

November 2012

# Submission to the Welsh Government

in response to

**Consultation Document  
WG16557:  
M4 Corridor Enhancement  
Measures Strategic  
Environmental Assessment**



**cyfeillion  
y ddaear  
cymru  
friends of  
the earth  
cymru**

## Summary

1. Friends of the Earth Cymru is concerned that taken as whole the Strategic Environmental Assessment (SEA) process into the proposed options for M4 Corridor Enhancement Measures does not represent an analytically robust and rigorous assessment of the likely impacts or how they may be mitigated.
2. As a result of the flaws in this document, it is likely the assessments do not comply with the Welsh Government's Regulations on the implementation of the SEA Directive as well as the spirit and letter of the original Directive. There is thus a significant chance that the Welsh Government has been non-compliant with statutory requirements, the consequences of which frustrate the Directive.
3. We strongly recommend that the Welsh Government reconsiders the methods and conclusions of the Environmental Report in the light of the issues raised in this response.

## Introduction

### The SEA Directive

4. Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment<sup>1</sup> (the SEA Directive) applies to a wide range of public plans and programmes. The Directive is transposed by Regulations<sup>2</sup>. Plans and programmes in the sense of the SEA Directive must be prepared or adopted by an authority (at national, regional or local level) and be required by legislative, regulatory or administrative provisions. The Welsh Government has stated that this SEA is required under the terms of the Directive<sup>3</sup>.

5. The objectives of the SEA Directive are defined, in particular, in Article 1:

“The objective of this Directive is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development, by ensuring that, in accordance with this Directive, an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment”.

6. Plans and programmes are defined in Article 2(a):

“For the purposes of this Directive:

(a) “plans and programmes” shall mean plans and programmes, including those co-financed by the European Community, as well as any modifications to them:

- which are subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government, and

<sup>1</sup> European Parliament and Council, 27 June 2001, [Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment](#)

<sup>2</sup> Legislation, 2004, [The Environmental Assessment of Plans and Programmes \(Wales\) Regulations 2004](#), 2004 No. 1656 ( W. 170)

<sup>3</sup> Welsh Government, November 2012, [M4 Corridor Enhancement Measures SEA Environmental Report](#), page 4

- which are required by legislative, regulatory or administrative provisions”.

7. Article 3 determines which plans and programmes require an assessment. The relevant provisions are, in particular, Article 3(1) to (5):

“1. An environmental assessment, in accordance with Articles 4 to 9, shall be carried out for plans and programmes referred to in paragraphs 2 to 4 which are likely to have significant environmental effects.

2. Subject to paragraph 3, an environmental assessment shall be carried out for all plans and programmes,

(a) which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use and which set the framework for future development consent of projects listed in Annexes I and II to Directive 85/337/EEC, or (...)

3. Plans and programmes referred to in paragraph 2 which determine the use of small areas at local level and minor modifications to plans and programmes referred to in paragraph 2 shall require an environmental assessment only where the Member States determine that they are likely to have significant environmental effects.

4. Member States shall determine whether plans and programmes, other than those referred to in paragraph 2, which set the framework for future development consent of projects, are likely to have significant environmental effects.

5. Member States shall determine whether plans or programmes referred to in paragraphs 3 and 4 are likely to have significant environmental effects either through case-by-case examination or by specifying types of plans and programmes or by combining both approaches. For this purpose Member States shall in all cases take into account relevant criteria set out in Annex II, in order to ensure that plans and programmes with likely significant effects on the environment are covered by this Directive.

8. Article 5(1) of the Directive provides:

‘Where an environmental assessment is required under Article 3(1), 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. The information to be given for this purpose is referred to in Annex I.’

9. The Environmental Report should consider the environmental characteristics likely to be affected, including designated sites, and likely significant effects on the environment, including secondary, cumulative, synergistic, short, medium and long term, permanent and temporary, positive and negative effects. Measures intended to avoid, mitigate or compensate for serious adverse impacts must be included, as must a description of the proposed monitoring. An SEA and Environmental Report must fulfil all aspects of the Directive.

### **Introductory remarks**

10. As is apparent from Article 1 of Directive 2001/42, the fundamental objective of that Directive is to require, where plans and programmes are likely to have significant effects on the environment, that an environmental assessment be carried out in their regard at the time they are prepared and before they

are adopted (Joined Cases C-105/09 and C-110/09 *Terre wallonne and Inter-Environnement Wallonie* [2010] ECR I-5611, paragraph 32).

11. Where such an environmental assessment is required by Directive 2001/42, the Directive lays down minimum rules concerning the preparation of the environmental report, the carrying out of the consultation process, the taking into account of the results of the environmental assessment and the communication of information on the decision adopted at the end of the assessment (*Terre wallonne and Inter-Environnement Wallonie*, paragraph 33).
12. The M4 CEM SEA has the following aims:
  - Ensure integration of environmental considerations into the M4 CEM from the early stages of its development through to its adoption
  - Demonstrate the Welsh Government's leadership role in applying SEA in Wales;
  - Address the policy agenda set out in the Welsh Government Environment Strategy for Wales (2006), Environment Strategy Action Plan 2008 – 2011 and One Wales: One Planet. The Sustainable Development Scheme of the Welsh Assembly Government (July 2009)
  - Improve the evidence base for transport planning and monitoring; and
  - Support the integration of transport planning with spatial planning under the Wales Spatial Plan 2008 Update.

## Our Concerns

### Timing and notification

13. The *Terre wallonne and Inter-Environnement Wallonie* cases make clear that an environmental assessment should be carried out with regard to plans and programmes likely to have significant effects on the environment at the time they are prepared and before they are adopted. These cases are supported by the *Seaports Investments* case. The Welsh Government's SEA was clearly commissioned subsequent to the M4 CEM consultation (the SEA consultation declares "The relatively short time scale to undertake the SEA has made it challenging to complete the work to the agreed programme, particularly relating to consultation timescales (scoping consultation responses were only received in full the week before)").
14. This would indicate that either the M4 CEM consultation was an early consultation to be followed by a further plan or programme to be subject to later consultation, or that the Welsh Government has no intention that the SEA should inform the views and opinions of either the Welsh Government or consultees *vis a vis* the M4 CEM consultation.
15. For example, it is reasonable to infer that views of:
  - The Welsh Government may have been influenced by the environmental information supplied in the SEA and that the options considered in the M4 CEM consultation may have differed as a result.
  - Consultees may have been influenced by the environmental information supplied in the SEA and that their views would have differed from those submitted in response to the M4 CEM consultation.

16. Welsh Transport Planning and Appraisal Guidance (WelTAG) states:

“The SEA should be started early in the process and aligned to the preparation of the plan. SEA should be an iterative process of collecting information, defining alternatives, identifying environmental effects, considering ways of mitigating adverse effects and revising proposals in the light of predicted environmental effects”<sup>4</sup>.

17. There is a clear recognition of three crucial elements in WelTAG which the Welsh Government appears to have neglected in this SEA process:

- That an SEA should be started early in the process
- An SEA should be aligned to preparation of the plan
- An SEA should be iterative and include revising proposals in the light of predicted environmental effects

18. If the Welsh Government’s intention is to engage in a further round of consultations Friends of the Earth Cymru looks forward to participating, while highlighting that it would have been good practice to have made potential consultees aware of this arrangement.

19. If, alternatively, the Welsh Government does not intend to consult further on a basis informed by the SEA, we are concerned that prior case law leaves the Welsh Government vulnerable to a potential challenge on the grounds of process.

20. Article 6 of the Directive requires public authorities to give the public “affected or likely to be affected by” the programme “an early and effective opportunity within appropriate time frames to express their opinion...” Friends of the Earth Cymru has received reports that residents in the Brynglas area have not been informed about the SEA consultation. We would be grateful for the Welsh Government’s confirmation that residents in potentially affected areas have been able to enjoy the full 28 day consultation period.

21. Given the complexity of the documentation, Friends of the Earth Cymru also considers the chosen time-scale of 28 days not to be in the spirit of the Directive, and to potentially breach Regulation 13(3)b, which requires not only a minimum period of 28 days, but that the consultation period should be:

“of such length as will ensure that the consultation bodies and the public consultees are given an effective opportunity to express their opinion on the relevant documents”.

22. The consultation period – short of one month – should also be put into the context of the M4 CEM consultation, which was open for an initial period of 3 months and subsequently extended for a further month, and again for a further 5 days<sup>5</sup>. The Welsh Government has provided no explanation as to why the environmental aspects of the M4 CEM programme should be subject to less public scrutiny than the original consultation.

<sup>4</sup> Welsh Government, June 2008, [Welsh transport planning and appraisal guidance](#), p.102

<sup>5</sup> Welsh Government, July 2012, [Easing the flow](#)

23. The consultation for the SEA should also be contrasted with the activity surrounding the M4 CEM consultation, which prompted seven community exhibitions and three workshops. As far as Friends of the Earth Cymru has been able to ascertain, no community exhibitions or workshops have been held for the SEA consultation.

### **The SEA test and ‘do nothing’**

24. We regret that the Welsh Government appears to have neglected the advice within its own *Practical Guide to the SEA Directive*<sup>6</sup>, which states:

“Consultation with the public at earlier stages (e.g. when considering the scope of the Environmental Report) can provide useful information and public and stakeholder opinions on issues relevant to the plan or programme and the SEA. This can also help to avoid issues arising later which might delay the preparation of the plan or programme”.

25. In particular, the Welsh Government appears to have ignored the submissions of Friends of the Earth Cymru and several other organisations to its consultation on the M4 CEM earlier this year that raised serious concerns over the omission of a ‘do nothing’ alternative. That this failure is replicated in the SEA consultation is surprising, and particularly since Friends of the Earth Cymru drew the Welsh Government’s attention specifically to the decline in road traffic since 2004 near Newport that undermines the case for infrastructure works.

26. In this regard, the Welsh Government might have benefited from applying section 5.B.5 of its own guidance, which states:

“Alternatives considered often include scenarios termed ‘no plan or programme’ and ‘business as usual’. It is important to be clear what these alternatives mean in relation to a particular plan or programme. ‘No plan or programme’ might mean not introducing a plan or programme where none already exists, or it might in effect propose no further action to implement a plan or programme (e.g. no more developments in a particular area). ‘Business as usual’ usually means a continuation of an existing plan or programme, as an alternative to preparing a new one. It is important to be aware that baselines will change over time under ‘no plan or programme’ and ‘business as usual’ alternatives, as well as under new plans or programmes”.

27. We consider that the consultation process would benefit from detailed explanation from the Welsh Government for its failure to consider a ‘no plan or programme’ or ‘business as usual’ option in contravention of its own guidelines, particularly in light of section 5.B.6 of its guidance, which states:

“it may be possible to drop some alternatives from further consideration and document the reasons for eliminating them. Justifications for these choices will need to be robust, as they can affect decisions on major developments”.

28. The reasoning for excluding a ‘do nothing option’ is as follows:

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<sup>6</sup> Welsh Assembly Government, September 2005, [A practical guide to the Strategic Environmental Assessment Directive](#)

“One Wales: Connecting the Nation - The Wales Transport Strategy (WTS) was adopted in 2008 and aims to deliver the One Wales commitments that are related to transport. The WTS is a document for which an SEA has already been undertaken.

In turn, the NTP was developed as a plan designed specifically to take forward the delivery of the five strategic priorities of the WTS in all areas of transport over which the Welsh Government has responsibility. It was developed on the basis of the commitments and priorities in existing programmes and has taken into account the high level strategy from the WTS to integrate road and rail with other transport modes.

The NTP has also undergone an SEA. The M4 CEM Programme has been designed to specifically take forward the delivery of elements of the NTP, including EWS15 “Deliver a package of measures designed to improve the efficiency of the M4 in south-east Wales, including public transport enhancements, making the best possible use of the motorway and improving the resilience of the network.

Given this planning hierarchy, within which the M4 CEM Programme has been developed, there has been no scope for consideration of alternative high level strategies within the M4 CEM Programme. Similarly, a “do nothing” scenario has not been considered as the Welsh Government is committed to delivering an M4 CEM package of measures to improve the motorway around Newport. Instead, the M4 CEM development process has considered the most effective ways of achieving the NTP strategic priorities by considering a variety of solutions for tackling the transport-related issues that have been identified”.

29. The Welsh Government’s reasoning can be summed up thus:

- The National Transport Plan was developed to deliver the five strategic priorities of the Wales Transport Strategy (namely: reducing greenhouse gas emissions, improving public transport, improving all-Wales links, improving international connectivity, and increasing safety<sup>7</sup>)
- The most important frame of reference for the M4 CEM Programme is to deliver “a package of measures designed to improve the efficiency of the M4 in south-east Wales, including public transport enhancements, making the best possible use of the motorway and improving the resilience of the network”.
- The Welsh Government is unable to modify its plans and programmes in relation to changing circumstances and *must* proceed with infrastructure interventions regardless of any evidence presented to it.
- Because the Welsh Government has no option but to proceed with infrastructure intervention the Strategic Environmental Assessment does not need to countenance a ‘do nothing’ option, regardless of any evidence arising that suggests a ‘do nothing’ option (whether in combination with various ‘common measures’ or otherwise) is a reasonable alternative to infrastructure interventions.

30. Friends of the Earth Cymru does not consider this to be a “robust justification” for rejecting the ‘do nothing’ option. In particular, the Welsh Government appears to be locking itself into a dogmatic procedure of following a line of policy while ignoring compelling evidence presented to it by consultees.

31. This has three major implications. Firstly, under the Århus Convention<sup>8</sup>, consultation must be meaningful. Article 6 (8) of the Convention states that:

<sup>7</sup> Welsh Assembly Government, April 2008, [One Wales: Connecting the nation. The Wales transport strategy](#)

<sup>8</sup> UNECE, 25 June 1998, [Convention on access to information, public participation in decision-making and access to justice in environmental matters](#)

“Each Party shall ensure that in the decision due account is taken of the outcome of the public participation”.

If the Welsh Government proceeds on its line of reasoning and effectively ignores the evidence presented to it by consultees then there would appear to be a significant risk of a challenge under Article 6 of the Convention.

32. Secondly, because we believe the evidence to be compelling for assessing whether or not a ‘do nothing’ option (whether in combination with various ‘common measures’ or otherwise) would achieve the aims of the M4 CEM Programme, we are concerned that failure to consider a ‘do nothing’ option would be viewed by the Courts as a failure by the Welsh Government to consider reasonable alternatives.
33. And thirdly, it suggests that the Welsh Government’s primary concern is in making infrastructure interventions rather than reaching the solutions desired by the Wales Transport Plan. With an open mind, any rational actor would be delighted if it could achieve the aims of the Wales Transport Plan with a package of minor infrastructure, public transport and active travel interventions at a fraction of the cost of the proposed major infrastructure options. The conclusion can only therefore arise that the Welsh Government is acting irrationally. This has legal implications.

### **SEA quality**

34. Even taking into account a previous judgment on SEA that "the court should not examine the fine detail of the contents but seek to establish whether there has been substantial compliance with the information required by Schedule 2"<sup>9</sup>, the SEA is vulnerable in a number of areas so as to not comply as a whole.
35. The Directive and the transposing Regulations are quite clear on the requirements of an SEA. Annex I to the Directive, which sets out the ‘Information referred to in Article 5(1)’, with a view to the preparation of environmental reports, stipulates the necessary components of an SEA and reads as follows:
  - (a) an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes;
  - (b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;
  - (c) the environmental characteristics of areas likely to be significantly affected;
  - (d) 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;
  - (e) the environmental protection objectives, established at international, Community or Member State 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;

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<sup>9</sup> ELM, 2008, [\*Strategic Environmental Assessment: The Seaports Investments case\*](#)



- (f) the likely significant effects<sup>(1)</sup> on the environment, including on issues such as 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 the above factors;
  - (g) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;
  - (h) an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;
  - (i) a description of the measures envisaged concerning monitoring in accordance with Article 10;
  - (j) a non-technical summary of the information provided under the above headings.
- (1) These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

36. This SEA is deficient in at least the following areas:

- The likely evolution of the environment without implementation of the plan or programme (this is exacerbated by the absence of a 'do nothing' option);
- The temporal nature of significant effects, specifically those that are short- and medium-term in nature;
- Synergistic nature of significant effects
- Measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme
- An outline of the reasons for selecting the alternatives dealt with that is 'robust'
- A description of the measures envisaged concerning monitoring in accordance with Article 10

37. Many of these flaws are symptomatic of a process that has received insufficient care and consideration. It is worth highlighting once more the consultants' concern that "The relatively short time scale to undertake the SEA has made it challenging to complete the work to the agreed programme, particularly relating to consultation timescales (scoping consultation responses were only received in full the week before)".

38. There is no narrative or coherent account of the **likely evolution of the environment** in the absence of this programme. The 'trends and future baselines' sections of the document do not provide a picture of the "likely evolution of the environment" without the M4 CEM programme. Consideration of a 'do nothing' alternative would of course have covered this point, and perhaps explains its absence, because even without the M4 CEM programme we believe the programme's objectives would be achieved by a combination of common measures and public transport measures.

39. The Welsh Government's Guide to SEA also states:

"It may be impossible to predict the precise effects of a plan or programme. However, the Responsible Authority must demonstrate that consideration has been given to all of the effects in Annex I(f) of the Directive, for example by explaining any distinctions that can be made between the **short, medium or long term effects** in the comments column"<sup>10</sup>.

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<sup>10</sup> Welsh Assembly Government, September 2005, [A practical guide to the Strategic Environmental Assessment Directive](#), 5.B.17

The SEA does not explain such distinctions. In particular, the SEA does not explore the potential short- or medium-term impacts that could arise as a result of the proposed programme.

40. The only short term effect of any of the proposed options relates to the effect of public transport measures on biodiversity, flora and fauna. The SEA has found no medium term effects of the programme whatsoever. That means that for 71 out of 72 of factors considered, the only impacts determined by the assessment of significant effects are long term (defined in the report as effects expected over a 10+ year time period).
41. The SEA appears to be suggesting that, with the surprising exception of public transport on biodiversity, flora and fauna, there will be no impacts – positive or negative – from any of the options on any of the receptors for a period of between 0 and 9 years.
42. One might expect, for example, that construction of a major new dual carriageway across the Gwent Levels to have significant short and medium term impacts on air pollution, biodiversity, greenhouse gas emissions etc. But the SEA appears to consider otherwise.
43. Likewise, construction of a new tunnel at Brynglas might be expected to have significant short and medium term impacts, not least on the residents living in the vicinity in terms of air pollution, noise and vibration, and human health<sup>11</sup>. But this SEA considers that the residents in the vicinity of Brynglas will have no negative or positive effects from a construction project lasting up to five years underneath and around their houses.
44. Meanwhile, the greenhouse gas emissions and use of material assets associated with construction of highway alternatives are of no apparent significance within a 0-9 year timescale.
45. This omission fully contradicts the Assessment of Significant Effects, which describes 10 of the 72 factors as having major “direct, irreversible and permanent effects”.
46. No mention is made of **synergistic environmental impacts** in this report. To give an example of this failure one need only examine page 5 of the M4 CEM consultation:

“the M4 is critical to the south Wales economy. Cardiff and Newport have ambitious regeneration strategies and Monmouthshire is developing areas around Junction 23a of the M4. Congestion on the M4 could hamper these plans”.

The SEA has singularly failed to take into account the potential environmental impact of Cardiff and Newport’s ambitious regeneration strategies, or Monmouthshire’s plans to develop around the M4 acting *in conjunction with* this programme, despite these issues receiving prime billing under the Ministerial Foreword of the M4 CEM consultation.

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<sup>11</sup> Considering that the reduction in driver stress is one of the reasons for according a positive value to the human health impacts of Highway Option A (p. 66), one would surmise that stress caused by construction activities over a period of years might have a negative impact on human health

47. Likewise, the additional traffic likely to be generated by increasing the capacity of the road network is treated by this SEA as an unquantifiable mystery, when this effect has been the subject of freely available peer review research funded by the Welsh Assembly Government<sup>12</sup>. The greenhouse gas impact of this additional traffic is likely to be a significant environmental impact, but in the section on significant impacts there is a series of question marks hanging over the greenhouse gas impacts of the infrastructure works.
48. There is no meaningful treatment of the synergy between increasing greenhouse gas emissions from induced road traffic and the climate impact on biodiversity, human health, soil and water.
49. **Mitigation measures** receive insufficient treatment, despite section 5.7 of the SEA stating:
- “Where the assessment identifies the potential for significant adverse environmental effects, the SEA will either recommend changes to the programme or identify mitigation measures that can help to offset these effects”.
50. Most of the proposed mitigation measures in Table 23 are non-specific; as conceded by the consultants:
- “The mitigation measures and recommendations... are largely based on the SEA Environmental Report for the National Transport Plan but have been modified where applicable”.
51. This treatment contradicts both the assertion that mitigation measures will be identified and the requirement laid out in the Directive. So for example, under greenhouse gas emissions the envisaged measures include:
- Measures should be considered to address the potential of additional traffic using the road
  - Measures to encourage alternative travel modes and smarter travel choices
  - Consider air pollution and greenhouse gas emissions when developing strategies
  - Consider air pollution and greenhouse gas emissions when promoting electric vehicles
52. None of these can be reasonably considered to be ‘identified’ mitigation measures. Similar lack of specificity characterises other sections. However, the mitigation envisaged for the category of ‘water’ includes 13 detailed recommendations – this level of detail should be the template for the mitigation section.
53. The failure to robustly demonstrate the reasons for selecting **the alternatives dealt with** is considered elsewhere in this response.
54. **Monitoring** receives cursory treatment. The SEA authors could have benefited from studying a report commissioned by the European Commission into Article 10 (monitoring), which states:
- “it is helpful and a basis for effective monitoring to follow a certain structure when developing a monitoring mechanism for a plan or programme, since otherwise the genuine aim of monitoring might get out of sight. A starting point for this structure might be the following questions:

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<sup>12</sup> Duranton G and Turner MA, 2009, [The fundamental law of road congestion: Evidence from US cities](#)

1. Topic of a specific monitoring: WHAT DO I WANT TO MONITOR?
2. Objective of the specific monitoring: WHY DO I WANT TO MONITOR THIS TOPIC?
3. Selection of an appropriate indicator along DPSIR: HOW CAN I MEASURE THIS OBJECTIVE?
4. Source of information (monitoring system): WHERE DO I GET THE NECESSARY INFORMATION?
5. Criteria of intervention (environmental goals): AT WHICH VALUE OF THE INDICATOR EXISTS A NEED TO INTERVENE?”<sup>13</sup>

55. The SEA does not set out measures or plans to monitor the impacts of the programme although monitoring is a key requirement of the SEA process. The approach taken seems to have excluded any useful detail of monitoring. For example, monitoring of water pollution is apparently covered by “transport effects on water quality”, and monitoring of soil condition by “transport effects on soil (loss, sealing, contamination). For noise and vibration, the SEA apparently feels it unnecessary to monitor noise and vibration during construction, preferring to concentrate on “noise levels related to transport”. Most of the monitoring is supplemented by the catch-all “project level effects”, which reveals nothing about the proposed monitoring regime.

### Detailed comments

56. Section 2.1.1 repeats the line of the M4 consultation that the standard of the M4 around Newport “together with increasing traffic, is why problems with congestion and unreliable journey times have been a fact of life on the M4 around Newport for many years”. This contention was shown to be fallacious by Friends of the Earth Cymru’s response to the M4 consultation, but is repeated, unqualified, in this consultation. This raises a significant concern that the Welsh Government has taken no account of consultation responses which it has possessed for at least four months.
57. Section 2.1.4 states “having established the problems and the need to tackle them”, when neither the M4 consultation nor the SEA consultation has done anything of the sort. While it could be conceived that the M4 consultation was written in ignorance of the facts<sup>14</sup>, that argument no longer holds for the SEA consultation. The baseline premise of the SEA is therefore unsafe – which renders the whole consultation flawed.
58. Section 2.14 also reveals the Welsh Government’s approach to tackling perceived problems on the M4:

“The strategic approaches adopted by the Welsh Government to reduce congestion and to delivering the M4 CEM Goals all involve creating some new highway capacity on the M4, and /or elsewhere in the highway network between Magor and Castleton. However traffic congestion will not simply disappear as a result of capacity increase. This is because the development of new or up-graded, convenient and reliable roads tends to encourage more people on to them. This results in additional vehicles using additional road capacity (not a stable volume of vehicles using more/emptier roads).

To avoid this and to curb the rising demand for more highway capacity and to put transport onto a carbon reduction pathway, the M4 CEM Programme proposes increasing and improving the opportunities for access,

<sup>13</sup> Öko-Institut, 10 December 2002, [IMPEL project: Implementing Article 10 of the SEA Directive](#)

<sup>14</sup> As laid out in the response from Friends of the Earth Cymru

and for travel and transport using alternatives modes, such as trains and buses (public transport), cycling and walking. It is also proposed to minimise the need for certain types of journey.

To enable the sustained productivity and competitiveness of Wales, and the South East Wales region in particular, highway infrastructure must also be developed; several alternative approaches are possible, each with particular advantages and challenges. In addition, some other common measures can enhance the effectiveness of each of the possible strategies that the Welsh Government is considering”.

59. There are three problems with this approach. Firstly, it involves “creating some new highway capacity”. No consideration was apparently given at any stage in the process to methods of achieving the scheme’s objectives in a manner which avoided the need to make highway infrastructure interventions.
60. Secondly, in order to reduce carbon, the Welsh Government has decided to retro-fit sustainable transport and active transport interventions. It has not apparently considered these options as obviating highway infrastructure interventions.
61. Thirdly, the Welsh Government is persuaded that enabling “the sustained productivity and competitiveness of Wales” requires the development of highway infrastructure. No evidence has been provided in either consultation in support of this contention.
62. Section 2.14 also describes the Welsh Government’s strategy as comprising “a range of the following measures”:  
  - Public transport measures
  - Highway infrastructure measures
  - Common measures (highway infrastructure, demand management, alternative modes and smarter sustainable choices).
63. However this clearly contradicts the earlier statement that the Welsh Government intends to create some new highway capacity (unless the Welsh Government is referring specifically to the small infrastructure interventions under the common measures), because the Welsh Government intends to press ahead with highway infrastructure measures, with the other measures being optional. A more sensible approach would have been to have considered the contribution to the Welsh Government’s strategic aims of each of the components individually as well as in combination.
64. Section 3.1 – transport – suffers from multiple flaws. Firstly, it references as evidence data presented in the M4 Consultation document that has been discredited by the consultation response of Friends of the Earth Cymru and others. For example, it reiterates the forecast of a 32% increase in traffic on the M4 used in the original consultation despite no methodology being provided for this forecast in either consultation document.
65. Secondly, it references as evidence data that does not exist – or at least is not provided. For example, it suggests that road freight increased over the period 1996-2006, referencing the original consultation. However no such information appears in the original document. Even were it to appear, the data would be years out of date. It would also be incorrect. Friends of the Earth Cymru has conducted an analysis

of the Welsh Government's latest freight statistics<sup>15</sup> (Figure 1). Not only do the Welsh Government's own statistics run counter to the consultation's assertion (there was a 4.1% reduction in freight carried between 1996 and 2006), the overall trend appears to be downwards. 2009 and 2010 have the two lowest freight haulage figures since records began.

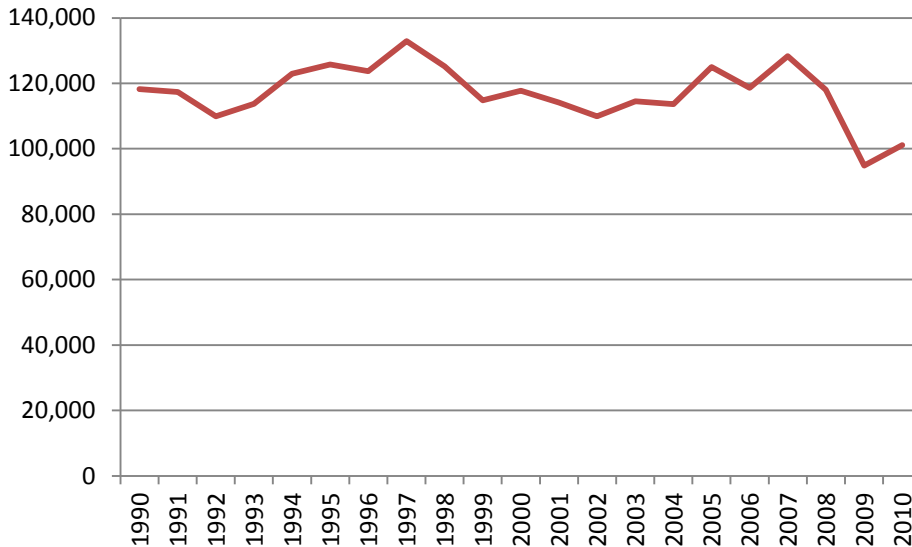


Figure 1 Goods lifted in Wales for domestic and international haulage (millions of metric tonnes)

66. The section on trends and future baseline claims that the proportion of people travelling in from outside Newport has increased, but provides no reference or figures to support the contention. Interestingly, the only referenced information (the high proportion of public transport use among commuters) would tend to militate *against* new road infrastructure.
67. Section 3.2 – air quality – would have benefited from the insight of a slightly declining trend in freight movements in Wales, given that HGV emissions are responsible for 70% of the NO<sub>x</sub> arriving at receptors in the Air Quality Management Areas adjacent to the M4. We welcome the recognition that “road traffic is a concern” in relation to air quality.
68. Section 3.3 – climate – suggests that “emissions of CO<sub>2</sub> from road transport is [sic] increasing”. This is not borne out by the evidence (Figure 2)<sup>16</sup>. Unsurprisingly, road transport emissions in 2010 had already decreased by 8% since the peak in road traffic in Wales in 2007.

<sup>15</sup> Welsh Government, [Welsh transport statistics 2010](#), Table 3.13

<sup>16</sup> AEA, August 2012, [Greenhouse gas inventories for England, Scotland, Wales and Northern Ireland](#), p. viii

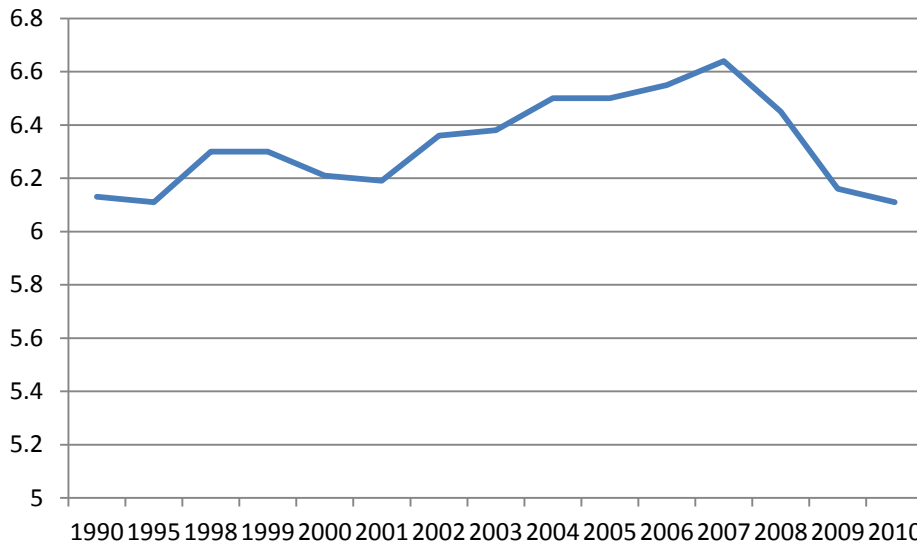


Figure 2 Road transport greenhouse gas emissions (million tonnes carbon dioxide equivalent)

69. Furthermore, there appears to be no recognition of the changing circumstances in the factors that are proposed to contribute to the 3% year-on-year reduction in greenhouse gas emissions from transport. For example, the Welsh Government's Climate Change Strategy for Wales estimates that 0.11 Mt of emissions savings will arise from the proposed increase in fuel duty by the UK Government.
70. This is not insignificant: it represents 38% of the entire Welsh Government's contribution to the 3% year-on-year target. But fuel duty has not increased as envisaged by the Welsh Government in 2010. Greater cuts in emissions will presumably have to be found from elsewhere in the transport portfolio to offset this effect – indeed the SEA consultation acknowledges “replacement of private car use by more sustainable modes of travel is required”. But building new road infrastructure is known to be an excellent way to *increase* carbon emissions, and the consultation documents have no convincing narrative in making additional carbon reductions above and beyond those previously envisaged in the Climate Change Strategy.
71. Section 3.4 – noise and vibration – reiterates the discredited notion that there is likely to be a “rise in traffic levels”, and that as a result noise levels are likely to increase.
72. Section 3.6 – population – suggests that an increase in population might lead to higher demand for transportation. However, in terms of road use, volumes of both freight and traffic in general have declined since 2004 or 2007 (depending on the area examined) despite an increasing population.
73. Section 3.7 – human health – refreshingly recognises that interventions since 2008 have significantly improved safety on the motorway around Newport. In fact the motorway around Newport is much safer than the UK average<sup>17</sup>.
74. Section 3.8 – soil – notes that soil condition is damaged by pollution arising from traffic.

<sup>17</sup> Friends of the Earth Cymru, July 2012, [Response to M4 consultation](#)

75. Section 3.9 – water – the River Basin Management Plan for the Severn catchment<sup>18</sup> shows that most of the water bodies adjacent to the M4 around Newport are failing to achieve good ecological status (and indeed good chemical status). Several of these failures are as a result of pollutants traceable to traffic pollution, including benzo[a]pyrene. No mention is made in the document of benzo[a]pyrene, other combustion by-products, or brake linings and particulates from catalytic converters (especially zinc, cadmium, copper and nickel). Any intervention that increases traffic on the motorway network and associated highways will make achieving good ecological status more problematic.
76. In its response as a statutory consultee to the SEA consultation, the Environment Agency also stated that “road transport may produce priority hazardous substances such as cadmium, zinc, copper, mineral oils and organic pollutants”. The response of the Welsh Government was simply “noted”.
77. Section 3.10 – material assets – notes that “Both the construction of new infrastructure and the maintenance of existing infrastructure give rise to the extraction of aggregates which can give rise to a number of environmental effects such as loss of biodiversity, increase in traffic, and air quality amongst others”.
78. Section 3.13 – sustainable development – contains the revelation that sustainable transport options “should be considered... in order to help improve traffic conditions and address reliance on cars”. The consultation document neglects to mention the Sustainable Development Bill, the White Paper on which was published today (3 December 2012).

### Assessment of significant effects

79. Friends of the Earth Cymru would like to challenge the repeated assumption (for example, Table 9, Table 10, Table 15, Section 6.2.2) – unsupported by evidence – that reducing congestion reduces emissions. We reiterate our evidence to the M4 CEM consultation:

“So it is only below about 45mph that congestion starts to increase CO2 emissions, and emissions at 30mph are about the same as those at 70mph. In fact, **emissions are reduced as a result of congestion** where it brings average speeds down to as low as 45mph. This brings one of the central tenets of the consultation – that any reduction in congestion contributes to a net reduction in CO2 emissions – into disrepute. This has a further important bearing on the conclusions reached by WelTAG, which do not appear to be based on empirical evidence.

In any case, the statement “slow and congested traffic can result in higher CO2 emissions than free-flowing traffic” is meaningless in the context of this document because no robust average speed measurements have been provided. The document should also, for objectivity, note that “free-flowing traffic can result in higher CO2 emissions than slow and congested traffic”.

<sup>18</sup> Environment Agency, December 2009, [River basin management plan: Severn River basin district Annex A: Current state of waters](#)



80. We would also challenge the contention that Highway Infrastructure Option A “would help improve safety, as on completion, it is forecast that the total number of accidents on major roads in Newport would fall”, because no evidence to that effect has been provided.

## Conclusions

81. The M4 CEM SEA has the following aims:
- Ensure integration of environmental considerations into the M4 CEM from the early stages of its development through to its adoption
  - Demonstrate the Welsh Government’s leadership role in applying SEA in Wales;
  - Address the policy agenda set out in the Welsh Government Environment Strategy for Wales (2006), Environment Strategy Action Plan 2008 – 2011 and One Wales: One Planet. The Sustainable Development Scheme of the Welsh Assembly Government (July 2009)
  - Improve the evidence base for transport planning and monitoring; and
  - Support the integration of transport planning with spatial planning under the Wales Spatial Plan 2008 Update.
82. The M4 CEM SEA has clearly failed to ensure integration of environmental considerations into the M4 CEM from the early stages of its development because the M4 CEM pre-dates the SEA.
83. The flawed nature of the SEA is not a good testament to the Welsh Government’s role in applying SEA in Wales. The reference to the rushed nature of the SEA seems to make the converse case, that the Welsh Government has failed to demonstrate strong leadership to a comprehensive SEA process.
84. Overall the SEA somewhat improves the evidence base for transport planning and monitoring, but the multitude of flaws in the SEA in some cases results in a worsening of the evidence base
85. As a result of the manifest flaws in this document, it is likely the assessments do not comply with the Welsh Government’s Regulations on the implementation of the SEA Directive as well as the spirit and letter of the original Directive.