CheckList for identification of features for selection of Transmission Line Route

A Name of Line :

Sl NO	Feature	Feature Involved		Details to be considered for route alignment
		Yes/No	Existing/ Proposed	
1	**Airport /Aerodrome/Airstrip**			To be identified within 20 Km radius of the proposed route
a)	Civil Aviation			Route to be aligned atleast 10kms away from the airstrip (ARP). In case of constraint, following to be considered keeping maximum possible distance from Airstrip:- i) No tower permissible within 2 kms from Radar (ASR/ARSR /MSSR). ii) Permissible Heights within 4km radius (i.e. IHS) : 45 m from reference datum of aerodrome elevation. iii) Additional Permissible Heights over ii) above from 4 to 6.1 km radius : 5 Mtr for every 100 m
b)	Defence Aviation & Other Facility viz Training			
c)	Emergency Landing Airstrips			
d)	Rifle ranges/ Air to Ground Firing Ranges			Location of rifle ranges and their boundary limits should be got ascertained to ensure adequate lateral clearance to rifle ranges.
e)	Helipads			Route to be aligned so as to avoid obstruction and provide clear approach to helipad. Allowable tower height 80 Mtr per 1 KM distance from helipad.
f)	Radar stations			Radar centres, very high frequency direction finding stations, satellite tracking stations, sector operation centres, wireless receiving stations, ground controlled interception stations etc. require certain minimum lateral clearances, which is to be checked up from the concerned authorities.
g)	Water Aerodromes			
2	**ForestLand & Protected Area**			
a)	Reserve/Protected/Notified Forest			To be avoided to the extent possible
b)	Revenue/Social/Deemed, etc.			
d)	Oran in Rajasthan			To be avoided and identified from Gazette notification.
e)	Protected Area i.e. National Park/Wildlife Sanctuary/ Biosphere Reserve/ Tiger Reserve/Tiger Corridor/Any Other Conservation Reserve			To be identified from Gazette notification and avoided to the extent possible.
f)	Elephant Corridor/Reserve			
g)	Eco-Sensitive Areas			To be avoided and identified from Gazette notification.
h)	Coastal Regulatory Zone			Category to be mentioned.
i)	GIB (Priority/Potential Area)/ Any other endangered species			To be avoided in GIB Priority Area. For Potential Area, new line to be aligned as close as possible to the existing line.
j)	Avifauna Area/Bird Sanctuary			To be avoided to the extent possible
k)	Schedule-V / VI/Autonomous Region			
3	**Army cantonment//No Go areas/Ammunition Depot**			To be avoided
4	**Dam/Water Reservoir/Catchment Area**			Route to be kept away from the Dam
5	**Major River Crossing details (Bank to Bank Distance>600M)**			
a)	Navigable			Navigability to be checked from National Waterways Act, 2016 and latest amendment thereof.
b)	Non-Navigable			
6	**Roads**			
a)	NH/Expressway			
b)	SH			
c)	MDR			
7	**Any Permanent structure within line corridor**			To be avoided/to be kept out of RoW as far as possible

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		Yes/No	Existing/ Proposed	
8	**Railway Crossings**			Effect the crossing preferably. a) Outside station limit. (to be confirmed from Railway Authority) b) Outside railway boundaries. c) Where the track is in cutting. d) Avoiding structures, posts, masts, stays etc. within 10 Mtr from the outer conductor of transmission line. e) No overhead line crossing shall be located over a booster transformer, traction switching station, traction sub-station or a track cabin location in an electrified area.
9	**Powerline crossings**			
i	400 kV and Above			
ii	110kV Up to 400kV			
iii	66 KV			
10	**Wind Mill Area**			to be routed by maintaining distance of hub height plus half of rotor diameter, plus five meters from Conductor
11	**Solar Park**			To be avoided
12	**Natural Gas/Crude Oil/Petroleum Pipe line**			
13	**Mines**			
a)	Major Mines			To be avoided as far as possible
b)	Minor Mines/Quarry Sites			
c)	Coal Blocks			
d)	Underground Mines			
14	**Master Development Plan for Major City/Towns**			Route to avoid urban areas and upcoming utility/residential/Commercial area
15	**Economic Corridor**			Area to be avoided
16	**Industrial Area/Corridor**			Area to be avoided
17	**LandSlide Prone Zone**			To be avoided
18	**Avalanche Prone Area**			To be avoided
19	**Orchards/Plantations/Tea Garden**			To be avoided to the extent possible
20	**RoW constraint area requiring special structures like monopoles**			
21	**Coastal Area**			60kms from Coastline
22	**Wind Zone**			Buffer of 50kms. to be kept considering higher of two wind zone.
23	**Creak Area/Marshy Area/Water-logged area**			
24	**Snow Zone**			
25	**Hilly/Undulated Terrain**			

Note

1. The details of above features are to be verified through various sources like PMGatishakti, Topo Map, Bhuvan/Google Earth, State GIS Portals, Gazzette notifications published by Concerned Department etc.

2. The stretch of the route may also be got confirmed from the concerned Authority in case of Airport /Aerodrome/Airstrip/Forest/Major Mines/Coal Blocks/Master Development Plan/Dam/Land slide/Avalanche prone area etc.

3. In case of crossings, route alignment shall be carried out as per the relevant TSD provisions / Technical Specification

4. Angle schedule to be enclosed along with the Route alignment on topo map