



निर्गत के लिए नहीं NOT FOR EXPORT

OPEN SERIES
MAP

No. D43C3

Scale 1:50,000

D43B14 (48E/14)	D43C2 (48I/2)	Belgaum KARNATAKA D43C6 (48I/6)
D43B15 (48E/15)	D43C3 (48I/3) North Goa South Goa GOA	D43C7 (48I/7) Uttar Kannad KARNATAKA
D43B16 (48E/16) Arabian Sea	D43C4 (48I/4)	D43C8 (48I/8)

भारतीय सर्वेक्षण विभाग

SURVEY OF INDIA

1st Edition 2010.

Price : Rs. 70/-

CONVENTIONAL SYMBOLS

Express highway, with toll, with bridge, with distance stone	
Roads, metalled, according to importance	
Roads, double carriageway according to importance	
Unmetalled road, C&G, P&G, with pass, Footpath	
Stream, with track in bed, unfordable, Canal	
Dam, masonry or rock-filled, earthen, Wall	
River, dry with water channel, with island & rocks, Tidal river	
Saltwater inlet, tidal, flowing, Freshwater	
Well, lined, unlined, Tube-well, Spring, Tanks, perennial, dry	
Embankment, road or rail, tank, broken ground	
Railways, broad gauge, double, single with station, under constr.	
Railways, other gauge, double, single with station, under constr.	
Metalled line or railway, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000	
Contours with sub-features, rocky slopes, C&G	
Sand features (1:100,000) (2:100,000) (3:100,000)	
Towns or Villages, inhabited, deserted, Fort	
Habit, permanent, temporary, Tower, Antiquities	
Temples, Church, Mosque, Synagogue, Temple, Shrine	
Lighthouse, Lightship, Buoy, lighted, unlighted, Aids to navigation	
Mine, View on hill, Grass, Scrub	
Palms, palmry, other, Plantain, Coconut, Bamboo, Other trees	
Areas, cultivated, wooded, Surveyed tree	
Boundary, International	
State, demarcated, undemarcated	
District, subdivision, taluk or block, forest	
Boundary pillars, surveyed, unlocated	
Height, triangulated, station, point, approximate	
Boundary mark, geodetic, literary, canal	
Post office, Telegraph office, Overland tank	
Post house or inspection bungalow, Circuit house, Police station	
Camping ground, Forest, reserved, protected	
Speed name, administrative, locality or tribal	
Hospital, Dispensary, Veterinary Hospital / Dispensary	
Airport, helipad, Tourist site	
Power line, with pylons, surveyed, with poles, unsurveyed	

REFERENCE

NH-66, National Highway No. 66

NOTES

Heights and Contours have not been shown.
A relative height, e.g., 10, represents the approximate height in meters, between the top and bottom of a steep slope.
Christian monuments are shown thus: T.
Hand pump is shown thus: H.

COMPILED INDEX

A. Compiled from 1:50,000 survey, 1960-85. Updated for major details during 2005-06.

Projection - UTM Datum - WGS 84

Magnetic Variation from True North about 1° West in 2005.

(Decreasing by about 1° annually).

Scale 1:50,000

For further details about this map, please contact

Director

Maharashtra & Goa Geo-Spatial Data Centre

Survey of India, Phule Nagar, Andri Road

Pune.

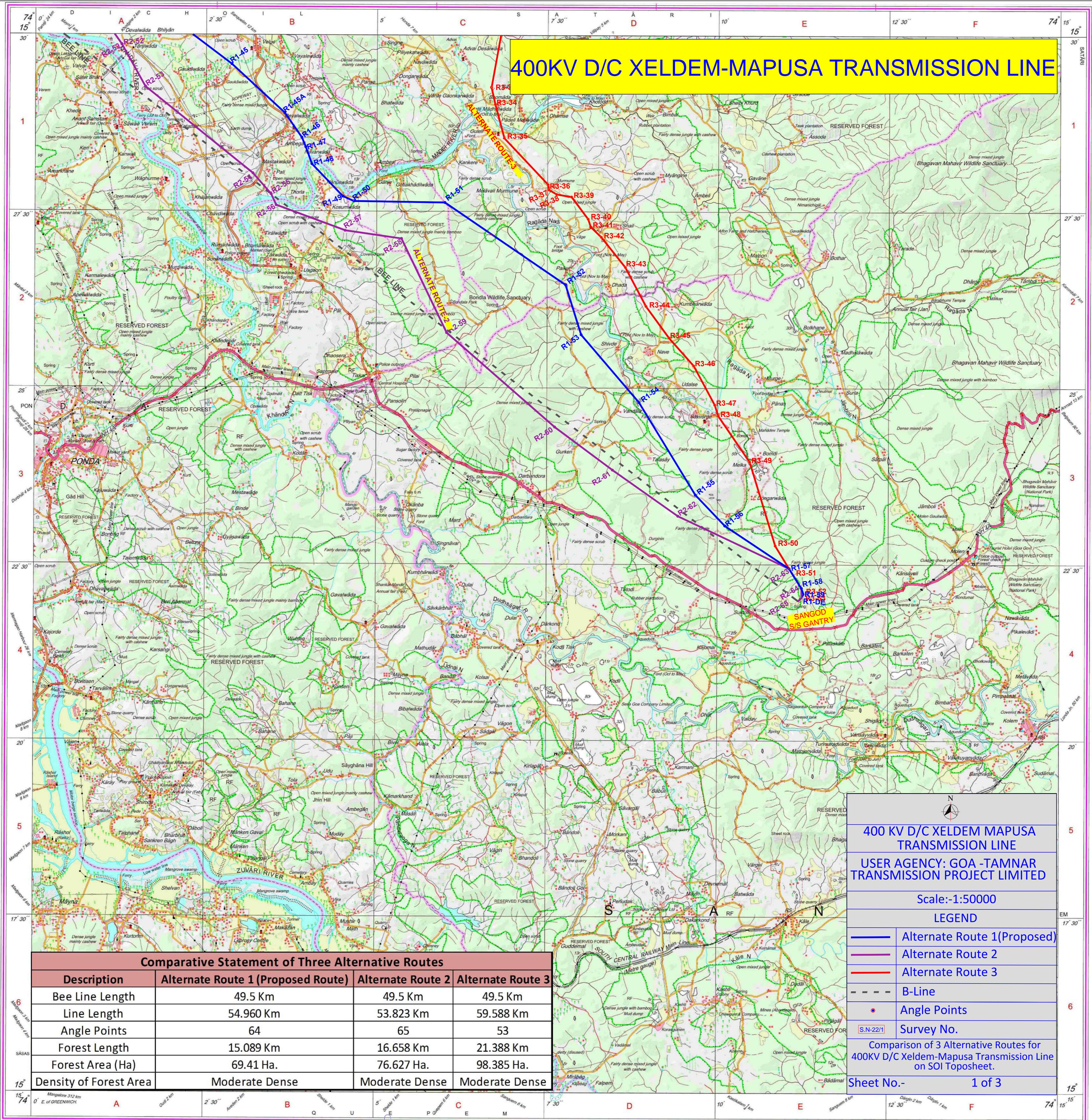
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REG. No. -SPG 010 (Maharashtra & Goa GDS-1:50,000)

महाराष्ट्र के सर्वेक्षण विभाग के द्वारा जारी

Published under the direction of Surveyor General of India,

Survey of India, Hathibakata Estate, Post Box No. 37, Dehra Dun-248001 (Uttarakhand),

Department of Science & Technology, Government of India.

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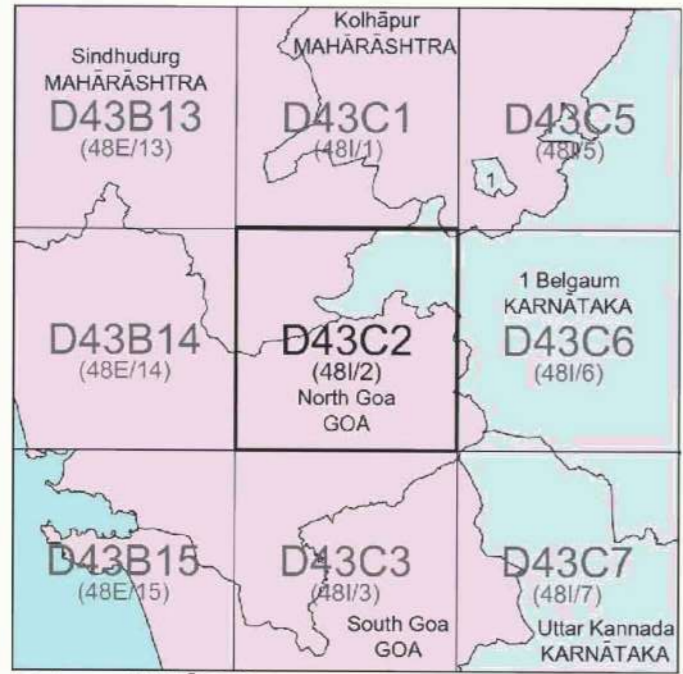


निर्वाह के लिए नहीं NOT FOR EXPORT

OPEN SERIES
MAP

No. D43C2

Scale 1:50,000



1 Belgaum, KARNATAKA
2 Uttar Kannada, KARNATAKA

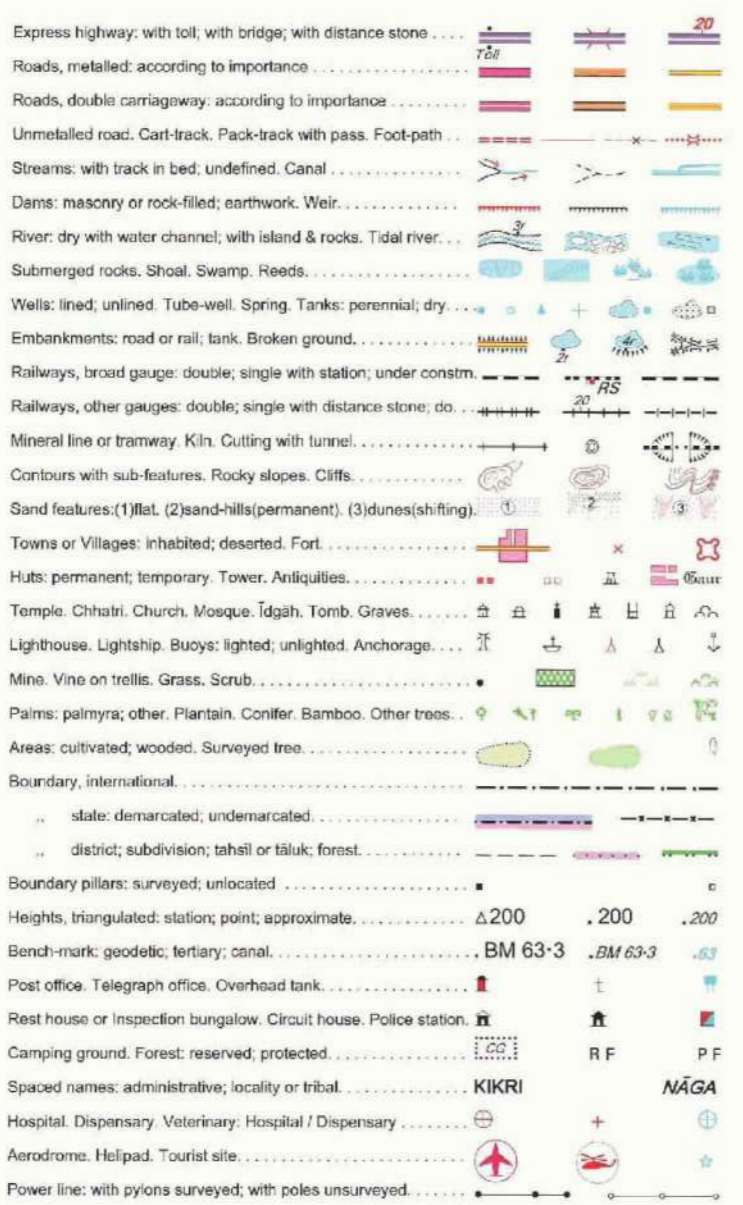
भारतीय सर्वेक्षण विभाग

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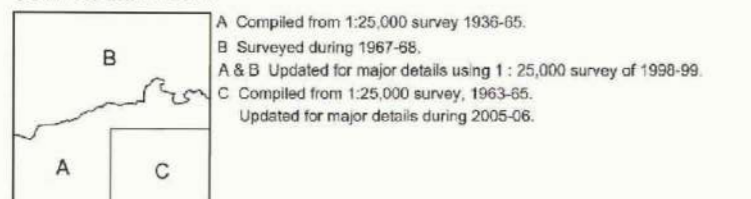
CONVENTIONAL SYMBOLS



NOTES

Heights and contours have not been shown.
A station height, e.g., 100, represents the approximate height, in metres, between the top and bottom of a steep slope.
The state state boundaries have been surveyed and pointed out by the local officials on the ground, but have not been verified by the Government of Maharashtra and Karnataka.
The model area in the Gao portion of this map are generally Reserved Forest.
There are numerous Christian Churches in Goa. A few prominent ones are shown thus:
Goswami is shown thus:
Hand pump is shown thus:

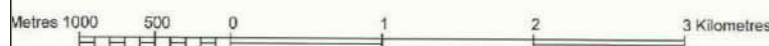
COMPILED INDEX



Projection - UTM Datum - WGS 84

Magnetic Variation from True North about 1° West in 2005.

Scale 1:50,000



For further details about this map, please contact

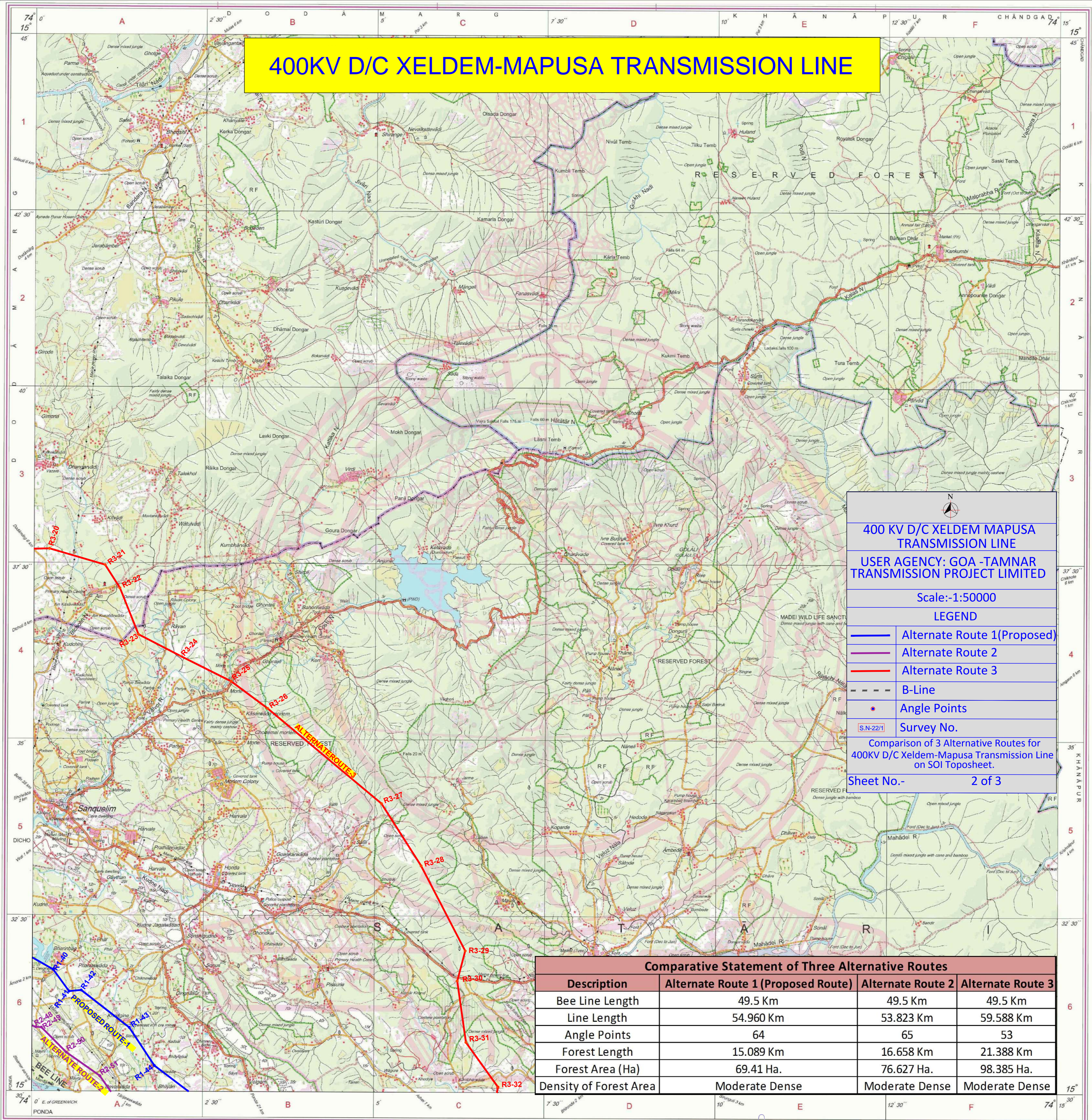
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Maharashtra & Goa Geo-Spatial Data Centre
Survey of India, Phule Nagar, Andol Road
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400KV D/C XELDEM-MAPUSA TRANSMISSION LINE



400 KV D/C XELDEM MAPUSA
TRANSMISSION LINE
USER AGENCY: GOA -TAMNAR
TRANSMISSION PROJECT LIMITED

Scale: 1:50000

LEGEND

- Alternate Route 1(Proposed)
- Alternate Route 2
- Alternate Route 3
- B-Line
- Angle Points
- Survey No. S.N.22/1

Comparison of 3 Alternative Routes for
400KV D/C Xeldem-Mapusa Transmission Line
on SOI Toposheet.

Sheet No.- 2 of 3

Comparative Statement of Three Alternative Routes

Description	Alternate Route 1 (Proposed Route)	Alternate Route 2	Alternate Route 3
Bee Line Length	49.5 Km	49.5 Km	49.5 Km
Line Length	54.960 Km	53.823 Km	59.588 Km
Angle Points	64	65	53
Forest Length	15.089 Km	16.658 Km	21.388 Km
Forest Area (Ha)	69.41 Ha.	76.627 Ha.	98.385 Ha.
Density of Forest Area	Moderate Dense	Moderate Dense	Moderate Dense

REG. No. 8532 - SPO D10 (Maharashtra & Goa GOO-1:50,000) 01/10/11.

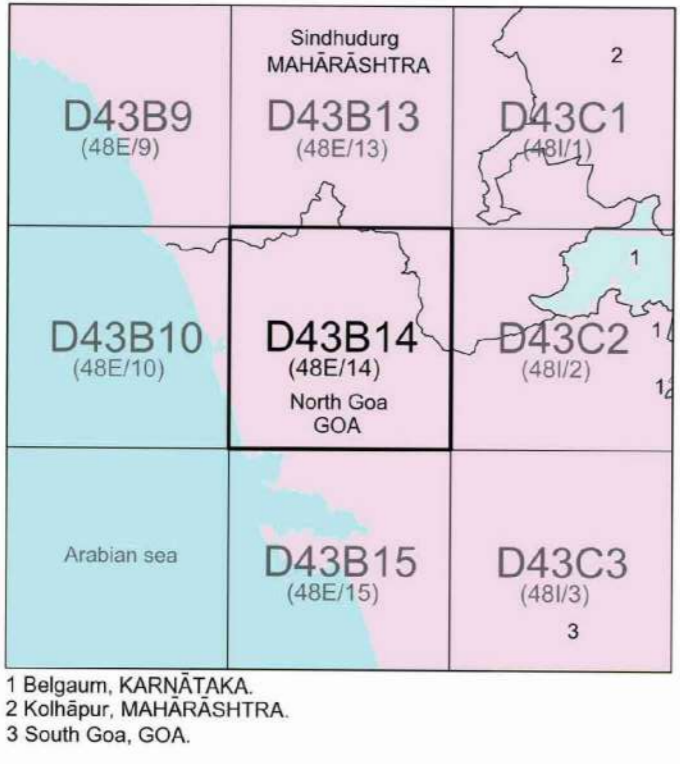
महाराष्ट्र के सर्वेक्षण विभाग के द्वारा
Published under the direction of Surveyor General of India,
Survey of India, Hattibarkala Estate, Post Box No. 37, Dehra Dun - 248001 (Uttarakhand),
Department of Science & Technology, Government of India.

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OPEN SERIES MAP
No. D43B14
Scale 1:50,000



भारतीय सर्वेक्षण विभाग
1st Edition 2011. Price : Rs. 70/-

- CONVENTIONAL SYMBOLS
- Express highway with toll, with bridge, with distance stone
 - Roads, metalled according to importance
 - Roads, double carriageway according to importance
 - Unmetalled road, cart track, foot track with or without foot path
 - Sewage with track in bed, underground, canal
 - Dam, masonry or rock-filled, earthen, weir
 - River, dry with water channel, with island & rocks, tidal river
 - Submerged rocks, shoal, bar, sand bank, reef
 - Wells, hand, electric, tube-well, spring, tank, reservoir, dry
 - Embankment, road or rail, track, broken ground
 - Railways, broad gauge, double, single with station, under construction
 - Railways, other gauges, double, single with station, under construction
 - Mineral line or tramway, with cutting with tunnel
 - Cuttings with side-slopes, rocky slopes, cliffs
 - Sand features (1) flat, (2) dune, (3) ridge, (4) dune, (5) dune
 - Towns or villages, inhabited, deserted, fort
 - Hill, permanent, temporary, tower, antiquities
 - Temple, church, mosque, synagogue, tomb, shrine, dargah
 - Lighthouse, lightship, buoy, lighted, unlighted, daymark
 - Mine, vein on hill, grass, scrub
 - Palm, palm, other, plantain, coffee, banana, other trees
 - Areas cultivated, wooded, surveyed tree
 - Boundary, international
 - State demarcated, undemarcated
 - district, subdivision, taluk or block, forest
 - Boundary pillars, surveyed, unlocated
 - Height, triangulated, station, point, approximate
 - Bench-mark, geodetic, levelling, aneroid
 - Post office, telegraph office, check post, CTR
 - Rest house or inspection bungalow, club house, police station
 - Camping ground, forest, reserved, protected
 - Spaced names, administrative, locality or tribal
 - Hospital, dispensary, veterinary hospital / dispensary
 - Air station, helipad, tourist site
 - Power line, with pylons surveyed, with poles unsurveyed

REFERENCE:
NH 17 National highway No. 17.

NOTES:-
A relative height, or represents the approximate height, in metres, between the top and bottom of a steep slope.
The State boundary between Goa and Maharashtra states has been surveyed as pointed out by local officials on the ground but has not been verified by the Government concerned.
The territorial waters of India extend into the sea to a distance of twelve nautical miles measured from the appropriate base line.
Hand pumps are shown thus
Believed trees are shown thus
Christian memorials are shown thus
Heights and contours have not been shown.
Important buildings are shown in black with names.

COMPILED INDEX
A. Compiled from 1:50,000 survey, 1963-64.
B. Surveyed during 1964-65.
A & B Updated for major details during 2005-06.

Projection - UTM Datum - WGS 84
Magnetic Variation from True North about 1° 15' West in 2005.
(Decreasing by about 1' annually).
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400 KV D/C XELDEM MAPUSA TRANSMISSION LINE
USER AGENCY: GOA -TAMNAR TRANSMISSION PROJECT LIMITED
Scale:-1:50000
LEGEND
Alternate Route 1(Proposed)
Alternate Route 2
Alternate Route 3
B-Line
Angle Points
Survey No. S.N-2271
Comparison of 3 Alternative Routes for 400KV D/C Xeldem-Mapusa Transmission Line on SOI Toposheet.
Sheet No.- 3 of 3

Comparative Statement of Three Alternative Routes			
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