

# Draft Wind Turbines Supplementary Planning Document and Emerging Policy 2013

**Supporting Documents Paper** 



www.milton-keynes.gov.uk/planning-policy

### **Contents**

| Document                 | Page no. |
|--------------------------|----------|
| Statement of Matters     | 3        |
| Consultation Statement   | 7        |
| Evidence Paper           | 11       |
| Sustainability Appraisal | 31       |

# **Statement of Matters**

#### Wind Turbines Statement of Matters

#### **Title of Document**

Milton Keynes Council Draft Supplementary Planning Document and Emerging Policy 2013

#### Subject matter and geographical Cover and draft SPD

The principal objective of the wind turbines SPD and Emerging policy is to offer protection of public safety from any unintended impacts of wind turbine developments. The document relates to large scale wind turbines that are generally constructed as part of a wind farm; it does recognise the potential for smaller non domestic scale wind turbine development.

#### **Period for representations**

The consultation runs for an eight week period, running from Wednesday 17 July 2013 to 5pm Wednesday 11 September 2013. Any person may make representations on the Council's proposals for the SPD within this consultation period.

#### How to make representations

Online: <a href="http://miltonkeynes-consult.limehouse.co.uk/portal">http://miltonkeynes-consult.limehouse.co.uk/portal</a>

Email: <u>development.plans@milton-keynes.gov.uk</u>

Post: Development Plans

Milton Keynes Council

Civic Office

1 Saxon Gate East Central Milton Keynes

MK9 3EJ

Further details of consultation are available at <a href="http://www.milton-keynes.gov.uk/planning-policy/displayarticle.asp?ID=84312">http://www.milton-keynes.gov.uk/planning-policy/displayarticle.asp?ID=84312</a>

Please note that any representations may be accompanied by a request to be notified, at a specified address, of the adoption of the SPD.

# **Consultation Statement**

### The 2013 Wind Turbines Supplementary Planning Document and Emerging Policy Consultation Statement

Prepared in accordance with Regulation 12(a) of The Town and Country Planning (Local Development)(England) Regulations 2004 (as amended)

#### **Background**

This consultation statement sets out the process for the preparation and formal consultation of the draft SPD and emerging policy. It also sets out how the Council will comply with the Statement of Community Involvement (SCI) and the requirements of Regulation 12 of the Town and Country Planning (Local Development) (England) Regulations 2004 (as amended).

#### Preparation of the Draft SPD and Emerging Policy (the 2012 SPD now quashed)

The initial request for an update of wind turbines planning policy came from Parish Councillors. A report was taken to Development Control Committee on 16 June 2011 which recommended that it was not necessary to produce any additional guidance. The item was deferred at the request of the Members of the Committee, so that the report could be sent to Parish Councillors for information. The report was sent to all Parish Councils on 21 June 2011; they were given until 8 August 2011 to respond with any comments. Comments received were reported to the Cabinet Member, along with officer responses.

A further report was taken to the Development Control Committee on 13 October 2011 (including details of the comments received, together with the Officer responses). It recommended that, due to the government's intention to replace all National Planning Policy Statements and Guidance notes (PPSs and PPGs) with the National Planning Policy Framework, an SPD be produced to prevent the loss of the relevant information contained within the PPSs/PPGs and their associated guidance documents. The Development Control Committee resolved to produce an SPD based on a model SPD submitted by a Castlethorpe Parish Councillor and that it be taken to the next available Cabinet meeting (December 2011).

Evidence was gathered and an SPD and interim policy were produced for a meeting of the Cabinet on 20 December 2011. The cabinet report recommended that a separation distance of 800m from settlements be carried forward into the interim policy within the SPD. However, the Council resolved to carry forward a separation distance of 1000m from all dwellings into the interim policy (together with some changes to the document).

Following the December Cabinet meeting, the decision was called in by a group of 20 residents. This resulted in the item being taken back to a further meeting of the Cabinet on 17 January 2012. Further representations were received from a Castlethorpe Parish Councillor prior to the January meeting. The policy within the SPD was reconsidered and revised as a result of these representations. It is this version that has been issued for consultation as a result of the resolution made by Cabinet in January 2012.

#### Strategic Environmental Assessment/ Sustainability Appraisal

A Screening Report was produced and sent to the statutory bodies to assess the requirement for a Strategic Environmental Assessment of the draft SPD. Assessment showed that SEA was required, so a Scoping Report was produced and sent to the statutory bodies. Comments received at the scoping stage were incorporated and the Scoping Report amended. Following the consultation, it was decided to undertake a full Sustainability Appraisal of the SPD. A full Sustainability Appraisal, incorporating the requirements for

Strategic Environmental Assessment, was carried out and made available at the meeting of the Cabinet on 20 December 2011.

#### **Regulation 12 Consultation Arrangements**

The draft SPD was subject to the following consultation arrangements:

- a) The Draft SPD and supporting documents paper (Evidence Paper, Sustainability Appraisal, SPD Matters and Consultation Statement) were made available for inspection:
  - at Milton Keynes Council, Civic Office, 1 Saxon Gate East, Central Milton Keynes, MK9 3EJ
  - at all libraries in the Borough. Library locations and opening hours are available from:
    - http://www.miltonkeynes.gov.uk/library\_services/DisplayArticle.asp?ID=21971
  - on the council's website: <a href="www.milton-keynes.gov.uk/wind-turbines">www.milton-keynes.gov.uk/wind-turbines</a> and: <a href="http://miltonkeynes-consult.limehouse.co.uk/portal">http://miltonkeynes-consult.limehouse.co.uk/portal</a>
- b) An advertisement was placed in the local newspaper MKNews, stating where a copy of the documents could be obtained, and when and where the documents could be inspected.
- c) A covering letter or email was sent to consultees on the Limehouse consultation database, notifying them of the publication of the draft SPD. The following groups were contacted directly:
  - Specific Consultation Bodies
  - General Consultation Bodies with an interest in the draft SPD
- d) The consultation ran from Thursday 2 February until Wednesday 28 March 2012

#### **Adoption**

The consultation responses were considered at a Members' Workshop, resulting in some minor changes to the SPD and Emerging Policy document which were carried forward into the Adopted document. The Consultation Statement was updated with a summary of responses. The Wind Turbines SPD and Emerging Policy: Wind Turbines Planning Applications document was adopted on 24 July 2012. The adoption report and decision notice are available to view via this link - <a href="http://cmis.milton-keynes.gov.uk/CmisWebPublic/Meeting.aspx?meetingID=10245">http://cmis.milton-keynes.gov.uk/CmisWebPublic/Meeting.aspx?meetingID=10245</a>. Copies of the, now

<u>keynes.gov.uk/CmisWebPublic/Meeting.aspx?meetingID=10245</u>. Copies of the, now quashed document, the Adoption Statement and the Consultation Statement are available to view via the links below.

- (Quashed) Wind Turbines SPD and Emerging Policy
- Adoption Statement
- Consultation Statement

#### **Judicial Review**

Following the decision to adopt this document a legal challenge was made by RWE Npower Renewables Ltd. The case was heard in the High Court on 28 February and 1 March by Deputy High Court Judge John Howell QC. In his judgment John Howell QC held that within the Wind Turbines Supplementary Planning Document and Emerging Policy (the "Wind SPD"), section 2 of the Wind SPD Emerging Policy was in conflict with the policy D5 in the

2005 Adopted Local Plan in respect of the separation distance from dwellings. However he also concluded that the claimant had not shown that sections 4 to 6 of the 2012 Wind SPD (minimum distances from bridleways and footpaths and safety requirements) were in conflict with the 2005 Local Plan. Nevertheless, the judge decided to quash the whole of the 2012 SPD – for more information regarding the judicial review please follow the council website at <a href="http://www.milton-keynes.gov.uk/planning-policy/displayarticle.asp?ID=84312">http://www.milton-keynes.gov.uk/planning-policy/displayarticle.asp?ID=84312</a>.

#### The 2013 Draft SPD and Emerging Policy

This Supplementary Planning Document and Emerging Policy has been produced as a result of the judicial review of the 2012 Wind Turbines Supplementary Planning Document and Emerging Policy. It refers to the relevant parts of the 2012 SPD which were not in the judgment found to be in conflict with the 2005 Local Plan policy D5, namely minimum distances from bridleways and footpaths and safety requirements. The principal objectives of the Wind Turbines SPD and Emerging Policy are to:

- ${\bf 1)}\ protect\ public\ safety\ from\ any\ unintended\ impacts\ of\ wind\ turbine\ developments\ and$
- 2) clarify the approach for assessing individual applications.

The draft Wind Turbines Supplementary Planning Document and Emerging Policy (2013) was approved for public consultation by the Cabinet Member for Economic Development and Enterprise on 11 June 2013. The Cabinet Member also agreed that the consultation arrangements as undertaken for the 2012 Supplementary Planning Document should be followed.

#### Strategic Environmental Assessment/ Sustainability Appraisal

The full SA/SEA was prepared for the 2012 Wind Turbines Supplementary Planning Document (SPD) and Emerging Planning Policy. The 2013 Wind Turbine SPD and the Emerging Policy does not include any policies relating to separation distances from residential dwellings and only deals with minimum distances from bridleways and footpaths and safety requirements. For that reason it was considered necessary to revise the previous Sustainability Appraisal Report.

It is considered that stages A1 to A5 of the previous SA/SEA report are still relevant to the proposed SPD and there is no need to significantly amend them. It should be stressed that the current SA/SEA report is made against the SEA objectives that were developed in December 2011.

# Regulation 12 Consultation Arrangements – the 2013 Wind Turbine SPD and Emerging Policy

The draft SPD will be subject to the following consultation arrangements:

- b) The Draft SPD and supporting documents paper (Evidence Paper, Sustainability Appraisal, SPD Matters and Consultation Statement) will be available for inspection:
  - at Milton Keynes Council, Civic Office, 1 Saxon Gate East, Central Milton Keynes, MK9 3EJ
  - at all libraries in the Borough. Library locations and opening hours are available from:
    - http://www.miltonkeynes.gov.uk/library\_services/DisplayArticle.asp?ID=21971
  - on the council's website: <a href="www.milton-keynes.gov.uk/wind-turbines">www.milton-keynes.gov.uk/wind-turbines</a> and: <a href="http://miltonkeynes-consult.limehouse.co.uk/portal">http://miltonkeynes-consult.limehouse.co.uk/portal</a>

- b) An advertisement has been placed in the local newspaper MKNews, stating where a copy of the documents can be obtained, and when and where the documents can be inspected.
- c) A covering letter or email has been sent to consultees on the Limehouse consultation database, notifying them of the publication of the draft SPD. The following groups has been contacted directly:
  - Specific Consultation Bodies
  - General Consultation Bodies with an interest in the draft SPD
- d) The consultation runs from <u>Wednesday 17 July until 5pm on Wednesday 11</u> <u>September 2013</u>

#### **Next Steps**

Following consultation, all comments will be reported to the Council for consideration and the SPD will be amended accordingly, prior to adoption. This Consultation Statement will be updated with a summary of responses.

# **Evidence Paper**

#### 1. Summary of planning appeals

The following list of appeals all have some reference to noise in the Inspector's report. One consistent issue raised by Inspectors is the ETSU R97 'The Assessment and Rating of Noise from Wind Farms' advice, although the separation distances vary from case to case. Copies of the reports are available from the Development Plans team.

Appeals A, B and C APP/Y0435/A/10/2140401, APP/K0235/A/11/2149434 and APP/H2835/A/11/2149437 November 2011 Land between London Road and Harrold Road. Bozeat

Appeal Ref: APP/P2114/A/10/2125561 August 2011 Cheverton Farm, Land at Cheverton Down, Cheverton Shute, Shorwell, Newport, Isle of Wight

Appeal Ref: APP/X2410/A/10/2134009 March 2011 Land adjacent to Wanlip Sewage Treatment Works, Wanlip, Leicestershire

Appeal ref: App/D2510/A/10/2121089 December 2010 Land at Chase Farm, Baumber, Horncastle Lincolnshire

Appeal Ref: APP/U2615/A/10/2131105 November 2010 Land to the east and west of the Ormesby Road, adjacent to the disused Hemsby Meteorological Station between the villages of Ormesby St Margaret and Hemsby Norfolk

Appeal Ref: APP/Y2810/A/10/2120332 July 2010 Land near Glebe Farm, Yelvertoft, Northamptonshire

Appeal Ref: APP/Y2430/A/09/2108595 July 2010 Site at Palmers Hollow (Field No. 2700) Main Street, Normanton, Bottesford, Leics

Appeal Ref: APP/C3105/A/09/2116152 July 2010 Willow Bank Farm, Fritwell Road, Fewcott, Bicester OX27 7NZ

Appeals A and B: APP/R1038/A/09/2107667 and APP/P1045/A/09/2108037
April 2010

Land belonging to Rushley Lodge Farm, off Wirestone Lane, Middle Moor/Matlock Moor

Appeal Ref: APP/J1915/A/09/2104406 March 2010 Land to the east of Walkern Road and north of High Elms Lane, Benington, Hertfordshire

Appeal Ref: APP/X1545/A/06/2023805 January 2010 Hockley Farm, Hockley Lane, Bradwell-on-Sea, Essex CM0 7PZ 10 turbines 121 m high

Appeal Ref: APP/D0840/A/09/2103026 January 2010

Carland Cross Wind Farm, 1.5 km south of St Newlyn East, TR8 5AY

Appeal Ref: APP/C1625/A/09/2116088 January 2010

Standle Farm, Stinchcombe, Dursley, Gloucestershire

Appeal Ref: APP/X1118/A/08/2083682 January 2010

Land at Paul's Moor, Wester Bullaford, West Moor, north of Knowstone,

South Molton EX36 4QH.

Appeal Ref: APP/L2630/A/08/2084443 December 2009

Land around Busseys Loke, Hempnall, Norwich

Appeal Ref: APP/E2001/A/09/2101851 December 2009

Land south of West Linton Farm, Brow Lane, Balkholme, East Riding of

Yorkshire

AppealA: APP/P2935/A/08/2078347 October 2009

Land at Barmoor, between Ford and Lowick Berwick on Tweed

Appeal B: APP/P2935/A/08/2079520

Moorsyde wind farm, north of Felkington and south of Shoresdean

Appeal C: APP/P2935/A/08/2077474

Land at Toft Hill to the south west of Grindon

Appeal Ref: APP/M0933/A/08/2090274 July 2009

Land to the east of Crosslands Farm, Old Hutton, Kendal, Cumbria

Appeal Ref: APP/E2001/A/05/2088796 April 2009

Land south, north and north east of Homer House, Aldbrough Road,

Withernwick, East Riding of Yorkshire

Appeal Ref: APP/L0635/A/07/2047477 November 2008

Aston Grange Farm, Aston, Runcorn, Cheshire WA7 4DG

Appeal Ref: APP/V3310/A/06/2031158 January 2008

Land at Inner Farm, Edithmead, Burnham-on-Sea, Somerset

GDBC/003/00024C LI X1118 May 2007

Application by Devon Wind Power Limited for Consent to Construct and Operate a 66MW Wind Turbine Generating Station at Fullabrook Down in

North Devon (Electricity and Planning Acts)

Appeal Ref: APP/Q1153/A/08/2017162 March 2007

Agricultural land to the south east of North Tawton and South West of Bow

| No. | Date             | PINS reference   | Location   | Turbines | Distance from homes | Reasons (in relation to noise issue)  |
|-----|------------------|--|--|----------|---------------------|---|
| 1   | November<br>2011 | APP/Y0435/A/10/2140401,<br>APP/K0235/A/11/2149434<br>and<br>APP/H2835/A/11/2149437 | Land between London<br>Road and Harrold Road,<br>Bozeat  | 12       | 677 m               | There is no challenge to the proposal on noise grounds from the Councils.  The noise assessment has been carried out in accordance with ETSU-R-97 requirements. BLOT has registered concerns over the appropriateness of the noise modelling and the likelihood of Excessive Amplitude Modulation. I note, however, that these concerns could be addressed by the imposition of suitable planning conditions. |
| 2   | August<br>2011   | APP/P2114/A/10/2125561   | Cheverton Farm, Land at<br>Cheverton Down,<br>Cheverton Shute, Shorwell,<br>Newport, Isle of Wight | 3        | 900 m               | Given the distance to the nearest dwellings, along with the local topography, I do not consider that there are any special circumstances or factors which would apply here to indicate that both construction and operational noise from the proposed wind farm could not be adequately controlled by the conditions suggested to the Inquiry.  |
| 3   | March 2011       | APP/X2410/A/10/2134009   | Land adjacent to Wanlip<br>Sewage Treatment Works,<br>Wanlip, Leicestershire                       | 1        | 609 m               | The noise assessment indicates that the limits could be comfortably met, but the appellant has indicated that in any event no objection would be raised to an appropriately worded condition or conditions the purpose of which would be to ensure compliance.  |
| 4   | December         | APP/D2510/A/10/2121089   | Land at Chase Farm,  | 8        | 698 m               | As to the totality of noise considerations there  |

|   | 2010             |                        | Baumber, Horncastle<br>Lincolnshire   |   |                                      | is no justifiable basis to conclude that this is a factor to be weighed against the project.   |
|---|------------------|------------------------|---|---|--------------------------------------|--|
| 5 | November<br>2010 | APP/U2615/A/10/2131105 | Land to the east and west of the Ormesby Road, adjacent to the disused Hemsby Meteorological Station between the villages of Ormesby St Margaret and Hemsby Norfolk | 4 | ?                                    | The Companion Guide to PPS22 (Technical Annex 8 para 45) the Government's view is quite simply that there is no evidence that ground transmitted low frequency noise from turbines is at a sufficient level to be harmful to human health. This view is restated in Revised Draft National Policy Statement for Renewable Energy Infrastructure (EN-3) which was published by the Government for consultation in the Autumn of 2010. |
| 6 | July 2010        | APP/Y2430/A/09/2108595 | Main Street, Normanton,<br>Bottesford, Leics  | 8 | 725 m                                | I conclude that the proposed development would satisfy the requirements set out in ETSU-R-97 and therefore conform to the guidance in PPS22.  The suggested condition, which has the agreement of the appellant and Council provides a means for assessing any AM together with a means of mitigating the problem, in the event that AM might occur were I to allow this appeal.   |
| 7 | July 2010        | APP/Y2810/A/10/2120332 | Land near Glebe Farm,<br>Yelvertoft,<br>Northamptonshire  | 8 | 500 m (but M1<br>motorway<br>effect) | I accept that ETSU-R-97 is now of some age and predated the development of the larger turbines which are now being constructed, but the Government has decided that it should remain the standard that should be applied.  |

| 8  | July 2010       | APP/C3105/A/09/2116152                                  | Willow Bank Farm, Fritwell<br>Road, Fewcott, Bicester                                       | 4  | ?           | I am content that the proposed noise limits, enforced by condition, would provide adequate protection for local residents against adverse noise effects that the turbines might otherwise cause. The predicted noise levels would not remove that protection and the simplified form of the noise limit would ease enforcement. |
|----|-----------------|---|---|----|-------------|---|
| 9  | April 2010      | APP/R1038/A/09/2107667<br>and<br>APP/P1045/A/09/2108037 | Land belonging to Rushley<br>Lodge Farm, off Wirestone<br>Lane, Middle<br>Moor/Matlock Moor | 5  | 650 m       | Living conditions would be unacceptably harmed, to varying degrees, by noise and visual impact. The ease and speed with which any breaches of the noise limits could be addressed, and the uncertainties about noise levels in the Amber Valley, are also matters that concern me.  |
| 10 | March 2010      | APP/J1915/A/09/2104406                                  | Land to the east of Walkern Road and north of High Elms Lane, Benington, Hertfordshire      | 3  | 750 m       | I conclude on the third issue that neighbouring residents would not suffer unacceptable disturbance from noise or shadow flicker  |
| 11 | January<br>2010 | APP/X1545/A/06/2023805                                  | Hockley Farm, Hockley<br>Lane, Bradwell-on-Sea,<br>Essex                                    | 10 | 600 to 630m | The identified harm and associated conflict with the development plan is limited and would be here outweighed in the wider public   |

|    |                 |                        |   |          |                                | interest by the benefits.  |
|----|-----------------|------------------------|---|----------|--------------------------------|--|
| 12 | January<br>2010 | APP/D0840/A/09/2103026 | Carland Cross Wind<br>Farm, 1.5 km south of St<br>Newlyn East                               | 10       | 600m                           | The proposed wind farm, being sited close to A30 where ambient noise levels are less susceptible to increase, where separation distances from existing dwellings are generally greater than now, and where proposed turbines on the western part of the site would all be in excess of 600m away from houses and can be operated within the requisite ETSU-R-97 derived limits has, I consider, been located and designed in accordance with this advice.                    |
| 13 | January<br>2010 | APP/C1625/A/09/2116088 | Standle Farm,<br>Stinchcombe, Dursley,<br>Gloucestershire                                   | 1 (mast) | 400 m                          | Given the distance of the site from the nearest properties, there would be no likelihood of disturbance to local residents from any sounds arising from the movement of wind through the structure, including the guys   |
| 14 | January<br>2010 | APP/X1118/A/08/2083682 | Land at Paul's Moor,<br>Wester Bullaford, West<br>Moor, north of Knowstone,<br>South Molton | 9        | 5 x the height of the turbines | ETSU seeks to define an acceptable noise environment during quiet daytime and night time periods, as compared with the existing background noise environment. Hence there is no need to set a minimum distance from property to turbine as the actual baseline noise environment will vary from site to site. The noise issue, then, boils down to whether the appellant has shown that noise generated by the development would be likely to be within, or capable of being |

|    |                  |  |   |             |       | constrained within, the noise guidelines in ETSU. It is my view that that has been demonstrated.   |
|----|------------------|--|---|-------------|-------|--|
| 15 | December<br>2009 | APP/L2630/A/08/2084443   | Land around Busseys Loke,<br>Hempnall, Norwich  | 7           | 700 m | I am also content that noise can be adequately dealt with by planning conditions, although some adjustment of the permitted quiet daytime noise limits suggested would in my judgement be desirable to ensure increases in ambient noise levels are minimised in line with paragraph 41 of the PPS22 Companion Guide.  |
| 16 | December<br>2009 | APP/E2001/A/09/2101851   | Land south of West Linton<br>Farm, Brow Lane,<br>Balkholme, East Riding of<br>Yorkshire | 10          | 600m  | On the main issues I find that there would be harm to the landscape character of the area, and conflict with some parts of the development plan. However, the degree of harm is limited and in my judgement is outweighed by the urgent need to provide renewable energy and the support of policy at national, regional and sub regional level. Subject to suitable conditions I do not find that there would be unacceptable harm to the living conditions of nearby residents |
| 17 | October<br>2009  | APP/P2935/A/08/2078347<br>APP/P2935/A/08/2079520<br>APP/P2935/A/08/2077474 | Land at Barmoor,<br>between Ford and<br>Lowick Berwick on<br>Tweed                      | 6<br>7<br>7 | 770 m | For the Moorsyde appeal, I consider that the main considerations are the landscape and visual effects of the proposed wind farm; and the effect of noise on living conditions at nearby dwellings My concerns about visual effects and noise are, in themselves, of insufficient weight to make the wind farm  |

| 10 | July 2000        | A DD /M0022 /A /09 /2000274 | Land to the east of  | 6 | 600 m | unacceptable. But, when taken together with the major effects on the landscape generally, and on the views of the Cheviots in particular, I have reached the view that the proposed wind farm has serious detracting features.  I consider that the turbines are unlikely to                                       |
|----|------------------|-----------------------------|--|---|-------|--|
| 18 | July 2009        | APP/M0933/A/08/2090274      | Crosslands Farm, Old<br>Hutton, Kendal   | 6 | 600 M | cause unacceptable noise at nearby dwellings.  Nevertheless, I accept the need for a noise limits condition on a precautionary basis.  |
| 19 | April 2009       | APP/E2001/A/05/2088796      | Land south, north and<br>north east of Homer<br>House, Aldbrough Road,<br>Withernwick, East Riding<br>of Yorkshire | 9 | ?     | I am satisfied that noise levels at the closest residential properties could be maintained within the limits specified in ETSU-R-97. PPS22 states that this report should be used to assess and rate noise from wind energy development.   |
| 20 | November<br>2008 | APP/L0635/A/07/2047477      | Aston Grange Farm,<br>Aston, Runcorn,<br>Cheshire  | 4 | ?     | The criteria included in ETSU-R-9722 do not require that turbines are inaudible at the nearest noise-sensitive properties; merely that they should not exceed certain limits. The noise survey carried out on behalf of the appellant demonstrates that there would be no exceedence of the relevant noise limits. |
| 21 | January<br>2008  | APP/V3310/A/06/2031158      | Land at Inner Farm,<br>Edithmead, Burnham-<br>on-Sea, Somerset   | 5 | 440 m | There is no clear evidence that noise from the turbines, noise-related problems or shadow flicker would cause any unacceptable harm to living conditions locally, especially if controlled by appropriate conditions.  |

| 22 | May 2007      | GDBC/003/00024C LI<br>X1118 | Application by Devon Wind Power Limited for Consent to Construct and Operate a 66MW Wind Turbine Generating Station at Fullabrook Down in North Devon (Electricity and Planning Acts) | 22 | 450 m | I conclude that, with suitable mitigation (through the use of SRS or SCADA were the Vestas V90 turbine to be used), and the imposition of Condition 20 (Option 1) and the other agreed noise conditions, this development would be compliant with the Recommended Good Practice on Controlling Noise from Wind Turbines as contained in the Companion Guide to PPS22, with ETSU-R-97              |
|----|---------------|-----------------------------|---|----|-------|---|
| 23 | March<br>2007 | APP/Q1153/A/08/2017162      | Agricultural land to the south east of North Tawton and South West of Bow   | 9  | I km  | While I am aware that the validity of the ETSU-R-97 methodology has also been questioned by objectors, especially in the context of low frequency sound and other potential noise and health impacts, the use of this methodology was coincidentally affirmed during the course of the Inquiry in a letter dated 22 November 2006 from the Department of Communities and Local Government (DCLG). |

#### 2. Other documents

Hayes Mckenzie report on wind turbine noise <a href="http://www.decc.gov.uk/en/content/cms/meeting">http://www.decc.gov.uk/en/content/cms/meeting</a> energy/wind/onshore/comms p <a href="maining/noise/noise.aspx">lanning/noise/noise.aspx</a>

ETSU-R-97 The Assessment and Rating of Noise from Wind Farms <a href="http://regmedia.co.uk/2011/08/02/etsu-r-97.pdf">http://regmedia.co.uk/2011/08/02/etsu-r-97.pdf</a>.

Renewable Energy UK Guidelines for onshore and offshore wind farms <a href="http://www.bwea.com/pdf/HSGuidelines.pdf">http://www.bwea.com/pdf/HSGuidelines.pdf</a>

Environmental Impact Assessment Regulations <a href="http://www.legislation.gov.uk/uksi/1999/293/contents/made">http://www.legislation.gov.uk/uksi/1999/293/contents/made</a>

Environmental Impact Assessment Guidance <a href="http://www.communities.gov.uk/publications/planningandbuilding/environmentalimpactassessment">http://www.communities.gov.uk/publications/planningandbuilding/environmentalimpactassessment</a>

UK Environmental Law Association summary of recent case law

#### 3. Documents provided to Milton Keynes Council by parish councillor

Bulletin of Science Technology and Society August 2011-12-22 www.epaw.org/documents/Interp Evidence re Wind Turbines.pdf

Dr C Hanning Sleep Disturbance-wind turbine noise <a href="https://www.windvigilance.com/about-adverse-health-effects/wind-turbine-noise-sleep-and-health-by-dr-hanning">www.windvigilance.com/about-adverse-health-effects/wind-turbine-noise-sleep-and-health-by-dr-hanning</a>

Lord Reay's members bill 2010/11 <a href="https://www.publications.parliament.uk/pa/ld201011/ldhansrd/text/110610-0001.htm#11061043000429">https://www.publications.parliament.uk/pa/ld201011/ldhansrd/text/110610-0001.htm#11061043000429</a>

Dr A Barry Wind Turbines Noise and Health 2007 <a href="mailto:rawindfarm.com/wp-content/uploads/wtnoise">rawindfarm.com/wp-content/uploads/wtnoise</a> health 2007 a barry.pdf

Dr. Nina Pierpont wind turbine syndrome 2009 www.windturbinesyndrome.com/book.html

Renewable Energy Foundation 2009 <a href="https://www.ref.org.uk/attachments/article/151/jc.lm.salford.data.comment.07.02.09.c.pdf">www.ref.org.uk/attachments/article/151/jc.lm.salford.data.comment.07.02.09.c.pdf</a>

Denbrook wind farm Devon legal challenge www.bailii.org/ew/cases/EWCA/Civ/2011/638.html

aeinews September 21st 2011 aeinews.org/archives/1440

R James Noise Con 2008 <u>acousticecology.org/wind/winddocs/noise/kamperman%20james 08 siting%20guid</u> elines full.pdf

Retexo RISP www.retexo.de/english/wind/seite5a.htm

The French Academy of Medicine <u>kirbymtn.blogspot.com/2006/03/french-academy-of-medicine-warns-of.html</u>

U.K. Noise Association <a href="http://www.countryguardian.net/Location.pdf">http://www.countryguardian.net/Location.pdf</a>

CPRE Northamptonshire

www.cprenorthants.org/documents/Misc/Windfarms-TimeToChangeDirection.pdf

(N.b.) CPRE Control office confirmed this does not change their national policy.

(N.b.) CPRE Central office confirmed this does not change their national policy November 2011.

Bulletin of Science, Technology & Society Wind Turbine Article Abstracts

http://www.windturbinesyndrome.com/news/wp-content/uploads/2011/08/BSTSociety-8 11-Abstracts.pdf.

Article by McGrigors Energy http://www.mcgrigors.com/e-bulletin/energy/eb 27 Sept 2010.html

The "How To" Guide To Siting Wind Turbines To Prevent Health Risks From Sound <a href="http://www.windaction.org/documents/17229">http://www.windaction.org/documents/17229</a>

The Acoustic Ecology Institute AEI Special Report: Wind Energy Noise Impacts <a href="http://www.acousticecology.org/srwind.html">http://www.acousticecology.org/srwind.html</a>

MAS Environmental, The Occurrence of Excess Amplitude Modulation <a href="http://www.nrc.me.uk/Windfarm/Misc%20Docs/MASreportturbinesatNewAlbion10">http://www.nrc.me.uk/Windfarm/Misc%20Docs/MASreportturbinesatNewAlbion10</a> <a href="https://occurrence.org/docs/MASreportturbinesatNewAlbion10">http://occurrence.org/docs/MASreportturbinesatNewAlbion10</a> <a href="https://occurrence.org/docs/MASreportturbinesatNewAlbion10">http://occurrence.org/docs/MASreportturbinesatNewAlbion10</a> <a href="https://occurrence.org/docs/MASreportturbinesatNewAlbion10">https://occurrence.org/docs/MASreportturbinesatNewAlbion10</a> <a href="https://occurrence.org/docs/MASreportturbinesatNewAlbion10">https://occurrence.org/docs/MASreportt

Hoare Lea Acoustics presentation, Noise and Wind Turbines http://www.bwea.com/pdf/planningconfs/hartlepool/Bullmore.pdf.

Letter written on behalf of illwind <a href="http://illwind.co.uk/Documents/Dismissed%20Wind%20Turbine%20Appeals%20-%20Summary%20Document.doc">http://illwind.co.uk/Documents/Dismissed%20Wind%20Turbine%20Appeals%20-%20Summary%20Document.doc</a>.

10th International Congress on Noise as a Public Health Problem (ICBEN) 2011, London, UK, Adverse health effects of industrial wind turbines: a preliminary report <a href="http://www.wind-watch.org/documents/adverse-health-effects-of-industrial-wind-turbines-a-preliminary-report/">http://www.wind-watch.org/documents/adverse-health-effects-of-industrial-wind-turbines-a-preliminary-report/</a>

A Summary of new evidence: Adverse health effects and industrial wind turbines August 2011

http://www.epaw.org/documents.php?lang=en&article=ns25

Eon document, Turbines on your Land <a href="http://www.eon-uk.com/Turbinesonyourland.pdf">http://www.eon-uk.com/Turbinesonyourland.pdf</a>.

#### **European examples**

#### CZECH REPUBLIC

There are no regulations on setbacks from wind turbine. In practice: 400 m to 800 m (1,312-2,625 ft).

#### DENMARK

Wind turbines must be situated at a minimum distance of  $4 \times$  their height away from habitation. If the windmill is erected closer than  $6 \times$  its height, an estimation is carried out free of charge regarding the depreciation of the property value. If the loss is more than 1%, full compensation of the loss in property value is paid out.

If the property is situated farther away than  $6 \times$  the height of the turbine, 4,000 DKK is payable to have an evaluation of the loss in value carried out. If it is estimated that the depreciation is more than 1%, the loss in value of the property is paid out and the 4,000 DKK reimbursed. If it is estimated that there is no loss in value of the property, the 4,000 DKK is forfeited. Owners of wind turbines have to pay the compensation.

#### ENGLAND, WALES

No regulations. In a court case, the previous owners of a house were condemned to compensate the buyers because they had not disclosed the wind farm project affecting the house: "District Judge Buckley decided that this amounted to 'material misrepresentation' and ordered the Holdings to pay compensation of 20 per cent of the market value of the house in 1997, £12,500, plus interest, because of damage to visual amenity, noise pollution and the 'irritating flickering' caused by the sun going down behind the moving blades of the turbines 550 metres [1,804 ft] from the house."

#### FRANCE

On a case-by-case basis, limited by noise legislation with a 500m exclusion zone around operational turbines.

However, in France, Marjolaine Villey-Migraine (PhD in Information and Communication, University of Paris II-Panthéon-Assas, Specialist in Scientific and Technical Information) concluded that the minimum should be 5 km (3 miles). More information can be found at <a href="www.wind-watch.org/documents/eoliennes-sons-et-infrasons-effets-de-leolien-industriel-sur-la-sante-des-hommes-wind-turbines-noise-and-infrasound-effects-of-industrial-wind-energy-on-human-health/">watch.org/documents/eoliennes-sons-et-infrasons-effets-de-leolien-industriel-sur-la-sante-des-hommes-wind-turbines-noise-and-infrasound-effects-of-industrial-wind-energy-on-human-health/</a>.

#### GERMANY

Different setbacks apply according to the noise level protection of the area:

- "quiet regions" [35 dB(A)]: 1,000-1,500 m (3,281-4,921 ft)
- o "middle regions" [(40 dB(A)]: 600-1,000 m (1,969-3,281 ft)
- "standard region" [(45 dB(A)]: 300-600 m (984-1,969 ft)

All makes and models of wind turbines are not equally noisy, hence the lack of a precise distance. Some states have standards of their own.

#### ITALY

Setbacks are determined by regional authorities. Some regions have defined setbacks, others don't. Calabria and Molise:  $5 \times$  the height of the turbines. Basilicata: 2 km from urbanized areas. Campania:  $10 \times$  the turbine height from urbanized areas. Molise:  $20 \times$  the turbine height from urbanized areas.

#### NETHERLANDS

In practice, they use  $4 \times$  the height of the mast of the wind turbine. This is not a legal setback. The legal setback is linked to a maximum noise level [40 dB(A)].

#### NORTHERN IRELAND

The "Best Practice Guidance to Planning Policy Statement 18 'Renewable Energy'" (August 2009) states: "As a matter of best practice for wind farm development, the Department [of the Environment] will generally apply a separation distance of 10 times rotor diameter to occupied property (with a minimum distance of not less than 500m)."

#### SCOTLAND

On a case-by-case basis within 2 km of the edge of cities, towns, and villages (SSP6 legislation).

#### SPAIN

National: noise legislation applies. Regional: wind power policies sometimes specify a setback. Examples:

- Valencia: 1,000 m (3,281 ft) from any piece of land that may be built upon.
- o Andalucia: 500 m (1,640 ft)

#### SWEDEN

The limit is the noise level [40 dB(A)].

Caithness Windfarm Information Forum www.caithnesswindfarms.co.uk/page4.htm.

Legal Challenges- reference to High Court challenge by Jane and Julian Davis from Lincolnshire (settled out of court December 2011).

Emerging UK Legislation: Wind Turbines (Minimum Distances from Residential Premises) Act 2010 sponsored by Lord Reay <a href="https://www.publications.parliament.uk/pa/ld201011/ldhansrd/text/110610-0001.htm#11061043000429">www.publications.parliament.uk/pa/ld201011/ldhansrd/text/110610-0001.htm#11061043000429</a>

Turbine manufacturer's guidelines www.windaction.org/documents/16496

**British Horse Society statement** 

www.bhs.org.uk/sitecore/content/mss content/Websites/MainSite/About Us/Free Leaflets/Rights of Way/Rights of Way Leaflets.aspx

A paper from the Acoustic Ecolgy Institute - Wind Energy Noise impacts (17/9/2011)-suggesting a 1.5km set-back to avoid noise issues <a href="http://www.windaction.org/documents/17229">http://www.windaction.org/documents/17229</a>

A summary of new evidence (Aug 2011) of the adverse health impacts <a href="http://www.acousticecology.org/docs/AEI%20Wind%20Turbine%20Noise%20report">http://www.acousticecology.org/docs/AEI%20Wind%20Turbine%20Noise%20report</a> %202009.pdf

A report from the International congress on Noise as a Public Health Nuisance - July 2011 - concluding set-backs of less than 1.5km are unsafe

A report from Dr Andrew Bullmore of Hoare Lee Acoustice (2009 we believe) that states the original ETSU set-back guidelines of >350m should now be >700m

Information on AM - an Appendix from a Wind Farm Case produced by Mike Stigwood - MIOA, FRSPH - a leading UK expert, who notes excess AM impacts at distances of 1450m

http://www.windaction.org/documents/33057

How to site turbines to prevent health risks from sound " (2008) from George W. Kamperman and Richard James which states >1km setback based on the turbines of that time

http://www.wind-watch.org/documents/the-how-to-guide-to-criteria-for-siting-wind-turbines-to-prevent-health-risks-from-sound/

A summary of recently dismissed appeals in the UK (May 2011) quoting developer guidelines of >700m in some cases and >1000m for Scottish Power

|     |          |                        | Recent l                           | Relevant Ap | peal Dismissals by the I  | Planning Inspectorate  |
|-----|----------|------------------------|------------------------------------|-------------|---|--|
| No. | Date     | Reference              | Location                           | Turbines    | Distance from Homes   | Reasons Appeal dismissed   |
| 1.  | 24/02/11 | APP/K3415/A/10/2134017 | Lichfield                          | 1 x 126.5m  | 26 within 850m (2 homes 450m away).   | <ul> <li>Harm to heritage asset.</li> <li>Detrimental effect on residential amenity.</li> </ul>  |
| 2.  | 27/10/10 | APP/W0530/A/09/2108277 | Linton                             | 8 x 125m    | Closest 700m away, but most more than 1km away                                    | <ul> <li>Radar issues not satisfactorily addressed.</li> <li>Harm to heritage assets.</li> <li>Harm to the landscape.</li> <li>Likelihood of harm to protected species [bats].</li> </ul>  |
| 3.  | 10/11/10 | PPA-110-2055           | Inverurie                          | 3 x 92.5m   | one 379m, five 500/600m   | <ul> <li>Contrary to the provisions of the Local Plan</li> <li>Impact on Landscape Character.</li> <li>Visual Amenity</li> </ul>   |
| 4.  | 20/09/10 | APP/Y2810/A/10/2125093 | Draughton                          | 7 x 126.5m  | 33 within 3km radius, one<br>800m and one 700m                                    | Impact on heritage assets.   |
| 5.  | 19/02/10 | P/PPA/110/2018         | Inverurie                          | 3 x 93.5m   | one 379m, five 500/600m   | <ul> <li>Visual amenity</li> <li>Contrary to the provisions of the Local Plan</li> </ul>   |
| 6.  | 08/07/10 | APP/Y2430/A/09/2108595 | Normanton                          | 8 x 100m    | Nearest property 725m   | <ul> <li>Effect on landscape</li> <li>Impact on heritage assets</li> <li>Residential amenity.</li> </ul>   |
| 7.  | 22/04/10 | APP/R1038/A/09/2107667 | Matlock Moor                       | 5 x 126m    | Nearest property 750m   | <ul> <li>Harm to landscape</li> <li>Impact on heritage assets</li> <li>Impact on rare birds.</li> <li>Concern over noise limits being breached.</li> <li>Concern over ability to control noise effectively by the application of conditions.</li> <li>Unacceptable harm to living conditions at 2 properties.</li> </ul> |
| 8.  | 11/02/10 | APP/W4705/A/09/2114165 | Bradford                           | 1 x 120.5m  | Situated in a residential area,<br>the nearest property 165m                      | <ul> <li>General Safety</li> <li>Adverse effect of Shadow Flicker.</li> <li>Adverse noise effect and tightness of predicted noise margins to ETSU-R-97 limits.</li> <li>Highway Safety.</li> <li>Endangerment of protected species [bats].</li> </ul>  |
| 9.  | 27/10/09 | Joint Public Inquiry.  | Steadings Estate<br>Northumberland | 21 x 125m   | Isolated farms. Closest properties (< 900m) have a financial interest.            | <ul> <li>Radar issues not satisfactorily addressed.</li> <li>Impact on landscape</li> <li>Impact on setting of heritage assets</li> </ul>  |
| 10. | 27/10/09 | Joint Public Inquiry.  | Ray Estate,<br>Northumberland      | 16 x 125m   | Village 2.5km away  | Radar issues not satisfactorily addressed.   |
| 11. | 15/07/09 | APP/L3245/A/08/2088742 | Shropshire                         | 7 x 110m    | Several rural dwellings<br>690m – 750m away                                       | Residential amenity.   |
| 12. | 16/03/09 | APP/X2220/A/08/2071880 | Langdon,                           | 5 x 120m    | 1 property 360m,<br>27 homes within 820 m   | <ul> <li>Radar issues not satisfactorily addressed.</li> <li>Noise</li> <li>Shadow Flicker</li> <li>Visual amenity.</li> <li>Insufficient separation distance</li> </ul>   |
| 13. | 09/03/09 | APP/F2605/A/08/2089810 | Shipdham                           | 2 x 100m    | 9 within 700m, of which one<br>500m and another 432m<br>22 dwellings within 1093m | <ul> <li>Shortcomings of Ecotricity's background noise measurements.</li> <li>Proximity to dwellings.</li> <li>Tightness of predicted noise margins to ETSU-R-97 limits.</li> <li>Reliance upon conditions to make the scheme acceptable.</li> <li>Frequency with which the conditions would be triggered.</li> </ul>    |

### 4. Information from Local Government Improvement and Development website

### **Identifying suitable sites**

| Wind speed            | Minimum average wind speeds of 5 – 6m/s will be required to obtain a good return from a wind turbine, potentially higher for commercial developers who are looking to maximise profits.  |
|-----------------------|--|
| Monitoring wind speed | Wind speed monitoring is advisable prior to developing a wind energy project, to obtain more accurate data on wind speeds at the height of the proposed turbine, to allow energy output to be estimated. Ideally, monitoring will be undertaken for a full year. Planning permission may be required for the wind monitoring mast. |
| Grid<br>connection    | Although some small wind turbines may be specified for off-grid locations, many will require access to a grid connection point. Underground or overhead power lines can be very expensive, so the closer the site is to a suitable connection point the better.  |
| Spacing               | If more than one turbine is being installed, a space of at least five times the diameter of the rotor should be allowed between turbines to optimise power output by reducing wind shadowing and or turbulence.  |
| Access                | Access for installation also needs to be taken into account. While remote areas may have better wind resources and less impact on the local community, access for vehicles to construct the foundations and transport the turbine blades and mast may be constrained.  |

### Designated areas and approximate setback distances

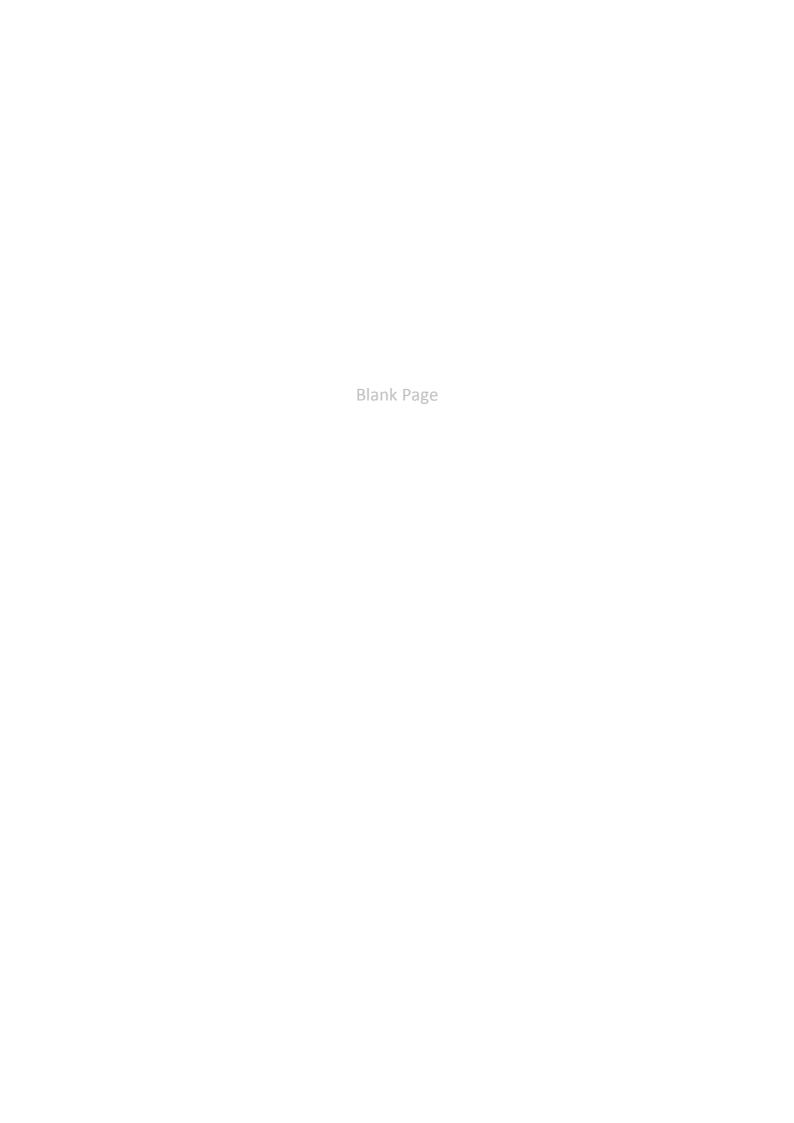
| Designated nature conservation areas | Designated nature conservation areas should be avoided, and a setback distance from the boundary of the designated area may be recommended by ecologists, for example, where sites are used by birds.  |
|--------------------------------------|--|
| Designated<br>landscape              | Designated landscapes may or may not be suitable for wind turbines, depending on the reason for their designation and the impact that wind turbines may have on this. Views from designated landscapes to wind turbine sites in the vicinity may also need to be taken into account. |
| Bats                                 | Hedgerows and woodland areas need to be avoided to reduce the potential impact on bats. Separation distances of around 50m for hedgerows and 100m for woodland may be required for large turbines.   |
| Greenbelt                            | Greenbelt should be taken into account when deciding if a location is suitable, but is not an absolute constraint on wind energy development.  |
| Residential properties               | A setback distance of at least 600 – 800 metres from residential properties for large wind turbines. This may be reduced for smaller projects. Other land uses, including non-residential buildings and agriculture, can still be accommodated in this zone.                         |
| Infrastructure                       | Minimum distances from roads, power lines, gas pipelines and other infrastructure, which are required by the Highways Agency and other infrastructure operators including National Grid.   |
| Exclusion area                       | Exclusion areas around airports, airfields and MOD land, which should be determined in consultation with the relevant bodies depending on the nature of the project.   |
| Communication links                  | Communications links need to be taken into account in consultation with the relevant telecoms operators.   |

Source: http://www.idea.gov.uk/idk/core/page.do?pageId=25290366

### Non-technical summary:

Sustainability Appraisal/Strategic Environmental assessment of the Wind Turbine Supplementary Planning Document and Emerging Policy

June 2013



#### 1. Introduction

- 1.1 This non-technical summary of the Sustainability Appraisal/Strategic Environmental Assessment (SA/SEA) report should be read alongside the full SA/SEA and the Wind Turbines Supplementary Planning Document (SPD) and Emerging Policy.
- 1.2 This report aims to provide information which will support evaluation of the SPD by stakeholders and members of the public and assist in forming consultation responses to the draft SPD.
- 1.3 This SA/SEA report is published alongside the draft SPD and comments on both documents are welcomed.

## 2. Methodology

- 2.1 The SA/SEA report has been produced in accordance with the SEA Directive and government guidance. It incorporates the 'scoping report' produced as part of 'Stage A' and adds the 'environmental report' as part of 'Stage B and C'. English Heritage, Natural England and the Environment Agency were consulted on the scope of the SA/SEA in December 2011. The appraisal of the draft Wind Turbines Supplementary Planning Document and Emerging Policy was undertaken by the Milton Keynes Development Plans team in December 2011. The Wind Turbine Supplementary Planning Document and Emerging Policy was adopted on 24 July 2012. The SPD was quashed by a High Court judgment in April 2013. A new Wind Turbine Supplementary Planning Document and Emerging Policy has been produced as a result of the judicial review.
- 2.2 It is considered that stages A1 to A5 of the previous SA/SEA report are still relevant to the proposed SPD and there is no need to significantly amend them. It should be stressed that the current SA/SEA report is made against the SEA objectives that were developed in December 2011.

| Stage A: Setting the context and | A1: Identifying other relevant plans, programmes          |  |
|----------------------------------|---|--|
| objectives, establishing the     | and environmental protection objectives                   |  |
| baseline and deciding on the     | A2: Collecting baseline information                       |  |
| scope                            | A3: Identifying sustainability issues                     |  |
|                                  | A4: Developing SEA objectives                             |  |
|                                  | A5: Consulting on the scope of the SEA                    |  |
| Stage B: Developing and          | <b>B1:</b> Testing the plan or programme objectives       |  |
| refining alternatives and        | against the SEA objectives                                |  |
| assessing effects                | <b>B2:</b> Developing Strategic Alternatives              |  |
|                                  | <b>B3:</b> Predicting the effects of the plan or          |  |
|                                  | programme, including alternatives                         |  |
|                                  | <b>B4:</b> Evaluating the effects of the draft plan or    |  |
|                                  | programme, including alternatives                         |  |
|                                  | <b>B5:</b> Considering ways of mitigating adverse effects |  |
|                                  | <b>B6:</b> Proposing measures to monitor the              |  |

|   | environmental effects of the plan or programme implementation                                     |
|---|---|
| Stage C: Preparing the environmental report | C1: Preparing the environmental report  |
| Stage D: Consultation and decision-making   | <b>D1:</b> Consulting on the draft plan or programme and environmental report                     |
|   | <b>D2:</b> Assessment of significant changes <b>D3:</b> Decision making and providing information |
| Stage E: Monitoring                         | <b>E1:</b> Developing aims and methods for monitoring   |
| implementation of the plan or programme     | E2: Responding to adverse effects   |

# 3. Content and objectives of the Wind Turbines Supplementary Planning Document and Emerging Policy

3.1 The principal objective of the wind turbines SPD and Emerging policy is to offer protection of public safety from any unintended impacts of wind turbine developments. The document relates to large scale wind turbines that are generally constructed as part of a wind farm; it does recognise the potential for smaller non domestic scale wind turbine development.

#### 4. Baseline Situation

4.1 Milton Keynes Borough covers an area of approximately 50,000 hectares. The population increased by an estimated 17% between 2001 and 2011 to 248,800. Current capacity from wind farms equates to 14MW from a single site at Petsoe Manor near Olney. Milton Keynes has a wealth of historic and environmental assets with 50 scheduled ancient monuments, three registered parks and gardens, 27 conservation areas and over 1,100 listed buildings. Of these listed buildings, one listed building and six scheduled ancient monuments were at risk in December 2011. Excluding Wildlife Sites, there were 1,951 hectares of sites designated for their biodiversity value in the Borough. This equates to 6.32% of the whole Borough.

## 5. Sustainability Framework

5.1 A review of relevant plans, policies, programmes and environmental objectives, combined with the baseline data and officer knowledge identified a number of key sustainability issues.

Wind farm developments can reduce reliance on green house gases and in turn reduce the vulnerability of rare and endangered flora and fauna to changes in climate in the longer term.

There may be immediate impacts on biodiversity depending on the location of turbines.

Potential for additional noise, shadow flicker and other risks associated with onshore wind turbines.

Wind farms could have implications for soil quality and loss of agricultural land.

Wind development has the potential to make a positive contribution to reducing CO2 emissions and increasing energy supply from renewable sources

Wind developments are likely to have a visual impact on landscape.

5.2 This all led to the development of an SA/SEA framework that included the identification of nine objectives; one social, one economic and seven environmental.

## Objective

## Social

1. Improve the health and quality of life of residents.

#### Environmental

- 2. Continue to maintain and improve local air quality and limit noise pollution.
- 3. Encourage the use of renewable sources of energy.
- 4. Conserve and enhance Milton Keynes' biodiversity.
- 5. Conserve and enhance Milton Keynes' landscape character.
- 6. Conserve and enhance the Borough's cultural heritage.
- 7. Reduce the risk of flooding.
- 8. Improve efficiency of land use.

### **Economic**

- 9. Encourage the creation of new businesses and ensure high levels of employment.
- 5.3 Three options were identified for the draft SPD:
  - **Option 1:** 'Do nothing': the Local Plan does not include any guidance on a minimum separation distance from bridleways or footpaths
  - **Option 2:** Adopt the SPD with a separation distance of 200 metres from bridleways and a fall-over distance (i.e. the height of the turbine to the tip of the blade) plus 25% from public footpaths
  - **Option 3:** Adopt the SPD with a separation distance of four times the overall height of the turbine from bridleways and a fall-over distance (i.e. the height of the turbine to the tip of the blade) plus 25% from public footpaths
- 5.4 The three options were assessed against the sustainability objectives. The appraisal of the options concluded that option 2 was the most sustainable option. Given the similarity between the two options, it was not possible for the SA to conclude definitively as to which provides the most sustainable option.
- 5.5 However, it was considered that in order to balance the objectives of the daft SPD and the objectives of the SEA framework then it was appropriate to develop a new option that amalgamates option 2 and 3. It was considered that this new option could offer more flexibility in terms of the separation distances from bridleways and therefore reduce the uncertainties that were identified in option 3. The new option would also minimise any risks of the possible conflict between the SPD and policy D5 of the Local Plan.
- 5.6 The preferred option includes a clear reference to the Companion Guide to PPS 22 and emphasises the importance of the negotiation process when making decisions on wind turbine applications.

## 6. Likely significant effects on the environment of implementing the plan

- 6.1 With the introduction of the proposed SPD there is scope to encourage a variety of wind turbines within the Borough. Typically an industrial scale wind farm will consist of turbines of at least 80 metres in height, and often larger. Based on the mapping undertaken for the SA, it is clear that opportunities will still exist for commercial scale wind turbines. On this basis, the option performs well in terms of protecting public safety from any unintended impacts of wind turbine. It also scores positively against objective 3 and 9.
- 6.2 Significantly, the draft SPD would allow the negotiation process to play some role in establishing what separation distances may be acceptable in particular circumstances of each site. This will therefore, have a more significant impact (both positive and negative) than the previously assessed options.

#### 7. Uncertainties and risk

7.1 There are a number of uncertainties and risks associated with the appraisal. The limited scope of the SPD meant that the differences between the options could be considered relatively minor which made assessment of the differences and the effects more difficult. In addition, it is difficult to reflect the specific nature of wind turbine development and their impacts against some of the SA/SEA framework objectives. Therefore the assessment has had to rely on broad assumptions and generalisations whilst acknowledging that it is only possible to determine the actual impacts on a site by site basis or at a level for which data collection is currently unavailable. It should be noted however, that the SA/SEA is the high level strategic assessment looking at the likely impacts. Applications for wind farms will be subject to Environmental Impact Assessment (EIA) that would identify the specific environmental effects of a proposal.

### 8. Monitoring

8.1 The indicators will be monitored where data is available through the Milton Keynes Annual Monitoring Report.

# Sustainability Appraisal/Strategic Environmental Assessment of the Wind Turbines Supplementary Planning Document and Emerging Policy

**Draft Environmental Report for Consultation (June 2013)** 



## 1. Wind Turbines Supplementary Planning Document

- 1.1 This environmental report has been produced to assess the environmental impacts of the 'Wind Turbine Supplementary Planning Document and Emerging Policy' that provide additional guidance on the application of planning policy D5 of the Adopted Local Plan 2005.
- 1.2 The principal objective of the wind turbines SPD and Emerging policy is to offer protection of residential amenity from any unintended impacts of wind turbine developments. The document relates to large scale wind turbines that are generally constructed as part of a wind farm; it does recognise the potential for smaller non domestic scale wind turbine development.

## 2. The need for SEA

- 2.1 European Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (the Strategic Environmental Assessment (SEA) Directive), was transposed into English Law in July 2004 through the 'SEA regulations'. The SEA process extends the assessment of environmental impacts from individual development projects to the broader perspective of regional, county and local level plans. It is a systematic process that assists authorities in the identification and assessment of the significant environmental impacts of a plan.
- 2.2 Milton Keynes Council is conducting the SEA alongside the process of developing and publishing a Wind Turbine Supplementary Planning Document and Emerging Policy.

## Compliance with the SEA Directive

| D ' (CEA D' 1)                             | and the state of t |
|--|--|
| Requirement of SEA Directive               | Where covered in the SA Report   |
| a) Outline of the plan , its main          | Section 1 provides a summary of the SPD.   |
| objectives, and relationship with other    | Section 3 and Appendix A show the  |
| relevant plans                             | relationship with other relevant plans.  |
| b) Relevant aspects of the current state   | Section 4 and Appendix B   |
| of the environment and their likely        |  |
| evolution without implementation of        |  |
| the plan;                                  |  |
| c) Environmental characteristics of        | Section 4 and Appendix B   |
| areas likely to be significantly affected; |  |
| d) Any existing environmental              | Section 4, Section 5 and Appendix B  |
| problems which are relevant to the         |  |
| plan, including, in particular, those      |  |
| relating to areas of particular            |  |
| environmental importance;                  |  |
| e) Environmental protection objectives     | Section 3, Section 6, Appendix A and   |
| established at international,              | Appendix D.  |
| community or national level, which are     |  |
| relevant to the plan and the way they      |  |
| and any environmental considerations       |  |
| have been taken into account during        |  |

| its preparation:   |                                      |
|--|--------------------------------------|
| its preparation; f) The likely significant effects of the plan on the environment: biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between them. (Effects should include secondary, cumulative, synergistic, short, medium and long term, medium and long term, permanent and temporary, positive and negative effects). | Section 8, 10, 11, 12 and Appendix G |
| g) The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment and implementing the plan.   | Section 13                           |
| h) Outline of the reasons for selecting the alternatives dealt with.  Description of how the assessment was undertaken, including any difficulties (eg. technical or lack of know how) encountered in compiling required information.  | Section 8 and Section 9              |
| i) Description of measures envisaged for monitoring.   | Section 15                           |
| j) Non technical summary.  | Non technical summary                |

## 2.3 The main stages of the SEA are:

| Stage A: Setting the context and | A1: Identifying other relevant plans, programmes          |  |
|----------------------------------|---|--|
| objectives, establishing the     | and environmental protection objectives                   |  |
| baseline and deciding on the     | A2: Collecting baseline information                       |  |
| scope                            | A3: Identifying sustainability issues                     |  |
|                                  | A4: Developing SEA objectives                             |  |
|                                  | A5: Consulting on the scope of the SEA                    |  |
| Stage B: Developing and          | <b>B1:</b> Testing the plan or programme objectives       |  |
| refining alternatives and        | against the SEA objectives                                |  |
| assessing effects                | <b>B2:</b> Developing Strategic Alternatives              |  |
|                                  | <b>B3:</b> Predicting the effects of the plan or          |  |
|                                  | programme, including alternatives                         |  |
|                                  | <b>B4:</b> Evaluating the effects of the draft plan or    |  |
|                                  | programme, including alternatives                         |  |
|                                  | <b>B5:</b> Considering ways of mitigating adverse effects |  |

|   | <b>B6:</b> Proposing measures to monitor the environmental effects of plan or programme implementation   |
|---|--|
| Stage C: Preparing the environmental report                 | C1: Preparing the environmental report   |
| Stage D: Consultation and decision-making                   | <ul><li>D1: Consulting on the draft plan or programme and environmental report</li><li>D2: Assessment of significant changes</li><li>D3: Decision making and providing information</li></ul> |
| Stage E: Monitoring implementation of the plan or programme | <b>E1:</b> Developing aims and methods for monitoring <b>E2:</b> Responding to adverse effects   |

- 2.4 This document incorporates the Stage A Scoping Report and the Stage B and C Environmental Report.
- 2.5 A Scoping Report constituting Stage A: Tasks A1 to A5 was produced in November 2011 and sent to the three statutory consultees (English Heritage, Natural England and Environment Agency) for comment. The content of the Scoping Report has, where appropriate, been updated and is set out below. Copies of the November 2011 Scoping Report are available from www.milton-keynes.gov.uk.
- 2.6 Comments from the statutory consultees have been taken into account in finalising the scope of the SEA and in setting the 'SEA Framework'. A summary of comments is shown in Appendix E. The SEA has also been extended to become a full sustainability appraisal (SA). The Scoping Report originally covered matters of environmental concern and also issues of population and human health (social) in accordance with the SEA Directive. It has been decided that it is appropriate to extend the SEA to an SA and include economic considerations. Incorporating full Sustainability Appraisal has led to the addition of one objective for the SA/SEA Framework in recognition of the economic impacts of wind farm developments.
- 2.7 The decision making prompts have also been amended to add clarity and to reflect the aim of the objective more positively.
- 2.8 The Wind Turbine Supplementary Planning Document and Emerging Policy was adopted on 24 July 2012. The SPD was quashed by a High Court judgment in April 2013. A new Wind Turbine Supplementary Planning Document and Emerging Policy has been produced as a result of this judicial review.
- 2.9 It is considered that stages A1 to A5 of the previous SA/SEA report are still relevant to the proposed SPD and there is no need to significantly amend them. It should be stressed that the current SA/SEA report is made against the SEA objectives that were developed in December 2011.



## **STAGE A:**

Setting the context and objectives, establishing the baseline and deciding on the scope

| Stage A: Setting the context and | A1: Identifying other relevant plans, programmes |
|----------------------------------|--|
| objectives, establishing the     | and environmental protection objectives          |
| baseline and deciding on the     | A2: Collecting baseline information              |
| scope                            | A3: Identifying sustainability issues            |
|                                  | A4: Developing SEA objectives                    |
|                                  | A5: Consulting on the scope of the SEA           |

## Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope

What the Directive says:

The Environmental Report shall include information on [inter alia]:

- the "relationship [of the plan or programme] with other relevant plans and programmes" (Annex I(a))
- "the environmental protection objectives, established at international, [European] Community or [national] level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation" (Annex I (e))
- "relevant aspects of the current state of the environment and the likely evolution thereof without
  implementation of the plan or programme" and "the environmental characteristics of areas likely to
  be significantly affected" (Annex I (b), (c))
- "any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC" (Annex I (d))

"The authorities ... which, by reason of their specific environmental responsibilities, are likely to be concerned by the environmental effects of implementing plans and programmes ... shall be consulted when deciding on the scope and level of detail of the information which must be included in the environmental report" (Article 5.4 and 6.3).

## 3. A1: Identifying other relevant plans, programmes policies and environmental protection objectives (PPPs)

- 3.1 In order to assist in scoping the SEA it is necessary to review the wide range of plans, programmes, polices and environmental protection objectives that are of relevance to the SPD and Emerging Policy.
- 3.2 The review of the PPPs has two main purposes. Firstly, they will inform the content of the Wind Turbine SPD and secondly they will help inform the preparation of the SEA. For the SEA, the PPPs will be used to inform some of the key sustainability issues related to wind turbines in Milton Keynes borough. This, in turn, will inform the sustainability framework against which the draft SPD will be assessed.
- 3.3 Taking into account the scope of the Wind Turbine Supplementary Planning Document, a range of relevant plans, programmes and objectives have been identified that should be taken into account in the preparation of the Wind Turbine SPD and the accompanying Sustainability Appraisal/Strategic Environmental Assessment. Appendix A of this report sets out in detail the PPPs most relevant to the Wind Turbine SPD.
- 3.4 Stage A3 uses this review to establish the key sustainability issues which informs the SA/SEA Framework.

## 4. A2: Collecting baseline information

- 4.1 The Wind Turbine SPD will have a number of potential impacts. It is anticipated that these are most likely in environmental and human health areas. Milton Keynes borough covers an area of approximately 50,000 hectares. The population increased by an estimated 17% between 2001 and 2011 to 248,800. Current capacity from wind farms equates to 14MW from a single site at Petsoe Manor near Olney. Milton Keynes has a wealth of historic and environmental assets with 50 scheduled ancient monuments, three registered parks and gardens, 27 conservation areas and over 1,100 listed buildings. Of these one listed building and six scheduled ancient monuments were at risk in December 2011. Excluding Wildlife Sites, there were 1,951 hectares of sites designated for their biodiversity value in the Borough. This equates to 6.32% of the whole Borough.
- 4.2 Appendix B sets out the baseline data for Milton Keynes that is of relevance to the Wind Turbine SPD.

## 5. A3: Identifying sustainability issues

5.1 Following a review of relevant plans, policies, programmes and environmental objectives and an assessment of the baseline data, the following key issues were identified for Milton Keynes and the Wind Turbine SPD and Emerging Policy.

| Sustainability Issues Arising from Stage A1 and A2  | Implications for the SPD   |
|---|--|
| Wind farm developments can reduce reliance on green house gases and in turn reduce the vulnerability of rare and endangered flora and fauna to changes in climate in the longer term. | The SPD will need to fully consider the implications for locating wind turbines in the most suitable locations to balance the potential benefits of renewable energy and the potential for short term negatives. |
| There may be immediate impacts on biodiversity depending on the location of turbines.   | The SPD will need to have regard to the immediate impacts of Wind Turbines on local biodiversity.  |
| Potential for additional noise, shadow flicker and other risks associated with on-shore wind turbines.  | The SPD will need to reflect possible impacts on the population in determining appropriate locations for wind turbines.  |
| Wind farms could have implications for soil quality and loss of agricultural land.  | The setting of separation distances should consider the implications for the need to protect soil quality and agricultural land although there is no grade 1 agricultural land in the Borough.                   |
| Wind development has the potential to make a positive contribution to reducing CO2 emissions and increasing energy supply from renewable sources                                      | The SPD will need to balance the benefits of wider climate change, CO2 reduction and renewable energy production objectives with local environmental matters.  |
| Wind developments are likely to have a  | The setting of separation distances should   |

| visual impact on landscape. | consider the implications for the need to |
|-----------------------------|---|
|                             | protect landscape character and quality   |
|                             | where appropriate.                        |

## 6. A4: Developing SEA objectives

- 6.1 The SEA Objectives have been devised taking into account the review of relevant PPPs, the baseline data and officer knowledge. The objectives have been focussed to those that are most relevant to the Wind Turbine SPD and Emerging Policy.
- 6.2 The SEA objectives will be used to assess the impacts of the Wind Turbine SPD and Emerging Policy. They have been tested for internal compatibility (see Appendix D). This highlighted potential conflict between the objective of encouraging renewable energy and the other environmental objectives. Some of this conflict is potentially only short term.

## 7. SA/SEA Framework

| SEA Topic                             | Objective   | Decision Making Prompts Will the proposed option                          | Indicators for Objectives                                    |  |
|---------------------------------------|---|---|--|--|
| Social                                | Social  |   |  |  |
| Human Health.                         | 1. Improve the health and quality of life of residents.         | minimise physical or perceived increase in health related issues?         | % of people describing their health as 'good'.               |  |
|                                       |   |   | % of people describing their health as 'not good'.           |  |
| Environmental                         |   |   |  |  |
| Air.                                  | 2. Continue to maintain and improve local air quality and limit | minimise noise complaints?  | Number of complaints in relation to wind turbines.           |  |
|                                       | noise pollution.  | lead to an improvement in air quality?                                    | Number AQMA  |  |
| Climatic Factors,<br>Material Assets. | 3. Encourage the use of renewable sources of energy.            | increase opportunities for renewable energy and wind farms in particular? | Capacity of Wind Farms in MK Borough (MW).                   |  |
| Biodiversity, Flora and Fauna,        | 4. Conserve and enhance Milton Keynes' biodiversity.            | protect sites designated for their biodiversity value?                    | % SSSI in favourable condition.                              |  |
| Landscape.                            |   | avoid adverse effects on bat and bird species of biodiversity value?      | Extent of designated sites.  Extent of BAP priority habitat. |  |
| Biodiversity, Flora                   | 5. Conserve and enhance Milton                                  | improve access to the countryside?  | No indicator   |  |
| and Fauna,<br>Landscape.              | Keynes' landscape character.                                    | protect the landscape character of the Borough?                           | No indicator   |  |
|                                       |   | minimise negative visual impacts?   | No indicator   |  |
| Cultural Heritage.                    | 6. Conserve and enhance the                                     | protect or enhance archaeological sites,                                  | Number of SAMs on the English                                |  |

|                                      | Borough's cultural heritage.  | monuments, structures, historic parks, gardens, listed buildings or conservation areas? | Heritage 'Heritage at Risk<br>Register'.  |
|--------------------------------------|---|---|---|
| Water.                               | 7. Reduce the risk of flooding.   | avoid locating development in areas of flood risk?                                      | Number of wind turbine applications permitted contrary to EA advice relating to flooding. |
|                                      |   | reduce the risk of flooding?  | SFRA (Strategic Flood Risk<br>Assessment)   |
| Soil, Landscape,<br>Flora and Fauna. | 8. Improve efficiency of land use.  | minimise or avoid the loss of the most versatile agricultural land?                     | Number of wind turbine applications permitted by agricultural land classification.        |
|                                      |   | prioritise the use of previously developed land?  | Number of wind turbines permitted on PDL  |
| Economic                             |   |   |   |
| Population                           | 9. Encourage the creation of new businesses and ensure high levels of employment. | promote economic activity in the Borough?   | No indicator  |

## **STAGE B:**

## Developing and refining alternatives and assessing effects

| <b>B1:</b> Testing the plan or programme objectives       |
|---|
| against the SEA objectives                                |
| <b>B2:</b> Developing Strategic Alternatives              |
| <b>B3:</b> Predicting the effects of the plan or          |
| programme, including alternatives                         |
| <b>B4:</b> Evaluating the effects of the draft plan or    |
| programme, including alternatives                         |
| <b>B5:</b> Considering ways of mitigating adverse effects |
| <b>B6:</b> Proposing measures to monitor the              |
| environmental effects of plan or programme                |
| implementation  |
|   |

## **STAGE C:**

## Preparing the Environmental Report

| Stage C: Preparing the | C1: Preparing the environmental report |
|------------------------|--|
| environmental report   |  |

## Stage B: Developing and refining alternatives and assessing effects

What the Directive says:

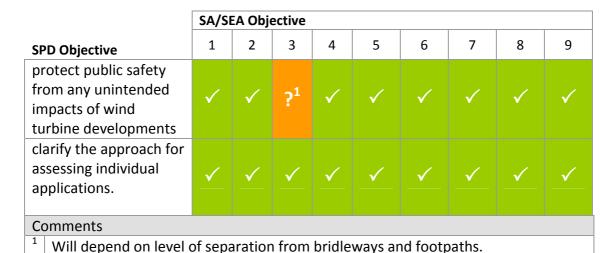
"... an environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated" (Article 5.1). Information to be provided in the Environmental Report includes "an outline of the reasons for selecting the alternatives dealt with" (Annex I (h)).

## 8. B1: Testing the plan or programme objectives against the SEA objectives

- 8.1 The principal objectives of the wind turbines SPD and policy are to:
  - 1) protect public safety from any unintended impacts of wind turbine developments and
  - 2) clarify the approach for assessing individual applications
- 8.2 The SPD objectives have been tested against the SA/SEA Objectives established in the SA/SEA Framework.
  - ✓ Plan objective is compatible with the SA/SEA Objective
  - Plan objective is incompatible with the SA/SEA objective
  - The compatibility of the plan objective with the SA/SEA objective is uncertain

## **SA/SEA Objective**

- 1. Improve the health and quality of life of residents.
- 2. Continue to maintain and improve local air quality and limit noise pollution.
- 3. Encourage the use of renewable sources of energy.
- 4. Conserve and enhance Milton Keynes' biodiversity.
- 5. Conserve and enhance Milton Keynes' landscape character.
- 6. Conserve and enhance the Borough's cultural heritage.
- 7. Reduce the risk of flooding.
- 8. Improve efficiency of land use.
- 9. Encourage the creation of new businesses and ensure high levels of employment.



## **Stage B2: Developing Strategic Alternatives**

- 8.3 Given the remit of the Wind Turbines SPD and Emerging Policy it is considered that two strategic options are suitable for assessment through the SEA process, these are:
  - Do not produce an SPD and Emerging Policy ('Do Nothing')
  - Produce a Wind Turbine SPD and Emerging Policy
- 8.4 Under the 'do nothing' approach it is important to remember that if the SPD is not produced, Adopted Local Plan policies, including Policies D5, T1, T3 and L6 would remain in force. A 'do nothing' approach would, therefore, mean remaining with the Local Plan Policy without additional guidance; it would not mean that there was no policy guidance.

Stage B3: Predicting the effects of the plan or programme, including alternatives & Stage B4: Evaluating the effects of the draft plan or programme, including alternatives.

8.5 The following assessment 'scoring' will be used alongside the SEA objectives:

| <b>✓</b> | The option will have a predominantly positive effect when assessed against the SEA objective             |
|----------|--|
| ×        | The option will have a predominantly negative effect when assessed against the SEA objective             |
| √/×      | There will be both positive and negative effects from the option when assessed against the SEA objective |
| ?        | The effects of the option are uncertain/unclear when assessed against the SEA objective                  |
| 0        | The option will have no effect on the SEA objective  |

- 8.6 The main aim of the SPD is to protect public safety from any unintended impacts of wind turbine developments through the introduction of an appropriate separation distance. The appraisal has therefore focussed on the separation distance and appraised the range of distances that were considered through the SPD process. The options have been refined to:
  - **Option1:** 'Do nothing': the Local Plan does not include any guidance on a minimum separation distance from bridleways or footpaths
  - **Option 2:** Adopt the SPD with a separation distance of 200 metres from bridleways and a fall-over distance (i.e. the height of the turbine to the tip of the blade) plus 25% from public footpaths
  - **Option 3:** Adopt the SPD with a separation distance of four times the overall height of the turbine from bridleways and a fall-over distance (i.e. the height of the turbine to the tip of the blade) plus 25% from public footpaths

- 8.7 The separation distances are intended to guide development to areas furthest away from rights of way. It should be noted that they would not act as a blanket ban on development within those areas and proposals would be assessed on their individual merits. However, for the purposes of SA/SEA, the options must be distinct and so the separation distance has been assessed as though those distances are generally enforced and development directed to areas outside the separation distances. Otherwise each option would essentially be the same as they all allow for developments at distances less than the specified separation distance. The geographical coverage of the differing separation distances are shown in Appendix F.
- 8.8 A summary of the appraisal is shown below. The full assessment is available in Appendix G.

| SA/SEA Objective   | Option 1:  Do not adopt the SPD  No guidance on a minimum separation distance from bridleways or footpaths | Option: 2 200m Buffer from bridleways & fall-over distance plus 25% from public footpath | Option: 3 4 times the overall height of the turbine from bridleways 8. fall-over distance plus 25% |
|--|--|--|--|
| 1. Improve the health and quality of life of residents.                          | ×  | ✓  | ✓  |
| 2. Continue to maintain and improve local air quality and limit noise pollution. | 0  | ✓  | ✓  |
| 3. Encourage the use of renewable sources of energy.                             | ✓  | ✓  | ?  |
| 4. Conserve and enhance Milton Keynes' biodiversity.                             | ?  | ?  | ?  |
| 5. Conserve and enhance Milton Keynes' landscape character.                      | 0  | √  | ✓  |
| 6. Conserve and enhance the Borough's cultural heritage.                         | 0  | ?  | ?  |
| 7. Reduce the risk of flooding.  | ✓  | ✓  | ?  |
| 8. Improve efficiency of land use.   | 0  | 0  | 0  |
| 9. Encourage the creation of new businesses and ensure high levels of employment | √  | ✓  | ?  |

| SA/SEA Objective   | Comments  |
|--|---|
| 1. Improve the health and quality of life of residents.                          | Option 1 does not afford any level of protection to those who use bridleways or footpaths and therefore could lead to less physical activity. All the other options have a positive effect on the objective. They all afford some level of protection. As the distance increases, the significance of this effect also increases.   |
| 2. Continue to maintain and improve local air quality and limit noise pollution. | Option 1 does not afford any level of protection to those who use bridleways and footpaths and has no effect on the objective. All of the other options have a positive effect on the objective. They all afford some level of protection. As the distance increases, the significance of this effect also increases.   |
| 3. Encourage the use of renewable sources of energy.                             | Option 1 and 2 score positively against the objective. They all identify large areas where wind turbines would be considered appropriate for consideration. The effect of option 3 is uncertain. Under this option, while it still provides some opportunities, these are more limited than options 1 and 2 and it is uncertain to what extent any development could be delivered within the more limited areas.  |
| 4. Conserve and enhance Milton<br>Keynes' biodiversity.                          | The effect of Options 1, 2, and 3 is uncertain. Ruling out parts of the borough for development through a separation distance from bridleways or footpaths would protect those areas. However, the separation distance has not taken into account sites or species of biodiversity value. It could lead to increased pressure on sensitive sites or species outside the buffer zones.   |
| 5. Conserve and enhance Milton<br>Keynes' landscape character.                   | Option 1 would not have any effect on the objective. All the other options would have a positive effect on the objective. While any development would have implications for landscape character, most of the character is considered of moderate quality. The primary reason for a positive score is the positive impact on visual amenity. In this regard, while all the options have a positive effect, this effect becomes more significant, the larger the separation zone.   |
| 6. Conserve and enhance the Borough's cultural heritage.                         | Option 1 would not have any effect on the objective. While any wind farm development could have implications for cultural heritage, SAMs and archaeological sites in particular would be at risk. However, there is no connection between the proposed buffer zones and the borough's cultural heritage and therefore the effect of option 2 and 3 on the objective is uncertain. Depending on the density of the rights of way network and/or location of individual bridleways and footpaths it may be possible that the heritage assets within, or close to a buffer would gain additional protection. However, this would not (and should not) be associated with the importance of the heritage asset. |
| 7. Reduce the risk of flooding.  | Options 1 and 2 are considered to score positively against the objective. This is in relation to reducing the risk of flooding and is only considered to be a long term positive effect of low significance given a long term view of reducing our impact on climate change through the use of renewable energy sources. The effect of Option 3 is uncertain as   |

|                                | there is no obvious correlation between bridleways/footpaths and areas of flood risk.                                   |
|--------------------------------|---|
| 8. Improve efficiency of land  | None of the options have any effect on the objective. Separation distances would mainly prevent wind turbine            |
| use.                           | development in the countryside where opportunities for re-use of previously developed land are not significant.         |
| 9. Encourage the creation of   | Option 1 and 2 score positively against the objective as linked to objective 3, they provide opportunities for wind     |
| new businesses and ensure high | turbine development and therefore encourage economic activity. The effect of Option 3 is uncertain; while under this    |
| levels of employment           | option some opportunities for wind farms/turbines are identified, they are limited and it is not certain how the option |
|                                | would meet the objective. It is recognised that Option 3 may have some positive effect on equestrian and tourism        |
|                                | businesses within the Borough.  |

## Option1: 'Do nothing': the Local Plan does not include any guidance on a minimum separation distance from bridleways or footpaths

8.10 The option scores negatively against the social objective. It has no effect on a number of the environmental objectives (objective 2, 5 and 6). It scores positively against the environmental objectives relating to encouraging the use of renewable sources of energy and reducing the risk of flooding. The effect of the option on biodiversity is uncertain as the option leaves some areas of the Borough available for possible wind farm development, which could have some impact on sites designated for their biodiversity value and species of biodiversity value. The option has no effect on the objective that seeks to improve efficiency of land use. In terms of the economic objective, the option provides opportunities for renewable energy and the associated short to medium economic benefits associated with wind turbine developments.

# Option 2: Adopt the SPD with a separation distance of 200 metres from bridleways and a fall-over distance (i.e. the height of the turbine to the tip of the blade) plus 25% from public footpaths

8.11 The option scores positively against the social objective, its effect is of medium significance. Against the environmental objectives it also scores positively. The option gives some environmental protection against air and noise pollution as well as flooding whilst still resulting in large areas of the Borough being available for possible wind farm development. The effect of the option on biodiversity and also cultural heritage is uncertain. The option leaves some areas of the Borough available for possible wind farm development and as a consequence of that sites within a buffer are afforded some additional protection whilst those outside may experience increased development pressures. The option has no effect on the objective that seeks to improve efficiency of land use. In terms of the economic objective, the option provides opportunities for renewable energy and the associated short to medium economic benefits associated with wind turbine developments.

# Option 3: Adopt the SPD with a separation distance of four times the overall height of the turbine from bridleways and a fall-over distance (i.e. the height of the turbine to the tip of the blade) plus 25% from public footpaths

8.12 The option performs positively in terms of achieving the social objective and scores better than option 2 in terms of the significance of the effect. It also scores positively against the environmental objectives relating to noise pollution and landscape character. The effect of the option on biodiversity and also cultural heritage is uncertain. The option leaves some areas of the Borough available for possible wind farm development and as a consequence of that sites within a buffer are afforded some additional protection whilst those outside may experience increased development pressures. The option is more restrictive than other options therefore leading to uncertainty over the effect against the objective of encouraging renewable energy. This is also true against the economic objective. The option has no effect on the objective that seeks to improve efficiency of land use.

## Overall conclusion

- 8.13 It should be noted that no weighting has been applied to the objectives in the SA/SEA framework. The Council may wish to prioritise some objectives over others, for example, one of the objectives of the draft SPD is to protect public safety from any unintended impacts of wind turbine. If greatest weight is attached to public safety then Option 3 would be the most suitable option as it provides the greatest separation distance and therefore the most significant positive effect in terms of possible safety impact. Conversely, if economic objectives are the priority, option 3 would be the least appropriate option.
- 8.14 This SA aims to provide an overall appraisal of the options to best deliver sustainable development.
- 8.15 Option 3 has uncertainties to the extent to which they would restrict wind turbine development which undermines the potential positive and negative effects particularly in terms of objectives 3 and 9, which whilst not rendering the option wholly unsustainable, this would indicate that it should be ruled out. It is worth noting that option 3 could result in a possible conflict between the emerging policy and policy D5 of the Local Plan. This would happen if the emerging policy was applied to bridleways located close to residential properties and the minimum distance between a wind turbine and a bridleway was greater than 350m.
- 8.16 Option 1 relies wholly on the existing planning policy framework i.e. the NPPF, the Local Plan and the Core Strategy. This policy framework does not include any specific guidance on minimum separation distances from wind turbines to bridleways or footpaths. The option does not offer any protection to footpaths or bridalways and therefore could lead to less physical activity. The option would have no effect on a number of the environmental objectives. The option scores positively against objective 3 and 9 with the high significance of the effect.
- 8.17 Therefore the most sustainable option is considered to be:
  - Option 2: Adopt the SPD with a separation distance of 200 metres from bridleways and a fall-over distance (i.e. the height of the turbine to the tip of the blade) plus 25% from public footpaths
- 8.18 In terms of the overall effect against the objectives option 2 performs better than the other options. It scores positively against objective 3 and 9 and its effect is of high significance. The option also has less uncertainties than option 3 and scores positively in terms of the social and most of the environmental objectives.

### 9. Preferred Option

9.1 If it is considered appropriate to balance the objectives of the daft SPD and the objectives of the SEA framework then it may be suitable to develop a new option that amalgamates option 2 and 3. This new option could offer more flexibility in terms of the separation distances from bridleways and therefore reduce the uncertainties that

- were identified in option 3. The new option would also minimise any risks of the possible conflict between the SPD and policy D5 of the Local Plan.
- 9.2 The proposed preferred option could combine option 2 and 3 and also emphasise that that the negotiation process recommended in the Companion Guide to PPS 22 should indicate whether, in the particular circumstances of each site, these guidelines for minimum distances can be relaxed or need strengthening to minimise or eliminate any perceived potential difficulties.
- 9.3 A full appraisal is shown in Appendix I with a summary below:

|           |        | SA/SEA Objectives |           |              |           |          |          |      |         |
|-----------|--------|-------------------|-----------|--------------|-----------|----------|----------|------|---------|
|           | 1      | 2 Air             | 3         | 4            | 5         | 6        | 7        | 8    | 9       |
|           | Health | &                 | Renewable | Biodiversity | Landscape | Heritage | Flooding | Land | Economy |
|           |        | Noise             | Energy    |              |           |          |          | use  |         |
| Draft SPD |        |                   |           |              |           |          |          |      |         |
| &         |        |                   |           | 2            | 1         | 2        | 1        | _    |         |
| Emerging  |        | V                 | <b>Y</b>  | · ·          | · ·       | 1        | Y        | 0    | Y       |
| Policy    |        |                   |           |              |           |          |          |      |         |

## 10. Significant effects of implementing the preferred option

- 10.1 With the introduction of the proposed SPD there is scope to encourage a variety of wind turbines within the Borough. Typically an industrial scale wind farm will consist of turbines of at least 80 metres in height, and often larger. Based on the mapping undertaken for the SA (appendix F), it is clear that opportunities will still exist for commercial scale wind turbines. On this basis, the option performs well in terms of protecting public safety from any unintended impacts of wind turbine. It also scores positively against objective 3 and 9.
- 10.2 Significantly, the draft SPD would allow the negotiation process to play some role in establishing what separation distances may be acceptable in particular circumstances of each site. This will therefore, have a more significant impact (both positive and negative) than the previously assessed options.

## 11. Geographical scale

11.1 The majority of impacts are at a local and Borough wide level. It is not considered that the proposed SPD could impact on national climate change objectives.

## 12. Mitigation

12.1 A suitable balance needs to be reached between the stated objectives of promoting wind turbine development on the one hand, and protecting public safety from any unintended impacts of wind turbine on the other. It is considered that the current draft SPD (June 2013) achieves this balance. If the current approach is not considered to achieve the objectives of the SPD and the objectives of the SEA, then an altered approach could be taken in the final SPD proposed for adoption.

### 13. Uncertainties and Risks

13.1 There are a number of uncertainties and risks associated with the appraisal. The limited scope of the SPD meant that the differences between the options could be considered relatively minor which made assessment of the differences and the effects more difficult. In addition, it is difficult to reflect the specific nature of wind turbine development and their impacts against some of the SA/SEA framework objectives. Therefore the assessment has had to rely on broad assumptions and generalisations whilst acknowledging that it is only possible to determine the actual impacts on a site by site basis or at a level for which data collection is currently unavailable. It should be noted however, that the SA/SEA is the high level strategic assessment looking at the likely impacts. Applications for wind farms will be subject to Environmental Impact Assessment (EIA) that would identify the specific environmental effects of a proposal.

## 14. Monitoring

14.1 The indicators will be monitored where data is available through the Milton Keynes Annual Monitoring Report.

## Appendix A: Relevant Plans, Policies, Programmes and Sustainability Objectives

## **International PPPs**

| Plan/Programme   | Key Relevant Objectives for the Wind Turbines SPD   | Implications for the Wind Turbines SPD  | Implications for the SEA  |
|--|---|---|---|
| European Spatial<br>Development<br>Perspective, 1999       | Objectives include:  The development of a polycentric and balanced urban system and the strengthening of the relationship between urban and rural areas  The promotion of integrated transport and communications which support integration and the polycentric development of the European Union territory  The development and conservation of the natural and cultural heritage contributing both to the preservation and deepening of regional identities and the maintenance of the natural and cultural diversity of the region | The SPD should seek to achieve sustainable development that balances urban and rural areas, and to protect and enhance natural and cultural heritage assets, as well as landscapes and townscapes | Ensure that the requirements of the ESDP are reflected in the SEA framework |
| Renewed EU<br>Sustainable<br>Development Strategy,<br>2006 | Deals in an integrated way with economic, environmental and social issues, with seven key challenges, in:  - Climate change and clean energy  - Conservation and management of natural resources  - Public health   | The SPD should include policies that have regard for the challenges set out in the strategy   | Ensure the requirements of the EU SDS are reflected in the SA framework     |
| Renewable Energy<br>Directive, 2009                        | The Directive imposes stretching renewables targets for 2020 across the EU. It requires 15% of energy in the UK to be renewable by 2020.  | The SPD should ensure that it does not impose overly restrictive requirements which would reduce the capacity for wind energy development in the Borough.   | Ensure that the requirements of the RED are reflected in the SEA framework  |
| EU Directive:  | Conserve fauna and flora, and natural habitats of EU  | The SPD should seek to avoid locations which  | Ensure the requirements   |

| Plan/Programme  | Key Relevant Objectives for the Wind Turbines SPD  | Implications for the Wind Turbines SPD  | Implications for the SEA   |
|---|--|---|--|
| Conservation of<br>Habitats and Wild<br>Fauna and Flora<br>(1992/43/EC) | importance. Establish a network of protected areas throughout the community designed to maintain both the distribution and abundance of threatened species and habitats  | would impact on sites of international or national importance. Where the MPA allows development that will negatively affect relevant sites, compensatory measures must be provided for. | of the Directive are<br>reflected in the SEA<br>framework                        |
| EU Noise Directive<br>(2000/14/EC)                                      | Environmental problem of noise should be mapped strategically. The public should be informed and consulted about noise exposure, its effects and the measures considered to address noise. Noise issues should be addressed through actions plans to reduce noise and maintain environmental noise where it is good.                             | SPD must consider the possible impacts of noise arising from the location of wind turbines and possible mitigation/reduction measures   | Ensure that the requirements of the Directive are reflected in the SEA framework |
| European Landscape<br>Convention, 2000                                  | Objectives include:  - The identification and assessment of landscapes, and analysis of landscape change, with the active participation of stakeholders  - Setting objectives for landscape quality, with the involvement of the public  - The implementation of landscape policies, through the establishment of plans and practical programmes | A key consideration for the Wind Turbine SPD should be how policies could impact on the landscape of the borough.   | Ensure that the requirements of the ELC are reflected in the SA framework        |

## **National PPPs**

| Plan/Programme   | Key Relevant Objectives   | Implications for the Wind Turbines SPD  | Implications for the SEA  |
|--|---|---|---|
| Securing the Future - UK<br>Government<br>Sustainable<br>Development Strategy,<br>2005 | Aims to enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life without compromising the quality of life for future generations.  Guiding principles:  Living within environmental limits  Using sound science responsibly   | The SPD should have regard to the indicators in the strategy and seek to contribute to the wider sustainable development agenda   | Ensure that the requirements of the Sustainable Development Strategy are reflected in the framework |
| Sustainable<br>Communities: Building<br>for the Future, 2003                           | Maintain and create sustainable communities that people want to live in, which:  - safeguard the countryside  - enjoy a well-designed and pleasant living and working environment   | Give due consideration to how the SPD can contribute to the objectives of the Sustainable Communities Plan, particularly safeguarding the countryside   | Ensure that the sustainability objectives of the Plan are reflected in the SEA                      |
| Climate Change Act,<br>2008  | The Act introduces legally binding targets to reduce green house gas emissions by 34% by 2020 and 80% by 2050   | The SPD should ensure that it does not impose overly restrictive requirements which would reduce the ability to cut carbon emissions through the installation of renewable energy developments. | Ensure the targets of the Act are reflected in the SEA framework                                    |
| UK Renewable Energy<br>Roadmap, Update 2012  | Provides a delivery "road map" to help the UK achieve its renewable energy targets. Onshore wind is identified as one of the technologies that will play an important part in helping the UK to reach its renewable energy targets. It also recognises that some communities are uneasy about the pace of development of onshore wind (The Call for Evidence on onshore wind was launched in September 2012). | The SPD should ensure that it does not impose overly restrictive requirements which would reduce the ability to contribute to the UK renewables targets.  | Ensure the aim of the document is reflected in the SEA framework                                    |

| Plan/Programme   | Key Relevant Objectives   | Implications for the Wind Turbines SPD   | Implications for the SEA  |
|--|---|--|---|
| Natural Environment<br>White Paper (2012)                                    | This White Paper recognises that a healthy, properly functioning natural environment is the foundation of sustained economic growth, prospering communities and personal well-being. It aims to mainstream the value of nature across society, including across government departments by: Facilitating greater local action to protect and improve nature; Creating a green economy, in which economic growth and the health of our natural resources sustain each other, and markets, business and Government better reflect the value of nature; Strengthening the connections between people and nature to the benefit of both; and Showing leadership in the European Union and internationally, to protect and enhance natural assets globally. | The SPD should take the White Paper's objectives.  | Ensure the aim of the document is reflected in the SEA framework                            |
| Working with the grain of nature - a biodiversity strategy for England, 2002 | Strategy aims to ensure construction, planning, development and regeneration has minimal adverse impacts on biodiversity and enhances it where possible   | The SPD should take into account the national biodiversity strategy objectives           | Ensure that biodiversity objectives of the Strategy are reflected in the SEA                |
| UK Biodiversity Action<br>Plan (BAP), 1994                                   | UK BAP's goal is to conserve and enhance biodiversity within the UK and the sustainable use biological resources, through all relevant mechanisms   | Wind Turbine SPD should take into account the protection and enhancement of biodiversity | SEA Framework should include a biodiversity objective against which policies must be tested |
| National Planning Policy<br>Framework, July 2011                             | Simplified national planning policy framework (NPPF) to replace previous planning policy guidance and statements. It aims to support economic growth but also to promote strong communities and the need to protect and enhance the environment. Core principles include:  — Support a genuinely plan-led system and plan   | The principles of the NPPF should be core to the SPD.                                    | The principles of the NPPF should be incorporated into the SEA Framework.                   |

| Plan/Programme   | Key Relevant Objectives   | Implications for the Wind Turbines SPD                             | Implications for the SEA  |
|--|---|--|---|
|  | positively for growth  Presumption in favour of sustainable development  Secure high quality design standards  Take account of the roles and character of different areas  Support transition to a low carbon future  Contribute to conserving and enhancing the natural environment and reducing pollution  Prioritising the use of previously developed land  Promote mixed use development  Conserve heritage assets  Manage patterns of growth to make full use of public transport, walking and cycling  Take account of and support local strategies to improve health, social and cultural wellbeing and deliver facilities and services to meet local needs |  |   |
| Planning Policy Statement 22 – Renewable Energy, Companion Guide, 2004 | The aim is to promote positive planning that facilitates renewable energy development. The most relevant of the document's key principles which local authorities must adhere to are:  Renewable energy developments should be capable of being accommodated throughout England in locations where the technology is viable and environmental, economic, and social impacts can be addressed satisfactorily  local development documents should contain policies designed to promote and encourage, rather than   | The principles of PPS22 Companion Guide should be core to the SPD. | Ensure the SEA framework incorporates the objectives and principles of PPS22 – Companion Guide. |

| Plan/Programme | Key Relevant Objectives   | Implications for the Wind Turbines SPD | Implications for the SEA |
|----------------|---|--|--------------------------|
|                | restrict, the development of renewable energy resources  • planning authorities should set out the criteria that will be applied in assessing applications for planning permission for renewable energy projects  • wider environmental and economic benefits of all proposals for renewable energy projects, whatever their scale, are material considerations that should be given significant weight |  |                          |

## **Regional PPPs**

| Plan/Programme  | Key Relevant Objectives  | Implications for the Wind Turbine SPD  | Implications for the SEA  |
|---|--|--|---|
| Integrated Regional<br>Framework - A better<br>quality of life in the<br>South East, 2004 | <ul> <li>Key aims of the framework include:</li> <li>enhancing the region's biodiversity</li> <li>managing and mitigating the likely impacts of climate change such as increases in flooding</li> <li>improving overall levels of health of people living in the region</li> <li>maintaining and improving the overall quality of the environment, including biodiversity and important landscapes</li> </ul>  | The SPD should include policies to help deliver the relevant aims of the IRF, specifically related to biodiversity, climate change, flooding, health, and landscape character/quality.   | SEA framework must ensure reflect the key messages.   |
| South East Biodiversity<br>Strategy, 2009   | <ul> <li>The strategy aims to: <ul> <li>Be a clear, coherent and inspiring vision for the South East</li> </ul> </li> <li>Provide a framework for the delivery of biodiversity targets that guide and support all those who have an impact on biodiversity in the region</li> <li>Embed a landscape scale approach to restoring whole ecosystems in the working practices and policies of all partners</li> <li>Create the space needed for wildlife to respond to climate change</li> <li>Enable all organisations in the South East to support and improve biodiversity across the region</li> <li>Be a core element within the strategies and delivery plans of organisations across the South East region</li> <li>A key element of the strategy is Biodiversity Opportunity Areas and SMART targets for BAP habitats and species</li> </ul> | The SEBS identifies four BOAs wholly or partially within Milton Keynes (Ouse Valley, Greensand Ridge, Yardley Chase and Whaddon Chase). The wind turbine document should have regard to biodiversity and the 4 BOA in devising guidance on locations for wind turbines | The SEA framework should reflect measures to protect and enhance biodiversity and the Biodiversity Opportunity Areas. |

| Plan/Programme  | Key Relevant Objectives  | Implications for the Wind Turbine SPD  | Implications for the SEA   |
|---|--|--|--|
| South East Green<br>Infrastructure<br>Framework, 2009 | The Framework seeks to establish green infrastructure as an integral and essential component of sustainable communities, develop a common understanding of the role and importance of green infrastructure and provide detailed guidance on how green infrastructure can be delivered through the planning system and local partnerships, including securing funding for its creation and long term maintenance. | The Wind Turbine SPD needs to consider implications of the location of development for the provision of green infrastructure, particularly surrounding issues of accessibility and recreation. | SEA framework should<br>ensure that the impact<br>on green infrastructure<br>functions is fully assessed |

## **Local PPPs**

| Plan/Programme                             | Key Relevant Objectives  | Implications for the Wind Turbine SPD  | Implications for the SEA   |
|--|--|--|--|
| Milton Keynes Core<br>Strategy (July 2013) | The Milton Keynes Core Strategy sets out the vision, objectives and polices for the spatial development of the borough up to 2026. Key objectives relevant to the are:  CS Obj 10: To mitigate the Borough's impact on climate change and reduce CO2 emissions through:  Implementing higher than national requirements for sustainable homes and buildings  Locating development away from areas of flood risk  Promoting community energy networks and strategic renewable energy developments  Reducing waste generation and increasing the amount of recycling  Sustainable transport initiatives  CS Obj 12 To protect, maintain and enhance the important features, character and assets of the New Town and the towns and villages throughout the Borough  CS Obj 13 To encourage healthy lifestyles with the provision of recreation facilities and biodiversity by enhancing the linear park network and extending it into new developments while conserving and protecting key landscapes and important habitats  Policy CS 14: 'Community Energy Networks and Large | The SPD should be in conformity with the policies and objectives in Core Strategy.  The SPD will need to have regard to the objective of 'Promoting community energy networks and strategic renewable energy developments' and Policies CS12, CS13 and CS14. | The SA framework should ensure compatibility with the Core Strategy objectives related to economic, environmental and social sustainability. |

| Plan/Programme                             | Key Relevant Objectives  | Implications for the Wind Turbine SPD   | Implications for the SEA   |
|--|--|---|--|
|  | Scale Renewable Energy Schemes' The Council wishes to promote the use of renewable energy schemes where it can be demonstrated that there will not be any negative social, economic, or environmental results from the scheme.   |   |  |
| Milton Keynes Local<br>Plan (adopted 2005) | The Local Plan sets out what type of development will be allowed in specific locations and policies that allow development proposals to be assessed. Key aims are:  Protect and enhance important wildlife habitats  Create new habitats to improve biodiversity  Conserve water supplies and natural water levels  Reduce land contamination  Protect the best and most versatile farmland and minimise the amount of greenfield development  Reduce noise and light pollution  Protect and enhance important archaeological and geological sites, listed buildings and conservation areas  Policy D5 of the local plan states: Planning Permission will be granted for proposals to develop renewable energy resources unless there would be:  i) significant harm to the amenity of residential | Ensure that the Wind Turbine SPD supports the relevant aims and objectives of the Adopted Local Plan. The SPD must reflect the existing Local Plan policy D5. | The SEA framework should ensure compatibility with the Local Plan aims related to economic, environmental and social sustainability. |
|  | areas, due to noise, traffic, pollution or odour ii) significant harm to wildlife species or habitat   |   |  |

| Plan/Programme  | Key Relevant Objectives  | Implications for the Wind Turbine SPD  | Implications for the SEA   |
|---|--|--|--|
|   | iii) unacceptable visual impact on the landscape   |  |  |
|   | Wind Turbines should in addition avoid unacceptable shadow flicker and electromagnetic interference and be sited at least 250 metres from any dwellings.   |  |  |
| Bucks and Milton<br>Keynes Rural Strategy<br>2008-2012                              | Sets out an action plan and key priority areas for rural Bucks and MK. Related to the SPD, these are: ensure appropriate management and conservation of the natural environment and; promote sustainable access and enjoyment of the countryside.  | Ensure that the objectives of the rural strategy are incorporated into the SPD   | Ensure that the sustainable outcomes of the rural strategy are reflected in the SEA framework. |
| Bucks and Milton<br>Keynes Biodiversity<br>Action Plan 2000-2010<br>(2008 revision) | Provides a framework for action to conserve and enhance MK's and Bucks Biodiversity. The Bucks and MK Biodiversity Partnership has identified Biodiversity Opportunity Areas (BOAs) as a tool to prioritise implementation of the BAP. In MK these include the Ouse Valley and the Greensand Ridge. These BOAs are recognised in the SE England Biodiversity Strategy which supports the SE Plan | Ensure that the SPD considers any effects on biodiversity and the BOAs when determining appropriate locations for wind turbines. | The framework should reflect measures to protect and enhance biodiversity.                     |
| Milton Keynes Strategic<br>Flood Risk Assessment<br>2008                            | The purpose of the SFRA is to assess all forms of flood risk taking into account future climate change predictions, and use this to locate future development primarily in low flood risk areas.   | The SPD should take into account areas of flood risk when determining separation distances.                                      | The SEA framework should acknowledge flooding as an issue through its objectives.              |
| Milton Keynes Draft<br>Landscape Character<br>Assessment Report                     | This document assesses the landscape character of Milton Keynes Borough and from there identifies the areas of important character to be used to inform decisions on development.  | The SPD should seek to minimise the impacts of wind turbines on the landscape.   | The SEA framework should include the preservation and enhancement of landscape character.      |
| Milton Keynes Draft   | The Green Infrastructure Plan should help to ensure a  | The SPD should consider the accessibility of   | The SEA framework  |

| Plan/Programme  | Key Relevant Objectives  | Implications for the Wind Turbine SPD  | Implications for the SEA  |
|---|--|--|---|
| Green Infrastructure<br>Plan  | strategically planned, appropriately resourced and managed network of accessible, high quality, sustainable and linked open spaces for existing and future populations.  | open space and impacts on green infrastructure and biodiversity in general.                          | should look to protect<br>and enhance existing<br>areas of green<br>infrastructure.                 |
| Parks Trust: A Strategic<br>Plan for the Green<br>Estate  | The Parks Trust manages approximately 1800 hectares of open space in Milton Keynes. In relation to the Wind Turbine SPD the strategy seeks to protect this land from inappropriate development, while increasing access, biodiversity nd promoting positive management.  | The SPD should ensure that its guidance does not conflict with those of the Parks Trust.             | The SEA framework should look to protect the quality of and access to areas of existing open space. |
| Buckinghamshire and<br>Milton Keynes Historic<br>Landscape<br>Characterisation (HLC)<br>Study, 2006 | The HLC study and accompanying GIS dataset provides an evidence-based interpretation of historic landscape character including sensitivity of varying landscape types and comprises a useful baseline from which decisions on development can be evaluated against historic landscape criteria   | The SPD should seek to minimise impacts of wind turbines on historic landscape character             | The SA framework should seek to preserve and enhance historic landscape character.                  |
| Low Carbon Living<br>Strategy and Action<br>Plan, 2010  | <ul> <li>The strategy aims to reduce greenhouse gas emissions locally to help tackle global climate change by:</li> <li>Integrating sustainability and carbon reduction into the planning and delivery of the Council's aims</li> <li>Reducing the authority's carbon footprint</li> <li>Demonstrating community leadership in tackling climate change and sustainability issues, including reducing the overall carbon footprint of the Borough.</li> <li>The strategy contains a target to cut carbon emissions by 40% per person by 2020 (compared with 2005). Wind turbines are listed as one of the contributors to achieving this target.</li> </ul> | The SPD should take into account the part wind turbines will play in achieving the emissions target. | Ensure the aims and targets of the Strategy and Action Plan are reflected in the SEA framework.     |
| Milton Keynes   | This strategy sets out the values that will guide the  | The SPD should take into account the aims of   | The SEA framework   |

| Plan/Programme                                   | Key Relevant Objectives  | Implications for the Wind Turbine SPD | Implications for the SEA   |
|--|--|---------------------------------------|--|
| Community Strategy<br>2004-2034, 2008<br>refresh | growth of Milton Keynes. Its aim is to create desirable, fun, affordable, safe and accessible places within Milton Keynes. The most relevant of the four key action areas is as follows:  Reinventing our city, places and space – delivering high quality environments for the people of our city and neighbourhoods. | the Community Strategy.               | should take into account<br>the aims of the<br>Community Strategy. |

#### **Appendix B: Relevant Baseline Data**

| SEA Topic                                  | Indicator   | MK Data  | Comparative Data/Targets   | Issue/Trend   | Source  |
|--|---|--|--|---|---|
| Population                                 | MK Population   | 228,400 (June 2007, estimate)<br>231,400 (June 2008, estimate)<br>235,250 (June 2009, estimate)<br>248,800 (the 2011 Census)   | None   | The population of MK increased 17% from 2001.               | MKC<br>Population<br>Bulletin,<br>Census 2011 |
| Human Health                               | % of people<br>describing their<br>health as 'good'<br>or 'very good' | 72% in 2001<br>85% in 2011   | England – 69% (2001) South East – 72% (2001) England – 81.4% (2011) South East – 83.6% (2011)                              | MK is currently broadly in line with the south east average | Census 2001<br>Census 2011                    |
| Human Health                               | % of people<br>describing their<br>health as 'bad or<br>very bad'     | 4.1% in 2011   | England – 5.4%<br>South East – 4.4%  | MK is currently in line with the south east average         | Census 2011                                   |
| Soil,<br>Landscape,<br>Flora and<br>Fauna. | Agricultural Land<br>Classification                                   | There is no grade 1 agricultural land in Milton Keynes Borough. The vast majority of non-urban land is grade 3 although there are areas of grade 2 in the north of the borough, mostly along the course of the River Great Ouse.   | No comparable data   | No identifiable<br>trend                                    | MKC –<br>Intelligence<br>Observatory<br>2011  |
| Flora, fauna<br>and<br>biodiversity        | % SSSI in favourable condition  | <ul> <li>2 SSSIs wholly within Milton Keynes. These are Howe Park Wood and Oxley Mead and both are in a favourable condition.</li> <li>Part of the Yardley Chase SSSI lies within MK Borough, most however is within Northants. Part of this SSSI is in favourable position while</li> </ul> | In 2007 in the South East as a whole 86% off SSSIs are meeting the Natural England target of all SSSIs being in favourable | No identifiable<br>trend                                    | BMERC 2009                                    |

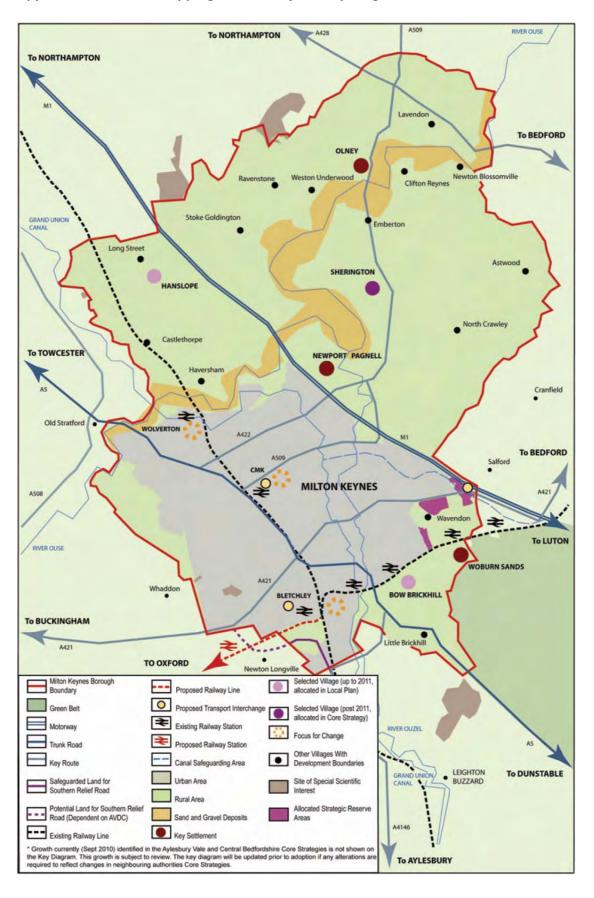
| SEA Topic    | Indicator        | MK Data                       |                   |            |         |                    | Comparative Data/Targets  | Issue/Trend   | Source    |
|--------------|------------------|-------------------------------|-------------------|------------|---------|--------------------|---------------------------|---|-----------|
|              |                  | the rest is in                | unfavour          | able recov | ering.  |                    | or unfavourable condition |   |           |
| Flora, fauna | Extent of        |                               |                   |            |         |                    | No comparable data        | The area of Local   | AMR 2010/ |
| and          | designated sites | Site                          |                   |            | Hectare | -                  |                           | Wildlife Sites has  |           |
| biodiversity |                  |                               |                   | 2008       | 2009    | 2010               |                           | increased from 230  |           |
|              |                  | Local Wildlife Sites          |                   | 229        | 230     | 254                |                           | hectares in 2009 to   |           |
|              |                  | Biological Notificati         | ion Sites         | 1691       | 1656    | 1599               |                           | 254 in 2010. This   |           |
|              |                  | Local Nature Reserv           | ves               | 34         | 33      | 33                 |                           | is as a result of<br>new survey work<br>rather than an<br>underlying change<br>in biodiversity. |           |
|              |                  | Local Geological Sit          | es                | 32         | 32      | 32                 |                           |   |           |
|              |                  | MK Railway Corrido            |                   | 712        | 712     | 712                |                           |   |           |
|              |                  | MK Road Corridors             |                   | 988        | 988     | 988                |                           |   |           |
|              |                  | MK Wetland Corrid             | ors               | 2648       | 2648    | 2648               |                           |   |           |
|              |                  | MK Woodland Corr              | idors             | 362        | 362     | 362                |                           |   |           |
|              |                  | Total (excluding w corridors) | ildlife           | 1986       | 1951    | 1918               |                           |   |           |
| Flora, fauna | Extent of BAP    |                               |                   |            |         |                    | 1.6% of the MK land       | No comparative  | AMR 2010/ |
| and          | priority habitat | Habitat Type                  | Habitat Type Area |            |         | area is covered by | data due to               |   |           |
| biodiversity | . ,              |                               | (hectare          | es)        |         |                    | BAP habitats              | changes in method   |           |
| biodiversity |                  |                               | 2008              | 2009       | 2010    |                    | compared to 2.34%         | of recording.   |           |
|              |                  | Floodplain                    |                   |            | 84      |                    | of Bucks CC.              |   |           |
|              |                  | Grazing Marsh                 |                   |            |         |                    |                           |   |           |
|              |                  | Lowland                       | 2.76              | 2.76       | 2.8     |                    |                           |   |           |
|              |                  | Calcareous                    |                   |            |         |                    |                           |   |           |
|              |                  | Grassland                     |                   |            |         |                    |                           |   |           |
|              |                  | Lowland Dry Acid              | -                 | 3.70       | 2       |                    |                           |   |           |
|              |                  | Grassland                     |                   |            |         |                    |                           |   |           |

| SEA Topic | Indicator       | MK Data             |             |            |               | Comparative Data/Targets | Issue/Trend        | Source |
|-----------|-----------------|---------------------|-------------|------------|---------------|--------------------------|--------------------|--------|
|           |                 | Lowland Fens        | -           | 3.90       | 4             |                          |                    |        |
|           |                 | Lowland             | -           | 0.50       | 0.50          |                          |                    |        |
|           |                 | Heathland           |             |            |               |                          |                    |        |
|           |                 | Lowland             | 9.88        | 9.90       | 10            |                          |                    |        |
|           |                 | Meadows             |             |            |               |                          |                    |        |
|           |                 | Lowland Mixed       | 225.72      | 259.20     | 258           |                          |                    |        |
|           |                 | Deciduous           |             |            |               |                          |                    |        |
|           |                 | Woodland            |             |            |               |                          |                    |        |
|           |                 | Purple Moor         | 4.26        | 3.99       | 4             |                          |                    |        |
|           |                 | Grass and Rush      |             |            |               |                          |                    |        |
|           |                 | Pasture             |             |            |               |                          |                    |        |
|           |                 | Reedbeds            | 1.47        | 11.99      | 12            |                          |                    |        |
|           |                 | Traditional         |             |            | 10            |                          |                    |        |
|           |                 | Orchards            |             |            |               |                          |                    |        |
|           |                 | Wet Woodland        | 0.81        | 0.81       | 0.81          |                          |                    |        |
|           |                 | Wood-Pastures       | 120.84      | 121.40     | 121           |                          |                    |        |
|           |                 | and Parkland        |             |            |               |                          |                    |        |
|           |                 | Total               | 365.74      | 418.15     | 509.11        |                          |                    |        |
|           |                 |                     |             |            |               |                          |                    |        |
| Water     | Extent of flood | The Milton Keynes   | area contai | ns four de | signated Mair | The SFRA provides        | Milton Keynes has  | SFRA   |
|           | risk SFRA/EA    | Rivers, the Great O |             |            | -             | mapping for the          | a good record of   |        |
|           | ,               | and Tongwell Brook  | -           | -          |               | extent of flooding in    | including measures |        |
|           |                 | courses and tributa |             |            |               | Milton Keynes.           | to mitigate the    |        |
|           |                 |                     | •           | '          |               |                          | impact of flooding |        |
|           |                 |                     |             |            |               |                          | primarily through  |        |
|           |                 |                     |             |            |               |                          | blue/green         |        |
|           |                 |                     |             |            |               |                          | infrastructure.    |        |

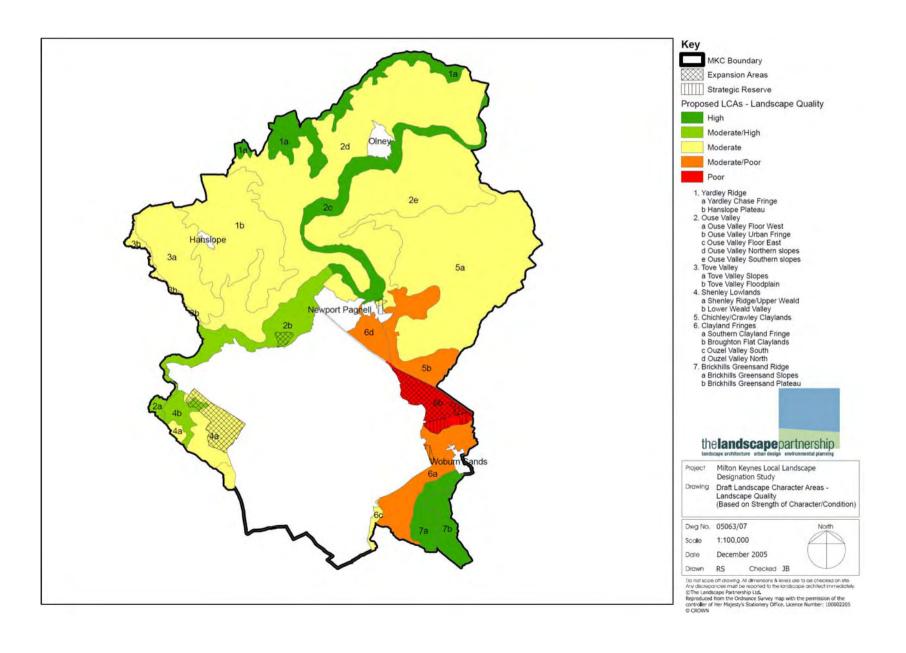
| SEA Topic            | Indicator  | MK Data  | Comparative Data/Targets | Issue/Trend  | Source      |
|----------------------|--|--|--------------------------|--|-------------|
|                      |  |  |                          | This will need to be continued in future developments.   |             |
| Water                | Number of applications permitted contrary to EA advice relating to flooding                            | <ul> <li>0 applications permitted contrary to<br/>Environment Agency advice. (2008)</li> <li>0 applications permitted contrary to<br/>Environment Agency advice. (2009)</li> <li>0 applications permitted contrary to<br/>Environment Agency advice. (2010)</li> </ul> | No comparable data       | This is the same as 2008 and 2009 when 0 applications were permitted contrary to EA advice                           | AMR 2010/11 |
| Air                  | Number of noise complaints   | There is currently only one recorded noise complaint in Milton Keynes relating to a wind turbine. This may largely be due to there only one being one wind farm in the Borough and its location away from residential dwellings.                                       | No comparable data       | This is an existing data gap. As more wind farms are developed, a more robust baseline situation can be established. |             |
| Air                  | Number of Air<br>Quality<br>Management<br>Areas (AQMA)   | 2008 – 1 AQMA<br>2009 – 1 AQMA<br>2010 – 1 AQMA  | No comparable data       | One AQMA was declared in Olney in 2008.  | AMR 2010/11 |
| Cultural<br>Heritage | Number of SAMS, registered parks and gardens, conservation areas and listed buildings Listed Buildings | <ul> <li>50 scheduled ancient monuments,</li> <li>3 registered parks and gardens</li> <li>27 conservation areas</li> <li>over 1,100 listed buildings. (2011)</li> </ul>  | No comparable data       | No trend   |             |
| Cultural             | Number of SAMs   | • 6 SAMs at risk (2011)  | To reduce the            | No listed buildings  | English     |

| SEA Topic  | Indicator                                     | MK Data   | Comparative Data/Targets                                 | Issue/Trend   | Source                                    |
|--|---|---|--|---|---|
| Heritage   | at risk                                       | 1 listed building at risk (2011)  | number of SAMs at risk by removing the threats.          | were at risk in 2008.   | Heritage,<br>Heritage at<br>Risk Register |
| Landscape,<br>Flora, fauna<br>and<br>biodiversity. |   | The Milton Keynes Local Plan has allocated two areas as Areas of Attractive Landscape (AAL). These local AAL designations are the Brickhills AAL in the south east of the Borough and the Ouse Valley AAL, to the north and west of Newport Pagnell (see Appendix C). | To maintain the integrity of the AAL.                    | No identifiable trend.  | MKC                                       |
| Flora, fauna<br>and<br>biodiversity,<br>Landscape  | Landscape<br>Character<br>Assessment          | The draft Landscape Character Assessment splits the Borough into 7 character types and rates them as 'high' 'moderate/high' 'moderate' moderate/poor' or 'poor'. (see Appendix C)   | To maintain the landscape character of the borough.      | No identifiable trend.  | MKC                                       |
| Climatic<br>Factors,<br>Material<br>Assets         | Capacity of wind<br>turbines in MK<br>Borough | 14 - 21Mw (2010)<br>14 - 21Mw (2011)  | To increase the amount of energy from renewable sources. | 2010 saw the first wind farm in Milton Keynes become operational. | MKC (2011)                                |

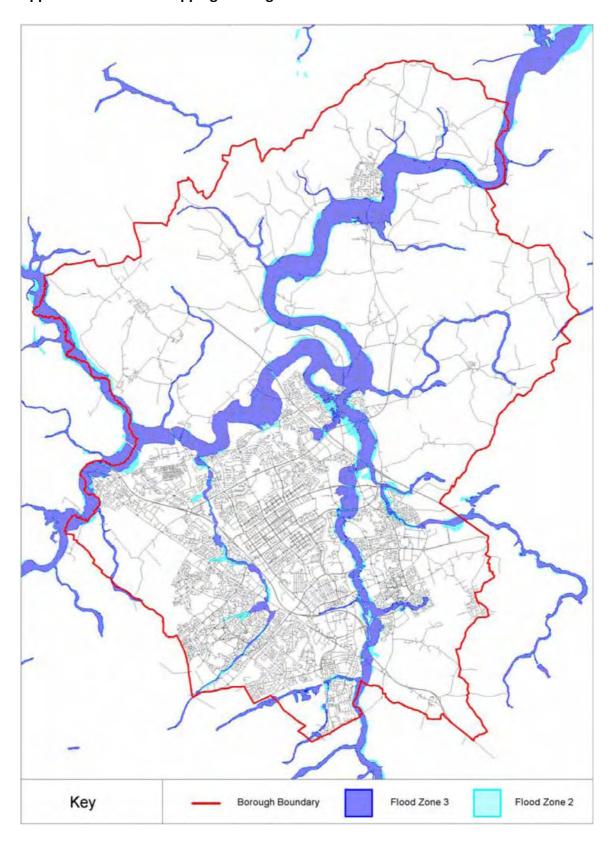
#### Appendix C Baseline Mapping: Milton Keynes Key Diagram



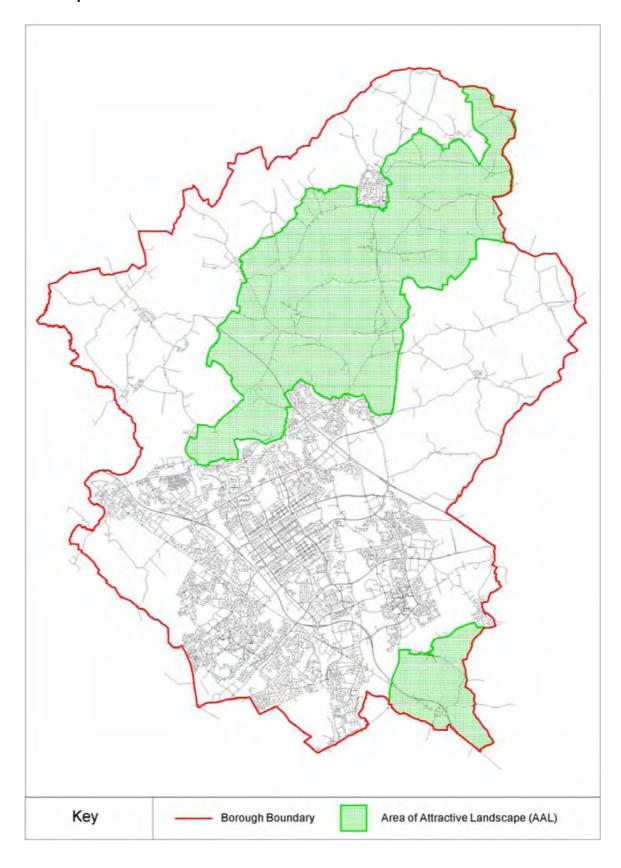
#### Appendix C Baseline Mapping: Draft Landscape Character Area Assessment: Quality



Appendix C Baseline Mapping: Strategic Flood Risk Assessment: Flood Zones



# Appendix C Baseline Mapping: Local Plan Designation: Areas of Attractive Landscape



## Appendix D: Internal SEA Objective Compatibility Assessment

|   | 7. Improve efficiency of land use. | 6. Reduce the risk of flooding. | 5. Conserve and enhance the<br>Borough's cultural heritage. | <ol> <li>Conserve and enhance Milton<br/>Keynes' biodiversity and landscape<br/>character.</li> </ol> | 3. Encourage the use of renewable sources of energy. | <ol> <li>Continue to maintain and<br/>improve local air quality and limit<br/>noise pollution.</li> </ol> |
|---|------------------------------------|---------------------------------|---|---|--|---|
| 1. Improve the health and quality of life of residents.                         | <b>√</b>                           | <b>√</b>                        | ✓   | <b>√</b>  | 1  | <b>√</b>  |
| 2 Continue to maintain and improve local air quality and limit noise pollution. | <b>✓</b>                           | <b>✓</b>                        | <b>√</b>  | <b>√</b>  | <b>√</b>   |   |
| 3 Encourage the use of renewable sources of energy.                             | 5                                  | 4                               | 3   | 2   |  | •   |
| 4 Conserve and enhance Milton Keynes' biodiversity and landscape character.     | <b>√</b>                           | <b>✓</b>                        | <b>√</b>  |   |  |   |
| 5 Conserve and enhance the Borough's cultural heritage.                         | <b>✓</b>                           | <b>✓</b>                        |   |   |  |   |
| 6 Reduce the risk of flooding.  | <b>√</b>                           |                                 | 1   |   |  |   |

| 1 | There could be potential for health effects arising from wind turbines. At the same time in the longer term, reducing CO2 emissions could have positive impacts   |
|---|---|
| 2 | Potential for short term harm to biodiversity arising from development. Longer term, positive contribution could arise from reducing our impact on climate change and thereby reducing the impact on biodiversity over a longer time period and a wider area. |
| 3 | Potential for harm to the borough's cultural heritage through inappropriate location of wind turbines.  |
| 4 | Potential positive a negative impact. Wind turbines should avoid areas of flood risk. Longer term they could reduce the impact of climate change on flooding.   |
| 5 | Large wind turbines will generally require the development of Greenfield land.  |

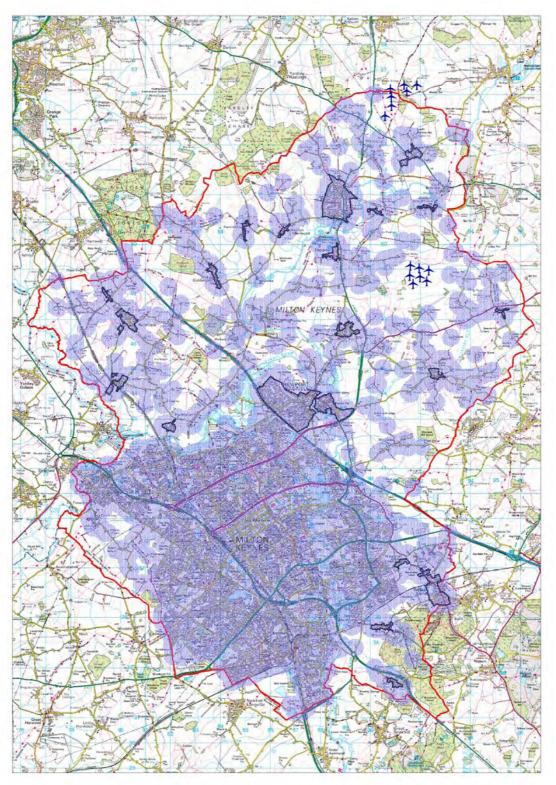
## **Appendix E: Scoping Report Consultation Responses**

| Consultee             | Response   | Action  |
|-----------------------|--|---|
| Environment<br>Agency | Page 7 - Climatic Factors - We agree that the SPD should seek to maximise the capacity of wind farms in MK. Careful consideration needs to be given as to how the Indicators for the objectives are measured.  | Noted. Capacity will be monitored through the Annual Monitoring Report  |
|                       | Page 7 - Water - We agree with the first point under Objective 6, using the EA planning responses to ensure appropriate development.   | Noted   |
|                       | In terms of the decision making prompt "avoid increasing the risk of surface water flooding for infrastructure" - we do not consider this appropriate. If it refers to the need to reduce surface water flood risk from the Wind Turbine developments, we would not regard this as an issue due to the lack of impermeable surfacing associated with turbine developments. If it relates to locating the wind turbine infrastructure in areas at risk of surface water flooding then we would address this through the planning stage (where surface water flood risk areas are known) | Decision making prompts have been amended. Now distinguish between generally reducing flood risk and locating wind turbines out of areas of flood risk. |
|                       | Page 16 - SEA framework should also include an objective to locate any turbines (or particularly their associated infrastructure - such as the transfer stations) in areas not at risk of flooding.  | Objective 6 will cover this point. An additional decision making prompt has been added to clarify that it covers the location of wind turbines.         |
|                       | Pages 21 and 22 - We agree with the inclusion of the MK SFRA 2008 and the Green Infrastructure plan as reference documents to inform the SEA/SPD.  | Noted   |
|                       | Page 26 - Water - In terms of the comparative data / targets - The SFRA should be used as an initial development planning tool. For individual applications the most up-to-date information will be used, whether this is the SFRA or the EA Flood Map (which may contain updated modelling from the 2008 SFRA).   | Noted   |

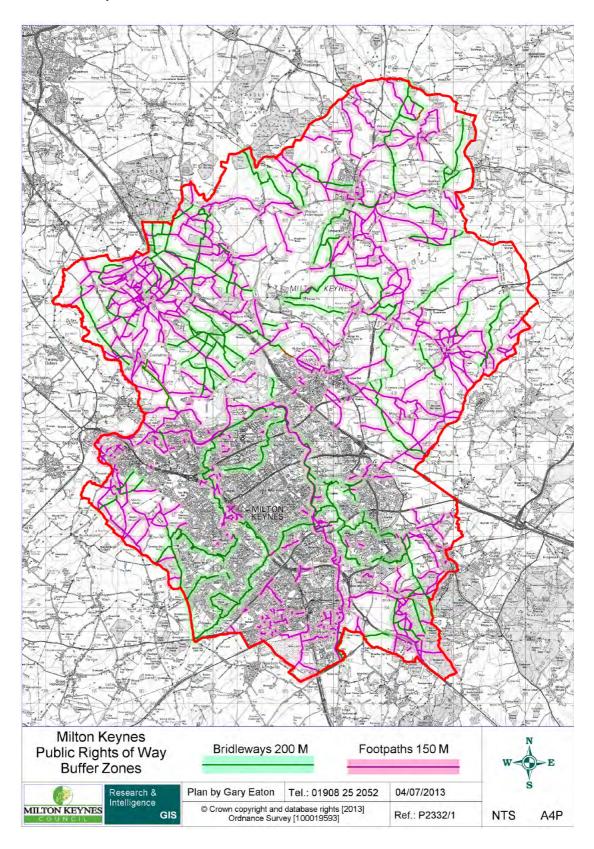
| Natural<br>England | We note that the SEA question "Will the proposed option help to protect sites designated for their biodiversity value?" is probably not the most incisive question to apply in the context of wind turbines. The prime biodiversity risk is the impacts on birds and bats. These species could be affected without affecting any sites designated for their biodiversity value. A better question might be "Will the proposed option have an adverse effect on bat and bird species of biodiversity value?"  | Amended the Framework the include reference to bat and bird species. Retained reference to sites as will be an important consideration in location of turbines. |
|--------------------|--|---|
|                    | We also advise that there is a distinction to be made between impact on landscape character and visual impact, the former being the impact on the landscape per se, the latter being the impact as perceived. The decision aiding question "Will the proposed option help protect the landscape character of the borough?" relates to the former, which is not particularly sensitive to, say, where existing dwellings are. You may wish to consider a supplementary question such as "Will the proposed option lead to a negative visual impact?"  | Framework amended to reflect distinction between landscape and visual amenity.  |
|                    | Whilst not directly related to the SEA, we would like to take the opportunity to point out the guidance we have with respect to protected species in general: <a href="http://www.naturalengland.org.uk/ourwork/planningtransportlocalgov/spatialplanning/standingadvice/default.aspx">http://www.naturalengland.org.uk/ourwork/planningtransportlocalgov/spatialplanning/standingadvice/default.aspx</a> , assessing the effects of onshore wind farms on birds: <a href="http://naturalengland.etraderstores.com/NaturalEnglandShop/TIN069">http://naturalengland.etraderstores.com/NaturalEnglandShop/TIN051</a> . It may be appropriate to reference these guidance documents in the proposed SPD. | Noted.  |

**Appendix F: Separation distances** 

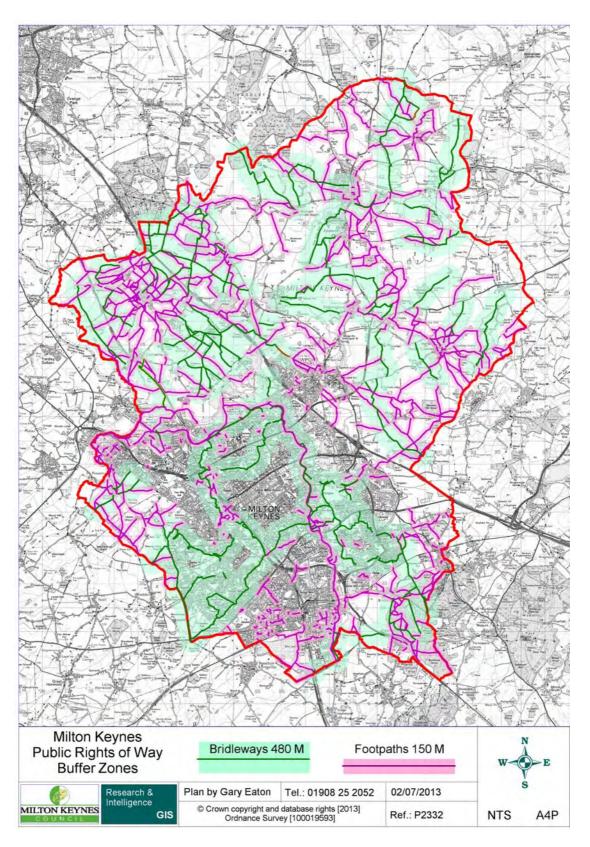
Option 1: Do not adopt the SPD: the Local Plan does not include any guidance on a minimum separation distance from bridleways or footpaths (Local Plan Policy D5 350m separation zone from residential properties shown)



Option 2: Adopt the SPD with a separation distance of 200 metres from bridleways and a fall-over distance (i.e. the height of the turbine to the tip of the blade) plus 25% from public footpaths (fall-over separation distance is based on a 120m high wind turbine)



Option 3: Adopt the SPD with a separation distance of four times the overall height of the turbine from bridleways and a fall-over distance (i.e. the height of the turbine to the tip of the blade) plus 25% from public footpaths (based on a 120m high wind turbine)



## Appendix G: Wind Turbine Separation Distance from Bridleways and Public Footpaths Options Appraisal

| ✓   | The option will have a predominantly positive effect when assessed against the SA/SEA objective             |
|-----|---|
| ×   | The option will have a predominantly negative effect when assessed against the SA/SEA objective             |
| √/x | There will be both positive and negative effects from the option when assessed against the SA/SEA objective |
| ?   | The effects of the option are uncertain/unclear when assessed against the SA/SEA objective                  |
| 0   | The option will have no effect on the SA/SEA objective  |

| SA Objective            | Will the option        | Effect        | Likelihood                         | Spatial                                    | Permanence                          | Timing                               | Significance                       | Justification        |
|-------------------------|------------------------|---------------|------------------------------------|--|-------------------------------------|--------------------------------------|------------------------------------|----------------------|
|                         |                        |               |                                    | scale                                      |                                     |                                      |                                    |                      |
|                         |                        | $\checkmark$  |                                    |  |                                     |                                      |                                    |                      |
| The SA/SEA<br>Objective | decision making prompt | ×<br>√/×<br>? | High<br>Medium<br>Low<br>Uncertain | Local<br>Regional<br>National<br>Uncertain | Permanent<br>Temporary<br>Uncertain | Short<br>Medium<br>Long<br>Uncertain | High<br>Medium<br>Low<br>Uncertain | Supporting statement |
|                         |                        | 0             |                                    |  |                                     |                                      |                                    |                      |

| OPTION 1: Do not   | OPTION 1: Do not adopt the SPD: the Local Plan does not include any guidance on a minimum separation distance from bridleways or footpaths |        |            |               |            |                         |              |  |  |  |  |
|--|--|--------|------------|---------------|------------|-------------------------|--------------|--|--|--|--|
| SA Objective   | Will the option  | Effect | Likelihood | Spatial scale | Permanence | Timing                  | Significance | Justification  |  |  |  |
| 1. Improve the health and quality of life of residents.                          | minimise physical or perceived increase in health related issues?  | ×      | Medium     | Local         | Permanent  | Short<br>Medium<br>Long | Low          | The option will not offer any increased protection to quality of life of residents. It does not offer any protection to footpaths or bridalways and therefore could lead to less physical activity   |  |  |  |
| 2. Continue to maintain and improve local air quality and limit noise pollution. | minimise noise complaints?lead to an improvement in air quality?   | 0      | Medium     | Local         | Permanent  | Medium                  | Low          | The option will not offer any increased protection from noise pollution from wind farm development.  |  |  |  |
| 3. Encourage the use of renewable sources of energy.                             | increase opportunities for renewable energy and wind farms in particular?  | √      | Medium     | Local         | Permanent  | Short<br>Medium<br>Long | High         | The option leaves some areas of the borough available for possible wind farm development.  |  |  |  |
| 4. Conserve and<br>enhance Milton<br>Keynes'<br>biodiversity                     | to protect sites designated for their biodiversity value?avoid adverse effects on bat and bird species of biodiversity value?              | ?      | Uncertain  | Uncertain     | Uncertain  | Uncertain               | Uncertain    | The effect of the option on biodiversity is uncertain. The option leaves some areas of the borough available for possible wind farm development – this could have some impact on sites designated for their biodiversity value and species of biodiversity value. However, existing policy protection would remain and any impact of possible wind farm development on the sites and species of biodiversity value would have to be individually assessed. |  |  |  |
| 5. Conserve and<br>enhance Milton<br>Keynes'<br>landscape                        | improve access to<br>the countryside?<br>protect the<br>landscape character  | 0      | High       | Local         | Permanent  | Short<br>Medium<br>Long | Low          | Overall the option will have no impact against the objective. It would leave some areas as possible development sites which could impact on landscape character.   |  |  |  |

| OPTION 1: Do not   | OPTION 1: Do not adopt the SPD: the Local Plan does not include any guidance on a minimum separation distance from bridleways or footpaths            |          |            |                               |            |                         |              |  |  |  |  |
|--|---|----------|------------|-------------------------------|------------|-------------------------|--------------|--|--|--|--|
| SA Objective   | Will the option   | Effect   | Likelihood | Spatial scale                 | Permanence | Timing                  | Significance | Justification  |  |  |  |
| character.   | of the borough?<br>minimise negative<br>visual impacts?   |          |            |                               |            |                         |              |  |  |  |  |
| 6. Conserve and enhance the Borough's cultural heritage. | protect or<br>enhance<br>archaeological sites,<br>monuments,<br>structures, historic<br>parks, gardens,<br>listed buildings or<br>conservation areas? | 0        | Medium     | Local                         | Permanent  | Short<br>Medium<br>Long | Low          | The option will have no impact against the objective. The impact on SAMS (Scheduled Ancient Monuments Sites) and archaeological sites is uncertain although existing planning policy protection and specific heritage protection legislation would remain.   |  |  |  |
| 7. Reduce the risk of flooding.                          | avoid locating development in areas of flood risk?reduce the risk of flooding?  | <b>√</b> | Low        | Local<br>Regional<br>National | Permanent  | Long                    | Low          | The option could have positive effect. Renewable energy can contribute to reducing impacts of climate change including flooding.   |  |  |  |
| 8. Improve efficiency of land use.                       | minimise or avoid<br>the loss of the most<br>versatile agricultural<br>land?<br>prioritise the use<br>of previously<br>developed land?                | 0        | High       | Local                         | Permanent  | Short<br>Medium<br>Long | Low          | The option will have very little impact on the possibility of developing on previously developed land. Most PDL will be located in settlements and not in the countryside where majority of bridleways and public footpaths are. Any buffer along bridleways or footpaths would not factor in agricultural land quality as the focus is on protecting the safety of rights of way users. |  |  |  |

| OPTION 1: Do not               | OPTION 1: Do not adopt the SPD: the Local Plan does not include any guidance on a minimum separation distance from bridleways or footpaths |        |            |               |            |        |              |   |  |  |  |  |
|--------------------------------|--|--------|------------|---------------|------------|--------|--------------|---|--|--|--|--|
| SA Objective                   | Will the option  | Effect | Likelihood | Spatial scale | Permanence | Timing | Significance | Justification   |  |  |  |  |
| 9. Encourage the               | promote  |        |            | SCale         |            |        |              |   |  |  |  |  |
| creation of new businesses and | economic activity in the borough?  |        | Madium     | Local         | Tomporoni  | Short  | High         | The option will have a positive impact against                          |  |  |  |  |
| ensure high                    |  | ľ      | Medium     | Local         | Temporary  | Medium | High         | the objective, it would leave some areas as possible development sites. |  |  |  |  |
| levels of employment.          |  |        |            |               |            |        |              |   |  |  |  |  |

OPTION 2: Adopt the SPD with a separation distance of 200 metres from bridleways and a fall-over distance (i.e. the height of the turbine to the tip of the blade) plus 25% from public footpaths

| SA Objective   | Will the option   | Effect   | Likelihood | Spatial scale | Permanence | Timing                  | Significance | Justification   |
|--|---|----------|------------|---------------|------------|-------------------------|--------------|---|
| 1. Improve the health and quality of life of residents.                          | minimise physical<br>or perceived<br>increase in health<br>related issues?  | ✓        | Medium     | Local         | Permanent  | Short<br>Medium<br>Long | Low          | The option aims to provide some protection for bridleway and footpath users. Depending on the density of the rights of way network and/or location of individual bridleways and footpaths it may be possible that residential properties within a buffer or close to it would gain additional protection but there could be increased pressure in areas outside the buffer. |
| 2. Continue to maintain and improve local air quality and limit noise pollution. | minimise noise complaints?lead to an improvement in air quality?  | <b>√</b> | Medium     | Local         | Permanent  | Short<br>Medium<br>Long | Low          | The option should provide some protection from noise pollution from wind farm development.  |
| 3. Encourage the use of renewable sources of energy.                             | increase opportunities for renewable energy and wind farms in particular?   | <b>✓</b> | Medium     | Local         | Permanent  | Short<br>Medium<br>Long | High         | The option leaves some areas of the borough available for possible wind farm development.   |
| 4. Conserve and enhance Milton Keynes' biodiversity                              | to protect sites designated for their biodiversity value?avoid adverse effects on bat and bird species of biodiversity value? | ?        | Uncertain  | Uncertain     | Uncertain  | Uncertain               | Uncertain    | The effect of the option on biodiversity is uncertain. Sites within a buffer would be protected but there could be increased pressure in areas outside the buffer. However, existing policy protection would remain and any impact of possible wind farm development on the sites and species of biodiversity value would have to be individually assessed.                 |
| 5. Conserve and  | improve access to   | ✓        | High       | Local         | Permanent  | Short                   | Medium       | Overall the option will have a positive impact  |

OPTION 2: Adopt the SPD with a separation distance of 200 metres from bridleways and a fall-over distance (i.e. the height of the turbine to the tip of the blade) plus 25% from public footpaths

| SA Objective   | Will the option  | Effect | Likelihood | Spatial scale                 | Permanence | Timing                  | Significance | Justification   |
|--|--|--------|------------|-------------------------------|------------|-------------------------|--------------|---|
| enhance Milton<br>Keynes'<br>landscape<br>character.     | the countryside?protect the landscape character of the borough?minimise negative visual impacts?                                       |        |            |                               |            | Medium<br>Long          |              | against the objective. It would however leave some areas as possible development sites which could impact on landscape character.   |
| 6. Conserve and enhance the Borough's cultural heritage. | protect or enhance archaeological sites, monuments, structures, historic parks, gardens, listed buildings or conservation areas?       | ?      | Uncertain  | Uncertain                     | Uncertain  | Uncertain               | Uncertain    | The effect of the option on the borough's cultural heritage is uncertain. Sites within a buffer would be protected but there could be increased pressure in areas outside the buffer. However, existing policy protection would remain and any impact of possible wind farm development on any heritage assets would have to be individually assessed.  |
| 7. Reduce the risk of flooding.                          | avoid locating development in areas of flood risk?reduce the risk of flooding?   | ✓      | Low        | Local<br>Regional<br>National | Permanent  | Long                    | Low          | The option leaves some areas of the borough available for possible wind farm development. The option could have minor positive effect. Renewable energy can contribute to reducing impacts of climate change including flooding.  |
| 8. Improve efficiency of land use.                       | minimise or avoid<br>the loss of the most<br>versatile agricultural<br>land?<br>prioritise the use<br>of previously<br>developed land? | 0      | High       | Local                         | Permanent  | Short<br>Medium<br>Long | Low          | The option will have very little impact on the possibility of developing on previously developed land (PDL). Most PDL will be located in settlements and not in the countryside where majority of bridleways and public footpaths can be found. Any buffer along bridleways or footpaths would not factor in agricultural land quality as the focus is on protecting the safety of rights of way users. |

OPTION 2: Adopt the SPD with a separation distance of 200 metres from bridleways and a fall-over distance (i.e. the height of the turbine to the tip of the blade) plus 25% from public footpaths

| SA Objective  | Will the option                                 | Effect   | Likelihood | Spatial scale | Permanence | Timing          | Significance | Justification  |
|---|---|----------|------------|---------------|------------|-----------------|--------------|--|
| 9. Encourage the creation of new businesses and ensure high levels of employment. | promote<br>economic activity in<br>the borough? | <b>√</b> | Medium     | Local         | Temporary  | Short<br>Medium | High         | The option will have a positive impact against the objective; it would leave some areas as possible development sites. |

OPTION 3: Adopt the SPD with a separation distance of four times the overall height of the turbine from bridleways and a fall-over distance (i.e. the height of the turbine to the tip of the blade) plus 25% from public footpaths

| SA Objective   | Will the option   | Effect | Likelihood | Spatial scale | Permanence | Timing                  | Significance | Justification   |
|--|---|--------|------------|---------------|------------|-------------------------|--------------|---|
| 1. Improve the health and quality of life of residents.                          | minimise physical<br>or perceived<br>increase in health<br>related issues?                                | ✓      | Medium     | Local         | Permanent  | Short<br>Medium<br>Long | Medium       | The option aims to provide some protection for bridleway and footpath users. Depending on the density of the rights of way network and/or location of individual bridleways and footpaths it may be possible that residential properties within, or close to a buffer would gain additional protection. The option may result in increased pressure from wind farm development in areas outside the buffer. |
| 2. Continue to maintain and improve local air quality and limit noise pollution. | minimise noise complaints?lead to an improvement in air quality?  | √      | Medium     | Local         | Permanent  | Medium                  | Medium       | The option should provide some protection from noise pollution from wind farm development.  |
| 3. Encourage the use of renewable sources of energy.                             | increase opportunities for renewable energy and wind farms in particular?                                 | ?      | Uncertain  | Uncertain     | Uncertain  | Uncertain               | Uncertain    | The option would identify areas for possible wind farm development. However, it is uncertain how suitable those sites are and to what extent they will enable suitable development sites to come forward given the limited scope.   |
| 4. Conserve and enhance Milton Keynes' biodiversity                              | to protect sites designated for their biodiversity value?avoid adverse effects on bat and bird species of | ?      | Uncertain  | Uncertain     | Uncertain  | Uncertain               | Uncertain    | The effect of the option on biodiversity is uncertain. Sites within a buffer would be protected but there could be increased pressure in areas outside the buffer. However, existing policy protection would remain and any impact of possible wind farm development on the sites   |

OPTION 3: Adopt the SPD with a separation distance of four times the overall height of the turbine from bridleways and a fall-over distance (i.e. the height of the turbine to the tip of the blade) plus 25% from public footpaths

| SA Objective  | Will the option   | Effect   | Likelihood | Spatial scale | Permanence | Timing                  | Significance | Justification   |
|---|---|----------|------------|---------------|------------|-------------------------|--------------|---|
|   | biodiversity value?   |          |            |               |            |                         |              | and species of biodiversity value would have to be individually assessed.   |
| 5. Conserve and<br>enhance Milton<br>Keynes'<br>landscape<br>character. | improve access to the countryside?protect the landscape character of the borough?minimise negative visual impacts?                                    | <b>√</b> | High       | Local         | Permanent  | Short<br>Medium<br>Long | High         | Overall the option will have a positive impact against the objective. It would however leave some areas as possible development sites which could impact on landscape character.  |
| 6. Conserve and enhance the Borough's cultural heritage.                | protect or<br>enhance<br>archaeological sites,<br>monuments,<br>structures, historic<br>parks, gardens,<br>listed buildings or<br>conservation areas? | ?        | Uncertain  | Uncertain     | Uncertain  | Uncertain               | Uncertain    | The effect of the option on borough's cultural heritage is uncertain. Sites within a buffer would be protected but there could be increased pressure in areas outside the buffer. However, existing policy protection would remain and any impact of possible wind farm development on any heritage assets would have to be individually assessed.                                    |
| 7. Reduce the risk of flooding.   | avoid locating<br>development in<br>areas of flood risk?<br>reduce the risk of<br>flooding?   | ?        | Uncertain  | Uncertain     | Uncertain  | Uncertain               | Uncertain    | Depending on the density of the rights of way network and/or location of individual bridleways and footpaths it may be possible that the option would prevent development in areas of flood risk within the borough. However, the effect of the option on flooding is uncertain since larger areas of the borough would be excluded from wind farm development and, in the long term, |

## OPTION 3: Adopt the SPD with a separation distance of four times the overall height of the turbine from bridleways and a fall-over distance (i.e. the height of the turbine to the tip of the blade) plus 25% from public footpaths

| SA Objective  | Will the option  | Effect | Likelihood | Spatial scale | Permanence | Timing                  | Significance | Justification   |
|---|--|--------|------------|---------------|------------|-------------------------|--------------|---|
|   |  |        |            |               |            |                         |              | switching to renewable energy sources could become more difficult.  |
| 8. Improve efficiency of land use.  | minimise or avoid<br>the loss of the most<br>versatile agricultural<br>land?<br>prioritise the use<br>of previously<br>developed land? | 0      | High       | Local         | Permanent  | Short<br>Medium<br>Long | Low          | The option will have very little impact on the possibility of developing on previously developed land (PDL). Most PDL will be located in settlements and not in the countryside where majority of bridleways and public footpaths can be found. Any buffer along bridleways or footpaths would not factor in agricultural land quality as the focus is on protecting the safety of rights of way users. |
| 9. Encourage the creation of new businesses and ensure high levels of employment. | promote economic activity in the borough?  | ?      | Uncertain  | Uncertain     | Uncertain  | Uncertain               | Uncertain    | The effect of the option is uncertain. Although opportunities for wind farms are identified, they are limited and it is not certain how it would meet the objective. The option may have a positive impact on equestrian and tourism businesses as it focuses on protecting the safety of rights of way users.  |

### **Appendix I: Draft Wind Turbine and Emerging Policy Appraisal**

Preferred Option: Adopt the SPD with a separation distance of

1) four times the overall height of the turbine from bridleways or 200 metres, whichever is the greater. The negotiation process recommended in the Companion Guide to PPS 22 should indicate whether, in the particular circumstances of each site, these guidelines can be relaxed or need strengthening to minimise or eliminate any perceived potential difficulties.

2) a fall-over distance (i.e. the height of the turbine to the tip of the blade) plus 25% from public footpaths

| SA Objective   | Will the option  | Effect   | Likelihood | Spatial scale | Permanence | Timing                  | Significance | Justification   |
|--|--|----------|------------|---------------|------------|-------------------------|--------------|---|
| 1. Improve the health and quality of life of residents.                          | minimise physical<br>or perceived<br>increase in health<br>related issues? | <b>√</b> | Medium     | Local         | Permanent  | Short<br>Medium<br>Long | Medium       | The option aims to provide some protection for bridleway and footpath users. Depending on the density of the rights of way network and/or location of individual bridleways and footpaths it may be possible that residential properties within a buffer or close to it would gain additional protection but there could be increased pressure in areas outside the buffer. The negotiation process should indicate whether the recommended separation distance is appropriate. |
| 2. Continue to maintain and improve local air quality and limit noise pollution. | minimise noise complaints?lead to an improvement in air quality?           | <b>√</b> | Medium     | Local         | Permanent  | Short<br>Medium<br>Long | Medium       | The option should provide some protection from noise pollution from wind farm development.  |
| 3. Encourage the use of renewable sources of energy.                             | increase opportunities for renewable energy and wind farms in particular?  | ✓        | Medium     | Local         | Permanent  | Short<br>Medium<br>Long | High         | The option leaves some areas of the borough available for possible wind farm development. The negotiation process should indicate whether the recommended separation distance is appropriate.   |

Preferred Option: Adopt the SPD with a separation distance of

1) four times the overall height of the turbine from bridleways or 200 metres, whichever is the greater. The negotiation process recommended in the Companion Guide to PPS 22 should indicate whether, in the particular circumstances of each site, these guidelines can be relaxed or need strengthening to minimise or eliminate any perceived potential difficulties.

2) a fall-over distance (i.e. the height of the turbine to the tip of the blade) plus 25% from public footpaths

| SA Objective  | Will the option   | Effect | Likelihood | Spatial                       | Permanence | Timing                  | Significance | Justification   |
|---|---|--------|------------|-------------------------------|------------|-------------------------|--------------|---|
| 4. Conserve and enhance Milton Keynes' biodiversity                     | to protect sites<br>designated for their<br>biodiversity value?<br>avoid adverse<br>effects on bat and<br>bird species of<br>biodiversity value?      | ?      | Uncertain  | scale Uncertain               | Uncertain  | Uncertain               | Uncertain    | The effect of the option on biodiversity is uncertain. Sites within a buffer would be protected but there could be increased pressure in areas outside the buffer. However, existing policy protection would remain and any impact of possible wind farm development on the sites and species of biodiversity value would have to be individually assessed. |
| 5. Conserve and<br>enhance Milton<br>Keynes'<br>landscape<br>character. | improve access to the countryside?protect the landscape character of the borough?minimise negative visual impacts?                                    | ✓      | High       | Local                         | Permanent  | Short<br>Medium<br>Long | Medium       | Overall the option will have a positive impact against the objective. It would however leave some areas as possible development sites which could impact on landscape character.  |
| 6. Conserve and enhance the Borough's cultural heritage.                | protect or<br>enhance<br>archaeological sites,<br>monuments,<br>structures, historic<br>parks, gardens,<br>listed buildings or<br>conservation areas? | ?      | Uncertain  | Uncertain                     | Uncertain  | Uncertain               | Uncertain    | The effect of the option on the borough's cultural heritage is uncertain. Sites within a buffer would be protected but there could be increased pressure in areas outside the buffer. However, existing policy protection would remain and any impact of possible wind farm development on any heritage assets would have to be individually assessed.      |
| 7. Reduce the risk of flooding.   | avoid locating development in areas of flood risk?  | ✓      | Low        | Local<br>Regional<br>National | Permanent  | Long                    | Low          | The option leaves some areas of the borough available for possible wind farm development. The option could have minor positive effect.  |

Preferred Option: Adopt the SPD with a separation distance of

- 1) four times the overall height of the turbine from bridleways or 200 metres, whichever is the greater. The negotiation process recommended in the Companion Guide to PPS 22 should indicate whether, in the particular circumstances of each site, these guidelines can be relaxed or need strengthening to minimise or eliminate any perceived potential difficulties.
- 2) a fall-over distance (i.e. the height of the turbine to the tip of the blade) plus 25% from public footpaths

| SA Objective  | Will the option  | Effect | Likelihood | Spatial scale | Permanence | Timing                  | Significance | Justification   |
|---|--|--------|------------|---------------|------------|-------------------------|--------------|---|
|   | reduce the risk of flooding?   |        |            |               |            |                         |              | Renewable energy can contribute to reducing impacts of climate change including flooding.  The negotiation process should indicate whether the recommended separation distance is appropriate in terms of reducing the risk of flooding   |
| 8. Improve efficiency of land use.  | minimise or avoid<br>the loss of the most<br>versatile agricultural<br>land?<br>prioritise the use<br>of previously<br>developed land? | 0      | High       | Local         | Permanent  | Short<br>Medium<br>Long | Low          | The option will have very little impact on the possibility of developing on previously developed land (PDL). Most PDL will be located in settlements and not in the countryside where majority of bridleways and public footpaths can be found. Any buffer along bridleways or footpaths would not factor in agricultural land quality as the focus is on protecting the safety of rights of way users. |
| 9. Encourage the creation of new businesses and ensure high levels of employment. | promote economic activity in the borough?  | ✓      | Medium     | Local         | Temporary  | Short<br>Medium         | High         | The option will have a positive impact against the objective; it would leave some areas as possible development sites.  |



#### Milton Keynes Council

Development Plans Civic Offices, 1 Saxon Gate East, Central Milton Keynes MK9 3EJ

**T** 01908 252358 **F** 01908 252330

**E** development.plans@milton-keynes.gov.uk

www.milton-keynes.gov.uk/planning-policy

