

9/124

O/o Chief Secretary
Entry No.: 141262144
Date: 23/10/19

Tel: 0832-2585005

Reply should be addressed to  
The Commanding Officer

INS Hansa  
Dabolim  
Goa - 403 801

714/23/2/CCZM

15 Oct 19

✓ Chief Secretary  
Govt of Goa  
Secretariat, Porvorim  
Goa - 403 521

The Director  
Directorate of Civil Aviation  
Govt of Goa  
Secretariat  
Porvorim  
Goa - 403521

Directorate of Civil Aviation
Inward No.: 1233
Date: 24/10/2019

12  
23-10-19  
The District Magistrate  
Office of the Collector & District Magistrate  
South Goa District  
Matanhy Saltanha, Administrative Complex  
Margao, Goa - 403 602

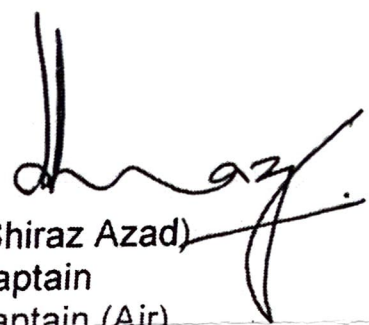
The District Magistrate  
Office of the Collector & District Magistrate  
North Goa District  
Collectorate Building  
Opp. Municipal Garden  
Panaji, Goa - 403 001

The Member Secretary  
Mormugao Planning and Development Authority (MPDA)  
II floor, Commerce Center  
Vasco-da-Gama  
Goa- 403 802

### DISSEMINATION OF COLOR CODED ZONING MAP, GOA AIRPORT

1. In compliance to Govt of India gazette G.S.R 751 (E) dated 30 Sep 2015, the process of formulation of Color Coded Zoning Map (CCZM) in respect of Goa airport has been completed by the INS Hansa and same is ready for dissemination. The soft copy of CCZM is forwarded herewith in CD for immediate implementation to the Member Secretary, MPDA. Further, the CCZM shall be read along with guidelines issued at enclosure I and II.
- 2019

2. In addition, any clarification required in terms of implementation may be brought out to this office on telephone 0832-2585050 or email on [atc.hansa@navy.gov.in](mailto:atc.hansa@navy.gov.in).

  
(Shiraz Azad)  
Captain  
Captain (Air)  
for Commanding Officer

Copy to:-

The Chief of Naval Staff  
(for DNAS)  
IHQ MoD (N)  
New Delhi - 100 001

The Flag Officer Commanding  
{for CSO / SSO (E&I)}  
Headquarters Goa Naval Area  
Vasco-da-Gama  
Goa - 403 802

The Flag Officer Commanding  
{SO (AV)}  
Headquarters Goa Naval Area  
Goa-403802

The Airport Director  
Airport Authority of India  
Dabolim Airport  
Vasco-da-Gama  
Goa - 403802

The Chief Town Planner & Member Secretary  
TCP Board Town and Country Planning Dept  
Dempo Towers, 2<sup>nd</sup> Floor, Patto Plaza  
Panaji, Goa

The Director of Municipal Administration  
Government of Goa, Collectorate Bldg  
Panaji, Goa

The Director of Panchayats  
Junta House, Panaji, Goa



**GUIDELINES AND INTERPRETATION OF COLOUR CODED ZONING MAP (CCZM)**

1. CCZM is formulated based on Geo-reference Grid of one minute by one minute (Latitude/ Longitude) and cover an area of about 75 km X 75 km around the ARP. The CCZM of Goa Airport is mainly prepared in five colours on the scale of 1: 192,000 chart.
2. The Colour Coded Zoning Map (CCZM) is strictly for possession of Local Municipal Authority/ Municipal Commissioner MPDA and is to be used for the purpose of determining the requirement of seeking NOC for 'height clearance' from Indian Navy for regulating heights of building/ structure around Dabolim airport under the provisions of Gazette of India GSR 751 (E).
3. The concerned Local, Municipal or Town Planning and development authorities to approve construction of buildings as per their own building regulations / bye-Laws up to the heights indicate in CCZM. For such building, NOC for height clearance is not required from Indian Navy.
4. The applicant is to submit all documents required for NOC in **ORIGINAL** to Local Municipal or Town Planning and Development authority. If, using the Map, the applicant is being exempted from seeking NOC from Indian Navy then Local Municipal or Town Planning and Development authority shall approve the plan (without NOC from Indian Navy) and forward a copy of its approval letter along with application and all documents in original to 'Headquarters Goa Naval Area / Staff Officer (Aviation)' within a period of **THIRTY DAYS** of approval.
4. Municipal authorities are to ensure that the applicants exempted from seeking NOC from Indian Navy furnish site coordinates and site elevation certificate issued by Survey of India / CPWD / State PWD, Govt. approved Department / Agency authorized for this purpose, Urban Local Body authorized licensed Surveyors/Architects/Engineers in **ORIGINAL** for all intended structures.
5. The applicant shall mention all the coordinates of corners of building/ structures irrespective of its shape in application form. However for the purpose of calculations in CCZM map, the applicant shall use most qualifying nearest point towards aerodrome. Further, if elevations at site are varying significantly due uneven terrain/ vast area of construction, the applicant shall refer to maximum elevation within site.
6. The accuracy requirement for site elevation is 0.5 m AMSL. The accuracy requirement for WGS-84 Coordinates is 1/10th of a second in the format of DD MM SS.s and position accuracy should be within 3 meters. Accuracy requirement for top elevation of structures/buildings shall be same as site elevation i.e. 0.5 m AMSL. The heights indicate in CCZM are Above Mean Sea Level (AMSL).
7. Indian Navy shall have power to disapprove the clearance in case of Non Submission of these documents/ any discrepancy in the documents. The violation of regulation shall be dealt under 'The Aircraft Rules-1994' (Demolition of Obstructions caused by Buildings and Trees etc.).



8. The interpretation of CCZM is enumerated in the following paragraphs:-

(a) The area around Dabolim airport has been divided into Geo-referenced grids of 1 minute by 1 minute each. Aerodrome Elevation of Dabolim airport is 56.8m (186 ft).

(b) Referring to the site co-ordinate certificate issued by Survey of India, Municipal or Town Planning body/ Development authority shall identify the 'Home Grid' where the plot/site lies on the CCZM.

(c) Co-relate the colour of the Home Grid with legend in the Map. If colour of Home Grid is "RED" then **IRRESPECTIVE OF HEIGHT** of the building/structure, the applicant shall furnish application for seeking NOC from Indian Navy.

(d) If colour of the home grid is 'BLUE' or 'PINK' then find out top elevation of the building by adding Site elevation of plot/ site (mentioned in the 'elevation certificate') with the height of top most point of the proposed building/ structure (including all temporary/ permanent super structure e.g. water tank/ lightening arresters/ Lift Rooms/ Cranes etc.). For buildings of top elevation higher than 101 meters in BLUE Zone and 102 metres in PINK Zone, applications for NOC to be filed with Indian Navy.

(e) If colour of the home grid is 'YELLOW/GREEN', then find out top elevation of the Building by adding Site elevation of plot/ site (mentioned in the 'elevation certificate' issued by Survey of India) with the height of top most point of the proposed building/ structure (including all temporary/ permanent super structure e.g. water tank/ lightening arresters/ Lift Rooms/ Cranes etc.). For buildings of top elevation higher than 166 meters in YELLOW Zone and higher than 196 meters in GREEN Zone, applications for NOC to be filed with Indian Navy.

9. If proposed site of building/ structures lies within the jurisdiction of any other Civil Airport clearance shall also be required from the concerned authority. Also for sites located in Danger or Prohibited areas, clearances from concerned controlling Defence/ Civil agencies should be sought.

10. For proposals located in areas contiguous to Defence Establishment governed by Works of Defence Act (WoDA) 1903, SRO/ Gazette Notifications notified by Govt from time to time, NOC shall be obtained by applicants from Local Military Authority irrespective of Colour Coding in Colour Coded Zoning Map.

11. The Local Municipal or Town Planning and development authorities can plan their development as per the CCZM.

12. CCZM of Dabolim airport is purely for processing of NOC cases around Dabolim airport and doesn't take into consideration of any proposed airports within the state of Goa. Additional restrictions may be applied in case of any such future airport.



### STEPS TO BE FOLLOWED WHILE USING CCZM

<u>Sr No</u>	<u>Steps</u>	<u>Brief</u>	<u>Remarks</u>
1	Access to CCZM (soft copy)	<p>(a) The CCZM map is generated on Geo-pdf file.</p> <p>(b) To interact with Geo –PDF, the user shall open CCZM from <b>Adobe Reader</b>.</p> <p>(c) Go to <b>EDIT / TOOLS &gt; Analysis&gt; Geospatial Location Tool</b>.</p>	This option converts map to interactive PDF which allows user to access grid view in Lat/Long in a Decimal Degree format.
2.	Conversion of WGS-84 coordinates to <b>Grid format</b> .	<p>The user shall use following formula to convert WGS-84 coordinates into Decimal Degree format Coordinates :-</p> $\{DD^{\circ}MM' SS.s'' N\} = DD^{\circ} + (MM/60) + (SS/3600)N$ $\{DD^{\circ}MM' SS.s'' S\} = DD^{\circ} + (MM/60) + (SS/3600)S$ <p><b>e.g</b> The site coordinate <u>15° 23' 18.57" N 073° 52' 20" E</u> shall be converted in following format:-</p> <p>For, 15° 23' 18.57" N</p> $= 15 + (23/60) + (18.57/3600)$ $= \underline{15.38849167N}$ <p>For, 073° 52' 20" E</p> $= 73 + (52/60) + (20/3600)$ $= \underline{73.8722222 E}$ <p><u>The final Grid coordinates : 15.3884 N 73.8722E</u></p>	By moving the cursor, the user can reach the Grid coordinates.
3.	Identification of	By referring to above resulted coordinates, Local Municipal	

	Home Grid	Authority (LMA) shall identify the 'Home Grid, where the Plot / site lies on the CCZM by placing cursor on exact Grid coordinates.
4.	Identification of colour code	<p>Co-relate the colour of the Home Grid obtained with legend in the map. The following procedure shall be followed on identifying exact colour:-</p> <p>(a) <b>Red Colour.</b> Irrespective Of Height of building / structure, the applicant shall furnish application for seeking NOC from Indian Navy.</p> <p>(b) <b>Blue Colour.</b> NOC is exempted only if top elevation is 101M AMSL or below. However, due to constant change in permissible top elevation with distance from runway end NOC shall be applied for constructions above 101 AMSL.</p> <p>(c) <b>Pink Colour.</b> NOC exempted only if top elevation is 102 M AMSL or below.</p> <p>(d) <b>Yellow Colour.</b> NOC exempted only if top elevation is 166 M AMSL or below.</p> <p>(e) <b>Green Colour.</b> NOC exempted only if top elevation is 196 M AMSL or below.</p>
5.	Calculation of Permissible Top Elevation (PTE)	The applicant shall refer to elevation of site as mentioned in elevation certificate then add proposed height of building / structure (including all temporary/ permanent super structures e.g water tank/ lightening arresters / Lift Rooms/ Cranes etc). If top elevation falls above permissible limits, the applicant shall apply for NOC mandatorily.