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**Health and Safety Executive****CD276 Consultation on the transposition of Directive  
2013/35/EU on the minimum health and safety requirements  
regarding the exposure of workers to the risks arising from  
physical agents - electromagnetic fields (EMF)****Reply Form****Completing this Questionnaire**

You can move between questions by pressing the 'Tab' / 'Shift-Tab' or 'Page Up' / 'Page Down' keys or by clicking on the grey boxes with a mouse. Please type your replies within the rectangular grey boxes, or click on the square grey boxes to select an answer (e.g. 'Yes' or 'No').

**Respondent's details:**

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Organisation:

On behalf of the Institute of Physics and Engineering in Medicine

Fax:

### Size of organisation:

Choose one option:

Not applicable

1 to 9 employees

10 to 49 employees

50 to 249 employees

250 to 1000 employees

1000+ employees

Self-employed

### Type of organisation:

Choose one option:

Academic

Charity

Consultancy

Industry

Local government

Member of the public

National government

Non-departmental public body

Non-governmental organisation

Pressure group

Trade association

Trade union

If you chose 'Other' please  
specify:

Professional Organisation

**Is your response being made in your capacity as:**

Choose one option:

An employer <input type="checkbox"/>	An employee <input type="checkbox"/>
Health and safety professional <input type="checkbox"/>	Trade union official <input type="checkbox"/>
Training provider <input type="checkbox"/>	

Other – please specify:

A representative of the IPEM professional organisation.
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**Confidentiality**

Please indicate below whether your comments can be made available to the public or if you want them to be confidential. (NB if you do not indicate your choice they will be made available to the public. This takes precedence over any automatic notes on e-mails that indicate that the contents are confidential.)
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Public	<input checked="" type="checkbox"/>
Confidential	<input type="checkbox"/>

**Q1. Do you agree or disagree with the transposition approach proposed?**

Agree	<input checked="" type="checkbox"/>
Disagree	<input type="checkbox"/>

**If you disagree, please state why?**

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**Q2. Does the guidance at Annex (i) make it clear what your responsibilities as an employer are under 'The Control of Electromagnetic Fields at Work Regulations 2016'?**

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

**If no, how can this be improved?**

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**Q3. Does the guidance at Annex (i) help you to find the information that you need to help you assess your workers' potential exposure to EMFs?**

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

**If no, how can this be improved?**

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**Q4. Is it clear from the guidance at Annex (i) that measurement of EMF exposure levels will only be necessary in strictly limited circumstances?**

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

**If no, how can this be improved?**

**Q5. HSE may exempt work activities from the exposure limits stated in these Regulations. Does the guidance at Annex (i) clearly explain when an exemption applies and the conditions that have to be met?**

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>

**If no, how can this be improved?**

In Annexe (i) the exemption states:

“The exposure limit requirements of the Control of Electromagnetic Fields at Work Regulations 2016 do not apply to the installation, maintenance of, or research related to, MRI equipment where it is used for patients in the health sector”

This is worded differently to Annexe (ii), Application 3. (3) (b):

“(3) Regulations 4(1) and 7(1) do not apply to the exposure of employees to electromagnetic fields-

(b) during the installation, use, development, maintenance of or research related to magnetic resonance imaging equipment for patients in the health sector,”

Annexe B: General Exemption List is still under development so it is not clear whether the use of MRI NOT related to human health care i.e. non-NHS research centres, non-patient volunteers, pre-clinical etc. is exempt or not and under what conditions.

It is unclear whether Quality Assurance/Quality Control/performance testing of MRI equipment is exempt or covered under maintenance.

Page 17 of the draft EMF document (pg 7 of the Guidelines) on ‘Lower risk work activities’ is particularly unclear especially the paragraph:

“You will not need to produce an exposure action plan for lower risk work activities and, as mentioned above; your employees may be exposed to EMFs in excess of the ELVs if they are only exceeded during lower risk work activities.”

**Q6. Does your business involve a work activity in respect of which you may find it difficult to meet the exposure limits?**

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

**If yes, what activity would this be?**

Use of magnetic resonance imaging (MRI) for medicinal purposes and Use of MRI for other purposes (non-patient volunteers, research and pre-clinical)

**Q7. Is there any additional information that you would like to see included in the guidance at Annex (i)?**

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

**If yes, what would this be?**

Further clarification and guidance for pregnant workers in the section “Workers at particular risk”.

Annex (i) states “You may wish to take a practical approach and limit the exposure of pregnant workers to the public exposure limits. These are stated in Council Recommendation 1999/519/EC”

The wording “You may wish...” is too indecisive and irresolute. This may lead to some MRI units applying an exposure limit to static magnetic fields of 2T for their pregnant workers and others 400mT (public exposure limit). A unified statement and approach with respect to managing the risks for pregnant workers employed in all MRI units would be more appropriate.

**Q8. Do you have any comments on the draft ‘The Control of Electromagnetic Fields at Work Regulations 2016’ at Annex (ii)?**

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

**If yes, please provide details.**

Are the units in table AL2 for Magnetic flux density Low ALs (B) [ $\mu\text{T}$ ] (RMS) meant to be  $2.0 \times 10^5 / f$  rather than  $2.0 \times 10^5 / f^2$  ?

**Q9. Do you agree or disagree with the analysis in the impact assessment at Annex (iii)?**

Agree	<input type="checkbox"/>
Disagree	<input checked="" type="checkbox"/>

**Please state why?**

The analysis in the impact assessment at Annex (iii) hugely underestimates the cost implication for MRI. Are the scoping costs (Table 1), Familiarisation Present Value on-going Costs (Table 4) realistically all expected to be nil for MRI?

It is assumed that all sites already have appropriate risk assessments for MRI as this is (apparently) required by the current H&S legislation, but experience suggests this requirement can be interpreted quite differently at different sites and many do not have appropriate risk assessments in place. The requirement for specific risk assessments in MRI under the EMF legislation has a significantly higher than zero cost implication.

The Total Costs of the Regulations £9-14,000 appears very low given there are estimated to be 500 MRI units in Great Britain.

The cost of time for an MRSE (MRI Safety Expert) estimated to be between £40 and £48 an hour (assuming 225 working days in a year, 37 hours worked per week and overheads of around 20%) is considered an underestimate.

**Q10. Do you have any other comments to make on the impact assessment at Annex (iii)?**

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

**If yes, please provide details.**

Under Familiarisation Costs, current businesses 83. “**MRI safety advisor**” should be replaced by “**MRSE (MRI Safety Expert)**”.

**Q11. Are there any further comments you would like to make on the issues raised in this consultative document?**

In Annexe (i) under Exemption for Use of magnetic resonance imaging (MRI) for medical purposes:

“The exposure limit requirements of the Control of Electromagnetic Fields at Work Regulations 2016 do not apply to the installation, maintenance of, or research related to, MRI equipment where it is used for patients in the health sector where:

- It is reasonable in the circumstances that the equipment be used;
- The exposure of employees is reduced to the lowest level reasonably practicable; and
- Employees are protected against the health effects and safety risks arising from their exposure to electromagnetic fields”

It is not clear how ensuring that the exposure of employees is reduced to the lowest level reasonably practicable will be achieved in MRI units with multiple MR scanners of different field strengths (eg. 1.5T, 3T and in some cases 7T) and the exemption only applies if these conditions are met.

**Is there anything you particularly like or dislike about this consultation?  
Please provide comments.**



**Please send your response by 3 December 2015 to:**

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L20 7HS**

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**Thank you for taking the time to complete this questionnaire**