

A83 Medium Term Strategy  
Options Assessment  
Option Fact Sheet

Option Name	Medium Term Solution (MTS) – Offline 2 Way Road LTS Cross-section / Geohazard Mitigation (No Debris Flow Shelter)
Brief Description	<p>This option generally follows the Long Term Solution (LTS) Green Route Options 5 and 6 on the south western slopes of Glen Croe within the lower slopes of Ben Donich. It consists of a 9.3m wide, two-way, single carriageway with 2.5m wide verges with significant lengths of deep cutting, up to 34m in height, with significant geohazard mitigation measures including catchpits, debris barriers and rock-fall fences, which is reflected in the estimated cost. The option is approximately 3.5km long, and the section that overlaps the LTS Green Route Option 5 has a 5.35% gradient, with steeper gradients at the north (8.67%) and south (7.88%) to tie-in to the existing road network.</p> <p>This offline MTS Option commences at a junction with the A83 Trunk Road, approximately 200m north of the current A83 Trunk Road / Old Military Road (OMR) junction and crosses the Croe Water, on a temporary bridge, before heading west to join the alignment of the LTS Green Route, where the centre lines of both routes overlap horizontally and vertically for approximately 2.0km. Where the LTS Green Route turns north, the Offline MTS Option veers west to join the remaining section of the Glen Croe forestry track and tie into the B828 Glen Mhor local road. The section of the B828 Glen Mohr local road from the forestry track junction to the A83 Trunk Road will require to be upgraded to allow two-way traffic with priority given to the A83 Trunk Road traffic at the junction with the continuing B828.</p>
Option Pros	<p>The key positive elements of this option are listed below:</p> <ul style="list-style-type: none"> <li>• This Offline MTS Option effectively bypasses the main landslide / debris flow hazard area on the eastern side of the Glen and is operationally comparable to the A83 Trunk Road with two-way traffic over its entire length, with no need for convoy or a lengthy diversion.</li> <li>• If the LTS Green Option were to be taken forward to construction, the LTS construction phase duration could be reduced due to some of the LTS work being done during the MTS construction phase. The overall duration of the two phases combined (MTS and then LTS) would be longer though.</li> <li>• The length of this Offline MTS Option lies entirely within Scottish Ministers land. Therefore, it is not expected that any third-party land will be required.</li> <li>• Minimal operating cost expected due to two-way traffic flow, although a warning system, for landslide risk, may be required.</li> <li>• As a result of the geohazard and flood mitigation measures proposed, the likelihood of closure is reduced.</li> <li>• Largely avoids all known heritage assets (except at OMR tie-in).</li> </ul>
Option Cons	The key negative elements of this option are listed below:

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	<ul style="list-style-type: none"> <li>• Significant lengths of this offline MTS option overlap the Green Route Options 5 and 6 and, if the LTS Green Option 5 or 6 were to be taken forward to construction, keeping the Offline MTS Option in operation during construction of the LTS Green Route Option 5 or 6 would be challenging.</li> <li>• Lengthy timescales involved before any of the benefits would be realised.</li> <li>• There remains a risk of this option being closed as a result of landslide on the south western side of the Glen.</li> <li>• In relation to geohazards, the south western slopes of Glen Croe have been identified as being susceptible to a variety of forms of instability, including debris flow, landslide, boulder fall and rock fall.</li> <li>• The earthworks construction is expected to be challenging due to the significant height of cuttings, volume of rock excavation anticipated, and the difficulties managing surface water run off from the hillside above the earthworks.</li> <li>• The Record of Determination (RoD) is likely to conclude that a full Environmental Impact Assessment Report (EIAR) is required.</li> <li>• This option would lead to the loss of a large area of plantation forestry (albeit FLS have plans to fell woodland in this area), reprofiling of the slope and introduction of significant embankments and cuttings. This cumulative effect is likely to have a significant visual impact on the landscape setting.</li> <li>• The loss of plantation forestry and slope reprofiling may also increase the potential for geohazard events, particularly landslide and debris flow, due to removal of trees which may be having a stabilising effect on the hillside slope, and changing the existing slope conditions.</li> </ul>
Time to Implementation	If progressed as a whole, depending on a number of factors such as decision to proceed, securing necessary rights over land, Ground Investigation, EIA Reporting and consultation requirements, this option has the potential to be open to traffic by 2027.
Outline Construction Programme	It is estimated that the construction of this option would extend over a period of 38 months to 44 months.
Scheme Costs	An initial estimated cost for this option is within the range of £239M-£315M at 2021 prices.
Caveats Identified	<p>The caveats associated with the above data at this stage are identified as following:</p> <ul style="list-style-type: none"> <li>• Final Determination on EIAR requirement yet to be reached.</li> <li>• No time has been included for statutory procedures relating to land acquisition.</li> <li>• There is limited available information on the underlying ground conditions and the general slope conditions along the western side of Glen Croe. Accordingly, the geotechnical solutions and geohazard mitigation proposed have been based on various assumptions and is subject to change</li> </ul>

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	<p>pending further data collection, assessment and design development. This may have significant bearing on the estimated cost generated.</p> <ul style="list-style-type: none"><li>• Proposals could change dependent on the outcome of ongoing geohazard and flood modelling.</li><li>• Estimated cost prepared on the assumption that approximately 500m length of slope, potentially underlain by historic landslide deposits, is competent / suitable for use.</li><li>• Rock slope stabilisation measures have not been proposed at this stage but may be required. Such measures are likely to be of relatively low cost when compared with other elements associated with construction of this option and are therefore assumed to be covered within optimism bias allowances within the estimated cost.</li></ul>
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