

Assessment of Corridor Options

Factor	Comment
<p>1. National Grid's statutory duties (system efficiency, co-ordination and economy and effect on the environment)</p>	<p>All four corridors could accommodate a scheme which would be sufficient in terms of the overall efficiency of the electricity transmission and distribution network. If capital cost alone were considered, Corridor 1 as an overhead line would be the preferred solution. However cost must be balanced against other factors, including impact on amenity.</p>
<p>2. Compliance with planning policies</p>	<p>In terms of planning policy considerations alone, Corridor 4 would have the least impact on areas designated for their environmental value as compared to Corridors 1, 2 and 3. Corridors 1 and 2 both pass through the Dedham Vale AONB and Corridor 3 passes through a larger section of a Special Landscape Area in comparison to Corridor 4.</p> <p>A new overhead line in any of the corridors would be visible from the Dedham Vale AONB. Corridor 1 would have the greatest effect on the AONB as it involves the construction of an extra overhead line running parallel to the existing lines.</p>
<p>3. Compliance with National Grid policies</p>	<p>Our commitments refer to avoiding designated sites including AONBs where possible. Corridor 4 is furthest from the AONB designation. Under our current guidelines, our approach to undergrounding would suggest that partial undergrounding could be considered for the sections of Corridors 1 and 2 which pass through an 'exceptionally constrained' rural area (the Dedham Vale AONB) and possibly for the western end of all four corridors which run through the Stour Valley.</p>
<p>4. Consultation representations</p>	<p>The analysis of the representations made during the Stage 1 Consultation made it clear that the selection of Corridors 3 and 4 was least favoured by the general public, and statutory and non-statutory consultees. Some respondents stated a clear preference for Corridor 2, with this corridor being identified as the least worst option by a large proportion of the public and statutory and non-statutory consultees. In the majority of cases any preference was stated subject to the proviso that undergrounding of some or the entire route be considered. There was significantly less public support for Corridor 1.</p> <p>The replacement of an existing overhead line, albeit with a line involving larger pylons, was seen by many as preferable to introducing a new overhead line into an area not currently affected by such infrastructure.</p>

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5. Landscape and visual impacts	A new overhead line would have adverse effects on landscape and views in any route corridor. Corridor 2 was considered to have least impact when compared to the other three corridor options because the scale of change would be lowest. Corridors 3 and 4 pass through areas which, while not designated for their landscape value, are highly valued by the local community.
6. Effects on historic environment	A new overhead line in any of the corridors would avoid passing through or over any sites designated for their historic value and the risk to unknown buried archaeology would be similar for all corridors. Effects from a new overhead line in Corridors 1 and 2 would be similar to the effects already experienced from the existing lines. Corridors 3 and 4 are considered by consultees to have a greater risk with regard to effects on the historic environment, including Conservation Areas, Listed Buildings and the historic landscape, and English Heritage advised that neither should be pursued.
7. Effects on biodiversity and geological conservation	All the potential corridors would have some effect on biodiversity and geology. Corridors 1 and 2B would result in direct effects on Hintlesham Woods Site of Special Scientific Interest (SSSI). In the case of Corridors 1 and 2, the majority of the nature conservation interest that might be affected is already affected to some degree by the existing 132kV overhead line, which would be removed and replaced by the new overhead line. Natural England concluded that Corridor 2 would have least impact on the environment. Corridors 3 and 4 offer the greatest potential to minimise effects on biodiversity through detailed routeing in relatively wide corridors, although effects would be in areas where these do not presently occur.
8. Effects on land use and socio-economic factors	There is little difference between the corridors in terms of potential impact on agricultural land use. All four corridors sought to avoid mineral reserves and active sites, and where they have been included we are certain that these can be avoided in the detailed connection design. The greatest risk of impacting on existing land uses would be associated with Corridors 1 and 2, because the need to follow an existing overhead line results in a narrower corridor width and limited flexibility in pylon positioning. However land uses in these corridors are already affected by existing overhead lines. At this stage no significant differences between the corridors in terms of local social and economic impacts have been identified.
9. Engineering – deliverability	There is no significant difference between the corridors in terms of main construction constraints or risk.
10. Effects on civil and military aviation and defence interests	None of the corridors infringe aviation safety zones; however the operation of some airstrips near Corridors 3 and 4 would need to be changed if a new overhead line was built in these corridors.
11. Effects on flood risk and climate change resilience	It is not appropriate to determine the preferred route corridor on the basis of resilience to climate change or flood risk, as the potential risk is similar for all options and can be managed.