

Adran yr Economi a'r Seilwaith
Department for Economy and Infrastructure



Llywodraeth Cymru
Welsh Government

File Ref WG/REB/OBJ0026+OBJ0292- PI

**Objection Ref OBJ0026 - Environment
Magor Services Objections**

Response to Objector's Evidence: Mr Mike Axon
(on behalf of Roadchef)

1. AUTHOR

- 1.1. I am Peter Ireland. I am a Senior Director of RPS in the Planning and Development Division of RPS Group plc. My professional qualifications are set out in my main proof of evidence and are not repeated here.

- 1.2. The evidence which I have prepared and provide in this response is true and I confirm that the opinions expressed are my true and professional opinions.

2. GROUNDS FOR OBJECTION

2.1. Details

2.1.1. Mr Mike Axon (Vectos) has submitted a Statement of Evidence dated February 2017 in relation to the draft statutory Orders associated with the Welsh Government's proposals for the M4 Corridor around Newport, which has been received via the Programme Officer.

2.1.2. The Welsh Government understands the evidence submitted within their Statement states the following:

1. Promotion of the alternative Roadchef Option 1
2. Promotion of the alternative Roadchef Option 2
3. Promotion of the alternative Roadchef Option 3
4. Promotion of the alternative Roadchef Option 4
5. No assessment of the environmental benefit for Magor as a result of J23 exists.
6. No environmental assessment of alternatives exists
7. No assessment of the environmental effects of induced traffic movement as a result of J23 exists.

3. REBUTTAL

3.1. Points Raised

3.1.1. The above points are dealt with by topic in the sections set out below. Readers should also make reference to the Proofs of Evidence in their entirety for a full understanding of the Welsh Government's case. For ease of reference the places where the above points are addressed in this Rebuttal are listed in the table below:

| Objector's point reference | Rebuttal paragraph reference |
|----------------------------|------------------------------|
| 1 | 3.2.1 to 3.2.19 |
| 2 | 3.3.1 to 3.3.23 |
| 3 | 3.4.1 to 3.4.19 |
| 4 | 3.5.1 to 3.5.11 |
| 5 | 3.6.1 to 3.6.3 |
| 6 | 3.7.1 to 3.7.3 |
| 7 | 3.8.1 to 3.8.3 |

3.1.2. With regard to Roadchef's alternative options the inclusion of a westbound on slip at J23A to the west of Magor to the proposed A4810/B4245 roundabout is an element common to all their options (Options 1 to 4). As set out in Matt Jones' rebuttal to Roadchef (WG/REB/OBJ026-MJ), in the absence of any vertical alignment, Welsh Government's team assumed that the slip road would be in shallow cutting to the east of the proposed new section of motorway which itself would be in a deeper cutting. The environmental appraisals were undertaken on that basis.

3.2. Promotion of the alternative Roadchef Option 1

Roadchef Option 1

3.2.1. Roadchef Option 1 comprises an additional eastbound free-flow connection at J23. The proposed M48 roundabout would be grade separated and connected to the B4245. Consequently the hamburger arrangement for the M48 roundabout and the eastbound on slip from the M48 roundabout to the existing M4 are not required. In addition, the proposed west bound off slip from the existing M4 to the B4245 and the proposed realignment of Bencroft Lane via Windmill Hill overbridge would not be provided. Connectivity of Bencroft Lane to the B4245 would be maintained via the grade separated M48 roundabout.

3.2.2. At J23A, a westbound on-slip would provide a connection to the westbound carriageway of the proposed new section of motorway, via the proposed Newport Road Roundabout. The slip road which for the most part would be in a shallow cutting would pass over the proposed new section of motorway via an overbridge.

3.2.3. Roadchef Option 1 has been appraised against the Welsh Government's environmental (and other) criteria as set out in WelTAG (Welsh Transport Appraisal Guidance) in the Objector's Suggested Alternatives Report of March 2017 (Document 4.7.2) as Alternative No. 8.

Landscape and Visual

3.2.4. At J23 the additional eastbound free flow connection, although located at a slightly higher elevation than the published scheme, is unlikely to change the level of landscape or visual effects for receptors to the east of Undy. It's introduction would however reduce the amount of highway infrastructure required immediately to the west of Llanfihangel near Rogiet.

3.2.5. The grade separated M48 roundabout and associated slip roads has the potential to increase the visual effects of the Scheme in views north-west from Llanfihangel near Rogiet and from receptors along the western edge of Rogiet.

3.2.6. The removal of the westbound off-slip to the B4245 would reduce visual effects for some receptors along the eastern edge of Undy to some degree in

the period between year 1 and year 15. However, once mitigation planting has been established the year 15 effects would be no different if the off-slip remained part of the Scheme.

- 3.2.7. The J23A westbound on-slip would cross the new M4 (which would be in cutting at this location) on an elevated structure. Without mitigation this additional structure and slip road would result in additional and/or increased adverse effects on visual receptors (including residential properties off Queens Gardens and Blenheim Gardens) along the western edge of Magor due to the presence of traffic and associated infrastructure located on a more prominent position than the published Scheme.
- 3.2.8. Overall Roadchef Option 1 would result in a slight increase in landscape and visual effects relative to the published scheme but these, with mitigation, would not be sufficient to alter the significance of effect from that reported in the M4CaN March 2016 Environmental Statement.

Cultural Heritage

- 3.2.9. On balance Roadchef Option 1 would result in a slight reduction in impact on the footprint of the Llanfihangel Rogiet Conservation Area (by the removal proposed eastbound on slip to the existing M4) and on the Scheduled standing stone at Undy (by the removal of the proposed westbound off slip from the existing M4 to the B4245). The reduction in impact would not alter the significance of effect from that reported in the M4CaN March 2016 Environmental Statement.

Biodiversity

- 3.2.10. The effect of Roadchef Option 1 on biodiversity and nature conservation would be similar to the published scheme in that the land take of the two are very similar, and where additional land take is required at J23 (Bencroft Lane realignment) and at J23a (westbound on slip via Newport Road) such land currently comprises arable, improved or semi-improved grassland.

Noise

- 3.2.11. At J23 the free flowing traffic on the eastbound connection and the removal of highway infrastructure closest to residential properties in Llanfihangel near Rogiet would result in a marginal improvement in the traffic noise regime

there. However, that may be offset by traffic noise from the elevated roundabout of the grade separated M48 roundabout.

3.2.12. The J23A westbound on-slip would be elevated on an overbridge and would bring traffic slightly closer to those properties in the north-west of Magor, which would, without mitigation, slightly increase traffic noise. A slightly more adverse impact compared to the published scheme would be expected, however, the increase would not alter the conclusions of the noise assessment from that reported in the M4CaN March 2016 Environmental Statement. Similarly changes in traffic noise on the B4245 through Magor and Undy as a result of redistributed traffic is unlikely to be significantly different from that with the published scheme.

Air Quality

3.2.13. At J23 the free flowing traffic on the eastbound connection and the removal of highway infrastructure closest to residential properties in Llanfihangel near Rogiet would result in a marginal improvement in air quality there. However the primary source of local air pollution from road traffic would remain the main carriageways of the M4.

3.2.14. The J23A westbound on-slip would be elevated on an overbridge and would bring traffic slightly closer to those properties in the north-west of Magor, which would increase pollutant concentrations slightly. A slightly more adverse impact compared to the published scheme would be expected, however, the increase would not alter the conclusions of the air quality assessment from that reported in the M4CaN March 2016 Environmental Statement.

Land Contamination

3.2.15. The effect of Roadchef Option 1 on soils and geology, including land contamination would be similar to the published scheme with the eastbound off slip at J23A in place.

Water Quality

3.2.16. The effect of Roadchef Option 1 on water quality and hydrology would be similar to the published scheme. The additional structure required for the J23A westbound on-slip increases the risk to the sensitive underlying

hydrogeology (karstic limestone aquifer) during piling, but that could be managed through effective risk management.

Non Motorised and Other Users

3.2.17. There would be a slightly more adverse impact for non-motorised users (NMUs) using Bencroft Lane (having to negotiate the grade separated M48 roundabout) and the B4245 Newport Road (due to the addition of the westbound on-slip) than with the published scheme.

3.2.18. In addition, there would be no link as currently proposed to the B4245 to the east of Undy which may reduce the opportunity for new NMU provision along the B4245. Such an omission would be contrary to The Plan published by Welsh Government in July 2014.

3.2.19. The relocation of Bencroft Lane close to the dairy farm buildings to the north of the M48 roundabout may result in further potential adverse effects on Green Dairy Farm, one of only two dairy farms in the vicinity.

3.3. Promotion of the alternative Roadchef Option 2

Roadchef Option 2

- 3.3.1 At J23 Roadchef Option 2 comprises the existing layout together with just an additional eastbound free-flow connection. No M48 roundabout or connection to the B4245 are provided and Bencroft Lane is retained on its present alignment.
- 3.3.2 At J23A, a westbound on-slip would provide a connection to the westbound carriageway of the proposed new section of motorway, via the proposed Newport Road Roundabout. The slip road which for the most part would be in a shallow cutting would pass over the proposed new section of motorway via an overbridge.
- 3.3.3 Roadchef Option 2 has been appraised against the Welsh Government's environmental (and other) criteria as set out in WeITAG (Welsh Transport Appraisal Guidance) in the Objector's Suggested Alternatives Report of March 2017 (Document 4.7.2) as Alternative No. 9.

Landscape and Visual

- 3.3.4 At J23 the additional eastbound free flow connection, although located at a slightly higher elevation than the published scheme, is unlikely to change the level of landscape or visual effects for receptors to the east of Undy. It's introduction would however reduce the amount of highway infrastructure required immediately to the west of Llanfihangel near Rogiet.
- 3.3.5 The removal of the M48 roundabout would reduce the landscape and visual effects east of the existing M4, particularly around Llanfihangel near Rogiet and from the west of Rogiet.
- 3.3.6 The removal of the westbound off-slip to the B4245 would reduce visual effects for some receptors along the eastern edge of Undy to some degree in the period between year 1 and year 15. However, once mitigation planting has been established the year 15 effects would be no different if the off-slip remained part of the Scheme.
- 3.3.7 The J23A westbound on-slip would cross the new M4 (which would be in cutting at this location) on an elevated structure. Without mitigation this additional structure and slip road would result in additional and/or increased

adverse effects on visual receptors (including residential properties off Queens Gardens and Blenheim Gardens) along the western edge of Magor due to the presence of traffic and associated infrastructure located on a more prominent position than the published Scheme.

- 3.3.8 Overall Roadchef Option 2 would slightly reduce the landscape and visual effects relative to the published scheme, albeit the effect will be different at different receptors and overall there is no significant difference. The effects are particularly at J23 with respect to Llanfihangel and Rogiet. At J23A, without mitigation, there would be an increase in landscape and visual effects, but these would not be sufficient to alter the significance of effect as reported in the M4CaN March 2016 Environmental Statement.

Cultural Heritage

- 3.3.9 On balance Roadchef Option 2 would result in a significant reduction in impact on the footprint of the Llanfihangel Rogiet Conservation Area (by the removal of the proposed M48 hamburger roundabout, the eastbound on slip to the existing M4, and the realignment of Bencroft Lane). Consequently it is likely that there would be a beneficial change in the significance of effect on the Llanfihangel Conservation Area compared to that reported in the M4CaN Environmental Statement (i.e. from moderate adverse to slight adverse).
- 3.3.10 With regard to the Scheduled standing stone at Undy the impact would be slightly reduced (by the removal of the proposed westbound off slip from the existing M4 to the B4245). However, the reduction in impact would not alter the significance of effect as reported in the M4CaN March 2016 Environmental Statement.

Biodiversity

- 3.3.11 The effect of Roadchef Option 2 on biodiversity and nature conservation would be similar to the published scheme in that whilst the land take at J23 would be reduced that land comprises improved and semi-improved grassland of low ecological value.
- 3.3.12 At J23A the land take of the two proposals are very similar, and where additional land take is required for the westbound on slip via Newport Road the land is also improved or semi-improved grassland.

Noise

- 3.3.13 At J23 the free flowing traffic on the eastbound connection and the removal of highway infrastructure closest to residential properties in Llanfihangel near Rogiet would result in some improvement in the traffic noise regime there. However, it should be noted however that the main traffic noise sources at Llanfihangel near Rogiet are the existing M4 and M48.
- 3.3.14 The J23A westbound on-slip would be elevated on an overbridge and would bring traffic slightly closer to those properties in the north-west of Magor, which would, without mitigation, slightly increase traffic noise. A slightly more adverse impact compared to the published scheme would be expected, however, the increase would not alter the conclusions of the noise assessment from that reported in the M4CaN March 2016 Environmental Statement.
- 3.3.15 Increase in traffic on the B4245 through Magor, Undy and Caldicot, and on the A48 between Langstone and Caldicot, would result in a slight and locally noticeable increase in noise impact on properties located near these roads. In addition a slight adverse impact for properties to the north of the existing M4 corridor between J23 and J23A would be expected.

Air Quality

- 3.3.16 At J23 the free flowing traffic on the eastbound connection and the removal of highway infrastructure closest to residential properties in Llanfihangel near Rogiet would result in a marginal improvement in air quality there. However the primary source of local air pollution from road traffic would remain the main carriageways of the M4 and M48.
- 3.3.17 The J23A westbound on-slip would be elevated on an overbridge and would bring traffic slightly closer to those properties in the north-west of Magor, which would increase pollutant concentrations slightly.
- 3.3.18 An increase in traffic on the B4245 though Magor, Undy and Caldicot, and on the A48 between Langstone and Caldicot, would have an air quality impact on properties near these roads. In addition, a slight adverse impact for properties to the north of the existing M4 corridor between J23 and J23A would be expected.

3.3.19 Overall, slightly more adverse impacts compared to the published scheme would be expected, however, the increases would not alter the conclusions of the air quality assessment from that reported in the M4CaN March 2016 Environmental Statement.

Land Contamination

3.3.20 The effect of Roadchef Option 2 on soils and geology, including land contamination would be similar to the published scheme with the eastbound off slip at J23A in place.

Water Quality

3.3.21 The J23A westbound on-slip would be elevated on an overbridge which raises concerns with respect to piling within sensitive hydrogeology (karstic limestone aquifer) whilst this could be managed through risk assessment, intrusive works within the limestone present higher risks than in less sensitive hydrogeology.

Non Motorised and Other Users

3.3.22 There would be a slightly more adverse impact for non-motorised users (NMUs) using the B4245 Newport Road (due to the addition of the westbound on-slip) than with the published scheme, (i.e. pedestrians walking from Magor village to and from the Magor Brewery, Wales One and the Monmouthshire County Council offices may need to cross an extra road and encounter additional traffic).

3.3.23 In addition, there would be no link as currently proposed to the B4245 to the east of Undy which may reduce the opportunity for new NMU provision along the B4245. Such an omission would be contrary to The Plan published by Welsh Government in July 2014.

3.4. Promotion of the alternative Roadchef Option 3

Roadchef Option 3

- 3.4.1 Roadchef Option 3 comprises an additional eastbound free-flow connection at J23 and an M48 roundabout smaller than that in the published scheme. The M48 roundabout would be at grade and connected to the B4245. Consequently the hamburger arrangement for the M48 roundabout and the eastbound on slip from the M48 roundabout to the existing M4 are not required. In addition, the proposed west bound off slip from the existing M4 to the B4245 and the proposed realignment of Bencroft Lane via Windmill Hill overbridge would not be provided. Connectivity of Bencroft Lane to the B4245 would be maintained via at grade M48 roundabout.
- 3.4.2 At J23A, a westbound on-slip would provide a connection to the westbound carriageway of the proposed new section of motorway, via the proposed Newport Road Roundabout. The slip road which for the most part would be in a shallow cutting would pass over the proposed new section of motorway via an overbridge.
- 3.4.3 Roadchef Option 3 has been appraised against the Welsh Government's environmental (and other) criteria as set out in WelTAG (Welsh Transport Appraisal Guidance) in the Objector's Suggested Alternatives Report of March 2017 (Document 4.7.2) as Alternative No. 10.

Landscape and Visual

- 3.4.4 At J23 the additional eastbound free flow connection, although located at a slightly higher elevation than the published scheme, is unlikely to change the level of landscape or visual effects for receptors to the east of Undy. It's introduction would however reduce the amount of highway infrastructure required immediately to the west of Llanfihangel near Rogiet.
- 3.4.5 The M48 roundabout proposals associated with this option would result in similar landscape and visual effects to those identified for the published scheme.
- 3.4.6 The removal of the westbound off-slip to the B4245 would reduce visual effects for some receptors along the eastern edge of Undy to some degree in the period between year 1 and year 15. However, once mitigation planting

has been established the year 15 effects would be no different if the off-slip remained part of the Scheme.

- 3.4.7 The J23A westbound on-slip would cross the new M4 (which would be in cutting at this location) on an elevated structure. This additional structure would result in additional and/or increased adverse effects on visual receptors (including residential properties off Queens Gardens and Blenheim Gardens) along the western edge of Magor due to the presence of traffic and associated infrastructure located on a more prominent position than the published Scheme.
- 3.4.8 Overall Roadchef Option 3 would result in a slight reduction in landscape and visual effects relative to the published scheme overall, albeit the impacts will be different for different receptors. Overall there is no significant difference. The effects are particularly at J23 with respect to Llanfihangel and Rogiet. At J23A, without mitigation, there would be an increase in landscape and visual effects, but these would not be sufficient to alter the significance of effect as reported in the M4CaN March 2016 Environmental Statement.

Cultural Heritage

- 3.4.9 On balance Roadchef Option 3 would result in a slight reduction in impact on the footprint of the Llanfihangel Rogiet Conservation Area (by the removal proposed eastbound on slip to the existing M4 and smaller M48 roundabout) and on the Scheduled standing stone at Undy (by the removal of the proposed westbound off slip from the existing M4 to the B4245). The reduction in impact would not alter the significance of effect as reported in the M4CaN March 2016 Environmental Statement.

Biodiversity

- 3.4.10 The effect of Roadchef Option 3 on biodiversity and nature conservation would be similar to the published scheme in that the land take of the two are very similar, and where additional land take is required at J23 (Bencroft Lane realignment) and at J23a (westbound on slip via Newport Road) such land currently comprises arable, improved or semi-improved grassland.

Noise

3.4.11 At J23 the free flowing traffic on the eastbound connection and the removal of highway infrastructure closest to residential properties in Llanfihangel near Rogiet would result in a marginal improvement in the traffic noise regime there.

3.4.12 The J23A westbound on-slip would be elevated on an overbridge and would bring traffic slightly closer to those properties in the north-west of Magor, which would, without mitigation, slightly increase traffic noise. A slightly more adverse impact compared to the published scheme would be expected, however, the increase would not alter the conclusions of the noise assessment from that reported in the M4CaN March 2016 Environmental Statement. Similarly changes in traffic noise on the B4245 through Magor and Undy as a result of redistributed traffic is unlikely to be significantly different from that with the published scheme.

Air Quality

3.4.13 At J23 the free flowing traffic on the eastbound connection and the removal of highway infrastructure closest to residential properties in Llanfihangel near Rogiet would result in a marginal improvement in air quality there. However the primary source of local air pollution from road traffic would remain the main carriageways of the M4.

3.4.14 The J23A westbound on-slip would be elevated on an overbridge and would bring traffic slightly closer to those properties in the north-west of Magor, which would increase pollutant concentrations slightly. A slightly more adverse impact compared to the published scheme would be expected, however, the increase would not alter the conclusions of the air quality assessment from that reported in the M4CaN March 2016 Environmental Statement.

Land Contamination

3.4.15 The effect of Roadchef Option 3 on soils and geology, including land contamination would be similar to the published scheme with the eastbound off slip at J23A in place.

Water Quality

3.4.16 The effect of Roadchef Option3 on water quality and hydrology would be similar to the published scheme. The additional structure required for the J23A westbound on-slip increases the risk to the sensitive underlying hydrogeology (karstic limestone aquifer) during piling, but that could be managed through effective risk management.

Non Motorised and Other Users

3.4.17 There would be a slightly more adverse impact for non-motorised users (NMUs) using Bencroft Lane (having to negotiate the at grade M48 roundabout) and the B4245 Newport Road (due to the addition of the westbound on-slip) than with the published scheme.

3.4.18 In addition, there would be no link as currently proposed to the B4245 to the east of Undy which may reduce the opportunity for new NMU provision along the B4245. Such an omission would be contrary to The Plan published by Welsh Government in July 2014.

3.4.19 The relocation of Bencroft Lane close to the dairy farm buildings to the north of the M48 roundabout may result in further potential adverse effects on Green Dairy Farm, one of only two dairy farms in the vicinity.

3.5. Promotion of the alternative Roadchef Option 4

Roadchef Option 4

- 3.5.1 Roadchef Option 4 comprises an additional westbound on-slip that would connect the existing J23A to the westbound carriageway of the proposed new section of motorway, via the proposed Newport Road Roundabout. The slip road which for the most part would be in a shallow cutting would pass over the proposed new section of motorway via an overbridge. J23 would be the same as for the published scheme.
- 3.5.2 Roadchef Option 4 has been appraised against the Welsh Government's environmental (and other) criteria as set out in WeITAG (Welsh Transport Appraisal Guidance) in the Objector's Suggested Alternatives Report of March 2017 (Document 4.7.2) as Alternative No. 11.

Landscape and Visual

- 3.5.3 The J23A westbound on-slip would cross the new M4 (which would be in cutting at this location) on an elevated structure. This additional structure would result in additional and/or increased adverse effects on visual receptors (including residential properties off Queens Gardens and Blenheim Gardens) along the western edge of Magor due to the presence of traffic and associated infrastructure located on a more prominent position than the published Scheme.
- 3.5.4 Overall Roadchef Option 3, without mitigation, there would be an increase in landscape and visual effects, but these would not be sufficient to alter the significance of effect from that reported in the M4CaN March 2016 Environmental Statement.

Cultural Heritage

- 3.5.5 The effects of Roadchef Option 4 on cultural heritage would be very similar to those of the published scheme.

Biodiversity

- 3.5.6 The effects of Roadchef Option 4 on biodiversity would be very similar to those of the published scheme.

Noise

3.5.7 The J23A westbound on-slip would be elevated on an overbridge and would bring traffic slightly closer to those properties in the north-west of Magor, which would, without mitigation, slightly increase traffic noise. A slightly more adverse impact compared to the published scheme would be expected, however, the increase would not alter the conclusions of the noise assessment from that reported in the M4CaN March 2016 Environmental Statement. Similarly changes in traffic noise on the B4245 through Magor and Undy as a result of redistributed traffic is unlikely to be significantly different from that with the published scheme.

Air Quality

3.5.8 The J23A westbound on-slip would be elevated on an overbridge and would bring traffic slightly closer to those properties in the north-west of Magor, which would increase pollutant concentrations slightly. A slightly more adverse impact compared to the published scheme would be expected, however, the increase would not alter the conclusions of the air quality assessment as reported in the M4CaN March 2016 Environmental Statement.

Land Contamination

3.5.9 The effect of Roadchef Option 4 on soils and geology, including land contamination would be similar to the published scheme with the eastbound off slip at J23A in place.

Water Quality

3.5.10 The effect of Roadchef Option 4 on water quality and hydrology would be similar to the published scheme. The additional structure required for the J23A westbound on-slip increases the risk to the sensitive underlying hydrogeology (karstic limestone aquifer) during piling, but that could be managed through effective risk management.

Non Motorised and Other Users

3.5.11 There would be a slightly more adverse impact for non-motorised users (NMUs) using the B4245 Newport Road (due to the addition of the westbound on-slip) than with the published scheme.

3.6. Environmental Benefits for Magor

- 3.6.1 At paragraph 4.50 of Mike Axon's statement of evidence he claims that no assessment of the environmental benefit for Magor as a result of Junction 23 has been undertaken.
- 3.6.2 The effect of redistributing road traffic that would occur as a result of the proposed scheme on J23 is set out in Chapter 2 of the March 2016 Environmental Statement, Appendix 2.1 which is an extract from the Traffic Forecasting Report. It is acknowledged that that appendix confines itself to traffic flows on the existing M4, and in the opening and design years for the new section of motorway to the south of Newport and the reclassified M4.
- 3.6.3 However, for the assessment of traffic noise and air quality effects as reported in chapters 13 and 7 of the March 2016 Environmental Statement respectively, the full traffic dataset from the traffic model was used to enable accurate predictions for noise and air effects to be made at more than 20,000 receptors.

3.7 Environmental Assessment of Alternatives

3.7.1 At paragraph 4.50 of Mike Axon's statement of evidence he claims that no assessment of alternatives has been undertaken.

3.7.2 Paragraph 4.2.1 of Volume 1 of the March 2016 Environmental Statement sets out the legal requirement to consider alternatives in EIA. It states that:

The 2011 EIA Directive requires the following to be included within an ES.

'An outline of the main alternatives studied by the developer and an indication of the main reasons for his choice, taking into account environmental effects'. (Article 5, 3(d) Directive 2011/92/EU)

3.7.3 Chapter 4 of the March 2016 Environmental Statement (which runs to 42 pages) summaries and cross references the various alternatives and options that have been considered by Welsh Government since 1989.

3.8 Environmental Effects of Induced Traffic as a result of J23

- 3.8.1 At paragraph 4.51 of Mike Axon's statement of evidence he claims that no environmental assessment of induced traffic movement as a result of J23 has been undertaken.
- 3.8.2 As stated in the evidence of Bryan Whittaker induced traffic movements are included in the M4CaN traffic model and as such the traffic noise and air quality assessments based on that model's outputs include induced traffic movements.
- 3.8.3 However, it is true to say that no environmental assessment of induced traffic movements alone, and as a result of just J23, has been undertaken. However, this is because induced traffic invariably is a redistribution of traffic already on the network such that an increase in traffic flows on any one link or links (e.g. at J23) results in a decrease in traffic flows on other links elsewhere within the same network.
- 3.8.4 I confirm that the statement of truth and professional obligations to the inquiry from my main proof still applies.