ANNEX B

Positioning of speed limit signs at different speed limit road interfaces and examples of inappropriate locations of speed limit signs

Positioning of Speed Limit Signs at different speed limit road interfaces and examples of inappropriate locations of speed limit signs

1. General

The Road Traffic Bill 2004 introduced the following:

- A new national roads speed limit of 100 kilometres per hour in respect of all national roads, other than national roads with special speed limits and those in built-up areas
- A new regional and local roads speed limit of 80 kilometres per hour in respect of all regional and local roads, other than such roads with special speed limits and those in built-up areas

In order to indicate to motorists where these new default speed limits apply it was proposed to provide speed limit signs at the interface of national and non-national roads (other than those with special speed limits and those in built-up areas) as set out below and shown in Diagram 1:

- When you turn from a national road onto the regional or local road one 80km/h sign (600mm diameter) will be mounted on a new post on the left hand side of the regional or local road (See 2 below).
- Other than in the circumstances outlined in sections 5 to 7 below, two 100 km/h repeater signs (450mm diameter), one each side of the junction will be mounted on new posts on the left hand side of the 100 km/h road.

2. Location of Sign on regional or local road

It is recommended that the new 80 km/h sign on the regional or local road be placed as close as practicable to the junction with the national road. Where there is a radius joining the two roads it should be past the tangent point on the minor road. Alternatively where there is no clear radius as occurs with many local roads, the sign could be positioned close to the intersection point of the hedgerows/fence lines of the two roads. In either event the sign should not be positioned in locations where it would be obscured by vegetation or other signs.

In most cases it should not be necessary to locate the sign at a distance of more than 50 metres from the road junction. In exceptional circumstances it may be necessary to position the 80 km/h sign on the right hand side as one turns from the national road onto the regional or local road. In those circumstances **it is vital that the speed limit sign does not obscure a stop or yield sign** for traffic travelling in the opposite direction. Consideration could be given to attaching the speed limit sign to the rear of the stop or yield sign in such exceptional circumstances. In these cases, care should be taken not to obscure the shape of the stop or yield sign.

3. Location of Signs on national roads

Considerable care should be taken when locating speed limit signs on national roads. It is important that speed limit signs are not located on lengths of road where the road alignment is insufficient to allow vehicles to travel safely at the posted speed limit. Such situations can give mixed signals to the driver. In such cases the speed limit sign should be omitted (unless specific circumstances dictate otherwise) and rely instead on the next appropriately located repeater sign (See also point 7 below).

Flexibility is therefore available to road authorities when locating the two 100 km/h repeater signs on the national road. The normal range for placement of these signs would be a distance of 20 to 100 metres from the road junction

Diagram 1 indicates that a staggered junction can be signed so that the repeater sign on each side of the national road is located so that it will serve traffic exiting from both minor roads (no repeater sign is located on the national road between the two minor roads). In order to avoid a multiplicity of repeater signs it is suggested that junctions within 250 metres of each other be treated as one junction for the purpose of providing repeater speed limit signs on the national road (the minor roads could be on opposite sides of the national road or on the same side).

The guiding principle is that motorists should be advised within a reasonable distance by way of repeater sign that they are on a road with a higher speed limit (See point 7 below regarding poorly aligned national roads).

4. Mounting of Signs on national road

Generally the repeater signs on national roads will be mounted on newly erected posts. However there will be instances where it is possible to attach repeater signs to existing street furniture e.g. lamp standards or posts provided for warning or information signs. These alternatives should be utilised where possible (See point 7. below regarding poorly aligned national roads).

5. Non public roads

No interface speed limit signage is required where a non-public road meets a national road

6. Tertiary Local Roads

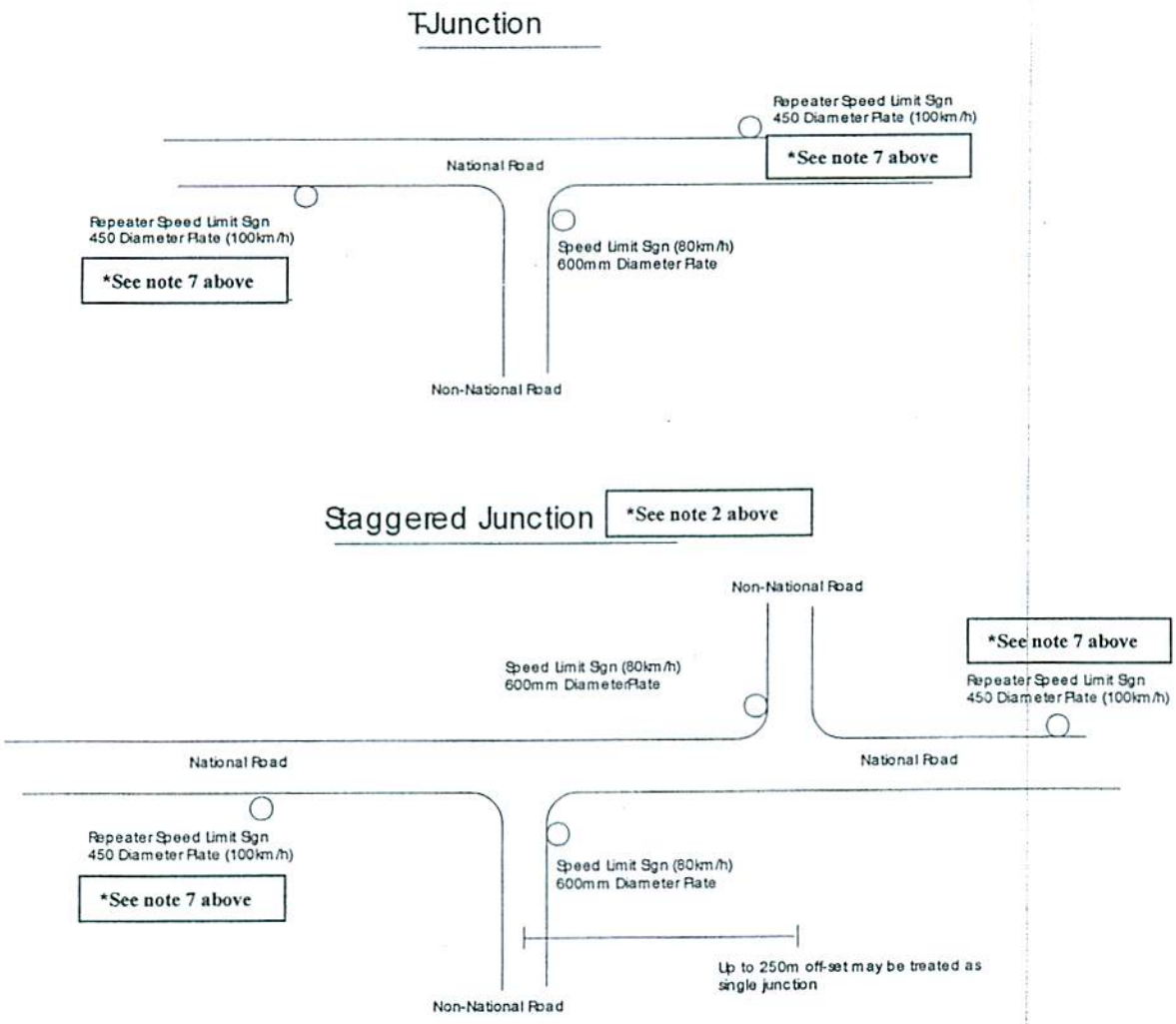
- The 80km/h sign (600mm diameter) should be provided on the left hand side of the regional or local road. If the interfacing road is also 80km/h it is not necessary to show the 80km/h again on the tertiary road particularly if it is clear the tertiary road is not capable of being driven at 80km/h.
- It is suggested that the two 100 km/h repeater signs need not be provided on the national road after a junction with a local tertiary road.

7. Poorly aligned national roads

It is important to ensure that the provision of the 100 km/h repeater signs on national roads do not conflict with other road safety messages. In the case of junctions located on poorly aligned sections of national road (eg locations containing a series of bends preceded by warning signs or on sections of road where 'SLOW' signs/markings or road narrows signs have been installed, etc) **the 100km/h national road repeater signs** should be omitted and rely, instead, on the repeater signs at junctions located outside the sections to which the warning/information road signs apply. In general, the 100 km/h repeater speed limit signs should only be located in areas where it is possible to drive safely at that speed.

If the 80km/h sign is intended to alert drivers to the lower general speed limit applicable to regional and local roads (i.e at a junction with a 100km/h speed limit road), this sign should be provided at national/non-national road junctions even in cases where the 100km/h national road repeater signs are to be omitted.

Diagram 1: Speed Limit Sign Positions at 100km/h road and lower speed limit road interfaces



8. Examples of inappropriate locations of speed limit signs

The transition to metric speed limits occurred in early 2005 and was successful. However, now 5 years on, it is apparent that there are improvements that can be made to some existing poor practices and inappropriate locations of speed limit signs that are currently in place and have materialised since the introduction of metrication.

8.1 Example 1

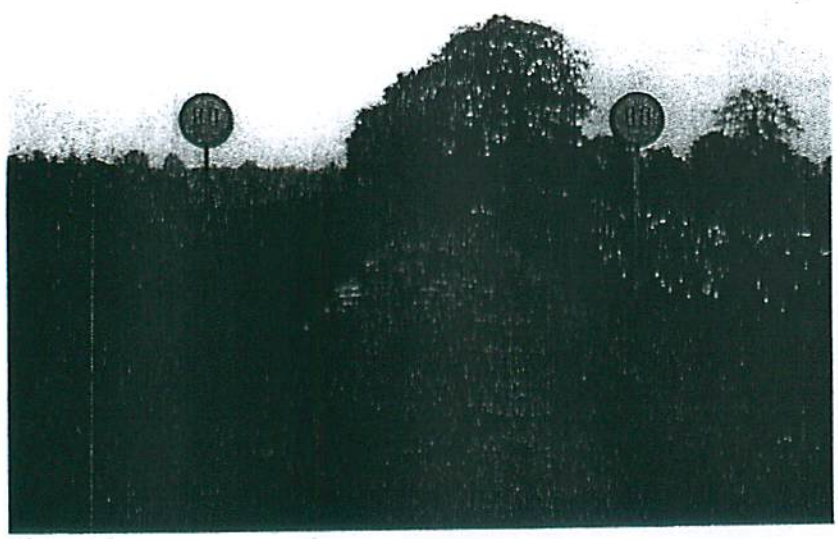
Speed limit signs shown at interface with other similar speed limit roads.

When moving from an 80km/h road onto another 80km/h road it is not necessary (unless for particular circumstances) to re-sign the speed limit at the interface of the two roads. This situation is becoming more noticeable due to the significant number of old national roads which are now bypassed and have become regional/local roads with a default speed limit of 80km/h. The speed limit signs at the junctions of these new regional/local roads and the local road network should now be rationalised.

In these cases it may be more appropriate to remove the speed limit signs and/or replace these speed limit signs with warning signs suitable to the prevailing road condition. For example,

- W053 Series of sharp bends OR
- W071 Road Narrows on Both Sides OR
- W140 Pedestrians in lieu of the speed limit signs.

This rationalization would go some way to reducing the number of 80km/h signs on poor local roads which have caused some frustration for the driver (See picture 1).

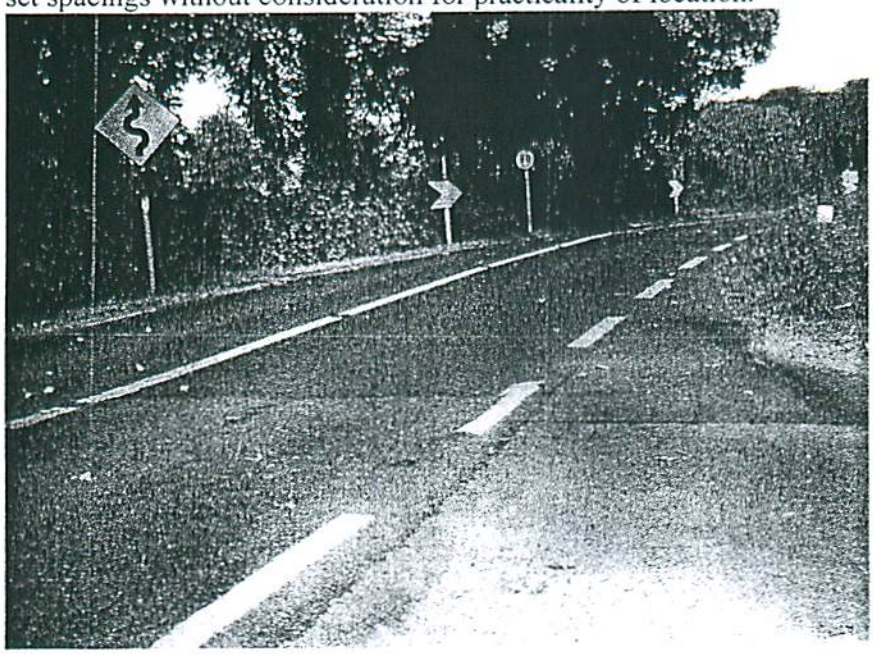


Picture 1

8.2 Example 2: Speed limit signs displayed on sections of road not capable of being driven at the posted speed limit.

Very often speed limit signs appear on stretches of road which are incapable of being driven at that speed and sends mixed signals to the driver. For example:

Signs appear in locations such as just in advance of and within bad bends where it is clear the road cannot be driven at these speeds and the road user should be slowing down –See picture 2 below. These signs could have been placed by contract at certain set spacings without consideration for practicality of location.



Picture 2

The provision of a 100km/h speed limit sign on a poorly aligned stretch of national road (e.g. locations containing a series of bends or road narrowing where warning signs markings are warranted) immediately after a junction with a lower speed limit road – See picture 3 below. In such cases it is appropriate to omit the 100km/h national road repeater sign and rely on the repeater signs located directly outside the sections to which the warning information road signs apply. (See section 7)

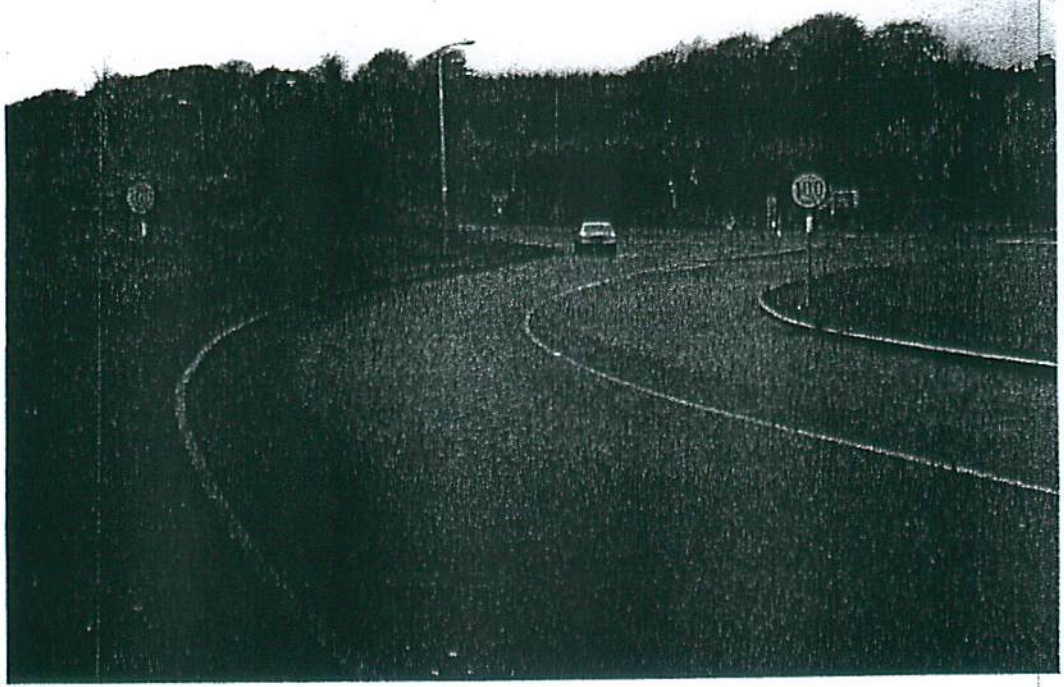
Picture 3

8.3 Example 3; Speed limit signs displayed on sections of road where a speed limit change is approaching and speeds should be reducing.

For example on the approach to a town on a 100km/h road repeater signs should not be located within close proximity of the 60km/h speed limit (or 50km/h as the case may be). These signs should be rationalised and possibly replaced with warning signs or cautionary speed limit ahead signs as contained in the traffic signs manual.

8.4 Example 4: Speed limit signs displayed in advance of a junction of a road with a different speed limit.

For example, on a regional road just in advance of the junction with a national road the speed limit of 100km/h for the national road should not be shown on the regional road – See picture 4 below. Also the speed limit sign of 80km/h for a regional road should also not be shown on the approach to the junction. See diagram 1 above. These signs should be rationalized and possible replaced with junction ahead warning signs. Care should be taken not to obscure any other signage such as yield or stop signs.



Picture 4

8.5 Example 5: Speed limit signs located on short links.
It is not necessary to show speed limit signs on short links where a vehicle would be incapable of getting close to the speed limit – see picture 5. The road authority engineer should use their own discretion and judgement in these instances.

Picture 5

9. Road Authorities are required to complete Table 1 below showing where any modifications to speed limit signs have taken place or are proposed to take place based on:

- any change in location and/or rationalisation of speed limit signs as a result of inappropriate locations particularly those highlighted in this Annex and:
- any potential change to a speed limit as a result of the new Guidelines for the application of speed limits 2010.

Table 1 requires information relating to the spatial coordinates of each sign. In time, the information required will be better structured to allow greater ease of data collation, storage and dissemination electronically.

Provision of this information is required by 31st October 2011.

Table 1: Rationalisation of existing speed limit signage and/or road layout

City/County:_____

Information and data valid for period DDMMYYYY to DDMMYYYY_____

Road number	X	Y	Inappropriate location of speed limit signs	Is further action required to the speed limit	Proposal/Description e.g. lining, traffic calming, communication, modify speed limit
e.g. R448	261676	232713	Remove 2*80km/h signs – replace with appropriate warning sign (eg. W071Road narrows, W140 Pedestrians or W053 Series of bends)	Yes	Investigate 60km/h special speed limit on local road.
e.g. N59	263132	233192	Remove 100km/h sign in close proximity to 60km/h and replace with cautionary speed limit ahead sign as per TSM.	No	No
e.g. N59	263963	231930	N/A	Yes, wide cross section including H/S Inappropriate for 60 km/h	Provide traffic calming e.g. hatching or cycle/foot path within 60km/h zone to narrow c/way OR modify speed limit location