomic nervous system

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## Abstract

**Aim:** The effect of pulsed (100 Hz) microwave (MW) radiation on heart rate variability (HRV) was tested in a double blind study. **Materials and Methods:** Twenty-five subjects in Colorado between the ages of 37 to 79 completed an electrohypersensitivity (EHS) questionnaire. After recording their orthostatic HRV, we did continuous real-time monitoring of HRV in a provocation study, where supine subjects were exposed for 3-minute intervals to radiation generated by a cordless phone at 2.4 GHz or to sham exposure. **Results:** Questionnaire: Based on self-assessments, participants classified themselves as extremely electrically sensitive (24%), moderately (16%), slightly (16%), not sensitive (8%) or with no opinion (36%) about their sensitivity. The top 10 symptoms experienced by those claiming to be sensitive include memory problems, difficulty concentrating, eye problems, sleep disorder, feeling unwell, headache, dizziness, tinnitus, chronic fatigue, and heart palpitations. The five most common objects allegedly causing sensitivity were fluorescent lights, antennas, cell phones, Wi-Fi, and cordless phones. **Provocation Experiment:** Forty percent of the subjects experienced some changes in their HRV attributable to digitally pulsed (100 Hz) MW radiation. For some the response was extreme (tachycardia), for others moderate to mild (changes in sympathetic nervous system and/or parasympathetic nervous system). and for some there was no observable reaction either because of high adaptive capacity or because of systemic neurovegetative exhaustion. **Conclusions:** Orthostatic HRV combined with provocation testing may provide a diagnostic test for some EHS sufferers when they are exposed to electromagnetic emitting devices. This is the first study that documents immediate and dramatic changes in both Heart Rate (HR) and HR variability (HRV) associated with MW exposure at levels

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well below (0.5%) federal guidelines in Canada and the United States (1000 microW/cm<sup>2</sup>).

**Key Words:** heart rate variability, microwave radiation, DECT phone, autonomic nervous system, provocation study, sympathetic, parasympathetic, cordless phone, 2.4 GHz, electrohypersensitivity

## Introduction

A growing population claims to be sensitive to devices emitting electromagnetic energy. Hallberg and Oberfeld<sup>1</sup> report a prevalence of electrohypersensitivity (EHS) that has increased from less than 2% prior to 1997 to approximately 10% by 2004 and is expected to affect 50% of the population by 2017. Whether this is due to a real increase in EHS or to greater media attention, is not known. However, to label EHS as a psychological disorder or to attribute the symptoms to aging and/or stress does not resolve the issue that a growing population, especially those under the age of 60, are suffering from some combination of fatigue, sleep disturbance, chronic pain, skin, eye, hearing, cardiovascular and balance problems, mood disorders as well as cognitive dysfunction and that these symptoms appear to worsen when people are exposed to electromagnetic emitting devices<sup>2-7</sup>.

The World Health Organization (WHO) organized an international seminar and working group meeting in Prague on EMF Hypersensitivity in 2004, and at that meeting they defined EHS as follows<sup>8</sup>:

*“ . . . a phenomenon where individuals experience adverse health effects while using or being in the vicinity of devices emanating electric, magnetic, or electromagnetic fields (EMFs) . . . Whatever its cause, EHS is a real and sometimes a debilitating problem for the affected persons . . . Their exposures are generally several orders of magnitude under the limits in internationally accepted standards.”*

The WHO goes on to state that:

*“EHS is characterized by a variety of non-specific symptoms, which afflicted individuals attribute to exposure to EMF. The symptoms most commonly experienced include dermatological symptoms (redness, tingling, and burning sensations) as well as neurasthenic and vegetative symptoms (fatigue, tiredness, concentration difficulties, dizziness, nausea, heart palpitation and digestive disturbances). The collection of symptoms is not part of any recognized syndrome.”*

Both provocation studies (where individuals are exposed to some form of electromagnetic energy and their symptoms are documented) and amelioration studies (where exposure is reduced) can shed light on the offending energy source and the type and rate of reaction.

Several amelioration studies have documented improvements in the behavior of students and the health and wellbeing of teachers<sup>9</sup>, among asthmatics<sup>10</sup>, and in both diabetics and those with multiple sclerosis<sup>11,12</sup> when their exposure to dirty electricity is reduced. Dirty electricity refers to microsurgs flowing along electrical wires in the kHz

# Replication of heart rate variability provocation study with 2.4-GHz cordless phone confirms original findings

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This is a replication of a study that we previously conducted in Colorado with 25 subjects designed to test the effect of electromagnetic radiation generated by the base station of a cordless phone on heart rate variability (HRV). In this study, we analyzed the response of 69 subjects between the ages of 26 and 80 in both Canada and the USA. Subjects were exposed to radiation for 3-min intervals generated by a 2.4-GHz cordless phone base station ( $3-8 \mu\text{W}/\text{cm}^2$ ). A few participants had a severe reaction to the radiation with an increase in heart rate and altered HRV indicative of an alarm response to stress. Based on the HRV analyses of the 69 subjects, 7% were classified as being “moderately to very” sensitive, 29% were “little to moderately” sensitive, 30% were “not to little” sensitive and 6% were “unknown”. These results are not psychosomatic and are not due to electromagnetic interference. Twenty-five percent of the subjects’ self-proclaimed sensitivity corresponded to that based on the HRV analysis, while 32% overestimated their sensitivity and 42% did not know whether or not they were electrically sensitive. Of the 39 participants who claimed to experience some electrical hypersensitivity, 36% claimed they also reacted to a cordless phone and experienced heart symptoms and, of these, 64% were classified as having some degree of electrohypersensitivity (EHS) based on their HRV response. Novel findings include documentation of a delayed response to radiation. Orthostatic HRV testing combined with provocation testing may provide a diagnostic tool for some sufferers of EHS when they are exposed to electromagnetic emitting devices. The protocol used underestimates reaction to electromagnetic radiation for those who have a delayed autonomic nervous system reaction and it may under diagnose those who have adrenal exhaustion as their ability to mount a response to a stressor is diminished.

**Keywords:** heart rate variability, mobile phone, tachycardia, arrhythmia, microwave radiation, radio frequency radiation, electrohypersensitivity, autonomic nervous system

## Introduction

Individuals who complain of electrical hypersensitivity experience a myriad of symptoms that may include heart palpitation, arrhythmia, tachycardia, pain or pressure in the chest that may or may not be accompanied by anxiety, dizziness, nausea and headaches (Austrian Medical Association, 2012; Bevington, 2010; McCarty et al., 2011; Eltiti et al., 2007; Johansson, 2006). Since we have technology to measure the activity of

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# **WI-FI ELECTROMAGNETIC FIELDS EXERT GENDER RELATED ALTERATIONS ON EEG**

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## ***Abstract***

The present study investigated the influence of electromagnetic fields, similar to that emitted by Wi-Fi system, on brain activity. Fifteen female and fifteen male subjects performed a short memory task (Wechsler test), both without and with exposure to a 2.4GHz Wi-Fi signal. For each subject, radiation condition and electrode, the amplitude in the frequency domain of the EEG signal was calculated from the recordings of 30 scalp electrodes, using the Fourier transform.

The presence of radiation had no effect on the energies of alpha and beta band of male subjects, while it reduced these energies of female subjects, resulting in significantly lower energies, as compared to those of males. Delta and theta band energies did not experience any noteworthy effect from gender, radiation condition and their interaction. Conversely, there was a significant interaction effect (gender x radiation) on the energies of alpha and beta rhythms.

Interestingly, this pattern was observed for a number of electrodes, which formed two distinct clusters: one located at right- anterior and the second at occipital brain areas.

The present data support the idea that Wi-Fi signal may influence normal physiology through changes in gender related cortical excitability, as reflected by alpha and beta EEG frequencies.

ORIGINAL ARTICLE

## **Drosophila oogenesis as a bio-marker responding to EMF sources**

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### **Abstract**

The model biological organisms *Drosophila melanogaster* and *Drosophila virilis* have been utilized to assess effects on apoptotic cell death of follicles during oogenesis and reproductive capacity (fecundity) decline. A total of 280 different experiments were performed using newly emerged flies exposed for short time daily for 3–7 d to various EMF sources including: GSM 900/1800 MHz mobile phone, 1880–1900 MHz DECT wireless base, DECT wireless handset, mobile phone-DECT handset combination, 2.44 GHz wireless network (Wi-Fi), 2.44 GHz blue tooth, 92.8 MHz FM generator, 27.15 MHz baby monitor, 900 MHz CW RF generator and microwave oven's 2.44 GHz RF and magnetic field components. Mobile phone was used as a reference exposure system for evaluating factors considered very important in dosimetry extending our published work with *D. melanogaster* to the insect *D. virilis*. Distance from the emitting source, the exposure duration and the repeatability were examined. All EMF sources used created statistically significant effects regarding fecundity and cell death-apoptosis induction, even at very low intensity levels (0.3 V/m blue tooth radiation), well below ICNIRP's guidelines, suggesting that *Drosophila* oogenesis system is suitable to be used as a biomarker for exploring potential EMF bioactivity. Also, there is no linear cumulative effect when increasing the duration of exposure or using one EMF source after the other (i.e. mobile phone and DECT handset) at the specific conditions used. The role of the average versus the peak E-field values as measured by spectrum analyzers on the final effects is discussed.

### **Keywords**

Apoptosis, baby monitor, blue tooth, DECT base, DECT handset, *Drosophila*, EMFs, mobile phones, MW oven, reproduction, Wi-Fi

### **History**

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### **Introduction**

Wireless communication devices are widely used worldwide at nearly all human activities at home, for entertainment, for education and especially at work. The related devices include the well-known cell phones (nearly 6 billion users globally), the wireless DECT telephones (no records available but apparently their number is considered very high), the wireless local area network routers (no records available), iPads which are increasingly penetrating the market having only Wi-Fi (and not wired) internet access, not to mention the baby monitors and the also newly developed “smart meters”. Apart from the above “electromagnetic pollution” sources, there is also direct or indirect radiation exposure of humans by FM and TV broadcast stations, cell phone network mast stations, TETRA police and fire department antennae and many more. Because people may be adversely affected by the environmental impact of such electromagnetic fields (EMFs), it is of great scientific and social interest to explore the

possible health hazards (Behari, 2010) potentially caused by this radiation spectrum. Major research is associated mainly with cell phones, while at the same time the other sources have been neglected with the exception of the epidemiological and partially clinical studies involving DECT phones (Hardell & Carlberg, 2009; Hardell et al., 2004, 2006, 2011; Khurana et al., 2010). Mobile phone-like radiation studies have been performed during the last decades investigating a variety of biological effects, in humans with clinical studies and experimental work with rodents, flies and cell cultures. Assessing the possible link between exposure to electromagnetic fields and genotoxic effects, a number of studies have reported DNA damage, cell malformations, apoptotic cell death, changes in chromatin conformation and micronucleus formation in different cell types or organisms (Lai & Singh, 1996; Lixia et al., 2006; Ruediger, 2009; Zhao et al., 2007). However, in other studies, no genotoxic effects from exposure to EMF were observed (Belyaev et al., 2006; Verschaeve, 2005).

Mobile phone radiation has been also found to cause broad changes in gene and protein expression in certain cell types (Belyaev et al., 2006; Nylund & Leszczynski, 2006; Nylund et al., 2009; Remondini et al., 2006). Our group using

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## Modulator effects of L-carnitine and selenium on wireless devices (2.45 GHz)-induced oxidative stress and electroencephalography records in brain of rat

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### Abstract

**Purpose:** Electromagnetic radiation (EMR) from wireless devices may affect biological systems by increasing free radicals. The present study was designed to determine the effects of 2.45 GHz EMR on the brain antioxidant redox system and electroencephalography (EEG) records in rat. The possible protective effects of selenium and L-carnitine were also tested and compared to untreated controls.

**Materials and methods:** Thirty rats were equally divided into five different groups, namely Group A<sub>1</sub>: Cage control, Group A<sub>2</sub>: Sham control, group B: 2.45 GHz EMR, group C: 2.45 GHz EMR + selenium, group D: 2.45 GHz EMR + L-carnitine. Groups B, C and D were exposed to 2.45 GHz EMR during 60 min/day for 28 days. End of the experiments, EEG records and the brain cortex samples were taken.

**Results:** The cortex brain vitamin A ( $p < 0.05$ ), vitamin C ( $p < 0.01$ ) and vitamin E ( $p < 0.05$ ) concentrations values were lower in group B than in group A<sub>1</sub> and A<sub>2</sub> although their concentrations were increased by selenium and L-carnitine supplementation. Lipid peroxidation, levels were lower in group C ( $p < 0.05$ ) and D ( $p < 0.01$ ) than in group B where as reduced glutathione levels were higher in group C ( $p < 0.05$ ) than in group A<sub>1</sub>, A<sub>2</sub> and B. However, B-carotene levels did not change in the five groups.

**Conclusions:** L-carnitine and selenium seem to have protective effects on the 2.45 GHz-induced decrease of the vitamins by supporting antioxidant redox system. L-carnitine on the vitamin concentrations seems to more protective affect than in selenium.

**Keywords:** Wireless devices, lipid peroxidation, brain, vitamin E, L-carnitine, selenium, electroencephalography records

**Abbreviations:** ANOVA, analysis of variance; EEG, electroencephalography; EMF, electromagnetic fields; EMR, electromagnetic radiation; GSH, glutathione; GSH-Px, glutathione peroxidase; L-CAR, L-carnitine; LP, lipid peroxidation; LSD, least significance test; ROS, reactive oxygen species; SAR, specific absorption rate; SD, standard deviation; Se, selenium

### Introduction

In present times there is widespread use of 2.45 GHz irradiation-emitting devices in industrial, scientific, medical, military and domestic applications, with potential leakage of such radiation into the environment (Crouzier et al. 2007). Several studies have suggested that biological systems might be sensitive to such form of radiation (Koyu et al. 2005, Köylü et al. 2006). Today there is widespread use of 2.45 GHz radiation from common household devices likemicrowave ovens, wireless access points, and

computers, which in some cases were shown to be carcinogenic (Omura and Losco 1993).

Reactive oxygen substances (ROS) are produced by a free radical chain reaction, which can also be initiated by ROS (Naziroğlu 2007a). The ROS, i.e. singlet oxygen, superoxide anion radical and hydroxyl radical, contribute to tissue damage (Naziroğlu 2007b). ROS also cause injury by reacting with biomolecules such as lipids, proteins and nucleic acids as well as by depleting enzymatic and/or non-enzymatic antioxidants in the brain (Halliwell 2006, Naziroğlu et al. 2008). Memory and learning

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## 2.45-Gz wireless devices induce oxidative stress and proliferation through cytosolic Ca<sup>2+</sup> influx in human leukemia cancer cells

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### Abstract

**Purpose:** Electromagnetic radiation from wireless devices may affect biological systems by increasing free radicals. The present study was designed to determine the effects of 2.45 GHz radiation on the antioxidant redox system, calcium ion signaling, cell count and viability in human leukemia 60 cells.

**Materials and methods:** Twelve cell cultures were equally divided into two main groups as controls ( $n = 6$ ) and irradiated ( $n = 6$ ) and then subdivided into four different subgroups depending on the duration of exposure, namely 1, 2, 12 and 24 hours. The samples were analyzed immediately after the experimental period.

**Results:** The extent of lipid peroxidation, cytosolic free Ca<sup>2+</sup> and cell numbers were higher in 2.45 GHz groups than in the controls. The increase of cytosolic free Ca<sup>2+</sup> concentrations was radiation time-dependent and was highest at 24-h exposure. The reduced glutathione, glutathione peroxidase, vitamin C and cell viability values did not show any changes in any of the experimental groups. 2-aminoethyl diphenylborinate inhibits Ca<sup>2+</sup> ions influx by blockage of the transient receptor potential melastatin 2.

**Conclusions:** 2.45 GHz electromagnetic radiation appears to induce proliferative effects through oxidative stress and Ca<sup>2+</sup> influx although blocking of transient receptor potential melastatin 2 channels by 2-aminoethyl diphenylborinate seems to counteract the effects on Ca<sup>2+</sup> ions influx.

**Keywords:** Wireless devices, oxidative stress, Ca<sup>2+</sup> influx, TRPM2 channels, blood cancer

### Introduction

In present times there is widespread use of 2.45 GHz irradiation-emitting devices in industrial, scientific, medical, military and domestic applications, with potential leakage of such radiation into the environment (Crouzier et al. 2007). Common household devices like microwave ovens, wireless access points, and computers were in some cases shown to be carcinogenic (Omura and Losco 1993). Other studies have

suggested that biological systems might be sensitive to such form of radiation (Nazırođlu and Gumlral 2009, Nazırođlu et al. 2012, Gumlral et al. 2009).

Reactive oxygen species (ROS) are produced by a free radical chain reaction, which in some cases can be auto-initiated (Nazırođlu 2007a, 2007b). These species cause injury by reacting with lipids, proteins and nucleic acids as well as by depleting antioxidants in cancer cells (Reuter et al. 2010). There are various antioxidant mechanisms in cells that neutralize the harmful effects of ROS. In contrast, exposure to electromagnetic radiation (EMR) results in increases of ROS due to loss of efficiency of antioxidants mechanisms and alterations in mitochondrial electron transfer chain (Kovacic and Somanathan 2008).

Glutathione peroxidase is responsible for the reduction of hydro- and organic peroxides in the presence of reduced glutathione (Whanger 2001). Vitamin C is a free radical scavenger that also transforms vitamin E to its active form (Nazırođlu 2007a). We recently reported that 2.45 GHz radiation induced oxidative stress in brain and blood cells of rats (Nazırođlu and Gumlral 2009, Gumlral et al. 2009). However, whether 2.45 GHz EMR also induces oxidative stress in cancer cells is still unknown and deserves further study. The homeostasis of Ca<sup>2+</sup> ions is one of the most important factors of cellular physiological function. It is involved in such diverse functions as cellular proliferation, apoptosis, induction of oxidative stress and physiological signal transductions (Putney 2009). The cytosolic free calcium ion concentration [Ca<sup>2+</sup>]<sub>i</sub> is controlled by a number of membrane-bound ion channels located both in the plasma and intracellular membranes. Transient receptor potential (TRP) channels are a group of non-selective cation channels that play important functions in sensory neurons (Nazırođlu 2011a). One subgroup of TRP melastatin is TRP melastatin 2 (TRPM2), which has two distinct domains with one functioning as an ion channel and the other as an adenosine diphosphate ribose-specific

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# Melatonin modulates wireless (2.45 GHz)-induced oxidative injury through TRPM2 and voltage gated $Ca^{2+}$ channels in brain and dorsal root ganglion in rat

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## ABSTRACT

We aimed to investigate the protective effects of melatonin and 2.45 GHz electromagnetic radiation (EMR) on brain and dorsal root ganglion (DRG) neuron antioxidant redox system,  $Ca^{2+}$  influx, cell viability and electroencephalography (EEG) records in the rat. Thirty two rats were equally divided into four different groups namely group A1: Cage control, group A2: Sham control, group B: 2.45 GHz EMR, group C: 2.45 GHz EMR + melatonin. Groups B and C were exposed to 2.45 GHz EMR during 60 min/day for 30 days. End of the experiments, EEG records and the brain cortex and DRG samples were taken. Lipid peroxidation (LP), cell viability and cytosolic  $Ca^{2+}$  values in DRG neurons were higher in group B than in groups A1 and A2 although their concentrations were increased by melatonin, 2-aminoethylidiphenyl borinate (2-APB), diltiazem and verapamil supplementation. Spike numbers of EEG records in group C were lower than in group B. Brain cortex vitamin E concentration was higher in group C than in group B. In conclusion, Melatonin supplementation in DRG neurons and brain seems to have protective effects on the 2.45 GHz-induced increase  $Ca^{2+}$  influx, EEG records and cell viability of the hormone through TRPM2 and voltage gated  $Ca^{2+}$  channels.

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## 1. Introduction

In present times there is widespread use of 2.45 GHz irradiation-emitting devices in industrial, scientific, medical, military and domestic applications, with potential leakage of such radiation into the environment [1]. Several studies have suggested that biological systems might be sensitive to such form of radiation [2,3]. Today there is widespread use of 2.45 GHz radiation from common household devices like microwave ovens, wireless access points, and computers, which in some cases were shown to be carcinogenic [4].

Reactive oxygen substances (ROS) are produced by a free radical chain reaction, which can also be initiated by ROS [5]. ROS also cause

injury by reacting with biomolecules such as lipids, proteins and nucleic acids as well as by depleting enzymatic antioxidant such as glutathione peroxidase (GSH-Px) and/or nonenzymatic antioxidants such as reduced glutathione (GSH), vitamins A, C, E and  $\beta$ -carotene in the brain and neuronal cells [6]. Pain and brain diseases are impaired in individuals with brain and sensory neuron-related neurodegenerative diseases; this is believed to be, in part, the result of excessive production of ROS [7]. The brain and neurons consume the highest amount of oxygen in the human body [6] although most of the oxygen used in brain tissues is converted to  $CO_2$  and water, small amounts of oxygen form ROS [5]. The existence of polyunsaturated fatty acids which are targets of the ROS in the brain makes this organ more sensitive to oxidative damage [8]. ROS may be involved in the action of cell phone-induced electromagnetic radiation (EMR) on biological systems [2,9–11].

Neuropathic pain states severely limit the quality of life. There are several types of sensory neurons in dorsal root ganglion (DRG) neurons with responsiveness to different kinds of external and internal stimuli. These stimuli such as nociceptive, thermal and mechanical activate different receptors and ion channels that are present in the nerve terminals at the sensory receptive fields. Their expression in selective subsets of DRG neurons determines the response profile of individual neurons to a given stimulus [12].  $Ca^{2+}$  homeostasis is one of the most important factors of cellular physiological function. It

*Abbreviations:* 2-APB, 2-aminoethylidiphenyl borinate; DRG, dorsal root ganglion; EEG, electroencephalography; EMF, electromagnetic fields; EMR, electromagnetic radiation; FFA, flufenamic acid; GSH, glutathione; GSH-Px, glutathione peroxidase; LP, lipid peroxidation; ROS, reactive oxygen species; SAR, specific absorption rate.

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## ORIGINAL ARTICLE

**Protective effects of melatonin against oxidative injury in rat testis induced by wireless (2.45 GHz) devices**T. Oksay<sup>1</sup>, M. Nazıroğlu<sup>2</sup>, S. Doğan<sup>2</sup>, A. Güzel<sup>1</sup>, N. Gümral<sup>3</sup> & P. A. Koşar<sup>4</sup><sup>1</sup> Department of Urology, Suleyman Demirel University, Faculty of Medicine, Isparta, Turkey;<sup>2</sup> Department of Biophysics, Suleyman Demirel University, Faculty of Medicine, Isparta, Turkey;<sup>3</sup> Department of Physiology, Suleyman Demirel University, Faculty of Medicine, Isparta, Turkey;<sup>4</sup> Department Medical Biology and Genetics, Suleyman Demirel University, Faculty of Medicine, Isparta, Turkey**Keywords**

Melatonin—oxidative stress—rat—testis—wireless devices

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**Summary**

Wireless devices have become part of everyday life and mostly located near reproductive organs while they are in use. The present study was designed to determine the possible protective effects of melatonin on oxidative stress-dependent testis injury induced by 2.45-GHz electromagnetic radiation (EMR). Thirty-two rats were equally divided into four different groups, namely cage control (A1), sham control (A2), 2.45-GHz EMR (B) and 2.45-GHz EMR+melatonin (C). Group B and C were exposed to 2.45-GHz EMR during 60 min day<sup>-1</sup> for 30 days. Lipid peroxidation levels were higher in Group B than in Group A1 and A2. Melatonin treatment prevented the increase in the lipid peroxidation induced by EMR. Also reduced glutathione (GSH) and glutathione peroxidase (GSH-Px) levels in Group D were higher than that of exposure group. Vitamin A and E concentrations decreased in exposure group, and melatonin prevented the decrease in vitamin E levels. In conclusion, wireless (2.45 GHz) EMR caused oxidative damage in testis by increasing the levels of lipid peroxidation and decreasing in vitamin A and E levels. Melatonin supplementation prevented oxidative damage induced by EMR and also supported the antioxidant redox system in the testis.

**Introduction**

There is widespread use of 2.45-GHz irradiation emitting wireless devices in industrial, scientific, medical, military and domestic applications, in the recent century. Therefore, the leakage of irradiation into the environment is inevitable (Wang *et al.*, 2005; Crouzier *et al.*, 2007). Studies had already shown the effects of 2.45-GHz electromagnetic radiation on different body parts like nervous system, body weight, tissue morphology and histology, blood biochemical parameters, hormones, immune system and reproductive system (Aweda *et al.*, 2003; Hossmann & Hermann, 2003; Kim *et al.*, 2007; Nazıroğlu & Gümral, 2009; Kumar *et al.*, 2011a; Saygin *et al.*, 2011). There is a consequence that exposure to electromagnetic radiation (EMR) is with enhanced production of reactive oxygen species (ROS), including superoxide anion, hydrogen peroxide and hydroxyl radicals (Murphy *et al.*, 1993; Aweda *et al.*, 2003). These species and/or other free radicals may be involved in the interactions of EMR on biological systems, but the cellular and molecular mecha-

nisms involved in this process are not totally clear (Kim & Rhee, 2004; Gumral *et al.*, 2009; Nazıroğlu & Gümral, 2009). Some studies showed exposure to 2.45-GHz EMR may cause an increase in lipid peroxidation levels and a decrease in antioxidant enzymes that prevent or protect against lipid peroxidation (LPO) in reproductive tissues of male rats (Kumar *et al.*, 2011b).

Melatonin (N-acetyl-5-methoxy-tryptamine) is synthesised mainly by the pineal gland and has been considered a potent antioxidant, even more potent than vitamin E, which detoxifies a variety of ROS in many pathophysiological states (Pieri *et al.*, 1994; Ekmekcioglu, 2006). The direct effects of melatonin on the male reproductive system and testosterone synthesis from Leydig cells have also been examined in studies on animals. Because melatonin binding sites have been detected in the reproductive system of different species, it seems reasonable to assume that melatonin exerts its actions not only as an antioxidant but also through direct interaction with the steroidogenic cells of the reproductive organs (Oner-Iyidogan *et al.*, 2001; Armagan *et al.*, 2006).

## EFFECTS OF WI-FI SIGNALS ON THE P300 COMPONENT OF EVENT-RELATED POTENTIALS DURING AN AUDITORY HAYLING TASK

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The P300 component of event-related potentials (ERPs) is believed to index attention and working memory (WM) operation of the brain. The present study focused on the possible gender-related effects of Wi-Fi (Wireless Fidelity) electromagnetic fields (EMF) on these processes. Fifteen male and fifteen female subjects, matched for age and education level, were investigated while performing a modified version of the Hayling Sentence Completion test adjusted to induce WM. ERPs were recorded at 30 scalp electrodes, both without and with the exposure to a Wi-Fi signal. P300 amplitude values at 18 electrodes were found to be significantly lower in the response inhibition condition than in the response initiation and baseline conditions. Independent of the above effect, within the response inhibition condition there was also a significant gender X radiation interaction effect manifested at 15 leads by decreased P300 amplitudes of males in comparison to female subjects only at the presence of EMF. In conclusion, the present findings suggest that Wi-Fi exposure may exert gender-related alterations on neural activity associated with the amount of attentional resources engaged during a linguistic test adjusted to induce WM.

*Keywords:* Wi-Fi; P300 ERP component; Hayling; gender; EMF.

### 1. Introduction

Concern of health effects due to EMF, specifically radiofrequency (RF) exposure is currently arising. Numerous studies have investigated the potential effects of EMF,

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## 2.45 GHz Microwave Irradiation-Induced Oxidative Stress Affects Implantation or Pregnancy in Mice, *Mus musculus*

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**Abstract** The present experiment was designed to study the 2.45 GHz low-level microwave (MW) irradiation-induced stress response and its effect on implantation or pregnancy in female mice. Twelve-week-old mice were exposed to MW radiation (continuous wave for 2 h/day for 45 days, frequency 2.45 GHz, power density=0.033549 mW/cm<sup>2</sup>, and specific absorption rate=0.023023 W/kg). At the end of a total of 45 days of exposure, mice were sacrificed, implantation sites were monitored, blood was processed to study stress parameters (hemoglobin, RBC and WBC count, and neutrophil/lymphocyte (N/L) ratio), the brain was processed for comet assay, and plasma was used for nitric oxide (NO), progesterone and estradiol estimation. Reactive oxygen species (ROS) and the activities of ROS-scavenging

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enzymes— superoxide dismutase, catalase, and glutathione peroxidase—were determined in the liver, kidney and ovary. We observed that implantation sites were affected significantly in MW-irradiated mice as compared to control. Further, in addition to a significant increase in ROS, hemoglobin ( $p<0.001$ ), RBC and WBC counts ( $p<0.001$ ), N/L ratio ( $p<0.01$ ), DNA damage ( $p<0.001$ ) in brain cells, and plasma estradiol concentration ( $p<0.05$ ), a significant decrease was observed in NO level ( $p<0.05$ ) and antioxidant enzyme activities of MW-exposed mice. Our findings led us to conclude that a low level of MW irradiation-induced oxidative stress not only suppresses implantation, but it may also lead to deformity of the embryo in case pregnancy continues. We also suggest that MW radiation-induced oxidative stress by increasing ROS production in the body may lead to DNA strand breakage in the brain cells and implantation failure/resorption or abnormal pregnancy in mice.

**Keywords** Microwave radiation · Reactive oxygen species (ROS) · Nitric oxide · Antioxidant enzyme activity · Implantation failure

## Introduction

Microwaves (MW) are non-ionizing electromagnetic radiation (EMR) (wavelength ranging from 1 mm to 1 m and frequency between 0.3 and 300 GHz), which unlike ionizing radiation, do not contain sufficient energy to break the bond or chemically change the substances by ionization. In general, non-ionizing radiations are associated with two major potential hazards, i.e., electrical and biological. In recent times, the level of EMR in our environment has increased manifold due to a large-scale expansion of communication networks such as mobile phones, base stations, WLAN, Wi-Fi, Wi-MAX, etc. Radiations emitted from these modern devices are reported to induce various types of biological effects which are of great concern to human health due to its increased use in daily life. MW radiation primarily increases the temperature of the biological system, i.e., thermal effects [1], but its nonthermal effects have also been noted and studied in detail [2–8]. Nonthermal effects occur when the intensity of the MW radiation is sufficiently low so that the amount of energy involved would not significantly increase the temperature of a cell, tissue, or an organism, but may induce some physical or biochemical changes [9]. Prolonged exposure to low intensity 2.45 GHz microwave radiation may affect the cholinergic activity in the rat [2], brain development in mice [10], DNA breakage in rat brain [11], and histone kinase activity in rat [12], which results in neurological problems and reproductive disorders [13–15], in addition to changes in hematopoiesis of pregnant mice [16] and micronucleated erythrocytes in rats [17]. The International Agency for Research on Cancer has also kept radiofrequency electromagnetic fields in the list of factors causing cancer to humans. Some studies performed in this context suggest that people heavily exposed to these radiations are more prone to nonmalignant tumors [18]. It has been reported that mobile phone or cell phone radiation (a type of MW radiation) causes changes in cognitive function [19]. A German study has indicated an increase in cancer around base stations. Mobile phones use electromagnetic radiation in a microwave range (2G—900/1,800 MHz, 3G—2,100 MHz frequency band) which some believe may be harmful to human health. People living close to 2G and mostly 3G mobile phone masts or base stations frequently report symptoms of electromagnetic hypersensitivity such as dizziness, headaches, skin conditions, allergies, and many other problems. Hardell and groups [20, 21] have reported the health implications of mobile phone exposure (800–2,200 MHz). They found that cell phone users had an increased risk of

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## Selenium and L-Carnitine Reduce Oxidative Stress in the Heart of Rat Induced by 2.45-GHz Radiation from Wireless Devices

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**Abstract** The aim of this study was to investigate the possible protective role of selenium and L-carnitine on oxidative stress induced by 2.45-GHz radiation in heart of rat. For this purpose, 30 male Wistar Albino rats were equally divided into five groups namely controls, sham controls, radiation-exposed rats, radiation-exposed rats treated with intraperitoneal injections of sodium selenite at a dose of 1.5 mg/kg/day, and radiation-exposed rats treated with intraperitoneal injections of L-carnitine at a dose of 1.5 mg/kg/day. Except for the controls and sham controls, the animals were exposed to 2.45-GHz radiation during 60 min/day for 28 days. The lipid peroxidation (LP) levels were higher in the radiation-exposed groups than in the control and sham control groups. The lipid peroxidation level in the irradiated animals treated with selenium and L-carnitine was lower than in those that were only exposed to 2.45-GHz radiation. The concentrations of vitamins A, C, and E were lower in the irradiated-only group relative to control and sham control groups, but their concentrations were increased in the groups treated with selenium- and L-carnitine. The activity of glutathione peroxidase was higher in the selenium-treated group than in the animals that were irradiated but received no treatment. The erythrocyte-reduced glutathione and  $\beta$ -carotene concentrations did not change in any of the groups. In conclusion, 2.45-GHz

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electromagnetic radiation caused oxidative stress in the heart of rats. There is an apparent protective effect of selenium and L-carnitine by inhibition of free radical formation and support of the antioxidant redox system.

**Keywords** 2.45-GHz electromagnetic radiation · Oxidative stress · Antioxidant enzymes · Antioxidant vitamins · L-Carnitine · Selenium

## Introduction

Many devices that emit 2.45-GHz radiation are in use for industrial, scientific, medical, military, and domestic purposes present a potential health and environmental problem [1]. Several studies have suggested that biological systems could exhibit a specific sensitivity to 2.45-GHz electromagnetic radiation [2–4]. Other studies were extended to electromagnetic radiation (EMR) generated from common household devices like microwave ovens, wireless access points, and computers which were also shown to have negative health effects, and that antioxidants showed a protective effect on 900-MHz mobile phone emissions [5, 6].

These types of radiation positively correlate to generation of oxygen-derived radicals (ROS) such as superoxide radical ions. The heart is the organ that consumes the greatest amount of oxygen, which makes it at greatest risk of oxidative stress and, in consequence, most susceptible to oxidative damage [1, 6, 7]. Superoxide ion radicals and other free radical species may be involved in the interactions of EMR on biological systems, but the cellular and molecular mechanisms involved in this process are still poorly understood [8, 9].

Exposure to 2.45-GHz EMR caused an increase in lipid peroxidation levels and a decrease in the activity of enzymes and vitamins that prevent or protect against lipid peroxidation in blood [8] and brain [9].

The body has enzymatic and non-enzymatic antioxidant systems. Enzymatic antioxidants neutralize excessive ROS, preventing them from damaging the cellular structure. Among those are superoxide dismutase (SOD), catalase (CAT), and glutathione peroxidase (GSH-Px) [10, 11]. In particular, GSH-Px is a selenium (Se)-containing enzyme responsible for the reduction of hydro- and organic peroxides in the presence of reduced glutathione (GSH) [12]. Se is also required for the catalytic activity of another critical antioxidant enzyme, mammalian thioredoxin reductase (TR). Along with vitamins C and E, Se is widely recognized as an essential part of the antioxidant system [11–13].

L-Carnitine (L-Car) is a low molecular weight compound obtained from the diet or biosynthesized from lysine and methionine. It has been identified in a variety of mammalian tissues and has an essential role in the mitochondrial oxidation of long-chain fatty acids through the action of specialized acyltransferases. Other roles for carnitine include buffering of the acyl coenzyme A/coenzyme A ratio, branched-chain amino acid metabolism, removal of excess acyl groups, and peroxisomal fatty acid oxidation [14]. L-Car has also been found to attenuate free radical-induced oxidative stress in various pathological conditions of heart [15]. The growing body of evidence about carnitine function in heart has led to increased understanding and identification of heart disorders associated with altered carnitine metabolism. However, there is no report on L-Car and 2.45 GHz-induced antioxidant redox system in heart.

There are no reports on the effects of wireless devices emitting 2.45 GHz radiation in the heart of experimental animals. The aim of the present study was to investigate the effects of

# Wi-Fi technology – an uncontrolled global experiment on the health of mankind

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The twenty-first century is marked with exponentially increasing development of technologies that provide wireless communications. To the pollution of the atmosphere with radio and TV signals, not only satellite communications but also any varieties of the Wi-Fi networks are added. By 2010 in the USA, 285 million mobile phone subscribers have been registered (for a little bit more than 300 million inhabitants). The estimate for the world is more than 5 billion mobile phone users at approximately 7 billion people living on this planet. Approximately 2 years ago, the International Agency of Research on Cancer (IARC) classified the electromagnetic fields used in mobile communication as a possible cancerogene. This paper discusses the potential health hazard and lack of scientific assessment and regulatory actions in protection of the life on the planet.

**Keywords:** WiFi, pollution, hazard, Radiofrequency electromagnetic fields

## The problem: Ionizing versus nonionizing radiation

Contemporary science is increasingly using and investigating two physical factors such as ionizing and nonionizing radiation, with an attempt to search for common mechanisms of action and evaluation of the public benefit and health hazard. What is common here is the word “radiation.” However, from the viewpoint of physics, these are two different factors that might be found in an environment. Importantly, they act simultaneously, but are discussed separately, entirely neglecting the existing background of the other factor.

It has been well established that ionizing radiation usually provokes effects based on energetic mechanisms and ionization of tissues. This action is characterized with threshold levels and could develop within short time after irradiation. Speaking on ionizing radiation, scientists and public health experts, based on decades of investigation, have come to know about a large variety of unfavorable, potentially harmful effects that developed hours (sometimes days) after irradiation. This was well confirmed in the evaluation of health effects and care for personnel and population after Chernobyl accident a quarter of century ago (Grigoriev, 2012a,b; Sage, 2012). Throughout the world, interest was also excited by the recent Fukushima disaster in March 2011.

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## Review

# Why children absorb more microwave radiation than adults: The consequences

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## ABSTRACT

Computer simulation using MRI scans of children is the only possible way to determine the microwave radiation (MWR) absorbed in specific tissues in children. Children absorb more MWR than adults because their brain tissues are more absorbent, their skulls are thinner and their relative size is smaller. MWR from wireless devices has been declared a possible human carcinogen. Children are at greater risk than adults when exposed to any carcinogen. Because the average latency time between first exposure and diagnosis of a tumor can be decades, tumors induced in children may not be diagnosed until well into adulthood. The fetus is particularly vulnerable to MWR. MWR exposure can result in degeneration of the protective myelin sheath that surrounds brain neurons. MWR-emitting toys are being sold for use by young infants and toddlers. Digital dementia has been reported in school age children. A case study has shown when cellphones are placed in teenage girls' bras multiple primary breast cancer develop beneath where the phones are placed. MWR exposure limits have remained unchanged for 19 years. All manufacturers of smartphones have warnings which describe the minimum distance at which phone must be kept away from users in order to not exceed the present legal limits for exposure to MWR. The exposure limit for laptop computers and tablets is set when devices are tested 20 cm away from the body. Belgium, France, India and other technologically sophisticated governments are passing laws and/or issuing warnings about children's use of wireless devices.

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**Abbreviations:** MRI, magnetic resonance imaging; MWR, microwave radiation; CNS, central nervous system; FDTD, finite-difference, time-domain; GBM, glioblastoma multiforme (also called glioblastoma); cm, centimeter.

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## 1. Introduction

Here we discuss: how the amount of MWR can be calculated, children's greater absorption of MWR compared to adults' adsorption, MWR's listing as a Class 2B (possible) carcinogen, the existing legal limits for human exposure to MWR, and that the existing legal limits do not incorporate the greater exposure to children.

### 1.1. Computer simulation

The finite-difference, time-domain (FDTD) computer algorithm has been the best way to simulate the amount of absorbed MWR in tissues for many decades. In 1997 the U.S. Federal Communications Commission (FCC) stated, "Currently, the finite-difference time-domain (FDTD) algorithm is the most widely accepted computational method for SAR modeling. This method adapts very well to the tissue models that are usually derived from MRI or CT scans. FDTD method offers great flexibility in modeling the inhomogeneous structures of anatomical tissues and organs. The FDTD method has been used in many far-field electromagnetic applications during the last three decades. With recent advances in computer technology, it has become possible to apply this method to near-field applications for evaluating handsets" [1].

### 1.2. Children's greater absorption of MWR

There are multiple studies showing that children absorb more MWR than adults. In 1996 a study reported that the absorbed MWR penetrated proportionally deeper into the brain of children age 5 and 10 compared to adults' brains [2].

In 2008 Joe Wiart, a senior researcher for French telecom and Orange reported that the brain tissue of children absorbed about two times more MWR than adults' brain tissue [3].

A 2009 study reported the CNS absorption by children is "significantly larger ( $\sim 2\times$ ) because the RF [MWR] source is closer and skin and bone layers are thinner", and "bone marrow exposure strongly varies with age and is significantly larger for children ( $\sim 10\times$ )" [4].

In 2010, Andreas Christ and team reported children's hippocampus and hypothalamus absorbs 1.6–3.1 times higher and the cerebellum absorbs 2.5 times higher MWR compared to adults'; children's bone marrow absorbs 10 times higher MWR radiation than in adults, and children's eyes absorb higher MWR than adults [5]. These calculations were based on porcine measurements taken from sacrificed animals.

### 1.3. Microwave radiation is a Class 2B (possible) carcinogen

After 30 experts from 14 countries reviewed the science, the World Health Organization's (WHO's) International Agency for Research on Cancer (IARC) declared that RF-EMF [MWR] is a Class 2B (possible) carcinogen [6]. It was a near unanimous declaration (one dissenter).

Including MWR, there are 285 agents listed by WHO's IARC as Class 2B carcinogens [7]. Exposures to almost all of these agents are regulated. Some of the commonly recognized agents are: carbon black, carbon tetrachloride, chloroform, DDT, lead, nickel, phenobarbital, styrene, diesel fuel, and gasoline.

Like these other Class 2B Carcinogens, should anyone, particularly children, be exposed to MWR?

#### 1.3.1. Children are at increased risk when exposed to carcinogens

Children are at greater risk from exposure to carcinogens than adults, and the younger the child, the higher the risk [8–10].

#### 1.4. Exposure limits

In 1996, the FCC adopted the IEEE 1991[11] standard with some details from the 1986 NCRP Report [12] as exposure limits in the United States. Nineteen years after the FCC exposure limits were published, based on documents published 24 and 29 years previously, the legal exposure limit has remained unchanged. Yet during these decades an enormous body of scientific studies was published reporting risk well below the legal exposure limit.

The Institute of Electrical and Electronic Engineers (IEEE) is an industry professional organization, as is the National Council on Radiation Protection (NCRP). Neither organization had medical or public health expertise.

In European countries and a few other countries, the exposure limits are based on the 1998 “Guidelines” of the International Commission for Non-Ionizing Radiation Protection (ICNIRP) [13]. These “Guidelines” were based on publications from 1984, 1987, 1991, and 1993 [page 494]. That is the “Guidelines” were based on publications up to 31 years ago. Similar to the IEEE and NCRP, ICNIRP is an organization without medical or public health expertise. It is accountable to no government and its funding sources are not transparent.

##### 1.4.1. The 19 year old IEEE and 17 year old ICNIRP exposure limits are based on a false premise

The exposure limits are premised on an assumption that the only biological effect from MWR exposure is acute (short-term) heating sufficient to cause tissue damage. There is no consideration of the effects from chronic (long-term) exposures. There are many scientific papers that report biological impacts tied with non-thermal (no measurable temperature change) effects. Indeed, the 480-page IARC Monograph 102 that documents the science that led to the declaration that MWR is a Class 2B (possible) carcinogen is a virtual compendium of such papers [14].

##### 1.4.2. FCC compliance requirements do not comport with current testing systems

The FCC requires “For purposes of evaluating compliance with localized SAR guidelines, portable devices should be tested or evaluated based on normal operating positions or conditions” [15]. But phones are not tested in pants or shirt pockets. As a result every cellphone manual has warnings that the phone should be kept at various distances from the body otherwise the human exposure limits can be exceeded.

Here are two of many examples:

- (1) The BlackBerry Torch 9800 Smart Phone warns, “keep the BlackBerry device at least 0.98 in. (25 mm) from your body (including the abdomen of pregnant women and the lower abdomen of teenagers).” “Lower abdomen” is an oblique reference to testicles and “abdomen of pregnant women” is an oblique reference to the fetus.
- (2) The iPhone 5’s manual is embedded within the phone: Users must go to “Settings,” and scroll down to “General,” then scroll to the bottom to “About,” go to “Legal,” scroll down to “RF [MWR] Exposure” where it reads, “To

reduce exposure to RF energy, use a hands-free option, such as the built-in speakerphone, the supplied headphones, or other similar accessories. Carry iPhone at least 10 mm away from your body to ensure exposure levels remain at or below the as-tested [exposure limit] levels.”

##### 1.4.3. There is a 20 cm distance rule for tablets and laptop computers

“For purposes of these requirements mobile<sup>1</sup> devices are defined by the FCC as transmitters designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 cm is normally maintained between radiating structures and the body of the user or nearby persons” [16].

Clearly, this 20 cm rule contradicts the “normal operating position” regulation in the description “a separation distance of at least 20 cm is normally maintained.” Indeed, “laptop” computer directly implies that it is to be placed on a lap which is not 20 cm distant from the user.

The growing use of tablets by young children in schools contradicts these normal tested conditions as well, as these children have shorter arms that do not allow them to hold devices 20 cm from their bodies.

## 2. Materials and methods

We have performed a review of the peer-reviewed cellphone exposure epidemiology from 2009 to 2014, and cellphone dosimetry since the 1970s from a previous paper [17], along with relevant governmental and other policy documents, manufacturers’ manuals and similar documents.

## 3. Results

### 3.1. Early development

Here we present evidence of harmful effects from exposure to MWR during early developmental stages both in animals and in humans.

#### 3.1.1. Fetal exposures

A study from Yale University School of Medicine exposed mice in utero to MWR [18]. The study reported that these mice were hyperactive and had impaired memory “due to altered neuronal developmental programming. Exposed mice had dose-responsive impaired glutamatergic synaptic transmission onto layer V pyramidal neurons of the prefrontal cortex.” During pregnancy the mice were irradiated by a cellphone positioned above each cage positioned over the feeding bottle at a distance of 4.5–22.3 cm from each mouse depending on the location of the mouse within the cage. Controls were under the same condition but the phone was not active. The observed effects were

<sup>1</sup> The FCC defines laptop computers, tablets and similar devices as “mobile devices” in comparison to “portable devices” which are cell and cordless phones and similar devices; the former falls under the 20 cm rule, the latter has no such rule.

similar to attention deficit hyperactivity disorder (ADHD) in children.

A Turkish study reported on a 900 MHz in utero exposure of rats [19]. “The results showed that prenatal EMF exposure caused a decrease in the number of granule cells in the dentate gyrus of the rats ( $p < 0.01$ ). This suggests that prenatal exposure to a 900 MHz EMF affects the development of the dentate gyrus granule cells in the rat hippocampus.”

A Chinese study investigated effects of MWR emitted by cellphones on rat CNS, in vitro (cortical neuronal cells) and in vivo (rat’s brain) [20]. Neuronal cells had a significantly higher death rate at power densities of 0.05 mW/cm<sup>2</sup> and above. In vivo results show increased apoptosis with DNA fragmentation.

### 3.1.2. Myelination

A myelin sheath covering neurons acts as an insulation of the electrical activity of neurons. In human embryos, the first layer develops from mid-gestation to 2 years of age and continues into adolescence [21]. Myelination of the brain is not complete until early adulthood.

There are two studies with reported degeneration of the myelin sheath after MWR exposure:

A 1972 study from Poland reported myelin degeneration and glial cell proliferation in guinea pigs and rabbits from a 3 GHz exposure [22].

In 1977 Switzer & Mitchell reported a 2.45 GHz exposure in rats increased myelin degeneration in rat brains at 6 weeks after exposure. They concluded “The results of our study and related investigations by others indicated that exposures to low-intensity MW irradiation can result both in transient and in long-term structural anomalies in CNS tissue and may result in various hematologic irregularities” [23].

### 3.2. Children and adolescents

Aydin et al. in a study of cellphone use by children and adolescents (median age 13 years), reported a significant risk of brain cancer and a significant exposure–response relationship for >2.8 years since first cellphone subscription, OR = 2.15, CI = 1.07–4.29,  $p$ -trend = 0.001 for increasing risk with increasing time since first subscription with operator recorded use data (billing records) [24]. Yet the study’s conclusion states, “The absence of an exposure–response relationship either in terms of the amount of mobile phone use . . . argues against a causal association.” It is unclear why the conclusion directly contradicts the published results. The study was funded in part by cellphone companies.

A Swedish study reported when first cellphone use began as a teenager or younger there was a significant ipsilateral risk of brain cancer, OR = 7.8, CI = 2.2–28,  $p < 0.01$ , and an almost identical ipsilateral risk from cordless phone use, OR = 7.9, CI = 2.5–25,  $p < 0.001$  [9].

A Korean study found risks for ADHD in first grade (ages 7–8) children and followed them to ages 12–13 [25]. “The ADHD symptom risk associated with mobile phone use for voice calls but the association was limited to children exposed to relatively high [blood] lead [levels].” With an average time per cellphone call of ½ to <1 min, OR = 5.66,

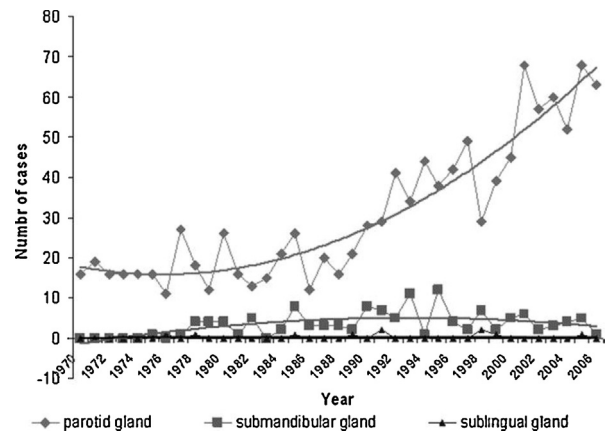


Fig. 1. Increase of parotid gland tumors relative to other salivary gland tumors in Israel.

CI = 1.31–24.51 and for 1+ minutes per call, OR = 7.20, CI = 1.37–37.91,  $p$ -trend = 0.02. For children playing games for 3+ minutes/day a significant risk for ADHD, OR = 1.94, CI = 1.30–2.89,  $p < 0.001$ , and  $p$ -trend < 0.001 in the lower blood lead level group.

Elsewhere it has been shown the low-level exposures to MWR increases the permeability of the blood–brain barrier [26–28]. This suggests children exposed to lead who use cellphone might have increased blood lead levels in the brain.

### 3.2.1. Breast cancers resulting from placement of cellphones in bras

A case study reported 4 women who placed cellphones in their bras. Two were diagnosed at age 21, with one who had begun placing her cellphone in her bra at age 15. This resulted in multiple primary breast cancers immediately beneath where the cellphone were placed [29].

### 3.2.2. Parotid gland tumors

The parotid gland is a large salivary gland in the cheek immediately next to where a cellphone is held to the ear.

A Chinese study reported statistically significant increased risks of 10- to 30-fold [30]. With more than 10 years since first use of a cellphone, the risk of epithelial parotid gland cancer, OR = 10.631, CI = 5.306–21.300,  $p < 10^{-10}$ ; similarly the risk for mucoepidermoid carcinoma, OR = 20.72, CI = 9.379–45.821,  $p < 10^{-13}$ , and for average daily use of >3.5 h, OR = 30.255, CI = 10.799–90.456,  $p < 10^{-10}$ .

An Israeli Interphone study found significant risk of parotid gland tumors [31]. “For ipsilateral use, the odds ratios in the highest category of cumulative number of calls and call time without use of hands-free devices were 1.58 (95% confidence interval: 1.11, 2.24) and 1.49 (95% confidence interval: 1.05, 2.13), respectively.”

Another Israeli study showed that among the 3 salivary glands, the only increase was the parotid gland [32]. “The total number of parotid gland cancers in Israel increased 4-fold from 1970 to 2006. . . whereas two other salivary gland cancers remained stable.” Fig. 1 illustrates the enormous

increase in parotid gland tumors relative to other salivary gland tumors.

A newspaper in Israel reported “[S]alivary gland cancer, which researchers suspect to be linked to cellphone use, was disproportionately common among young patients. One fifth of those patients were under 20” [33].

### 3.2.3. Sperm damage

Perhaps more than any other adverse health effect from exposure to MWR, damage to sperm is the most documented including in vitro, in vivo and human epidemiological studies.

A 2005 study with data collection from November 2002 to March 2004 examined the motility of sperm. “The proportion of slow progressive motile sperm increased with increase of the duration of the daily transmission time  $p < 0.01$ ” [34].

A study of cellphone usage among men who attended an infertility clinic concluded, “Use of cell phones decrease the semen quality in men by decreasing the sperm count, motility, viability, and normal morphology. The decrease in sperm parameters was dependent on the duration of daily exposure to cell phones and independent of the initial semen quality” [35].

A Japanese study reported “This study has indicated significant decrease in sperm count [ $p = 0.004$ ] and motility [ $p = 0.003$ ] . . . because of exposure to MP [Mobile Phone] emission, respectively” [36].

An Australian study investigated how sperm cells are damaged by cellphone MWR. Its conclusions stated “RF-EMR [Radio Frequency–Electro Magnetic Radiation] in both the power density and frequency range of mobile phones enhances mitochondrial reactive oxygen species generation by human spermatozoa, decreasing the motility and vitality of these cells while stimulating DNA base adduct formation and, ultimately DNA fragmentation. These findings have clear implications for the safety of extensive mobile phone use by males of reproductive age, potentially affecting both their fertility and the health and well-being of their offspring” [37].

Professor Stanton A. Glantz is a Professor of Medicine at the University of California, San Francisco Medical School. He is also author of a renowned graduate level statistics textbook, *Primer of Biostatistics, Seventh Edition* [38]. Referring to the above four studies on sperm damage from MWR he concludes:

“Taking all the information we have discussed on cell phones and sperm allows us to confidently conclude that exposure to cell phones adversely effects sperm.”

A study of temperature controlled human sperm placed 3 cm beneath a laptop computer connected to Wi-Fi for 4 h [39] reported, “Donor sperm samples, mostly normozoospermic [normal sperm], exposed ex vivo during 4 h to a wireless internet-connected laptop showed a significant decrease in progressive sperm motility and an increase in sperm DNA fragmentation.” The study concluded “Ex vivo exposure of human spermatozoa to a wireless internet-connected laptop decreased motility and induced DNA fragmentation by a nonthermal effect. We speculate that



**Fig. 2.** SAM Phantom. The red devices are clamps to hold the cellphone in a specified location. “CTIA” is the Cellular Telecommunications Industry Association. Source: Speag Phantom Product Flyer.

keeping a laptop connected wirelessly to the internet on the lap near the testes may result in decreased male fertility.”

### 3.3. Tumor latency times

The average time between exposure to a carcinogen and the diagnosis of a resultant solid tumor is 3 or more decades. Brain tumors, like lung cancer and many other solid tumors have, on average, long latency times [8,40]. Therefore, it may be several decades before tumors induced by current MWR exposures in children are diagnosed. For example, the Israeli study showing brain tumor risk was inverse with age had long latency times [8]. In contrast the Aydin et al. study had relatively short latency times [24].

## 4. Discussion

### 4.1. Wireless device exposure limit certification

The FCC has approved two processes to certify that a wireless device meets the required exposure limit:

- (1) The computer simulation process, and
- (2) The Specific Anthropomorphic Mannequin (SAM) process.

The computer simulation process is discussed above.

The SAM process is based on a plastic mannequin representing the top 10% largest U.S. military recruits in 1989. Any head smaller than SAM will absorb more MWR (~97% of the U.S. population) [17]. A liquid with the average adult absorption properties of the 40 tissues of the head is poured into a hole at the top of this head. A robotic arm with an electric field probe is positioned within the mannequin such that the location of the highest electric field is located within any one cubic centimeter volume. A cellphone to be certified is clamped to either side of SAM (see Fig. 2). The electric fields values are used to calculate the maximum spatial peak Specific Absorption Rate (SAR) for any 1 g of

**Table 1**

A comparison of the capability to measure SAR using the computer simulation certification process or the SAM certification process for various exposures.

Attribute	SAM process	FDTD process	Comments
Children's exposure	No	Yes	Multiple ages
Pregnant women's exposure	No	Yes	1, 3 and 9 months
Female exposure	No	Yes	
Specific tissue parameters	No	Yes	
3-D resolution	~1 cm <sup>3</sup>	<1 mm <sup>3</sup>	
Relative cost	Higher	Lower	
Medical implant exposure	No	Yes	
Testicle exposure	No	Yes	
Female breast exposure	No	Yes	With and without wire frame bra
Eye exposure	No	Yes	With and without wire frame eyeglasses
Thyroid gland exposure	No	Yes	With and without metal necklace
Parotid gland exposure	No	Yes	With and without dental braces

Adapted from Gandhi et al. [17].

tissue (equivalent to 1 cm<sup>3</sup> volume). If the maximum SAR is at or below the U.S. exposure limit of 1.6 W/kg the phone is certified for sale without regard to the  $\pm 30\%$  tolerance of the SAM certification process [41].

Table 1 compares the capabilities of the two cellphone certification processes.

As can be seen in Table 1 the SAM process is not capable of determining the MWR absorption as measured by SAR in every category except the relative cost and volume resolution. Nevertheless, the SAM process has been *exclusively used* to certify every cellphone to date.

#### 4.2. Cellphone manual warnings and 20 cm distance rule

In spite of an FCC regulation “For purposes of evaluating compliance with localized SAR guidelines, portable devices should be tested or evaluated based on normal operating positions or conditions” [15], this regulation is ignored by the FCC. Holding a cellphone at a defined distance from your body is not “based on normal operating positions”!

For laptop computers, tablets and similar devices, an exposure limit that begins at a distance of 20 cm is not “based on normal operating positions.” Indeed the very term “laptop” computer defines the normal operating position, which when placed on the lap is not 20 cm distant.

#### 4.3. Increasing brain cancer incidence

There are studies showing an increased risk of brain cancer from wireless phone use. It is a current problem. The worst brain cancer, glioblastoma, has increased in the United States, and Denmark. Brain cancer incidence has increased in Australia in recent years. These results are based on brain cancer incidence from each country's cancer registries.

A United States study examined 3 cancer registries (Los Angeles County, California and SEER 12<sup>2</sup>) [42]. It examined incidence rates between years 1992–2006 and reported the Average Percent Change (APC) during those years. “RESULTS: Increased AAIRs [Age-Adjusted Incidence Rates] of frontal (APC +2.4–3.0%,  $p \leq 0.001$ ) and temporal (APC

+1.3–2.3%,  $p \leq 0.027$ ) lobe glioblastoma multiforme (GBM) tumors were observed across all registries . . . The AAIR of cerebellar GBMs increased according to CCR (APC +11.9%,  $p < 0.001$ ).”

The Danish Cancer Registry issued a press release that stated, “The number of men who are diagnosed with the most malignant form of brain cancer (glioblastoma), has almost doubled over the past ten years” [43].

The Australian study reported, “an overall significant increase in primary malignant brain tumors was observed over the study period from 2000 to 2008 (APC, 3.9; 95%CI, 2.4–5.4), particularly since 2004 (overall AAPC, 3.9; 95% CI, 2.6–5.2)” [44].

#### 4.4. Selling toys for infants and toddlers

The iPad, tablets, laptop computers and cellphones are not children's toys. Within 20 cm of the device, the exposure limit can be exceeded with iPads and laptop computers. Figs. 3–5 are examples of toys for sale (there are many more similar toys).

#### 4.5. Digital dementia

Digital dementia also referred to as FOMO (Fear Of Missing Out) is a real concern. A science publication's review



**Fig. 3.** An iPad placed within a rattle. Note the device is immediately over the boy's testicles.

<sup>2</sup> SEER 12 is cancer registry data maintained by the National Cancer Institute (NCI) using 12 States of the United States.



**Fig. 4.** 2-in-1 iPotty with Activity Seat for iPad.



**Fig. 5.** An iPad for entertaining a baby.

article describes the problem in great depth [45]. An empirical study of the problem was published in 2013 [46].

#### 4.6. Governmental warnings

Many countries have issue warning about children's cellphone use. Some examples are:

Turkey 2013:

Governor Aksoy Huseyin, of the Samsun province announced he would launch a cellphone campaign to bring awareness of their hazards.

Belgium 2013:

The Public Health Minister bans cellphone sales for children under 7 years old. Advertisements are also banned during children's TV programs.

Australia 2013:

The federal government created a fact sheet providing citizens ways to reduce exposure from wireless devices. The agency advises parents to limit children's exposure to cellphones.

France, 2010

Laws make advertising cellphones to children under the age of 12 illegal.

## 5. Conclusions

The risk to children and adolescent from exposure to microwave radiating devices is considerable. Adults have a smaller but very real risk, as well.

- (1) Children absorb greater amount of microwave radiation (MWR) than adults;
- (2) MWR is a Class 2B (possible) carcinogen as is carbon black, carbon tetrachloride, chloroform, DDT, lead, nickel, phenobarbital, styrene, diesel fuel, and gasoline. It seems clear that we would not expose children to these other agents, so why would we expose children to microwave radiation?
- (3) Fetuses are even more vulnerable than children. Therefore pregnant women should avoid exposing their fetus to microwave radiation.
- (4) Adolescent girls and women should not place cellphones in their bras or in hijabs.
- (5) Cellphone manual warnings make clear an overexposure problem exists.
- (6) Wireless devices are radio transmitters, not toys. Selling toys that use them should be banned.
- (7) Government warnings have been issued but most of the public are unaware of such warnings.
- (8) Exposure limits are inadequate and should be revised such that they are adequate.

## Acknowledgements

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# Agenda Item 5.3

## **P-04-586 All NHS Wales staff to be Paid at Least the Hourly Living Wage Rate of £7.65.**

### **Petition Wording:**

We call upon the National Assembly for Wales to recognise the vital work undertaken by staff working for the NHS in Wales, and urge the Welsh Government to implement the recommendation made by the NHS pay review body, and ensure that all NHS Wales staff are paid at least the hourly living wage rate of £7.65.

### **Additional Information:**

NHS staff do some of the hardest jobs in the world – saving lives, caring for people, and helping us stay healthy. It is essential that NHS staff are rewarded appropriately for the work that they do as they are undeniably worth it. The UK government has decided not to implement the recommendation made by the Pay Review Body (PRB) and UNISON believes that this is an insult to staff in England. We believe that the National Assembly and the Welsh Government should do all they can to stand up for NHS workers in Wales, and that must include awarding staff the PRB recommendation and ensuring staff are paid at least an hourly living wage rate.

**Petition raised by:** UNISON Cymru/Wales

**Date Petition first considered by Committee:** 23 September 2014

**Number of signatures:** 174

**P-04-586 All NHS Wales staff to be Paid at Least the Hourly Living Wage Rate of £7.65. – Correspondence from the Petitioner to the Committee, 06.02.15**

Dear Kayleigh

My apologies for the oversight in not responding to your initial e-mail.

This matter has now been resolved with Welsh Government through negotiations which led to a Wales only agreement on pay in the Welsh NHS. This agreement gave our members a lump sum payment of £187 (pro rata) for 2015/15, the implementation of the Living Wage from 1st January 2015 and a consolidated 1% uplift on all pay points from 1st April 2015. In addition, UNISON and the other Health trade unions have agreed to co-operate with the work of the Independent Review of the NHS Workforce which will be looking at future pay strategy for those staff paid under Agenda for Change terms and conditions.

We thank the Health Minister for his response to our concerns around the issue of pay for NHS Workers. We believe there is still much to do to redress the loss of value in our members' pay since 2010. However, we are committed to continue working with Welsh Government to find ways of addressing this and in contributing to the work of the Independent Review of the NHS Workforce.



# Agenda Item 5.4

## **P-04-601 Proposed Ban on the Use of E-Cigarettes in Public Places**

### **Petition wording**

We call upon the Welsh Government not to proceed with their proposed ban on the use of e-cigarettes in enclosed public spaces, substantially enclosed public places, and places of work in Wales. This proposal, if implemented, can only lead to fewer people using e-cigarettes and more people smoking cigarettes.

### **Additional Information:**

Already 100,000 people in Wales are using e-cigarettes. These people are smoking fewer or no cigarettes; this should be a cause for celebration, not concern. A recent BBC poll found that 62% of the public opposed a ban on the use of e-cigarettes in public. In Spain where a ban on the use of e-cigarettes in public was introduced, there was a 70% decline in the use of e-cigarettes and a rise in the rate of smoking. We fear the same will happen in Wales if the Welsh Government implements their proposed ban. With a ban on the advertising and promotion of e-cigarettes soon to be introduced, following the passing of the Tobacco Products Directive, where are smokers to find out about e-cigarettes, particularly if they are banned in public places? Smokers need to see people using e-cigarettes in public, they need to be able to go up and speak to e-cigarette users so that they can find out further information and then hopefully make the switch to a safer alternative.

**Petitioner:** Simon Thurlow

**First considered by the Committee:** 7 October 2014

**Number of Signatures:** 1,196 electronic signatures

Mark Drakeford AC / AM  
Y Gweinidog Iechyd a Gwasanaethau Cymdeithasol  
Minister for Health and Social Services



Llywodraeth Cymru  
Welsh Government

Eich cyf/Your ref P-04-601  
Ein cyf/Our ref MD/00122/15

William Powell AM  
Assembly Member for Mid & West Wales  
Chair - petitions committee  
Ty Hywel  
Cardiff Bay  
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CF99 1NA

committeebusiness@Wales.gsi.gov.uk

2 February 2015

Dear William,

Thank you for your recent letter regarding Petition P-04-601 - Proposed ban on E-Cigarettes in enclosed public spaces, and for sight of the correspondence from Mr Simon Thurlow on behalf of the Save E-cigs Campaign.

I am grateful to you for forwarding this for my attention as I believe it is important that we continue to look at all the available information in relation to this matter.

The petitioner has recently met with my officials to discuss the issues raised in his letter. They have explained the legislative process, and so he is aware of the opportunities for continuing dialogue on this matter.

Best wishes,

Mark.

**Mark Drakeford AC / AM**  
Y Gweinidog Iechyd a Gwasanaethau Cymdeithasol  
Minister for Health and Social Services

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**P-04-601 Proposed Ban on the Use of e-cigarettes in Public Places – Correspondence from the Petitioner to the Committee, 13.02.15**

William Powell AM  
Assembly Member for Mid & West Wales  
Chair Petitions Committee  
Ty Hywel  
Cardiff Bay  
Cardiff CF99 1NA

Dear Mr Powell,

I would like to thank you and the Petitions Committee for continuing to keep myself and my colleagues at the Save E-cigs campaign informed as to the progress of our petition against the proposed ban on vaping in enclosed public places.

We would like to put on record our extreme disappointment regarding the Health Minister's response to your Committee's latest letter. It is dismissive at best and fails to tackle any of the substantive points raised by Save E-cigs or your Committee.

We remain deeply concerned that Mr Drakeford and his officials are pushing ahead with this proposal without regard to the evidence. This is in stark contrast to the Scottish Government who, like the Welsh Government, also proposed a ban on vaping in enclosed public places. The Scottish Government chose to engage with the vaping community from the outset of their consultation process including the holding of at least one round-table meeting. Having listened to all the evidence, we have been informed that the Scottish Government will not now be pursuing their proposal to ban vaping in enclosed public places.

You may also be aware that there has been a debate taking place in Westminster as to whether or not MPs, Peers, staff, and visitors can vape in the Palace of Westminster. The initial view, reported in the press, was that vaping should be banned. However, like the Scottish Government, they chose to engage with interested parties on all sides of this debate and agreed to allow vaping. Vaping is now allowed in dedicated areas in Portcullis House, offices, and the Stranger's bar (the main bar in the Palace of Westminster).

We would also like to bring to your committee's attention a debate that took place in the House of Lords on e-cigarettes. During this debate the Health Minister The Earl Howe said, "The levels of toxicants in e-cigarette vapour were very much lower than those found in

conventional cigarette smoke and not considered to pose any significant passive inhalation risk.”

It is extremely disappointing, not to mention rather worrying, that Mr Drakeford refuses time and time again to engage with the evidence. In all the letters that both your committee and Save E-cigs has sent him he has not once engaged with the independent expert evidence that we have provided. Perhaps this is because it does not suit his agenda? More importantly, we feel that Mr Drakeford’s conduct to date reflects badly on the Welsh Government when compared to the examples highlighted above from Scotland and Westminster. This should be of concern to all those with an interest in Welsh politics.

The one body that Mr Drakeford continues to quote as supporting his proposed ban on vaping in enclosed public places is the World Health Organisation. Interestingly the Scottish Government, the Department of Health in England, and the Palace of Westminster authorities chose to discount the WHO’s advice on public vaping. On the subject of the WHO we would like to draw your committee’s attention to a significant intervention from Robert West, Professor of health psychology and director of tobacco studies at University College London’s department of epidemiology and public health, in relation to the WHO’s advice relating to e-cigarettes. He said, and I quote, that it was “a shocking piece of deception” and that “Someone at the top in the organisation needs to get a grip on this.”

As your committee will be aware, we have met with AMs from right across the political spectrum to discuss our concerns regarding this issue and have found all of them supportive of these concerns and in total agreement with our viewpoints. This has included meetings with Kirsty Williams, Elin Jones, and Darren Millar – all of whom are responsible for health issues within their respective parties.

No doubt when your committee meets there will be pressure to close our petition. We feel strongly that this would be the wrong thing to do. Whilst Mark Drakeford continues to demonstrate a failure to engage with the actual evidence, we feel that it is your committee’s duty to pursue this issue.

Each and every time we communicate with your committee we are able to provide you with fresh and independent evidence in support of our petition. When faced with the arguments from both sides of this debate the Scottish Government chose not to pursue a ban on public vaping. When faced with the arguments from both sides of this debate the Westminster authorities chose not to ban vaping. When faced with the arguments from both sides of this debate the UK Government concluded that passive vaping did not pose a significant risk. This

is in stark contrast to the Welsh Government who has chosen not to fully engage with the vaping community or the significant amount of evidence that has been provided.

The Petitions Committee must therefore continue to pursue our petition. If not Mark Drakeford will have essentially been allowed to simply ignore the views of the 1,196 vapers who signed our petition. The petitions process was designed to give the Welsh electorate a voice and a platform to raise their concerns. Whilst we cannot expect Mark Drakeford to agree with everything we say, we can at the very least, expect him to engage with us and your committee in a constructive manner. If Mark Drakeford is simply allowed to dismiss our petition and the extensive evidence that we have provided then we are left with little option but to ask what is the point of this committee?

Finally, I would like to bring to your attention the fact that Professor Linda Bauld (University of Stirling, UK Centre for Tobacco and Alcohol Studies (UKTAS) and Cancer Research UK) will be addressing a breakfast meeting for AMs on the 25<sup>th</sup> of March 2015. She will be speaking specifically on the topic of e-cigarettes. Professor Linda Bauld is one of the key advisers to the aforementioned Scottish Government consultation. As a campaign we would urge all members of your committee (and indeed all AMs) to attend this important meeting as it will be a wonderful opportunity to hear from a leading authority on the subject of e-cigarettes.

Yours sincerely

Simon Thurlow

On behalf of the Save E-cigs Campaign

## **P-04-603 Helping Babies Born at 22 Weeks to Survive.**

### **Petition wording**

We call upon the National Assembly for Wales to urge the Welsh Government to:

- change the guidelines so that babies born after 22 weeks and who show signs of life are given appropriate medical care; and
- In changing these guidelines ensure that they include a guarantee that a Paediatrician will review and weigh every baby born after 22 weeks who shows signs of life immediately after their birth so that parents and clinicians can make informed decisions based on the individual baby's chance of survival.

**Petitioner :** Emma Jones

**First considered by the Committee:** 25 November 2014

**Number of Signatures:** 2,543 electronic signatures and 216 paper signatures collected. Total: 2,759



Mark Drakeford AC / AM  
Y Gweinidog Iechyd a Gwasanaethau Cymdeithasol  
Minister for Health and Social Services



Llywodraeth Cymru  
Welsh Government

Eich cyf/Your ref P-04-603  
Ein cyf/Our ref MD/00088/15

William Powell AM  
Assembly Member for Mid & West Wales  
Chair - petitions committee  
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31 January 2015

*Dear William,*

Thank you for your letter of 9 January regarding Emma Jones's petition in relation to the care of babies born after 22 weeks gestation.

This is of course a very sensitive issue, and I am not aware of all the details of Emma Jones's case, beyond those she has provided in her letters. I would like to clarify my earlier comments to explain that clinically speaking resuscitation describes the need to support breathing where a baby is unable to continue breathing unaided. The details provided suggest that her child was unable to continue breathing independently and would therefore have required resuscitation, and that is why I referred to resuscitation in my previous letter.

To expand on my letter of the 31 October, whilst the care of the mother and her baby will always need to be individualised, clinicians are guided in their judgements by current guidance, in this case that would be the British Association of Perinatal Medicine and the Nuffield Council Guidelines. These guidelines are based on extensive evidence and set out current best practice, and they are reviewed and updated to take account of improvements in clinical care. Both guidelines consider that resuscitation of babies below 23 weeks should only be carried out in exceptional circumstances.

An appointment has been offered for Emma to discuss these issues with the Welsh Government Professional Adviser for Maternal and Child Health, Dr Heather Payne, but no response to this offer has so far been received. This offer of course still stands and I would encourage Emma to take up this offer. Of course, the clinicians involved in the delivery of

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Wedi'i argraffu ar bapur wedi'i ailgylchu (100%)  
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Emma's baby would be best placed to discuss the precise issues relating to that birth, and the decisions made subsequently.

In response to your enquiry on behalf of the committee, as to whether "medical assistance should be given to babies born alive and breathing", my view is that for babies born before 23 weeks of gestation the position is both difficult and nuanced. I consider that decisions need to be made by the clinicians involved, in discussion with the parents whilst taking account of the current best guidance practice.

Best wishes,

Mark

**Mark Drakeford AC / AM**

Y Gweinidog Iechyd a Gwasanaethau Cymdeithasol  
Minister for Health and Social Services

**P-04-603 Helping Babies Born Under 22 Weeks to Survive –  
Correspondence from the Petitioner to the Chair, 11.02.15.**

Chair of the Petitions Committee, William Powell

This is my response to the health minister Mark Drakeford's recent letter dated 31/01/15. I will start with saying I agree that this is a sensitive issue and this is the whole reason why I am asking for change. The guideline as it is set is not in the interest of the baby when the baby is born breathing, it is uncertain to say whether or not any baby born before 23 weeks will or will not survive but when it is born independently breathing it should be given the chance and not immediately left to die because of sadistic or seen as a percentage. There is no fact that that baby wouldn't survive, that baby could be the low percentage but no one will know until each baby is given that chance. If each baby born independently breathing at or after 22 weeks they should be seen as a full term baby, just because that baby has sadly been born early at no fault of its own does not mean it has any less right to be medically helped or have its rights taken away from them.

As the health minister has explained resuscitation is set on the guideline as to been seen by medical professionals as when a baby needs support to continue breathing, meaning the baby will need resuscitation to stay alive. If this is true then how long does a baby need to be independently breathing before given help? As the committee know the reason I began this petition was because of my personal loss, my son was born breathing at 22+3 days and breathing, he breathed independently for 83 minutes with no help. We were told he couldn't have any help because of his gestation, the fact that he was breathing was of no interest to them. No higher medical staffs were called apart from the midwives on that ward, no one came and discussed any options or the outcome with me. The midwives just referred to the guideline as it was set in stone.

What are exceptional circumstances? When is a baby seen as valuable enough to be helped? How long before help is given after a baby is born and struggling to stay alive. My son lasted 83 minutes but he was not seen as an exceptional circumstance for even the paediatricians to come down before he finally gave up!

As the minister states in his letter each mother and baby needs to be individualised. This is not the action taken in these hospitals, I was not individualised and neither was my son.

He says the situation will always need to be individualised by clinicians; they should be guided by current guidance. They are not seeing this guideline as guiding them but as a set guideline, they are not using it to make a decision for a baby but as that's how it is and that's its attitude. I know this from not only my own experience in the hospital but from parents contacting me with their stories on how their baby was treated and left to die. Since starting this petition I have been contacted various ways by families who have lost their baby from not being helped after being born before 23 weeks but breathing independently. I have all these saved and have the support of families for this petition. What is going on? How can all these babies before 23 weeks be left to die because of their age. If the baby is fighting for a chance the baby should be given help each time, it is that baby's decision whether or not it'll live not the midwives at that time of labour.

It is frustrating to hear the health minister say the guideline does include 'exceptional circumstances' what do these babies born breathing have to do to be an exceptional circumstance. What qualifies the baby chosen to be helped, to be given the chance that each baby should have. It is as if the guideline is a lucky baby guideline, one lucky baby gets chosen to be given help. My son was not even looked at, so how do we know he wasn't that baby who'd survive out of your percentage! Babies no matter how small should never be seen as a percentage.

For us parents who have suffered the loss of a premature baby in the hands of medical staff are taking a stand and I will not let other parents go through this in the future, our son like many others should not be seen as a possible death but as hope and hope that that baby survives. Until each baby is given that chance is born with signs of life we will not know which baby will pull through or which baby will sadly die but each needs the help to have that chance to be the baby that survives. Leaving a baby breathing to die is not in the best interest of the baby or the mother, the baby fights till the end and is given no hope and the mother will always wish the medical staff there that day helped her baby and why their baby wasn't chosen to be saved. I will be fighting for each baby to be that one baby given the chance of hope and medical assistance he/she needs. Leaving a baby to die is murder and there is no other word than letting a baby die other than that.

Emma Jones

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## Agenda Item 5.6

### **P-04-608 Inquiry into the Welsh NHS**

We call upon the National Assembly for Wales to urge the Welsh Government to hold a full and comprehensive inquiry into the Welsh NHS. This diagnostic inquiry will ensure that all matters of concern are identified and addressed, and that standards in the Welsh health service are continually improved for the sake of NHS staff, patients and the people of Wales

**Petitioner :** PJ Vanston

**First considered by the Committee:** 9 December 2014

**Number of Signatures:** 146

Mark Drakeford AC / AM  
Y Gweinidog Iechyd a Gwasanaethau Cymdeithasol  
Minister for Health and Social Services



Llywodraeth Cymru  
Welsh Government

Eich cyf/Your ref P-04-608  
Ein cyf/Our ref MD/00172/15

William Powell AM  
Chair - Petitions Committee  
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committeebusiness@Wales.gsi.gov.uk

5 February 2015

*Dear William,*

Thank you for your further letter on behalf of the Petitions Committee regarding petition P-04-608 which calls for a 'full and comprehensive inquiry into the Welsh NHS'.

All health systems, both in the UK and internationally, are facing up to the same pressures and challenges of how to manage increasing demand caused by a growing older population, the development of chronic conditions and an increasing development of new technologies, clinical practices and drugs at a time when we have a responsibility to manage within our resources. Despite these pressures and challenges surveys and patient feedback consistently demonstrate a high level of satisfaction with the NHS in Wales.

I would again stress that the Welsh NHS is the most closely inspected and scrutinised health service of all the four nations in the UK, with more bodies charged with ensuring quality and safety standards are maintained for patients. Despite this, where problems are identified or concerns raised the NHS and the Welsh Government will, and has, acted. The publication of the Trusted to Care report last year is clear evidence of such action. Although this dealt with concerns in two hospitals, all-Wales action has been taken in response, including a comprehensive programme of unannounced spot check visits to every acute hospital in Wales. The findings from these visits have been published for all to see.

It is also important to set in context that the Keogh report was based on the review of a small number of trusts in England; it was not an inquiry into the English NHS.

Inquiries by their very nature focus on looking back and can hinder any progress with ongoing continuous improvement. They are also very costly, with the inquiry into Mid

Staffordshire NHS Foundation Trust having cost over £13 million as one example.  
Ultimately, any penny spent on an inquiry is a penny less for frontline care.

Best wishes,

Mark

**Mark Drakeford AC / AM**

Y Gweinidog Iechyd a Gwasanaethau Cymdeithasol  
Minister for Health and Social Services



# Agenda Item 5.7

## **P-04-422 : Fracking**

### **Petition wording:**

We call upon the National Assembly for Wales to urge the Minister for Environment and Sustainable Development to produce a Ministerial Interim Minerals Planning Policy Statement as well as a new technical advice note to strengthen the precautionary principle with regard to planning applications for onshore oil and gas, including fracking. All reasonable scientific doubt that there is any risk of adverse impacts must be eliminated, and strongest consideration must be given to the urgent need to mitigate climate change.

**Petition raised by:** Friends of the Earth Cymru

**Date petition first considered by Committee:** 2 October 2012

**Number of signatures:** Approximately 1000

Carl Sargeant AC / AM  
Y Gweinidog Cyfoeth Naturiol  
Minister for Natural Resources



Llywodraeth Cymru  
Welsh Government

Eich cyf/Your ref P-04-422  
Ein cyf/Our ref CS/00060/15

William Powell AM  
Chair Petitions Committee  
Ty Hywel  
Cardiff Bay  
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CF99 1NA

*27th* January 2015

Dear Bill,

Thank you for your letter dated January 2015 which seeks my views on the document "All that glitters..." and the related "petition" against fracking submitted to the Petitions Committee by Gareth Clubb.

I understand that the petition comprised around 2,080 signatories on postcards and petition papers referencing Friends of the Earth Cymru, Friends of the Earth and Frack Free Wales. A further 44 signatures were received on petition papers from Frack Free Llantrisant.

It is important to note that oil and gas matters are not devolved to Wales and remain the responsibility of the UK Government. However, detailed policy advice on shale gas, as well as other forms of unconventional oil and gas projects, is contained in national planning policy, specifically Minerals Planning Policy Wales. The policies set out a precautionary approach and identify the environmental impacts that must be addressed by planning authorities to ensure that any proposed development does not impact adversely on the environment, communities or wider society.

On the 8<sup>th</sup> July I issued a Clarification Letter (CL-04-14) to Chief Planning Officers in Wales. The letter reinforces the relevant national planning policies and their application for onshore unconventional oil and gas development. This is available online at: <http://wales.gov.uk/topics/planning/policy/policyclarificationletters/2014/cl-04-14/?lang=en>

It should be noted that planning permission, which will be required for each separate stage of unconventional oil and gas activities, (exploration, appraisal and extraction,) is one aspect of the rigorous regulatory consent and permitting regime. Natural Resources Wales, the environmental regulator for Wales and a statutory consultee in the planning process in Wales, has responsibility for issuing permits to ensure the protection of the environment. In addition, the Health and Safety Executive regulate and monitor industry practice and operation for the purposes of public safety.

The Welsh Government has worked with the Office for Unconventional Gas and Oil on the production of a regulatory roadmap for onshore oil and gas exploration for Wales, which was published in December 2013. This regulatory roadmap sets out the regulatory and permissions process for exploratory work in oil and gas development onshore in Wales. This is available at: <https://www.gov.uk/government/publications/regulatory-roadmap-onshore-oil-and-gas-exploration-in-the-uk-regulation-and-best-practice>.

We will continue to consider all the available evidence as it emerges including, where necessary bespoke Wales based studies to determine the potential impact on the Welsh environment and the people of Wales.

Yours sincerely

A handwritten signature in black ink, appearing to be 'CS' or similar initials, written in a cursive style.

**Carl Sargeant AC / AM**  
Y Gweinidog Cyfoeth Naturiol  
Minister for Natural Resources



**Cyfoeth  
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William Powell AM  
Chair, Petitions Committee  
National Assembly for Wales  
Cardiff Bay  
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CF99 1NA

Dear William,

**Petition: P-04-422 Fracking**

Thank you for the opportunity to provide our views on the petitioner`s document `All that glitters` (June 2014) and on the specific comments about the lack of guidance provided by Natural Resources Wales.

The petitioner`s document covers a range of themes and over-arching issues, many of which, such as national energy policy, planning and access rights, are within the remit of other bodies to consider and address. The attached document, Appendix 1, sets out the specific role of Natural Resources Wales in relation to unconventional onshore oil and gas activities and processes in Wales.

In discharging our role and duties we recognise that the prospect of exploiting any potential unconventional onshore oil and gas reserves in Wales is of considerable interest to Welsh citizens and, as an organisation, we aim to ensure that our evidence base and decision making process is robust and transparent.

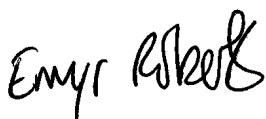
As outlined in our response to your Committee on 20 May 2014, we believe that our regulatory and enforcement roles help to ensure that onshore oil and gas operations in Wales are managed in a way that protects public health and the environment. We are clear on our approach to the regulation of exploratory

activity and the range of permits, consents and licences required by developers (see attached document – Annex 1). We have met with the majority of the companies who hold the 24 PEDL licences across Wales to discuss and confirm our regulatory approach.

To date, NRW has received five applications for a permit in relation to onshore oil and gas exploratory activity. We are thereby able to provide bespoke advice and guidance to operators and decision makers on how best to satisfy regulatory requirements.

We are therefore confident that the current approach to environmental regulation is appropriate for protecting public health and the environment from the risks associated with exploratory onshore oil and gas activity in Wales. As the industry develops and moves to appraisal testing and full scale commercial production other issues may emerge which may require revisions to our approach or new legislation.

I hope the information I have provided with this letter assures you that Natural Resources Wales is clear on its role, remit and approach to environmental regulation of onshore oil and gas development in Wales. If you have any further queries, please do not hesitate to contact me or Ceri Davies the Executive Director of Knowledge, Strategy & Planning who leads on this technical area for NRW.



Yours sincerely  
**Emyr Roberts**

**Prif Weithredwr**

**Chief Executive**

Appendix 1

## **Unconventional Onshore Oil and Gas Activities and Processes and the role of Natural Resources Wales**

## Summary of unconventional onshore oil and gas activities and processes

The process of testing, delineation and drilling are integral to all forms of hydrocarbon reservoir development. Oil and gas are moved to the surface from underground reservoirs either through natural pressure or through induced pressure by means of pumps or hydraulic fracturing (fracking).

The distinction between conventional and unconventional oil and gas reflects differences in how the oil or gas is held underground, either freely in an underground reservoir (conventional) or within rocks (unconventional).

Unconventional gas can take a number of forms:

- Shale gas – natural gas trapped in fractures and pore spaces within fine grained sedimentary shale rocks;
- Coal bed methane (CBM) – methane held within the coal by adsorption;
- Underground Coal Gasification (UCG) – igniting and partially combusting coal in situ and extracting the gasification products (known as syngas).

The regulatory regime covering conventional and unconventional oil and gas is exactly the same. For ease of explanation we use the term “onshore oil and gas” rather than draw the distinction between conventional and unconventional oil and gas.

The technologies used to extract the gas require the drilling of boreholes. Where there is insufficient natural permeability, both shale gas and coal bed methane extraction can be enhanced by using a technique known as hydraulic fracturing or “fracking”. Fluid<sup>1</sup> is pumped into the borehole at pressure to create and increase fractures in the shale to release gas and in coal beds to release methane.

Underground coal gasification requires the drilling of two boreholes into the coal seam. Through one borehole water/steam and oxygen are injected and ignited to partially combust the coal. The syngas (the resulting gases) are extracted through the second borehole.

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<sup>1</sup> A combination of water, sand and chemicals.

Shale gas and coal bed methane techniques have been widely deployed in America. Underground coal gasification has been deployed in Australia, India and Scotland. Application of these technologies in the UK has been very limited, and unconventional gas is not yet contributing to the UK energy mix. The technology is being applied in an exploratory way to determine the availability of resource.

There are a number of phases in the development of onshore oil and gas, although not all phases may apply to underground coal gasification:

- Licensing
- Exploration – likely to involve the drilling of one borehole to assess the level of resource available at the specific site.
- Appraisal – likely to include a small element of production with an increase in the number of boreholes, to assess the technical feasibility and costs of extracting the oil or gas at the specific site.
- Production – full scale commercial production. This is likely to require a large number of boreholes and associated surface operations.
- Abandonment and site remediation.

At each stage, the developer will be required to secure separate planning permissions, environmental permits and other notifications. The cumulative environmental impact at each phase is likely to be different. Should a developer receive permissions and permits for the exploratory phase of work, the cumulative impact will be considered when determining whether to issue permissions and/or permits for the appraisal or production phase.

Activity across Wales is currently focused on exploration for shale gas and coal bed methane.

### **Overview of current regulatory tools and advice**

The regulatory framework governing onshore oil and gas is complex, and requires licensing and permissions from a number of organisations (see Annex 1, the



required consents and Annex 2 for a list of regulators and other bodies). The Department of Energy and Climate Change (DECC) control the extent and pace of onshore oil and gas development across England and Wales through the issue of Petroleum Exploration and Development (PEDL)<sup>2</sup> licences under the Petroleum Act 1989. This matter is not devolved to Welsh Ministers. Once a developer has secured a PEDL licence they must seek additional permissions from the local planning authorities, Natural Resources Wales, Coal Authority, British Geological Society and HSE before exploratory work can start. The full list of permissions required is set out in Annex 1.

The UK Government has published the UK Regulatory Roadmap<sup>3</sup> which provides a useful overview of the process for shale gas and coal bed methane. The road map highlights the regulatory and other statutory bodies, relevant legislation and regulations, and identifies required actions and best practices for onshore oil and gas exploration in the UK. The Roadmap provides the whole picture on the current UK exploratory regulatory regime.

On 22 January 2014, the European Commission published a Recommendation<sup>4</sup> setting out minimum principles for the regulation of high volume hydraulic fracturing used in hydrocarbon exploration and production. The purpose of the Recommendation is to ensure that the public health, climate and environment are safe-guarded, and that the public is appropriately informed, should unconventional onshore gas resources be exploited across the EU.

NRW has been working closely with Welsh Government, DECC (Office of Unconventional Oil & Gas) and DEFRA in addressing and responding to the Recommendation. In particular, we have undertaken a detailed review of how the current regulatory regime addresses the Recommendations. The Commission will review the effectiveness of the Recommendation eighteen months after its

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<sup>2</sup> <https://www.gov.uk/oil-and-gas-petroleum-licensing-guidance>

<sup>3</sup> <https://www.gov.uk/government/publications/regulatory-roadmap-onshore-oil-and-gas-exploration-in-the-uk-regulation-and-best-practice>

<sup>4</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014H0070>

publication (August 2015), at which point it will decide whether to propose new legislation.

Our regulation, compliance and enforcement roles help to ensure that onshore oil and gas operations in Wales are managed in a way that protects public health and the environment. In addition to a PEDL, an Underground Coal Gasification (UCG) licence where appropriate, planning permission from the relevant Local Planning Authority (LPA), confirmation from the HSE that well designs and operating procedures are satisfactory, any operator would also require environmental permits from Natural Resources Wales before any operations could start. The precise nature of the permits required depends on the activities proposed and site specific circumstances. There are potentially eleven permits, consents and permissions required from Natural Resources Wales for onshore oil and gas activities in Wales (see Annex 1).

In common with other industry sectors there is no specific regulation for UOSOG. However, Natural Resources Wales is satisfied our existing regulatory tools will help ensure that exploratory onshore oil & gas activities are managed in a way that protects public health and the environment. This position will be reviewed over time as new information and data is generated.

### **The role of NRW regarding unconventional onshore oil and gas**

Natural Resources Wales undertakes five main roles in relation to unconventional onshore oil & gas activities;

#### **Advisory:**

We give advice and guidance to developers on the potential environmental and landscape impacts at a site, which may need to be addressed in a permit application and/ or an Environmental Impact Assessment; we are a statutory consultee to planning authorities on planning permissions for surface operations at a site; and we provide advice on consenting activities which may have an impact on the integrity of designated sites.

**Regulatory:**

As an environmental regulator we will assess individual onshore oil & gas proposals against a number of different pieces of legislation, and if appropriate, issue permits, licences & consents. In issuing these permits Natural Resources Wales will have to screen for and carry out a Habitats Regulation Assessment for any consents that are likely to have a significant impact on Natura 2000 (N2K<sup>5</sup>) sites.

**Monitoring and Compliance:**

Monitor compliance at each site to ensure that the environmental risks are properly managed through audits, site inspections, spot check monitoring and reviewing operator records and procedures.

**Incident management:**

We have a role in managing pollution incidents, responding to pollution events and acting to minimise potential impacts on residents and the local environment.

**Land owner and manager:**

We own land in various parts of Wales where exploration may take place. We are also the land manager of the Welsh Government Woodland Estate which may fall within the boundaries of the PEDL licences issued by DECC. The PEDL licences are issued by DECC as part of a competitive leasing round and allow the holder rights to explore and produce conventional and/or unconventional sources of oil and gas.

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<sup>5</sup> [http://ec.europa.eu/environment/nature/natura2000/index\\_en.htm](http://ec.europa.eu/environment/nature/natura2000/index_en.htm)

If any new proposals come forward for land managed by Natural Resources Wales, we will ensure that there is clear separation of duties, clarity of role and transparency in the way which we administer our functions (as we do for other regimes where we have dual roles).

### **Our approach to regulation to support natural resource management**

Natural Resources Wales is the regulatory authority in Wales for a wide range of environmental legislation. We are responsible for more than 40 different types of regulatory regimes across a wide range of activities. Across these regimes, including the regulation of onshore oil and gas, we are committed to the principles of better regulation, the Regulators' Code and our Regulatory Principles<sup>6</sup>. This necessitates a risk based, outcome focused and evidence led approach to advising and regulating onshore oil and gas developers. Further information on these principles can be found in Annex 3 and the foot notes.

### **Directives and UK legislation.**

We continue to work with Welsh Government, the Environment Agency and SEPA as well as the Office of Unconventional Oil & Gas at DECC to ensure that we are aware of any emerging issues that may require a change in our regulatory approach.

In Wales there is limited opportunity for shale gas exploration due to the local geology. There are greater opportunities for coal bed methane and underground coal gasification exploration. As activity across Wales is focused on the exploration phase, and is currently limited to only a small number of sites, we are able to meet with individual developers to confirm our regulatory approach and understand their plans for developing sites in Wales. This approach enables NRW to fully familiarise itself with site specific issues, how the industry may develop

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<sup>6</sup> <http://naturalresourceswales.gov.uk/content/docs/pdfs/how-we-regulate-you/our-approach-to-regulation-to-support-natural-resource-management.pdf?lang=en>

over time, and how to best deploy our regulatory tools. We are thereby able to provide bespoke advice and guidance to operators on how best to satisfy regulatory requirements.

We have written to the ten companies who hold the twenty-four PEDL licences across Wales, and have already met with the majority of them. To date NRW has received only five applications for a permit in relation to onshore oil and gas exploratory activity.

Following these discussions, we are confident that our current approach to environmental regulation is appropriate for protecting public health and the environment from the risks associated with exploratory onshore oil and gas activity in Wales. As the industry develops, and if it moves to appraisal testing and full scale commercial production, we will review our approach based on the best available information.

## Summary

- We believe that our current regulatory tools are appropriate for the regulation of exploratory onshore oil and gas activities.
- We have appropriate access to existing guidance and expertise to enable effective regulation of the exploratory phase (and whenever appropriate, we will publish or link available guidance on our external website).
- We will review the requirement to evolve our regulatory approach should developers wish to attain authorisation for appraisal and production phases.
- We will continue to work with the UK and Welsh Governments and the respective agencies to consider the emerging science on unconventional gas, to ensure that our approach to regulation is based on the best available evidence.

**Annex 1 – List of Consents, Licences and Permissions potentially required from Natural Resources Wales (NRW) for exploration of onshore oil and gas activities.**

There are potentially eleven licences or consents required from NRW, five of which fall under the Environmental Permitting (England & Wales) Regulation 2010 (as amended) (EPR). The list as follows but not limited;

### Types of Permits

### Conditions

#### Groundwater Activity

Unless we are satisfied that there is no risk of inputs to groundwater

#### Mining Waste Activity

Likely to apply in all circumstances

#### Industrial Emissions Activity

When the Operator intends to flare more than 10 tonnes of gas per day). If it is less than 10 tonnes of gas per day it is subject to Mining Waste Activity.

#### Radioactive Substances Activity

Likely to apply in all circumstances where oil and gas is produced.

#### Water Discharge Activity

If surface water run-off becomes polluted, for example due to a spill of diesel fuel

### Licences

### Conditions

#### European Protected Species

May be required where there is potential to have adverse effects. May also be subject to assessment under the Conservation of Habitats

and Species Regulations 2010.

## **Water Abstraction License**

If the Operator plans to abstract more than 20m<sup>3</sup>/day for their own use, rather than purchasing water from a public water supply utility company

## **Consents**

## **Conditions**

### **Groundwater Investigation Consent**

To cover drilling and test pumping where there is the potential to abstract more than 20m<sup>3</sup>/day in the production process

### **Flood Risk Consent**

If the proposed site is near a watercourse or main river

### **Site of Special Scientific Interest (SSSI's)**

Consent required where there is potential to impact these sites

May also be subject to assessment under the Conservation of Habitats and Species Regulations 2010

## **Permission**

Operators must serve a notice to NRW under Section 199 of the Water Resources Act 1991 to "construct a boring for the purposes of searching for or extracting minerals"



## **Annex 2 – Role of others Regulators and bodies**

As well as NRW there are a number of other regulators involved in the control of onshore oil & gas exploration operations;

**Department of Energy & Climate Change (DECC)**

DECC is responsible for issuing the Petroleum Exploration & Development Licence (PEDL). This licence gives an operator exclusive rights to prospect for all petroleum types (conventional and

unconventional oil & gas) in a licensed area. The licence confers exclusivity in a defined area against other exploration companies, but does not confer any exemption from other legal/regulatory requirements. Licence holders are also obliged to seek DECC's permission before they start any well operations.

#### **Local Planning Authority (LPA)**

LPA is responsible for granting planning permission (under the Town and Country Planning Act 1990) for surface related development. It may require operators to submit an Environmental Impact Assessment (EIA), Habitats Regulation Assessment (HRA) and Waste Management Plan with the applications. NRW is a statutory consultee to planning applications.

#### **Health and Safety Executives (HSE)**

HSE has a primary responsibility for ensuring safe practices in well design, integrity and construction at given location. They regulate the safety aspects of the drilling work. Operators need to provide HSE with details of the proposed well design that has been examined by an independent, competent well examiner. They must also notify HSE

of their intention to drill (minimum 21 days notice).

### **Coal Authority**

Coal Authority consent is needed for any activity which intersects disturbs or enters coal seams. The Coal Authority is part of DECC. Underground Coal Gasification licences are issued by the Coal Authority

### **British Geological Survey (BGS)**

BGS requires information on: any borehole that is intended to penetrate to a depth greater than 100 feet; or on the deepening of an existing well. Operators are required to keep a record in the form of logs and cores or fragments for a period of six months and must allow authorised officers of BGS to access at all reasonable times

### **Annex 3 – Our approach to regulation to support natural resource management**

The Regulators' Code is part of a package of measures to improve the relationship between regulators and those they regulate and to overcome barriers to growth, by improving the way regulation is delivered.

The Code states that:

- Regulators should carry out their activities in a way that supports those they regulate to comply and grow.
- Regulators should provide simple and straightforward ways to engage with those they regulate and hear their views.
- Regulators should base their regulatory activities on risk.
- Regulators should share information about compliance and risk.

- Regulators should ensure clear information, guidance and advice is available to help those they regulate meet their responsibilities to comply.
- Regulators should ensure that their approach to their regulatory activities is transparent.

This Regulators' Code is not statutory in Wales, although Welsh Government requires us to have regard to it in discharging our regulatory functions. Therefore, we will adopt the Regulators' Code resulting in this being embedded into our regulatory approach.

Our delivery of this Regulators' Code provides a mechanism to deliver a number of our own Regulatory Principles:

1. **Deliver outcomes** – We seek to deliver environmental outcomes, not just deliver regulation, seeking to deliver shared outcomes where we can.
2. **Prepared to challenge** – We will challenge and address barriers where they don't contribute to the environmental outcome.
3. **Be flexible** – We seek to be flexible and tailor the approach to the needs of the recipient, using innovation and novel approaches where appropriate and learning from past experience.
4. **Be intelligent** – We should use all available evidence from a range of sources and seek to ensure the data we collect from those we regulate contributes to the evidence to inform action to deliver outcomes.
5. **Use the full range of tools available** – We seek to apply a wide range of tools, chosen for their effectiveness in delivering outcomes. This includes using the law to deal with those who act illegally, to protect honest business, society and the environment.
6. **Bring the right skills / expertise together** – We seek to ensure we have the skills to use the right tools effectively, or seek access to and work with those who do.
7. **Be clear on what we do and why** – We will seek to ensure everyone understands the role and purpose of the regulator and what our outcomes

are, in such a way that it is easy to see the link between what we are doing and why and to embed a consistent approach.

8. **Be efficient and effective** – We will seek to deliver in an efficient and effective way, working with others where we can, and where this is a good thing to do.

**P-04-422 Fracking - Correspondence from the Petitioner to the Clerking Team, 13.02.15**

Hi Kayleigh,

I think the ground has shifted rather on this issue. However, the petition relates to onshore oil and gas, which includes coal bed methane and underground coal gasification. Perhaps the Committee would like to refocus its efforts on these forms of unconventional gas now that shale gas fracking has been subject to a moratorium?

Gareth

# Agenda Item 5.8

## **P-04-536 Stop Factory Dairy Farming in Wales**

### **Petition wording:**

We call upon the National Assembly for Wales to urge the Welsh Government to update Planning Policy Wales and other relevant planning documents such as Technical Advice Note 6: Planning for Sustainable Rural Communities, to ensure that large scale indoor factory dairy farms are not created in the pursuit of short-term economic gain and to the possible detriment of many small-scale run farms. The recent approval of the farm in Welshpool, Powys cited paragraph 7.2.2 of Planning Policy Wales specifically in saying that it “...recognise(d) that there will be occasions when the economic benefits will outweigh social and environmental considerations.” and we believe this must be urgently reviewed since the possible creation of a small number of new jobs should not outweigh the long term economic benefits afforded by the plentiful, efficient and sustainable asset of grazing which many Welsh dairy farmers fully recognise.

Large scale indoor factory dairy farms are designed to keep cows indoors rather than out on pasture, and have been shown to increase environmental damage, impoverish local communities, can severely compromise good animal welfare and become a financial drain on their surroundings. We believe that following the Welsh Government’s decision to approve the farm in Welshpool, a review of planning legislation is of critical importance to ensure Wales fulfils its aspiration to become a truly sustainable country.

**Petition raised by:** World Society for the Protection of Animals

**Date Petition first considered by Committee:** 18 February 2014

**Number of signatures:** 9246



Rebecca Evans AC / AM  
Y Dirprwy Weinidog Ffermio a Bwyd  
Deputy Minister for Farming and Food



Llywodraeth Cymru  
Welsh Government

Eich cyf/Your ref P-04-536  
Ein cyf/Our ref RE/00040/15

William Powell AM  
Assembly Member for Mid & West Wales  
Chair Petitions Committee  
Ty Hywel  
Cardiff Bay  
Cardiff  
CF99 1NA

6 February 2015

Dear William,

Thank you for your letter to the Minister for Natural Resources about the petition *P-04-536 Stop Factory Dairy Farming in Wales* which has been passed to me to reply. Carl Sargeant AM, Minister for Natural Resources, has previously responded to the issues raised by the petitioner.

The petitioner has not provided a clear definition of “factory dairy farming” and it is unclear whether the petitioner wishes to limit the size of a dairy herd (number of animals per farm unit), the management system under which the cows are kept (housed for more than six months in the year) or perhaps a combination of both these factors.

The Welsh dairy industry is extremely diverse with enterprises that vary in size, production systems and herd numbers. For example, there are some relatively small herds in Wales that have high output per cow and use robotic milking machines and others with more than 500 cows which operate a grazing system with a relatively short housing period.

There are small efficient farms making a profit and large inefficient farms making a loss so it is not correct to say large farms in Wales put smaller farmers out of business. It is important to note that the Welsh dairy industry does not operate as a market on its own but is influenced by the wider UK and international markets.

We have an excellent record of animal husbandry and promote the highest standards of welfare regardless of the size of the enterprise. The Welsh Government have all necessary legislation and reporting procedures in place to protect both animal welfare and the environment.

*Yours,  
Rebecca*

**Rebecca Evans AC / AM**  
Y Dirprwy Weinidog Ffermio a Bwyd  
Deputy Minister for Farming and Food

**P-04-536 Stop Factory Dairy Farming in Wales – Correspondence from the Petitioner to the Clerking Team, 17.02.15.**

Dear Kayleigh,

Many thanks for your email of 11th February regarding Petition P-04-536 (Stop Factory Dairy Farms in Wales), and the specific communication from the Deputy Minister for Farming and Food.

When the petition was submitted 12 months ago it highlighted why a review of planning legislation was of critical importance to ensure Wales fulfils its aspiration to become a truly sustainable country.

Our definition of “factory dairy farming” within the petition itself is detailed as being “large scale indoor dairy farms”. In simple terms, our concerns surround intensive indoor farms where cows have very limited or no access to pasture. Due to their operating requirements, and to achieve ever greater yields, these farms are very often large-scale farms, but that does not mean that the petition is aiming to place a limit on the size of dairy herds per say.

We agree with the Deputy Minister that in general Wales has as an excellent record of animal husbandry and promotes the highest standards of farm animal welfare. However, our concern is that Wales and the rest of the UK risks allowing intensive indoor dairy farms to alter that proud record, by restricting the natural behaviour of cows, and by pushing cows to and beyond the limits of their physical tolerances.

We are concerned that we appear to be sleepwalking into a nightmare scenario that other countries have already experienced that will ultimately be bad for dairy farmers, consumers, the environment and for cow welfare. We continue to support the call in Petition P-04-536 for an urgent inquiry to be undertaken to assess current and future risks, to ensure the planning system is able to prevent the negative impacts that can arise from intensive indoor dairy farms.

Kind regards,

Ian Woodhurst

## Agenda Item 5.9

### **P-04-579 Reinstatement funding for Skomer Island's Guillemot monitoring Wording**

Natural Resources Wales have cut the £12,000 annual funding they provide for the on-going Guillemot monitoring study on Skomer Island. This is a hugely important study, and gives valuable insights into seabird life and what affects their populations. Not only is it a shame to end such a long running (and therefore valuable) data set, but the cut couldn't have come at a worse time, considering the huge impact the recent storms have had on seabird populations (current death toll 25,000 and rising). This is a very bad decision on the part of Natural Resources Wales, and we'd like to see it amended.

**Petitioner:** Cardiff University Ornithological Society

**Considered first by the Committee:** 23 September 2014

**Number of signatures:** 1687

**P-04-579 Reinstate Funding for Skomer Island's Guillemot monitoring -  
Correspondence from the Petitioner to the Clerking Team, 09.02.15**

Dear Kayleigh,

My response is as follows:

Firstly may I say that we are very disappointed with this response.

Whilst guillemots on Skomer are indeed increasing in number, they remain the best barometer of the quality of the marine environment around the island, chiefly because they can be monitored more accurately than any other seabird on Skomer. To say that the JNCC's continued monitoring of the guillemot population is in any way reassuring is missing the crucial point, as highlighted by Professor Birkhead in his 2011 report to the Trust and JNCC, which showed that the data collected under JNCC contract is flawed and has produced erroneous results. I am assured he would not have fought so strongly against the funding cut if he were confident the JNCC's monitoring was sufficient.

As I have said, we at the Ornithological Society and Professor Birkhead himself are very disappointed by this response. All we are asking is that the Assembly, and Natural Resources Wales, understand that only a thorough study of the guillemot population such as that carried out by Professor Birkhead and his team all these years is sufficient to gain any meaningful understanding of the guillemot population and the precious marine environment of which they are a key indicator.

I do hope you will reconsider.

Yours sincerely,

Jamie Kingscott-Edmunds  
Cardiff University Ornithological Society

Carl Sargeant AC / AM  
Y Gweinidog Cyfoeth Naturiol  
Minister for Natural Resources



Llywodraeth Cymru  
Welsh Government

Eich cyf/Your ref P-04-579  
Ein cyf/Our ref CS/05188/14

William Powell AM  
Chair Petitions Committee  
Ty Hywel  
Cardiff Bay  
Cardiff  
CF99 1NA

21<sup>st</sup> October 2014

Dear William,

Thank you for your letter dated 30 September regarding the Cardiff University Ornithological Society's petition about funding for monitoring of guillemots at Skomer Island.

Wales provides important areas for breeding seabirds including guillemots, and I recognise the importance of monitoring population variations. Natural Resources Wales has a contract with the Joint Nature Conservation Committee (JNCC) to undertake annual surveys of the seabirds on Skomer Island, which includes guillemots.

I am aware that earlier this year Natural Resources Wales (NRW) decided not to renew a specific guillemot survey contract with Sheffield University. The long term increase in guillemot numbers at Skomer Island, and the fact that this species will continue to be monitored under the JNCC contract, reassures me that there will be no loss of data or information about these birds. NRW will of course keep monitoring needs and requirements under review.

My recent approval of boundary extensions and updated listing of species for three Special Protection Areas (SPA) for breeding seabirds now includes the marine areas which are vitally important for feeding, preening and other behaviours during the birds' breeding season. The sea adjacent to the nesting areas now enjoys the same level of protection as the nesting sites themselves. This gives both the colony the protection that will sustain the growth of guillemot and other seabird populations. The positive implications of these SPA extensions will also enhance the future visitor experience especially for those who enjoy

wildlife trips to these special places.

Yours sincerely

A handwritten signature in black ink, consisting of a large, stylized 'C' followed by a vertical line.

**Carl Sargeant AC / AM**  
Y Gweinidog Cyfoeth Naturiol  
Minister for Natural Resources

# Agenda Item 5.10

## **P-04-605 Save the Cwmcarn Forest Drive from Indefinite or Permanent Closure**

### **Petition wording**

We call upon the National Assembly for Wales to urge the Welsh Government to reverse the decision of Natural Resources Wales to close the Cwmcarn Forest Drive indefinitely on 2nd November 2014.

### **Additional Information**

NRW have stated that the Cwmcarn Forest Drive will be closed indefinitely in November and that this is necessary because of the infection of the Japanese larches in the forest. I am not convinced as there are inconsistencies with NRW approach. There are ample harvest roads which can be used to facilitate removal of the trees. What needs to be removed via the drive could be done during its annual winter closure; however NRW say that removing the trees will not be completed until 2018 and after this the drive may not reopen due to funding issues. Other forest parks are only facing minimal disruption to their facilities as a result of tree removal. To single out users of the drive is unfair and unnecessary when other users will face only temporary disruption. We should save the drive for its users, many of whom are elderly, disabled and from our ethnic minority and immigrant communities. This deprives those people who are our most deprived of their main facility for health and well being.

**Petitioner :** Robert Jeffrey Southall

**First considered by the Committee:**

**Number of Signatures:** 2,392 electronic signatures and 602 paper signatures. Total 2,994



P-04-605 Save Cwmcarn Forest Drive – Correspondence from the  
Petitioner to the Committee, 11.02.15

## Friends of Cwmcarn Forest Drive

Petitions Committee  
National Assembly for Wales  
Cardiff Bay  
Cardiff  
CF99 1NA

Dear Sir/Madam,

Many thanks for your communication of 5th February 2015. Firstly I would like to briefly update you on the current progress being made by NRW at Cwmcarn. The felling of the diseased trees in the Cwmcarn Forest has still not started and local people have been very saddened and upset about the way in which the facilities on the drive were decommissioned, likening this to mindless vandalism. Our new organisation, the Friends of Cwmcarn Forest Drive, has been keenly pursuing the stakeholder meetings on the future of the drive proposed by NRW, however there has been no indication to date that these will commence in the near future.

While I understand the Petitions Committee would now like to close my petition I feel that, given its high number of signatories, it should be kept open, and possibly returned to from time to time, in order to ensure that NRW are fulfilling their promise to complete the felling quickly in order to re-open the Drive to cars. There is another possible course of action that the Petitions committee could take if passes a request to the relevant Assembly Committee(s) to regularly monitor the work to ensure the speedy completion of the felling. It could also work with stakeholders to explore all possibilities for the re-opening of the Drive to private cars.

We feel that any other alternative would be grossly unfair and discriminatory to the many people, including elderly and disabled people, who are only able to access the Drive with its fantastic scenery via motor transport. The minibus service on the Drive for the mountain bikers continues but there seems no likelihood that this, or similar transport, will be made available to the wider public. As a rambler I can walk the Drive and the many hills and valleys locally, however there are many people who cannot and I feel it that it is in the best interests of these that the drive re-opens as soon as possible. NRW may need encouragement to do this and, as our representatives, the National Assembly is obviously best placed to do this and to regularly monitor progress towards this goal.

I have also attached our submission to the Committee, dated 10 December 2014, on the matter of the closure along with this letter. I hope that the Petitions Committee will be able to take both of these documents into consideration when discussing the future of our sadly missed Forest Drive.

Regards

A handwritten signature in black ink, appearing to read 'Rob Southall', written in a cursive style.

Rob Southall  
Chair, Friends of Cwmcarn Forest Drive

## **P-04-605 Save Cwmcarn Forest Drive – Correspondence from the Petitioner to the Committee, 10.12.14**

### **Submission to the National Assembly for Wales Petitions committee**

**Regarding the petition titled:** Save the Cwmcarn Forest Drive from Indefinite or Permanent Closure

**Petition Text:** We call upon the National Assembly for Wales to urge the Welsh Government to reverse the decision of Natural Resources Wales to close the Cwmcarn Forest Drive indefinitely on 2nd November 2014

**Statement:** I first heard of Natural Resources Wales proposal to close the Cwmcarn Forest Drive around March–April of this year and initially thought nothing of it assuming it to be temporary and a matter of felling the trees quickly and transporting them out of the valley. I did, however make a mental note at this time to contact NRW's Heritage and Conservation Officer Rosalind Watkins (formerly Codd) to seek reassurance that the felling would not threaten sensitive environmental and archaeological areas. I thought this as I am currently researching the history of the lost farms of Mynydd Maen it seemed a sensible precaution to take. This is especially the case since the careless destruction by forest contractors a few years earlier of the ruins of Ty'n y Waun farm, near Cwmfelinfach in the lower Sirhowy valley.

In mid to late August I happened to chat to Robert Cole who as the contract warden was employed on a contract basis by NRW to man the pay lodge at the entrance of the Forest Drive. It was he who first informed me of the full extent of the closure. Mr Cole informed me that the drive was to close indefinitely with a caveat that it would take at least six years to complete the felling and that due to lack of funds the drive might never re-open to cars. This was corroborated later by Mrs Barbara White who lives a Ty'n y Ffynnon farm which is actually situated just off the drive in the heart of the Nant Carn valley. Mrs White also told me that she had been told by local NRW employees that

the sculptures were to be removed and transported to other locations, the children's playground was to be dismantled and given away and the barbeques were to be demolished. Mrs White also told me that she had not been informed of any of NRW's plans officially in spite of being directly affected by them. Needless to say I was appalled and decided to set up the Facebook group to fight NRW's decision. This group picked up nearly 500 members in its first hour which gave me some indication of people's opposition to NRW's proposal.

Following this I wrote an e-mail to Peter Cloke, a senior manager within NRW's south Eastern region, to get an official response on the closure from him. That same evening I also wrote to First Minister Carwyn Jones AM in opposition to the NRW's closure plans, copying in a number of local AMs, including Lynne Neagle AM, Jocelyn Davies AM and William Graham AM and Gwyn Price AM. The first three responded over the next few days. That same evening I set up the Facebook group 'Campaign to Save the Cwmcarn Forest Drive' and was quite amazed to find that after just over an hour over five hundred people had joined. 4936 people are currently members of this group.

In the following days I received a confirmation from Peter Cloke that the information I had received initially about the closure was correct and I queried the need for an indefinite and/or permanent closure of the Drive. I felt that NRW were being intentionally vague and evasive. I was also finding that the information NRW were putting out was inconsistent. I contacted the South Wales Argus about this and it elicited several articles over the following weeks. I also contacted Iolo ap Dafydd, Environment correspondent for BBC Wales about this. Initially he was not minded that the press releases were inconsistent, but after further consideration he came back to me in full agreement with the points I had made. Several NRW managers and employees had put out statements and press releases that didn't seem to correspond to one another -some said the Drive was closing for a period of time and others confirmed the closure of the Drive would be permanent.

The main thrust of my argument was that the closure of the Drive to private cars was, and remains, discriminatory. In the course of the

campaign I have found that many people; a number of carers use the Drive almost daily to take clients, and elderly family members, out to enjoy the fresh air and fantastic views the drive affords. One of our society's leading activists, Mrs Sharon Peck, is a professional self employed child minder who uses the Drive and lake area daily.

The main reason I believe the closure is discriminatory is that the drive is only being closed to private cars. The cyclists can continue to use the Drive and the various cycle trails (and public footpaths!) within the valley, in addition the minibus and trailer service (Cwm-down) that ferries cyclists and their bikes up to the top of the downhill trail (at the very top of the Drive) is being allowed to continue, with only minor and temporary limitations. As a walker I can also continue to walk the Drive –and would fully intend to do so if walkers were barred.

A group of concerned people came together around the Facebook page and, at the beginning of September; we formed a loose society called 'the Friends of Cwmcarn Forest Drive' to take the campaign forward. The Friends will become a constituted society at the beginning of 2015. Our society is here to stay as we fully intend to continue to press to get the Drive re-opened to cars.

Around mid September I arranged a meeting at Crosskeys RFC club house with Andy Schofield who is regional land manager for NRW. The meeting was held in good spirits by all concerned and Andy provided several specialist maps featuring sensitive environmental and archaeological areas and hydrological features. He also informed us at this point that the larch around the Drive would now be felled over the first two years of a six year local felling plan and following the two years NRW would look at options for re-opening the Drive to private cars. I received a letter from Lynne Neagle AM dated 8th October which included a response from Carl Sargeant AM which outlined the reasons for the closure, talked about the revised felling plan and re-iterated that the Cwmcarn Forest Drive would now only be closed for two years –I have an electronic copy of this and would be happy to forward it to the Petitions Committee

We held a public meeting at the Cwmcarn Institute on Wednesday 16 October. This was attended by Andy Schofield and Jo-Anne Anstey on behalf of NRW and they presented on their organisation's plans. Both NRW managers re-iterated that the Drive would now only be closed for two years while the felling was in progress and after this NRW would endeavour to re-open the facilities to cars. Interestingly when I asked Jo-Anne Anstey if the sculptures from around the Drive were to remain at Cwmcarn she responded by saying that most would be moved to the sculpture trail at Fforest Fawr near Castell Coch. I asked again if any were to remain at Cwmcarn and received what I considered to be an intentionally vague and evasive answer. Later I contacted Mike Owen, the manager of the Cwmcarn Forest Drive Visitor centre, to ask if any had been offered to the local authority which runs this facility. He responded to me the following day, copied in to Jo-Anne Anstey, to say that none had been offered but they would be delighted to receive some if asked by NRW. This email was followed by an email from Jo-Anne Anstey telling him that they were available if the local authority could arrange transport. I understand the Caerphilly County Borough Council now plans to install some of these sculptures in the lake area which is managed by them and therefore remaining open.

Around 50 people attended and many of these asked questions of NRW. Gwyn Price AM (Lab-Islywn) and Jocelyn Davies AM (Plaid-SE Wales) also attended along with a BBC Wales Radio journalist and a South Wales Argus Reporter. On the afternoon of the closure (Sunday 2<sup>nd</sup> November) our society held a rally on the Drive which was attended by at least 20 other cars -it would have been ore but we had to bring it forward from 3.00 to 2.00pm to keep NRW happy. However this was not an issue because the rally was merely symbolic and I hope it re-iterated to NRW that our society is here to stay and we fully expect the Drive to re-open to cars in two years once the felling is complete.

In responding to Carl Sargeant AM's recent letter I have to say I am a little surprised that he seems to be backtracking on a statement he made in his letter dated 28 September to Lynne Neagle AM which runs as follows "Officials are in contact with Natural Resources Wales on this matter and have been assured that there is no intention to

permanently close the route. I understand that the route will be closed for approximately two years to allow for the safe and efficient felling and extraction of the infected trees". The Friends of Cwmcarn Forest Drive intend to hold NRW and the Welsh government to their promise and would certainly welcome involvement in plans for the future of the Drive -this has so far only been mentioned informally. We look forward to meetings with NRW to discuss this involvement in the New Year.

Robert J Southall  
Chair, Friends of Cwmcarn Forest Drive

Carl Sargeant AC / AM  
Y Gweinidog Cyfoeth Naturiol  
Minister for Natural Resources



Llywodraeth Cymru  
Welsh Government

Eich cyf/Your ref  
Ein cyf/Our ref CS/05273/14

William Powell AM  
Chair Petitions Committee  
Ty Hywel  
Cardiff Bay  
Cardiff  
CF99 1NA

44 November 2014

Dear Bill

Thank you for your letter of 15<sup>th</sup> October with regard to the petition against the decision by Natural Resources Wales (NRW) to close Cwmcarn Drive.

I am of the view that the closure of Cwmcarn Drive is an unfortunate but necessary step as part of the nationwide strategy to reduce the risk of the further spread of *Phytophthora ramorum* (Larch disease). Cwmcarn forest is predominantly larch (50%) with a concentration of 74% along the Drive itself. This is a much higher proportion of Larch than in other woodland areas in Wales.

Health and safety concerns, difficult terrain and the use of specialised heavy machinery were some of the key factors behind the decision by NRW to close the route. The removal of around 50,000 tonnes of larch from the area using the Drive (which is not a public highway but rather a forest road covered in a thin layer of tarmac) will have a significant impact on its condition.

I am informed that it will take approximately £2.5 million to re-instate the route. NRW officers are of the view that this would be the most expensive and least creative option for re-opening the route. They, in partnership with local residents, Welsh Government and Caerphilly County Council will be working to find a better, more appropriate alternative. I understand that Mr Southall has been invited to participate in this process.



Welsh Government officials have made it clear to NRW that least restrictive access to this site should be a priority once the felling operation has been completed.

Yours sincerely

A handwritten signature in black ink, consisting of a large, stylized 'C' followed by a vertical line.

**Carl Sargeant AC / AM**  
Y Gweinidog Cyfoeth Naturiol  
Minister for Natural Resources

# Agenda Item 5.11

## **P-04-458 Keep Further Education in the Public Sector**

### **Petition wording:**

We call upon the National Assembly for Wales to urge the Welsh Government to ensure:

1. Further education, along with publicly funded assets, is retained within the public sector.
2. Colleges continue to be bound by the national agreements in FE, such as the national pay scales.
3. The introduction of an all-Wales contract for FE lecturers.
4. Welsh Ministers do not dissolve colleges and give colleges the ability to transfer the property, rights and liabilities to another body.

**Petition raised by:** UCU Crosskeys Branch

**Date petition first considered by Committee:** 19 February 2013

**Number of signatures:** 246

**P-04-458 Keep Further Education in the Public Sector - Correspondence  
from the Petitioner to the Clerking Team, 08.02.15**

Dear Kayleigh

We have nothing further to comment on.

Best wishes

Ian

# Agenda Item 5.12

## **P-04-566 Review the School Admissions Code**

### **Petition wording:**

We call upon the National Assembly for Wales to urge the Welsh Government to review the School Admissions Code as it is not fit for purpose.

The School Admissions Code is not fit for purpose because:

- It plays lip service to the United Nations Rights of the Child as there is no requirement to consult with children in decisions that affect them;
- It plays lip service to the Equality Act as there is no requirement to undertake an Equality Impact Assessment;
- It is not prescriptive enough so leads to differences in implementation, some good, some bad;
- There is very restricted rights of Appeal for Parents and Governing Bodies to Welsh Government in particular Governing Bodies who are considered statutory consultees and yet are restricted to very specific circumstances in which they can appeal;
- The wording within the School Admissions Code is ambiguous and is not easy to penetrate by those who are forced to use it;
- The School Admissions Code does not define □reasonable□ with regards to Consultation periods;
- The School Admissions Code, for all of the above reasons, is not appropriate when dealing with significant changes such as changes to catchment areas.

**Petition raised by:** Jane Chapman

**Date Petition first considered by Committee:** 17 June 2014

**Number of signatures :** 156



Eich cyf/Your ref P-04-566  
Ein cyf/Our ref HL/01616/14

William Powell AM

committeebusiness@Wales.gsi.gov.uk

6 August 2014

Dear William

Thank you for your recent letter in which you seek my views on a petition received from Jane Chapman in respect of the School Admissions Code ("the Code").

I would like to address each of the points as follows

**The Code is not fit for purpose because:**

- **It plays lip service to the United Nations Rights of the Child as there is no requirement to consult with children in decisions that affect them.**

Whilst the Code itself does not stipulate that consultation with children on any particular aspect of school admissions must be undertaken, admission authorities need to consider how any decisions they make would affect them. One of the key principles set out in the Code is that admission arrangements must be procedurally fair and equitable for all groups of children.

Before the statutory consultation on the Code was carried out, my officials gave due consideration to the United Nations Convention on the Rights of the Child. A user friendly consultation document was distributed to children and young people. Children and young people provided 117 responses and these helped to inform the Code. It should be borne in mind that the law on admissions to schools provides a right for parents to express their preference, and it can be expected that when parents consider what preferences to express, they will consider the views of their children.

- **It plays lip service to the Equality Act as there is no requirement to undertake an Equality Impact Assessment.**

Whilst the Code itself does not state that Equality Impact Assessments must be undertaken, all admission authorities are under a duty to ensure that they comply with equalities legislation when fulfilling their responsibilities. This is clearly set out in Annex E of the Code.

- **It is not prescriptive enough so leads to differences in implementation, some good, some bad.**

The Code refers to both existing statutory requirements and itself imposes mandatory requirements with which prescribed bodies **must** comply. Where mandatory requirements are imposed by the Code, it is stated that the relevant bodies **must** comply with the particular requirement or provision. Where the Code prohibits practices, it is stated that the relevant body or bodies **must not** use this practice.

The Code also includes guidelines which the relevant bodies should follow unless they can demonstrate that they are justified in not doing so. Where guidelines refer to good practice, the Code states that the relevant bodies **should** follow the particular guidelines. On the other hand where the guidelines refer to actions normally regarded as poor practice, the Code states that the practice **should not** be used although there may be exceptional circumstances when it is justified.

Failure by an authority or body to comply with the mandatory provisions in the Code may result in a statutory objection or complaint being made to the Welsh Ministers. Failure to follow guidelines in the Code may also lead to an objection or complaint being upheld if admission authorities are unable to justify departing from those guidelines.

It is not possible for the Code to give exhaustive guidance, as it would be impossible to anticipate every eventuality. Admission authorities are best placed, in the light of detailed consideration of the circumstances of individual cases, to make judgements when called upon to do so.

- **There is very restricted rights of appeal for parents and governing bodies to Welsh Government in particular governing bodies who are considered statutory consultees and yet are restricted to very specific circumstances in which they can appeal.**

My officials carried out a 14 week consultation on the Code before it was finalised. At no point during this period was the issue of restricted right of appeal raised by any school governing body or parent. Governing bodies are able to object to the admission number which has been determined for their school, and no such objection has been dealt with in recent years. No governing body has made representation that they should have greater scope to object to admission arrangements. Parents are able to object in other limited circumstances, and such objections are very rare.

- **The wording within the School Admissions Code is ambiguous and is not easy to penetrate by those who are forced to use it.**

The Code itself is designed for use by practitioners, for example, local authorities and governing bodies. These bodies must “act in accordance with” the statutory aspects Code and comply with the guidance unless there is an overriding reason to depart from it. My officials are currently in the process of designing a user friendly guide to school admissions and school admissions appeals for use by parents. This will be subject to consultation in due course.

- **The School Admissions Code does not define “reasonable” with regards to consultation periods.**

It is for admission authorities to define what “reasonable” is in respect of consultation periods. In doing so, they should ensure those periods are fair and sensible, so that if challenged, their position is defensible.

- **The School Admissions Code, for all of the above reasons, it not appropriate when dealing with significant changes such as changes to catchment areas.**

How catchment areas are aligned is a matter for admission authorities. The Code provides that where they are used, they should be reasonable and clearly defined. Where significant changes are to be made they must be consulted upon, determined and published in the same way as other admission arrangements. This is clearly set out in the Code.

The Code was issued in July 2013 following a period of consultation, and after it had been laid before the National Assembly for Wales for consideration without any objection. There are currently no plans to revise the Code further at this stage, but the points raised within the petition will be kept for future reference and considered when the next review takes place.

I hope that this information addresses the petitioners’ concerns. I would also like to make it clear that whilst it is important that there are structures in place in relation to admissions to schools, of great importance too, is our drive to promote improvement in all schools so that children will receive the best possible provision, in whichever school is chosen for them.

Yours sincerely



**Huw Lewis AC / AM**  
Y Gweinidog Addysg a Sgiliau  
Minister for Education and Skills

# Agenda Item 5.13

## **P-04-540 Stop Sexism In Domestic Abuse**

### **Petition wording:**

We call upon the National Assembly for Wales to urge the Welsh Government to stop Domestic Abuse (DA) by treating it as a gender inclusive and human phenomenon in which many men and women share both suffering and responsibility.

### **Practical NOT Politics**

The current proposal blames men, and only men, for all violence and puts a radical gender based prejudice before the real needs of women, men and children and where 97% of men do NOT fit this profile.

Fear of repercussions and lack of publicity in Wales have prevented open and vocal dissent.

This Petition invites an alternative approach that recognises that 86% of DA is the responsibility of both women and men. It also offers greater protection to children and removes the discrimination that arises solely from radical gendered prejudice against those people in same sex female relationships.

**Petition raised by:** Healing Men

**Date Petition first considered by Committee:** 11 March 2014

**Number of signatures:** 238



**P-04-540- stop sexism in domestic abuse – Correspondence from the Petitioner to the Clerking Team, 05.02.15**

Dear Steve,

It occurred to me that the original request from the Committee to Welsh Women's Aid (WWA) almost a year ago has not been dealt with by WWA at all.

On the 30th April 2014 the Committee requested of WWA " ... your views on statistics provided by the petitioner ..." and " ...We would also be grateful for any other views you may have on the petition". Unfortunately the Supporting Information, containing the references and full documentation to the petition was not, in fact, attached as indicated in the Committee's letter and WWA only received and responded to the Title of the Petition and not the substance (see copy email – text in blue below). Subsequent events only served to create further confusion as set out in copy correspondence.

I only have a record of two items of correspondence from WWA:

- 1 A letter dated 19th June 2014 "Our response was based on the ... [Title of the petition] ... as this was the entirety of what we received". (per WWA letter dated 19th June and received 9th July 2014)
- 2 A letter undated in October 2014 that responded only to a letter from Healing Men.

Neither of these letters addresses the Committee's initial request to have a response from WWA concerning the substantive and substantiated case made in the Supporting Information to the petition and this request by the Committee remains unanswered by WWA to the best of my knowledge.

A complete copy of the petition and all the Supporting Information was sent to WWA on the 1st August 2014 and confirmation received that no further information or clarification was required was eventually received on the 31st October 2014.

WWA has had the full details supporting the petition since 1st August 2014 and has confirmed no further information is needed. I respectfully suggest that a detailed and considered response to the evidence presented in the Supporting Information to the petition would be helpful to the Committee in carefully considering the above petition especially when this has been specifically asked for by representatives of the Assembly and asked of the premier and overwhelmingly dominant agency dealing with domestic abuse and violence in Wales and where substantial issues of

concern for the ongoing safety of current and future generations boys and girls in Wales have been raised.

A synopsis of relevant correspondence follows.

Kind regards,  
Tony Stott  
HealingMen

#####

**Sent:** Friday, October 31, 2014 2:07 PM

Dear Mr Stott,

Thank you for your email. We have submitted a reply through the Petitions Committee and do not require any further information at this time.

Regards,

On behalf of **Tina Reece**

**Sent:** 30 October 2014 17:21

Dear Ms Owens,

Please let me know if Welsh Women's Aid (WWA) requires any any further information, explanation or clarification in order for WWA to respond to the content of Healing Men's petition as detailed below.

Regards,

Tony Stott, Healing Men

**Sent:** Friday, August 01, 2014 2:59 PM

**Subject:** Re: Petitiuon P-04-540m- stop sexism in domestic abuse.

Dear Ms Owens,

Thank you very much for your prompt response to my 2nd request and for the clarification as below. .... ..For the sake of clarity I attach a complete set of documents covering Healing Men's petition, including the supporting information from which the statistics you have quoted below were extracted and which are referenced within the supporting information.

I would very much welcome any views or comments that Welsh Women's Aid may wish to make. Please let me know as soon as possible if I can provide any further information or clarification.

Yours sincerely,

Tony Stott, Healing Men

**Sent:** Friday, August 01, 2014 10:03 AM

Dear Mr. Stott,

Our apologies, this was sent a few weeks ago but your email address was misspelt. Please see Gill's response below.

Best wishes,

**Emma Harris**

PA to the Chief Executive

Dear Mr Stott,

Thank you for your email below dated 11<sup>th</sup> of July.

In response to your initial query I can assure you that as Director of Operations for WWA I was indeed aware of the request for information from the Petitions Committee which was addressed to our Public Affairs Manager, and the final response submitted.

In regard to your request for clarification on the figures provided to us by the Committee for comment, they were as follows:

“We call upon the National Assembly for Wales to urge the Welsh Government to stop Domestic Abuse (DA) by treating it as a gender inclusive and human phenomenon in which many men and women share both suffering and responsibility. Practical NOT Politics. The current proposal blames men, and only men, for all violence and puts a radical gender based prejudice before the real needs of women, men and children and where 97% of men do NOT fit this profile. Fear of repercussions and lack of publicity in Wales have prevented open and vocal dissent. This Petition invites an alternative approach that recognises that 86% of DA is the responsibility of both women and men. It also offers greater protection to children and removes the discrimination that arises solely from radical gendered prejudice against those people in same sex female relationships.”

**Our response was based on the above as this was the entirety of what we received.**

Yours Sincerely,

Gill Owens

15.02.2015

Dear Mr George,

Ms Erin Pizzey was one of the very first signatories to support our Petition in March 2013 and would very much like to take this opportunity to bring her support for this petition to the attention of the Minister, Mr Leighton Andrews AM.

Ms Pizzey has sent the following letter by email and we would very much appreciate if the Committee would kindly agree to forward this directly to the Minister together with the latest letter from Healing Men to solicit the Minister's views and comments. Ms Pizzey's email address is shown above.

Thank you very much indeed for your kind consideration in this matter.

Yours sincerely,  
Tony Stott  
Healing Men

Mr Leighton Andrews AM

Minister for Public Services

February 2015

Dear Mr Andrews,

My name is Erin Pizzey and I founded the first women's refuge in Chiswick, London in 1971. I now have the campaign [www.whiteribbon.org](http://www.whiteribbon.org). The campaign invites everyone to contribute to the now universal truth: ***Domestic violence is not and never has been a gender issue.***

A cynical financially driven war by radical feminists has mislead governments and the general public into believing that men have been the perpetrators of all violence. For over forty years men have been demonised and pushed out of family life, often separated from their boys and girls, and many men have killed themselves so bereft that they saw no other way out.

For me it is recognising that violence in the family is a generational issue. Children born to dysfunctional families, marinated in violence and sexual abuse will often grow up to repeat these patterns. I have always advocated that all victims of

domestic violence need a therapeutic approach in order to find their way out of violence.

I signed a Welsh petition urging the Welsh Government to take a more inclusive and humane approach in dealing with domestic violence. I urge the Welsh Government in the very strongest possible terms to feel for the human suffering and put the needs of the people and the boys and girls of Wales above personal fear, corrupt radicalised ideology and misleading misinformation and adopt the principles of the petition as its policy and in forming new legislation.

I pledge to join with everyone who cares about this issue to continue to publish the truth.

Yours,

Erin Pizzey

# Agenda Item 5.14

## **P-04-556 No to Junction 41 closure**

### **Petition wording:**

We call upon the National Assembly for Wales to urge the Welsh Government not to close Junction 41 of the M4 for the following reasons: 1. The closure will negatively impact the town centre traders and businesses. 2. The closure will cause traffic chaos in the town as residents try to access the motorway. 3. There has been insufficient consultation with the townspeople. 4. Further research is needed into alternative solutions. 5. The new train station cannot be a transport hub if it is not easily accessible. 6. It will adversely affect the town redevelopment.

Additional Text: Again, the needs of motorists have been prioritised over those of the people of Port Talbot. The town was desecrated when the motorway was originally built through the heart of the town and now we are expected to suffer the pollution whilst traffic passes through our town on the way to somewhere else! The motorway, not the Steelworks, is the towns biggest polluter, and yet we who breathe it in will be unable to gain access to it. Plans to reroute the towns traffic through the streets will add to traffic pollution and bring chaos. People of the town understand the issues with the motorway but demand real consultation on options and alternatives. Please give us a chance to protect our town.

**Petition raised by:** Rose David

**Date Petition first considered by Committee:** 13 May 2014

**Number of signatures:** 1652. An associated paper petition was handed in and collected 22,467 signatures.

## **P-04-556 No to Junction 41 Closure – Correspondence from the Petitioner to the Clerking Team, 05.02.15**

Dear Kayleigh,

Thanks for your timely reminder concerning my petition against the closure of Junction 41. The trial has been in place for some months now and during this time I have been part of the group of local residents who have met with representatives of the WAG and NPTCBC.

My observations to date are :

### **1. Data Collection**

The effects of the part time closure on the town centre businesses are particularly noticeable

after 3.30 pm as people leave the town prior to the closures. I am not sure that the collection of footfall data is reflecting this. In addition, there are ongoing issues with the methods of footfall data collection in terms of accuracy. Results to date do not reflect the statistics collected by the more sophisticated system employed by the Aberafan shopping centre.

The car park ticketing statistics are also only providing a skewed picture of town traffic. The vast majority of shoppers and those accessing the town for 1–2 hrs use Tesco's car park rather than the expensive car parks. Tesco's have reported a drop in footfall after 3.30 PM.

I understand that we are looking at general trends but still feel that these should be based upon solid statistics.

2. It has been reported that traffic at J 41 is moving more freely on the M4. This would appear to be at the expense of J42. Traffic is a nightmare there as cars join the M4 at this crossover junction. This will be exacerbated by the traffic from the Coed D'Arcy development and with the traffic from the new quays/Baglan Energy Park link bridge as highlighted by The Chief Executive. Is this junction being monitored effectively as part of the trial?

3. I would like to see the effect of the new 50 mph Average Speed Cameras on the westbound junction without the closure. I feel that this should have been considered prior to the junction closure.

4. That the use of hard shoulder running was discounted on grounds of expense is truly galling when the cost of this trial is considered. The health and safety rationale is also spurious as there are other examples of hard shoulder running under the Smart Motorways initiatives – eg. M1 j10–13.

5. The chaos caused on local roads during the closures is creating havoc in some parts of the town. The mitigation measures are unable to stop drivers from 'rat running' which, again, causes problems which are not being properly monitored.

These are some of my ongoing concerns with regard to the closure. I hope that the committee will give consideration to these very real problems.

Many thanks,

Rose David



## **P-04-562 Caernarfon Heritage Centre**

### **Petition wording:**

We the undersigned call on the Welsh Government to fund a Heritage Centre in Caernarfon. The town deserves a centre to display its history and the history of its people, its industries, its language and its arts in an engaging building purpose-built in Caernarfon as a home for the treasures taken from it.

Close to 1,000 people – residents of Caernarfon and district and visitors to the area are calling for a resource of this nature in what is one of Wales' most ancient and significant towns. Visitors who take one of my tours around Caernarfon [www.drodre.co](http://www.drodre.co) ask, Where is the Town Museum?, to which the answer is that the town no longer possesses such a thing! This news is met with universal astonishment, given that history surrounds one at every turn.

**Petition raised by:** Caernarfon Civic Society

**Date Petition first considered by Committee:** 17 June 2014

Ken Skates AC / AM  
Y Dirprwy Weinidog Diwylliant, Chwaraeon a Thwristiaeth  
Deputy Minister for Culture, Sport and Tourism



Llywodraeth Cymru  
Welsh Government

Ein cyf/Our ref KS/00044/15

William Powell AM  
Chair - petitions committee

committeebusiness@Wales.gsi.gov.uk

23 January 2015

Dear William Powell AM,

Thank you for your letter to Cadw's Director about petition P-04-562 Caernarfon Heritage Centre and subsequent correspondence from the petitioner. I am responding as Heritage is within my portfolio.

I have already provided a response to a previous request through the Petition's Committee on the 24<sup>th</sup> of October. In the response I noted that significant investment and activity has and is continuing through Cadw and key partners in developing, improving and enhancing the heritage offer within Caernarfon. This of course includes innovative projects such as the recently successful grant funding bid by Gwynedd Council to the Arts Council of Wales to develop the Ideas, People Places programme, whereby the arts and regeneration activity will be integrated in partnership with the local community to try and interpret local heritage in new and exciting ways.

As previously outlined, although I would be supportive of the development of a new heritage centre in Caernarfon, this would have to be locally led and funded in order for such a venture to have long term financial sustainability.

Relevant officials in Cadw and CyMAL who have experience and knowledge of Caernarfon and relevant key developments will be available to meet and provide advice and guidance should the Civic Society wish to pursue this. The appropriate contacts to arrange such a meeting are Linda Tomos, Director of CyMAL (telephone: 0300 062 2098) and Laurence Smith, Heritage and Regeneration manager for North Wales (telephone: 01286 662314). I would suggest that the Civic Society also invite relevant Gwynedd Council officials to any proposed meeting.

Yours ever,

**Ken Skates AC / AM**

Y Dirprwy Weinidog Diwylliant, Chwaraeon a Thwristiaeth  
Deputy Minister for Culture, Sport and Tourism

# Pennaeth yr Economi a'r Gymuned

## Head of Economy & Community

Sioned E. Williams

Gofynnwch am / Ask for: Sioned E Williams

(01286) 679547

Ein Cyf / Our Ref: SEW/gh

Eich Cyf / Your Ref: P-04-562

[SionedEWilliams@gwynedd.gov.uk](mailto:SionedEWilliams@gwynedd.gov.uk)

28 January 2015

Mr. William Powell AM,  
Petitions Committee Chair, Welsh Government,  
National Assembly for Wales,  
Cardiff Bay,  
Cardiff. CF99 1NA

[Stephen.George@assembly.wales](mailto:Stephen.George@assembly.wales)

Dear William Powell AM, ([Stephen.George@assembly.wales](mailto:Stephen.George@assembly.wales))

Petition 04-04-562: Heritage Centre for Caernarfon

Thank you for your letter received on 13 January 2015 on behalf of the National Assembly for Wales' Petitions Committee concerning a petition to establish a Heritage Centre for Caernarfon and the additional information received from the petitioner.

As I indicated in my previous letter, for some years now plans have been discussed and implemented to improve heritage interpretation in Caernarfon and Gwynedd Council is very supportive of the principle of the development of Caernarfon as a heritage and culture destination of the highest quality.

Generally, there is close cooperation between the Council, Cadw and the Welsh Government departments, as well as partners in Caernarfon town. There are also exciting plans being developed by the Welsh Government's Regeneration Programme – Vibrant and Viable Places, the Art Council's Creating Contemporary Communities plan as well as other sources of funding. There may be opportunities through these plans to look at the way Caernarfon is interpreted as a whole in a creative and innovative way.

Gwynedd Council would need to consider the petitioner's application in the context of the plans that are being developed at present by partners in Caernarfon and if plans were being developed for a heritage centre, it would have to prove that it is viable and sustainable in order to receive the support of the Council.

Gwynedd Council is willing to discuss this further with the petitioner and local and national partners. Would you therefore be willing to forward the contact details of the petitioner to me please?

Yours faithfully



Sioned E Williams

Pennaeth Economi a Chymuned

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*Respect • Serving • Positive • Working as a team • Value for money*

**Council Office**  
**Caernarfon**  
Gwynedd. LL55 1SH  
01286 672255  
[www.gwynedd.gov.uk](http://www.gwynedd.gov.uk)

# Agenda Item 5.16

## **P-04-565 Revive disused railway lines for leisure**

### **Petition wording:**

The Welsh Government should look turning the hundreds of miles of disused railway lines (axed under Beeching) into high quality cycle/walk ways. The lines cover the whole of Wales and this scheme would: encourage healthy activities and lifestyle; provide a safe way to travel for those who want a green alternative; provide safe cycling for children and encourage use for going to school, clubs etc; reduce traffic on our roads; boost Welsh tourism especially by cyclists and walkers; enable the establishment of a vast number of varied, small businesses along the routes – shops, B&B etc. Rural areas will benefit. The potential good for the health of the population of Wales and its economy is unlimited and the return in this investment can be understood before it even starts.

**Petition raised by:** Albert Fox

**Date Petition first considered by Committee:** 17 June 2014

**Number of signatures :** 14

**P-04-565 Revive Disused Railway Lines for Leisure – Correspondence from the Petitioner to the Clerking Team, 09.02.15**

Dear Kayleigh,

Thank you for your email and the letter from the Minister. Sadly I am unable to assist in producing a business case as I do not have the resources or the necessary expertise to produce a robust business case for the Committee to consider.

I would, however, encourage the Minister to commission research into utilising the disused railway lines as I believe they have a future for promoting and encouraging tourism in Wales; with the subsequent financial and fitness benefits to Wales and the rural areas.

During my military career as a helicopter instructor, I spent many hours flying around Wales and was heartbroken to see the many railways lines going to waste. I truly believe that the benefits to the people of Wales would justify serious consideration to using these routes for tourism and encouraging healthy activities.

Yours sincerely,

Albie Fox  
Sqn Ldr RAF Retired.

# Agenda Item 5.17

## **P-04-590 Funding for the Cardi Bach Coastal Bus Service**

### **Petition wording:**

We call upon the National Assembly for Wales to urge the Welsh Government to re-instate the funding of the Cardi Bach coastal bus service in Ceredigion.

### **Further information :**

The Cardi Bach coastal bus service that runs between Cardigan and New Quay will be stopped on 30th September due to a lack of funding. The service received some funding from the Welsh Government under the Rural Development Plan 2007-2013.

There has been a noticeable increase in visitors to this area, particularly walkers, since the opening of the Wales Coast Path in 2012. The coastal bus service has enabled visitors to go to the towns and villages along the route.

This bus service brings custom to local businesses.

It is popular with walkers on the Wales Coast Path, enabling them to enjoy linear walks.

It provides both residents and visitors with an alternative to using the motor car.

Some rural areas will be particularly inconvenienced if the bus service ceases. For example, Cwmttydu is a popular village on the coast path, midway between New Quay and Llangrannog. If someone wanted to access a bus from here he would have to walk 4 miles to the nearest service bus route. He would have difficulty calling a taxi as there is no public phone box and the mobile phone signal is very poor.

**Petitioner :** Janet Richardson

**First considered by the Committee:** 23 September 2014

**Number of Signatures:** 1,084 paper signatures and 121 electronic signatures. Total 1,205



Edwina Hart MBE CStJ AC / AM  
Gweinidog yr Economi, Gwyddoniaeth a Thrafnidiaeth  
Minister for Economy, Science and Transport



Llywodraeth Cymru  
Welsh Government

Eich cyf/Your ref P-04-590  
Ein cyf/Our ref EH/00203/15

William Powell AM  
Chair - Petitions Committee

committeebusiness@Wales.gsi.gov.uk

27 January 2015

Dear William

Thank you for your letter which I received on 15 January regarding your Committee's further considerations on funding for the Cardi Bach.

I have decided to provide funding to Ceredigion County Council to reinstate the Cardi Bach service for a period of 12 months.

I was pleased to note that there is an active community group keen to promote the service to local residents and visitors. I will ask Ceredigion County Council to discuss the arrangements they are making to replace the Cardi Bach service with this group. Please arrange for the clerking team to send the necessary contact details to my office.

Edwina Hart

**P-04-590 Funding for the Cardi Bach Coastal Bus Service – Correspondence from the Petitioner to the Committee, 06.02.15**

I would like to thank the Petitions Committee for their attention to our petition.

I am delighted at the Minister's response. Money has been found to fund the Cardi Bach coastal bus service for a year but it is hoped there will eventually be money to fund it indefinitely.

I would appreciate it if the Petitions Committee were to see fit to keep this petition open until a more permanent solution has been found.

Janet Richardson

# Agenda Item 5.18

## P-04-539 Save Cardiff Coal Exchange

### Petition wording:

This petition seeks a commitment from the Welsh Government to set up a public enquiry into the events surrounding the Coal Exchange and to support public opinion which seeks to protect and conserve the building.

The Coal Exchange is one of Cardiff's most important buildings and one of the finest buildings in Wales. It's where the world's first million pound deal was struck during the city's industrial heyday (equivalent to over £100m today). Yet far from cherishing this building, Cardiff council proposes to demolish the main body of the building, keeping only the facades.

If this happens, then the magnificent interior with its immense historical significance will be lost forever. This grade 2\* listed building deserves better, and the views of the public need to be heard.

The Council have been claiming for the past year that it is on the point of collapse. No works have been done, yet there is no apparent evidence that the building is about to collapse. It is questioned if Cardiff Council were able to use section 78 powers under the building act to progress their plans, and this needs to be investigated openly.

So much of Cardiff Bay's social and built heritage has already been destroyed; it seems inconceivable that more can be cast aside with cynical abandon.

It's unclear why the council refuses to see the value of restoring the Coal Exchange to protect this iconic building for the use and enjoyment of future generations.

The issues are of the highest level of public interest, and it is considered essential that an open public consultation occurs to review matters.

**Petition raised by:** Jon Avent

**Date Petition first considered by Committee:** 11 March 2014

**Number of signatures:** 389 signatures. An associated petition hosted on another website collected 2680 signatures.

**Ken Skates AC / AM**  
Y Dirprwy Weinidog Diwylliant, Chwaraeon a Thwristiaeth  
Deputy Minister for Culture, Sport and Tourism



Llywodraeth Cymru  
Welsh Government

Ein cyf/Our ref KS/00047/15

William Powell AM  
Assembly Member for Mid & West Wales  
Chair - petitions committee  
Ty Hywel  
Cardiff Bay  
Cardiff  
CF99 1NA

committeebusiness@Wales.gsi.gov.uk

23 January 2015

Dear William Powell AM,

Thank you for your recent letter regarding the petition to save the Coal Exchange, Cardiff.

The Committee asks about the role of the Welsh Government now that the holding company has gone into liquidation and in the light of the building's listed status.

The Cardiff Exchange is one of the most historically important commercial buildings in Wales and its deteriorating condition is the cause of significant concern. As such, officials from across the Department of Economy, Science and Transport have been in discussion over options for the potential preservation and reuse of the building.

Any work would be carried out in association with stakeholders and would help inform and clarify the Welsh Government's future role and support for the re-use of the building.

Yours ever,

**Ken Skates AC / AM**  
Y Dirprwy Weinidog Diwylliant, Chwaraeon a Thwristiaeth  
Deputy Minister for Culture, Sport and Tourism

**P-04-539 Save the Coal Exchange - Correspondence from the Petitioner to the Clerking Team, 12.02.15**

Kayleigh

Many thanks for the reply.

It is promising that Welsh Government is discussing options for the building, although it is vitally important that this does not progress in the way Cardiff Council did in previous years, with a complete veil of secrecy and apparently no consultation with stakeholders, local residents and local business and simply appearing to follow their own pre-determined hidden agenda.

It would be assumed that, in contrast to Cardiff Councils approach, appropriately qualified consultants will be selected for the study via an open and transparent process.

I must stress that the petitions aims remain as strong as ever, and I repeat from my petition as follows:-

***This petition seeks a commitment from the Welsh Government to set up a public enquiry into the events surrounding the Coal Exchange and to support public opinion which seeks to protect and conserve the building.***

Significant funds have been spent by Cardiff Council, and apparently continue to be spent (temporary fencing, staff costs??, lost parking revenue.....etc..) It would seem that this is now well in excess of £1m of which almost none appears to have been spent on protecting the building. The ***public enquiry*** is considered essential as a means of demonstrating accountability of our politicians, rather than the current situation of apparent cover-up and protection.

I would reiterate that the offer of a visit and tour of the Coal Exchange to the petitions committee is in place and trust this offer will now be discussed on the 24<sup>th</sup> Feb, and will be taken up in the near future.

Thank you again for your ongoing assistance with this. It is greatly appreciated.

Regards

Jon

# Agenda Item 5.19

## **P-04-573 – Call on the Welsh Government to Investigate the Residential Leasehold System in Wales.**

### **Petition Wording**

We the undersigned call on the National Assembly for Wales to urge the Welsh Government to instigate an investigation into the way in which the residential leasehold system is operating in Wales despite the changes made by the Leasehold Reform Act and to consider whether there should be a cap on increases to leasehold agreements in Wales.

### **Additional Information:**

This petition has been submitted in light of the fear that residents on the Elba estate in Gowerton are currently experiencing, due to the demands of up to 5000% increases in annual ground rent that Swansea Council are demanding of these leaseholders.

**Petition raised by:** Residents of Elba Estate

**Date Petition first considered by Committee:** 15 July 2014

**Number of signatures:** 583

Lesley Griffiths AC / AM  
Y Gweinidog Cymunedau a Threchu Tlodi  
Minister for Communities and Tackling Poverty



Llywodraeth Cymru  
Welsh Government

Eich cyf/Your ref P-04-573  
Ein cyf/Our ref LG/00080/15

William Powell AM  
Chair - petitions committee  
Ty Hywel  
Cardiff Bay  
Cardiff  
CF99 1NA

committeebusiness@Wales.gsi.gov.uk

27 January 2015

Dear Bill,

You again wrote regarding petition P-04-573 - *Call on the Welsh Government to Investigate the Residential Leasehold System in Wales.*

You asked me to respond to the issues raised by two pieces of correspondence. Byron Davies AM wrote regarding the concerns of his constituent. He actually wrote a similar letter to me, the response to which I enclose with this letter. In summary, though this matter is of a concern for his constituent and her family, it is not the same issue as the case involving the residents of the Elba estate, so should not be regarded as such.

The original petitioner, Ken Douglas, also wrote with further concerns following the decision by Swansea Council to reduce the levels of ground rents from those originally proposed. I am glad the Council have seen sense, and the ground rents have been applied at a more affordable level.

At the end of his letter, Mr Douglas calls for recourse against Local Authorities raising ground rents above an affordable or reasonable level. As I have previously stated to the Committee, the route for recourse is there, and has always been there throughout this process, through the Leasehold Valuation Tribunal.

Regards  
Lesley

Lesley Griffiths AC / AM  
Y Gweinidog Cymunedau a Threchu Tlodi  
Minister for Communities and Tackling Poverty

Bae Caerdydd • Cardiff Bay  
Caerdydd • Cardiff  
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English Enquiry Line 0845 010 3300  
Llinell Ymholiadau Cymraeg 0845 010 4400  
Correspondence: Lesley.Griffiths@wales.gsi.gov.uk

Wedi'i argraffu ar bapur wedi'i ailgylchu (100%)  
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Lesley Griffiths AC / AM  
Y Gweinidog Cymunedau a Threchgu Tlodi  
Minister for Communities and Tackling Poverty



Llywodraeth Cymru  
Welsh Government

Ein cyf/Our ref LG/05389/14

Byron Davies AM  
Assembly Member for South Wales West

[Byron.Davies@wales.gov.uk](mailto:Byron.Davies@wales.gov.uk)

23 November 2014

Dear Byron

Thank you for your letter of 6 November, regarding a constituent who owns the lease on a house where City and County of Swansea is the freeholder.

Whilst I have sympathy with the circumstances you have outlined, the situation is very different to that of residents of the Elba estate. There is a clause in the lease allowing the freeholder to review and potentially increase rents on a periodic basis. Your constituent is coming close to the end of her lease and has been offered a lease extension or the option to buy the freehold.

Lease extensions are a very complex area and I would suggest your constituent contact the Leasehold Advisory Service (LEASE) who can offer her free, impartial advice. LEASE can be contacted on (029) 2078 2222, or by email: [wales@lease-advice.org](mailto:wales@lease-advice.org).

LEASE, though, are not able to represent individuals, so your constituent may also want to take her own legal advice in these particular circumstances.

I will ensure LEASE are made aware of the circumstances of this particular case, though I reiterate this is not a comparable issue to the ground rent increases levied upon the residents of the Elba estate.

Regards  
Lesley

Lesley Griffiths AC / AM  
Y Gweinidog Cymunedau a Threchgu Tlodi  
Minister for Communities and Tackling Poverty

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## **P-04-577 Reinstate Funding to the Real Opportunities Project**

### **Petition Wording**

We call on the National Assembly for Wales to urge the Welsh Government to reinstate funding to the Real Opportunities project previously funded by the European Social Fund in Wales, or some new similar project that has the same values as Real Opportunities. The project is vital to helping 14-19 year olds with a learning disability or autistic spectrum disorder to gain life skills and independence.

### **Additional Information:**

The Real Opportunities project enables 14-19 year olds with a learning disability or Autism Spectrum Disorder to develop skills vital for their transition into a college education as well as enabling them to transition into the world of work and develop basic life skills vital to their independence. The project has helped over 1700 young adults with learning disabilities or Autism Spectrum Disorder and has helped train over 1000 peer mentors with the intention of increasing the levels of integration between mainstream school pupils and those in a special needs unit. The values of this project are vital to these young people who at the start may have little or no awareness of personal hygiene etc and at the end are self aware of their personal hygiene and have completed Agored Cymru qualifications that they would otherwise be unable to do.

**Petition raised by:** Aled Davies

**Date Petition first considered by Committee:** 15 July 2014

**Number of signatures:** 25 - An associated e-petition collected 226 signatures.

Jane Hutt AC / AM  
Y Gweinidog Cyllid a Busnes y Llywodraeth  
Minister for Finance and Government Business



Llywodraeth Cymru  
Welsh Government

Eich cyf/Your ref P-04-577  
Ein cyf/Our ref JH/00024/15

William Powell AM  
Assembly Member for Mid & West Wales  
Chair - petitions committee  
Ty Hywel  
Cardiff Bay  
Cardiff  
CF99 1NA

committeebusiness@Wales.gsi.gov.uk

30 January 2015

*Dear William,*

Thank you for your letter received on 12 January with further comments from Mr Aled Davies, Petitioner to the Committee regarding the Regional SEN Transition into Employment Initiative (Real Opportunities project), which was supported through EU funds 2007-2013.

I am pleased that Mr Davies is engaged with Caerphilly Council on their proposal for a successor EU funds project. My officials in the Welsh European Funding Office (WEFO) assure me that they are continuing to work with Caerphilly Council to progress their application for EU funds and are expecting a first draft of their Business Plan by the end of this month.

While I appreciate the excellent work carried out by The Mix, as Minister I have no role in the approval or selection of EU funding project proposals. Subsequently, a meeting with Mr Davies, should he wish to pursue an EU funds application or seek alternative funds outside of the successor to Real Opportunities, would not be appropriate at this time. Should the Mix wish to explore EU funds opportunities independently of the Real Opportunities project, then I would continue to suggest that Mr Davies contact WEFO directly for advice.

*Best wishes,  
Jane*

**Jane Hutt AC / AM**  
Y Gweinidog Cyllid a Busnes y Llywodraeth  
Minister for Finance and Government Business

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