

User Manual

e-Transaction Aggregation & Analysis Layer

(<http://nesd.nic.in>)



National Informatics Centre
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Chapter 1: Introduction

eTaal is a National Dashboard, provides visual analysis tools by presenting the consolidated transactions count made by different National Electronic Service Delivery Channels across country.

Introduction	eTaal is a web portal for dissemination of transaction statistics of Central and State level e-Governance Projects including Mission Mode Projects. It receives transaction statistics from web based applications periodically on near real time basis.
Services	eTaal presents quick analysis of transaction counts in graphical form (Bar Chart, PI Chart, Bubble Chart etc.) and as Tabular Statements to give quick view of data received from various e-Gov projects.
Benefits	Provides visibility for the national/state level services of e-Governance Projects and presents status on actual utilization of various systems running at multiple locations across the country
Target Group	Any department or government organization offering G2C, G2B or G2G services.
What is a Transaction?	<p>“A transaction in delivering a public service which uses Information Technology (IT) while also satisfying the following four conditions,</p> <ol style="list-style-type: none"> Service is requested through electronic means including mobile devices Workflow/approval process is electronic Database is electronic/digitized Service delivery is electronic. <p>in order to improve access, enhance transparency and reduce response time.”</p>
Prerequisites for participation	<p>Server on which transaction data resides must be on internet.</p> <p>There is no restriction on software or hardware platform of the server. It may be on any platform (Windows/Linux etc.; SQL Server/Oracle/MySQL/PostgreSQL etc.; dot net /Java/PHP etc.).</p>

Chapter 2: How to access the eTaal Dashboard

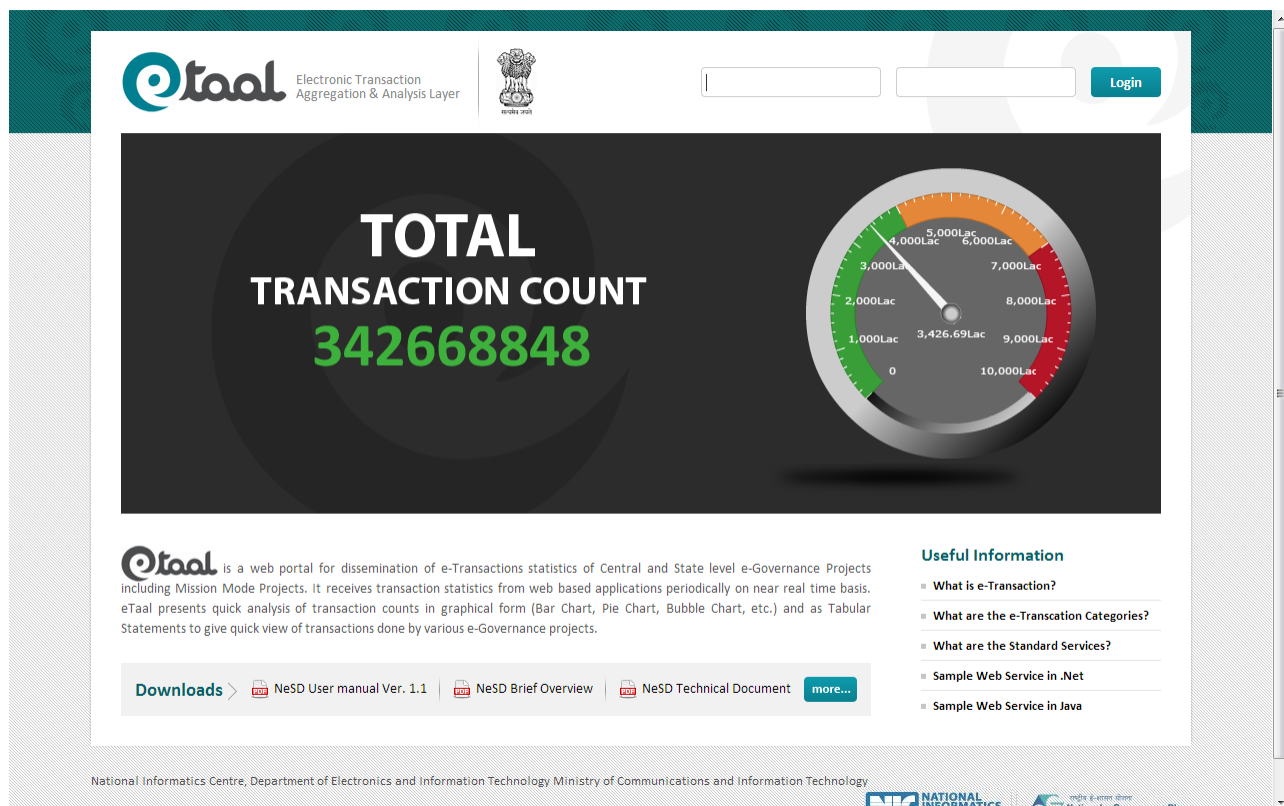
To access eTaal Dashboard enter following URL:

2.1 eTaal URL

<http://NeSD.nic.in>

User ID: nesd

Password: Nax@8\$#d



The screenshot displays the eTaal dashboard interface. At the top, there is a header with the eTaal logo, the text "Electronic Transaction Aggregation & Analysis Layer", and the Government of India emblem. Below the header, there are two input fields for user ID and password, followed by a "Login" button. The main content area features a large dark grey box with the text "TOTAL TRANSACTION COUNT" and a large green number "342668848". To the right of this box is a circular gauge chart with a needle pointing to the value 3,426.69Lac. The gauge has a scale from 0 to 10,000Lac with increments of 1,000Lac. Below the main content, there is a "Useful Information" section with a list of links: "What is e-Transaction?", "What are the e-Transaction Categories?", "What are the Standard Services?", "Sample Web Service in .Net", and "Sample Web Service in Java". At the bottom, there is a "Downloads" section with links to "NeSD User manual Ver. 1.1", "NeSD Brief Overview", and "NeSD Technical Document", along with a "more..." button. The footer contains the text "National Informatics Centre, Department of Electronics and Information Technology Ministry of Communications and Information Technology" and logos for "NATIONAL INFORMATICS" and "National e-Governance Plan".

eTaal Dashboard application is best viewed in Mozilla Firefox browser v3.6.19 or higher at resolution of (1366x768).

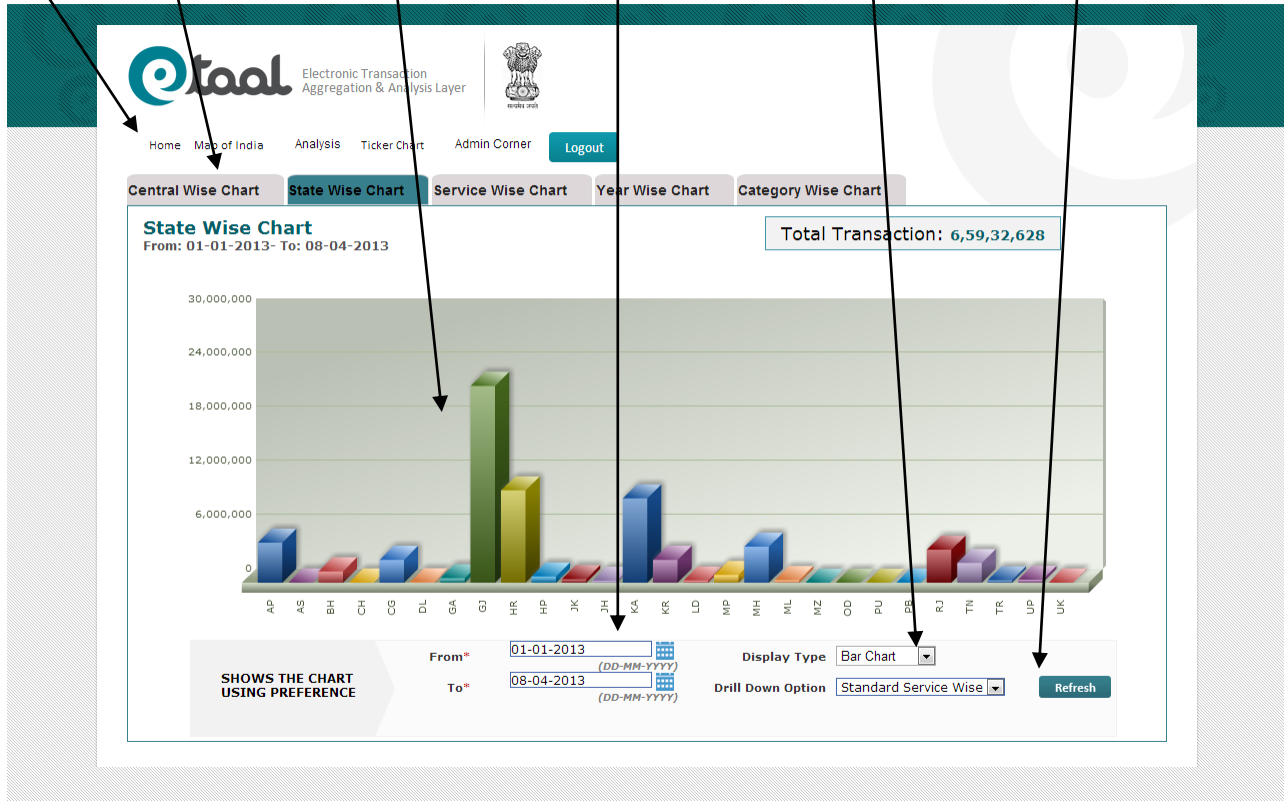
Please enter user ID and password and click on Login button. eTaal Home Page is displayed. In case you are not able to login, please open the website in new browser window. If problem continues, please contact website administrator.

Chapter 3: eTaal Home Page

Home Page:

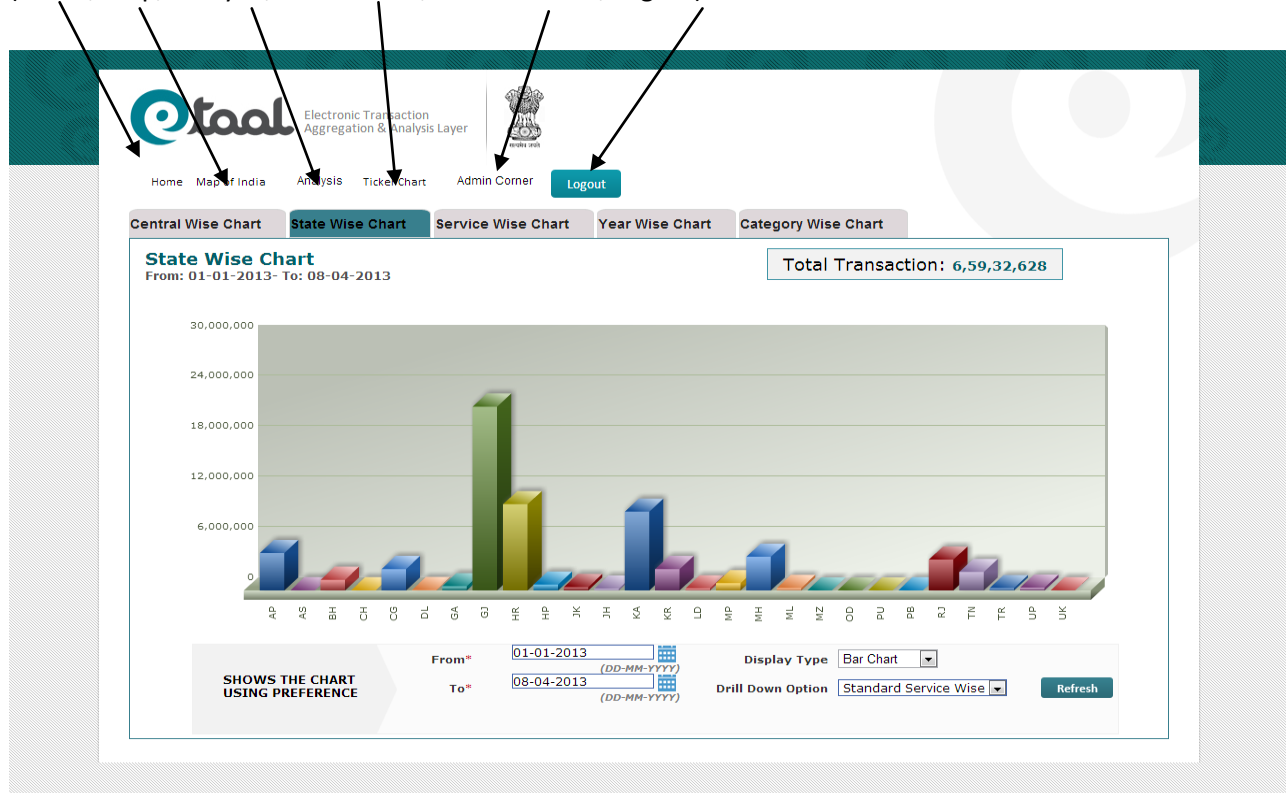
On successful login eTaal Home Page appears with

Menu tab, Chart tab, State wise chart & Option to change dates, chart type, drill down option.



3.1 Menu tab

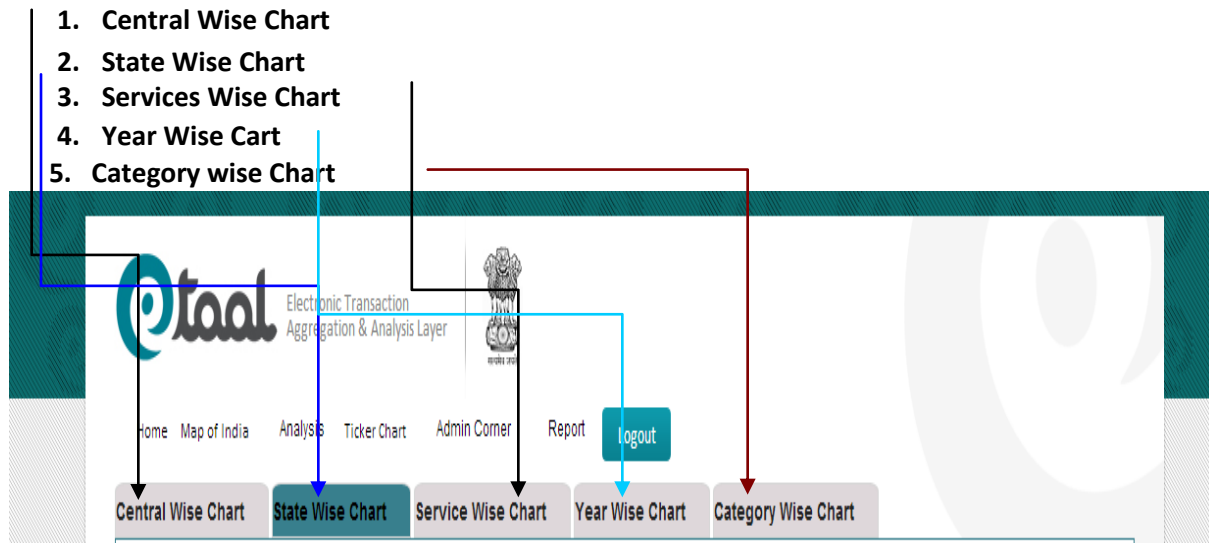
(Home, Map, Analysis, Ticker Chart, Admin Corner, Logout).



1. Home – This is the landing page of eTaal which is being rendered after successful login. It shows different view of Services.
2. Map of India – It shows the distribution of state wise data of e-Transaction on map of India.
3. Analysis – It shows the different type of graphical analysis on e-Transaction data.
4. Ticker Chart – It is a gauge chart which shows the e-Transaction being delivered at particular date.
5. Daily Transaction – This is transaction clock which shows the transaction count.
6. Enrolment – It provides the interface for ‘Self registration of web service’ in eTaal.
7. Report – It shows different type of reports of eTaal.
8. Audit Trails – It shows the login history of user.
9. Logout – This menu item logs the user out from the eTaal.

3.2 Chart Tab & Chart

A chart of transactions made in last seven days will be displayed. Initially State wise chart shall be displayed. Home page shows up with five tabs, State Wise chart (selected by default) shows total number of transactions between two dates (From date and To Date) entered by user, chart shown on each tab comes up with drill down capability, so that data of each chart can be viewed in detail. Following are the tab option on Home page:

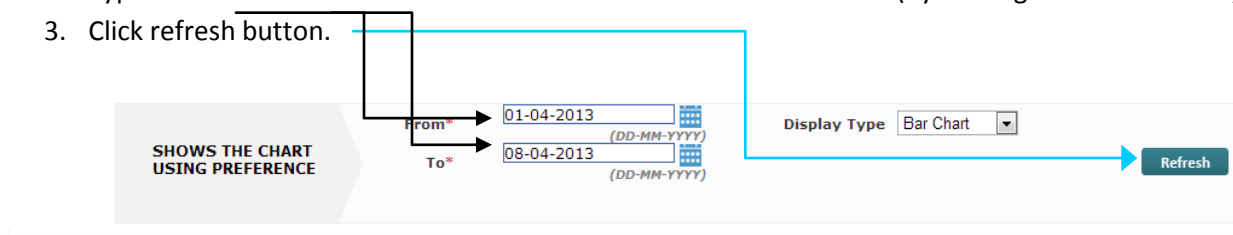


One can click following tabs to view variety of charts.

1 Central projects	Chart displays data of All India level projects providing consolidated transactions details, centrally.
2 State wise Projects	Chart displays data of IT projects running in states and state wise data is provided/ available.
3 Service wise Details	Chart displays Service wise data of transactions.
4 Year wise Chart	Year wise Transactions
5 Category wise Chart	Category wise Transactions, (all transactions can be categorized in 4 Categories A,B,C & D)

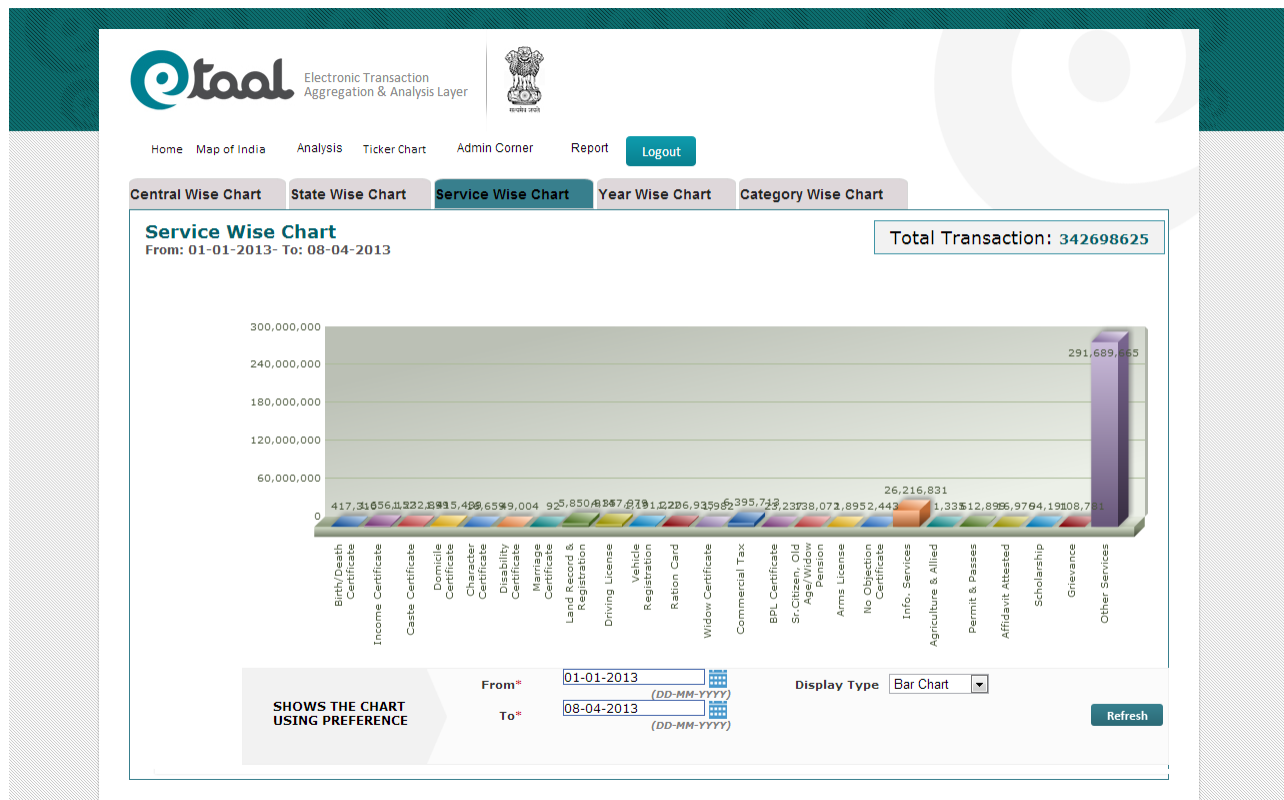
3.3 Date wise View

1. Select required tab from home page.
2. Type From-Date & To-Date in textbox or select dates from calendar (by clicking on calendar icon).
3. Click refresh button.



Chapter 4: eTaal Charts

4.1 Service Wise Chart: It displays consolidated count of e-Transaction Service Wise. It shows consolidated data of all the state and central projects. We can click specific service to Drill Down to show “State Wise Chart of selected Service”. Following screenshot shows Service Wise Chart:



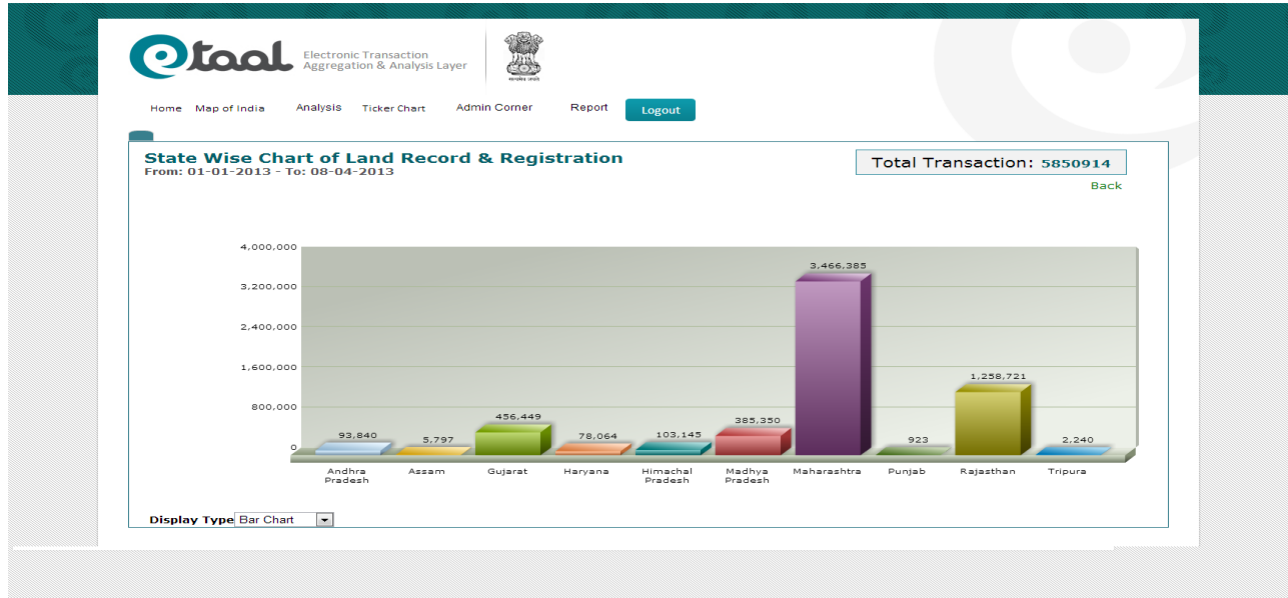
- Each 3D column bar represents a Service, identified by different color.
- Height of each column bar shows total transactions occurred in the Service, between two dates entered by the user.
- Same data can be viewed in pie chart and tabular data, by selecting Display Type in the drop-down list provided below the chart.

List of Standard Services:

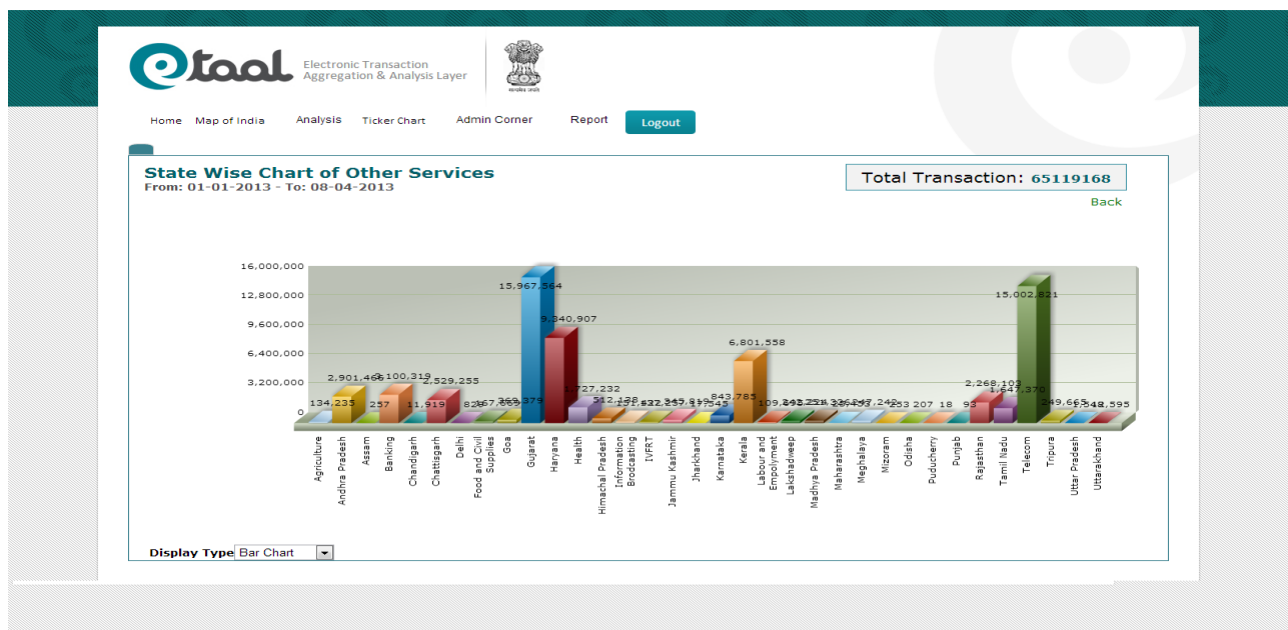
SL#	Service Name
1	Certificates
2	Licenses and Permits
3	Land Record & Registration
4	Integrated Finance Management System
5	Commercial Tax
6	Utility Services and Bill Payment
7	Social Welfare & Pension
8	Transport
9	Education
10	Public Distribution System
11	Agriculture & Allied
12	Court and Judiciary
13	Health
14	Rural Development
15	Election
16	Police
17	Personnel and Admin
18	Grievance
19	RTI
20	Information Service
21	State Specific Services
22	Other Services

4.2 Drilled-down Service Wise Chart: Service Wise Chart can be drilled down to get the state view. Following screenshot shows Drilled-down Service Wise Chart of the service ‘Land Records & Registration’.

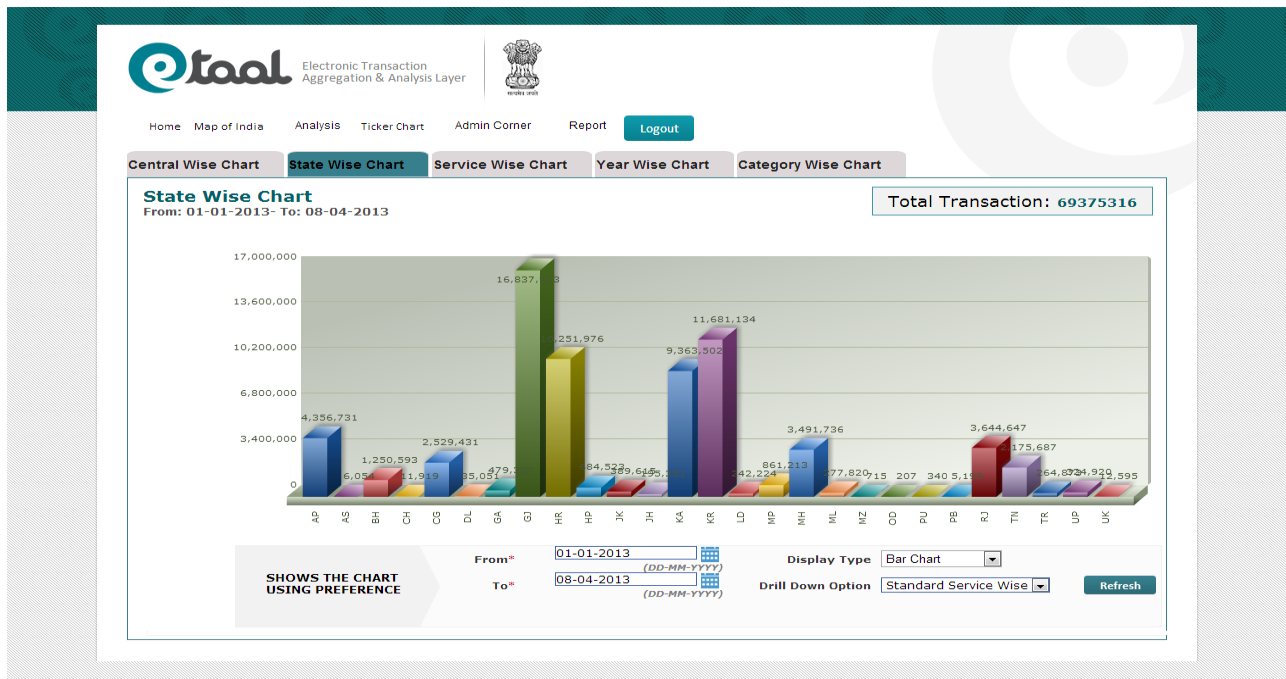
Drilled-down Service Wise Chart to show State wise chart of Land Records & Registration.



Drilled-down Service Wise Chart to show State wise chart of the other services.



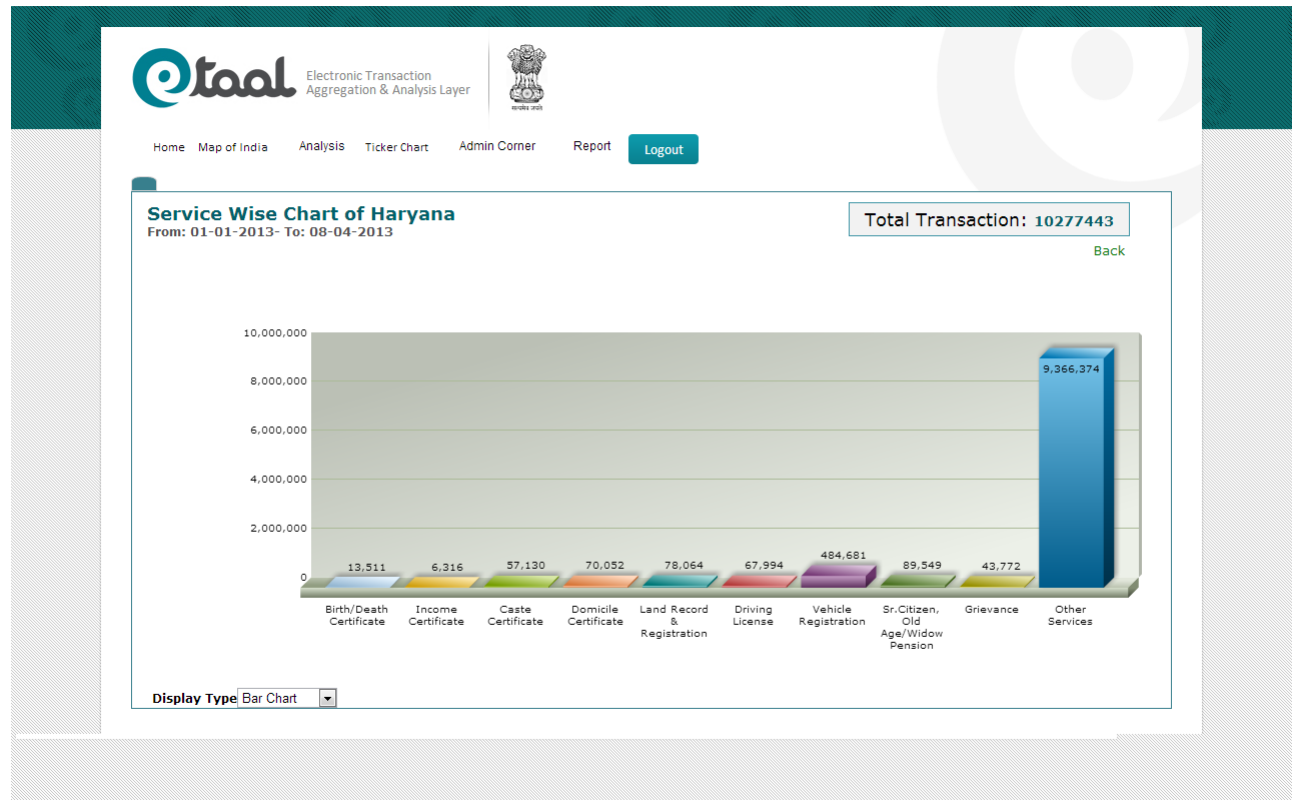
4.3 State Wise Chart: Following screenshot shows transactions (State Wise) in Column chart form. Only state wise tab comes with two type of drill down options (i.e. Standard service wise or Category Wise)



- Each 3D column bar depicts a state, identified by different color.
- Height of each column bar shows total transactions occurred in the state, between two dates entered by the user.
- Same data can be browsed in pie chart and tabular data, by selecting Display Type in the drop-down list provided below the chart.
- We can change time period for displaying data (Change From Date and To Date) and click on Refresh button.

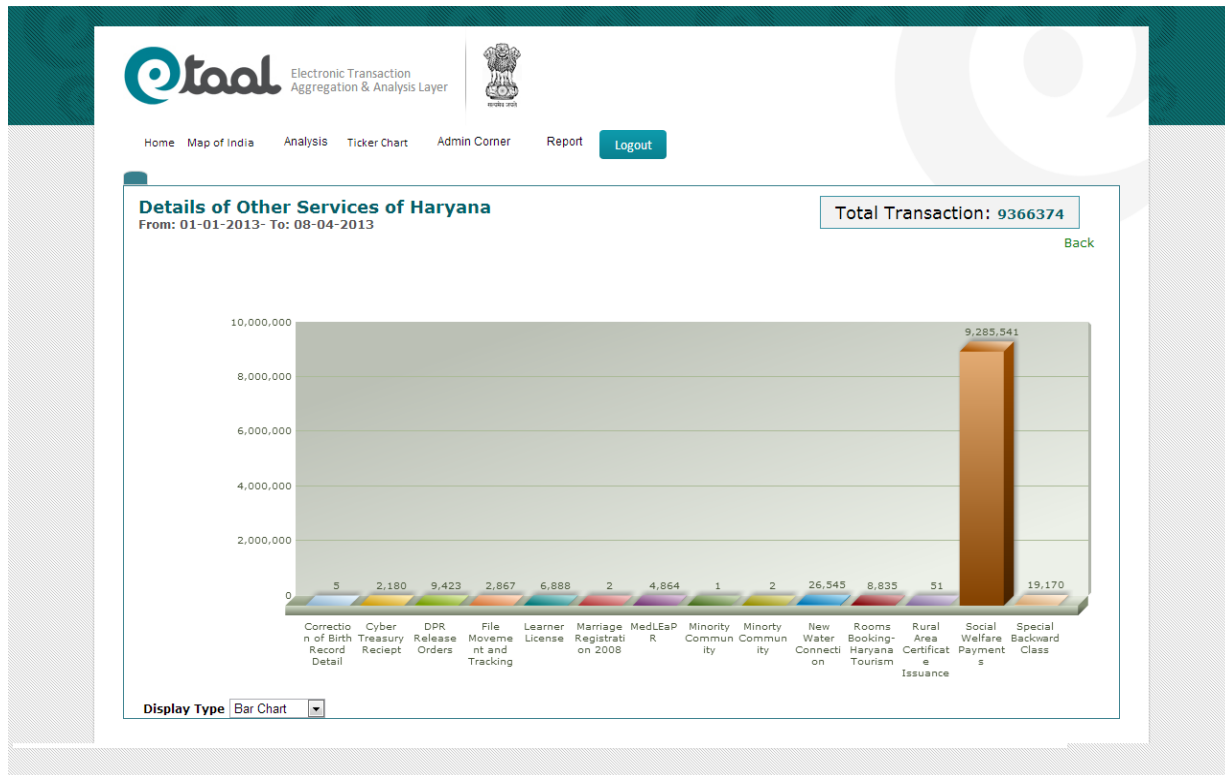
4.4 Drilled down State wise Chart (Service wise)

Following screenshot shows transactions (State Wise) in Column chart form. Only state wise tab comes with two type of drill down options (i.e. Standard service wise or Category Wise)



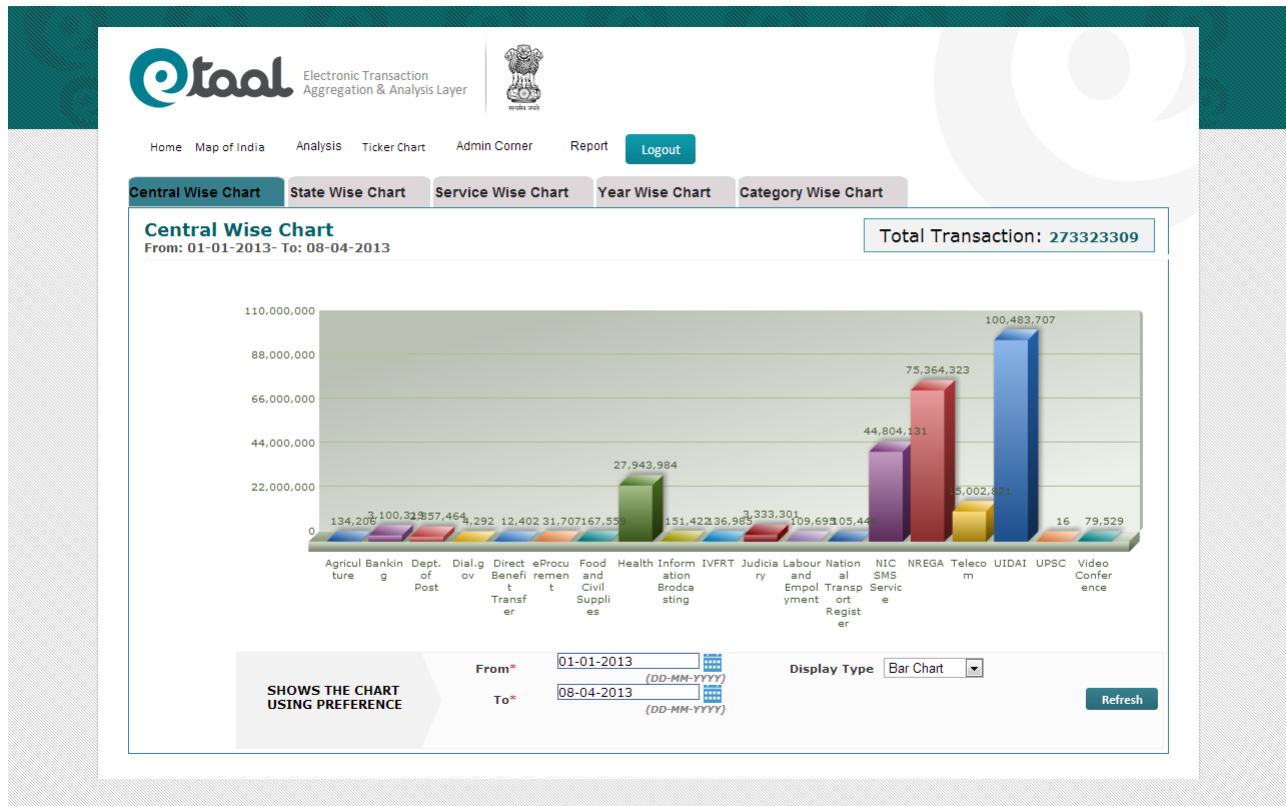
- Each 3D column bar depicts a state, identified by different color.
- Height of each column bar shows total transactions occurred in the state, between two dates entered by the user at earlier stage.
- Same data can be browsed in pie chart and tabular data, by selecting Display Type in the drop-down list provided below the chart.

4.5 Other Services details of State Wise Chart: Further in Service Wise Chart of a particular state we can see detail view of other services in that particular state.



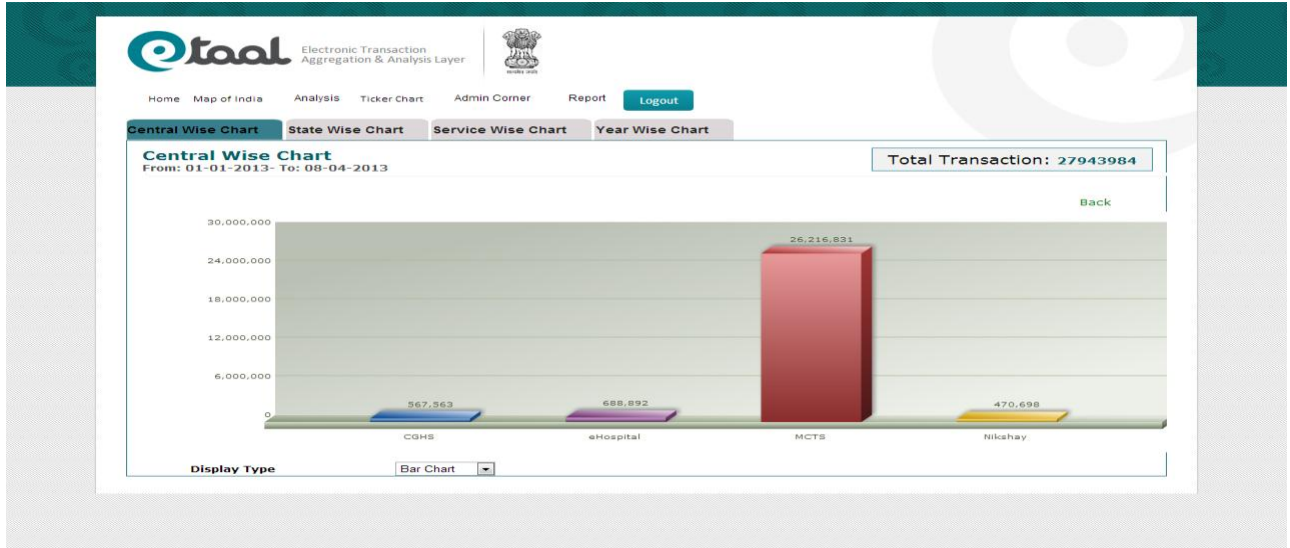
- Each 3D column bar depicts a state, identified by different color.
- Height of each column bar shows total transactions occurred in the state, between two dates entered by the user at earlier stage.
- Same data can be browsed in pie chart and tabular data, by selecting Display Type in the drop-down list provided below the chart.

4.6 Central Wise Chart: Further in Central Wise Chart of services, where transaction data is provided centrally. Each service can be clicked to further drill-down for details.



- Each 3D column bar depicts a Service, identified by different color.
- Height of each column bar shows total transactions occurred in the Service, between two dates entered by the user at earlier stage.
- Same data can be browsed in pie chart and tabular data, by selecting Display Type in the drop-down list provided below the chart.
- Each service can be clicked to further drill-down for details.

4.7 Drilled-down Central Wise Chart: Central Wise Chart of services can be drilled-down by clicking on service name. Following is drilled-down chart of Health services.

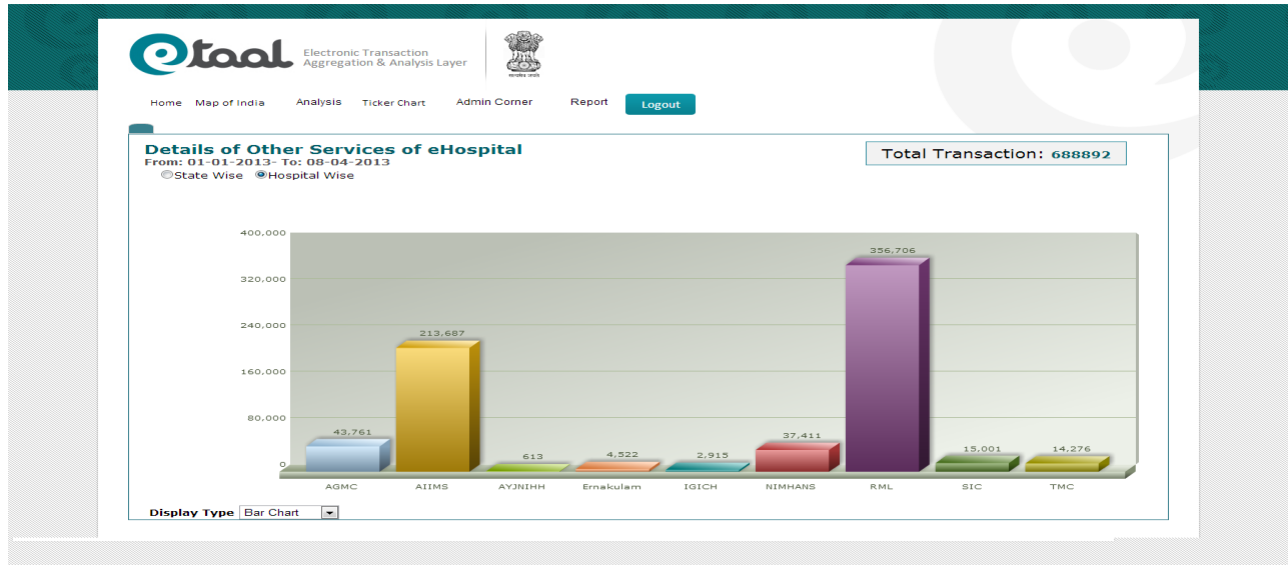


- Each 3D column bar depicts a Service, identified by different color.
- Height of each column bar shows total transactions occurred in the Service, between two dates entered by the user at earlier stage.
- Same data can be browsed in pie chart and tabular data, by selecting Display Type in the drop-down list provided below the chart

State wise e-Transaction count of eHospital project

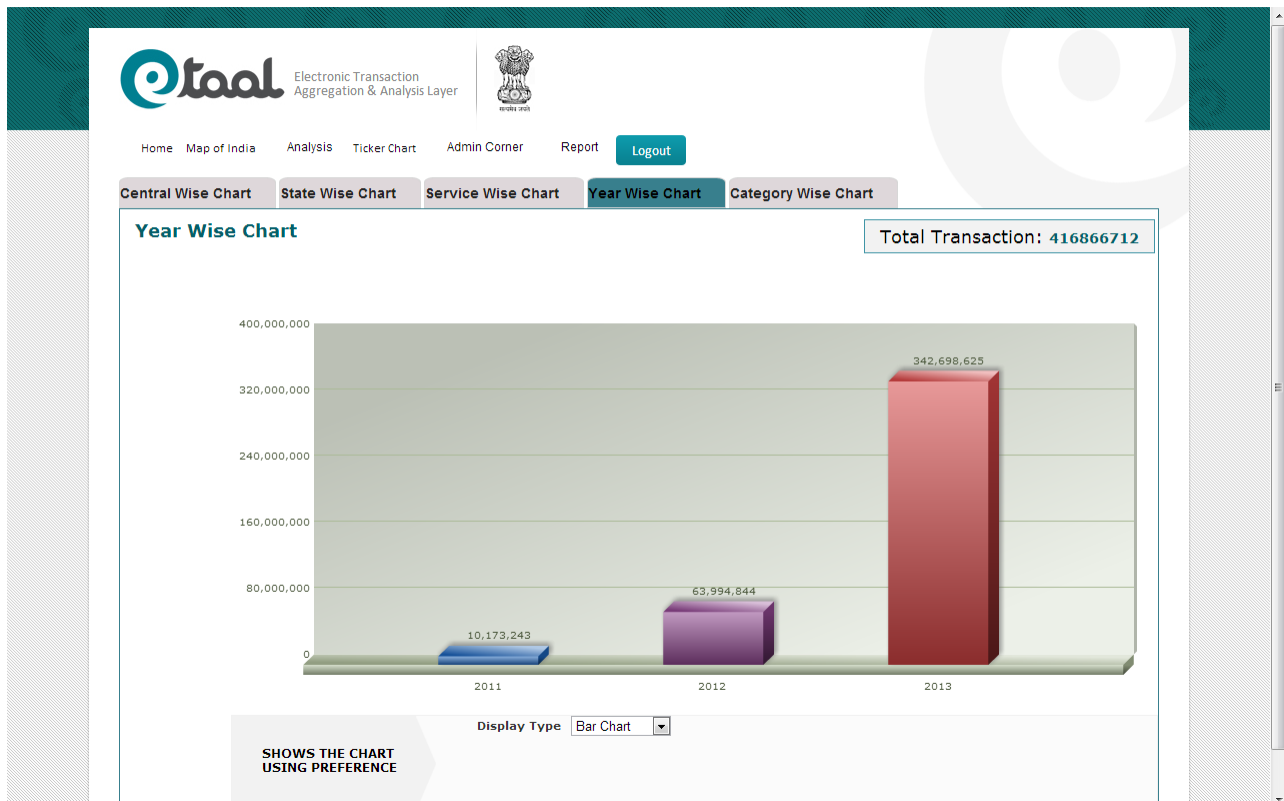


Hospital wise e-Transaction count of eHospital project



4.8 Year wise Chart

Following screenshot shows admin view of transactions (Year Wise Chart) in Column Chart.

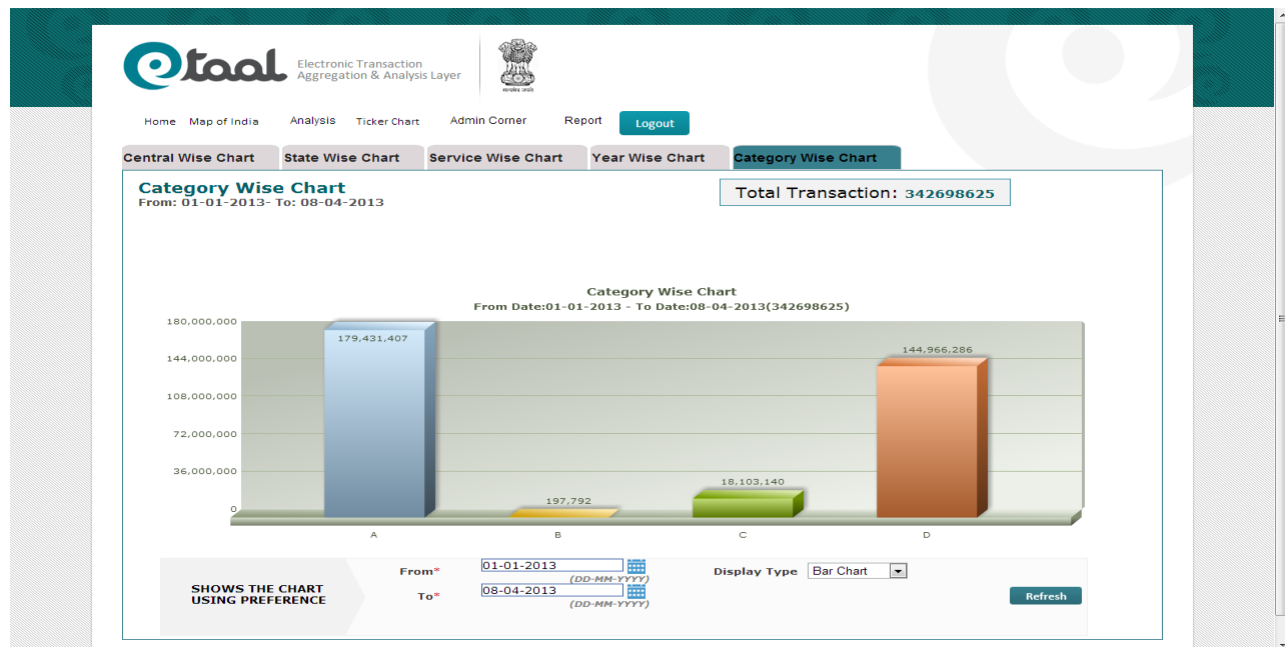


This chart can be further viewed in detailed view by drill down into:

- Months of selected year
- Then into weeks of selected month
- And finally into services in selected week of that month

4.9 Category wise Chart:

Following screenshot shows Category wise view of transactions in Column Chart

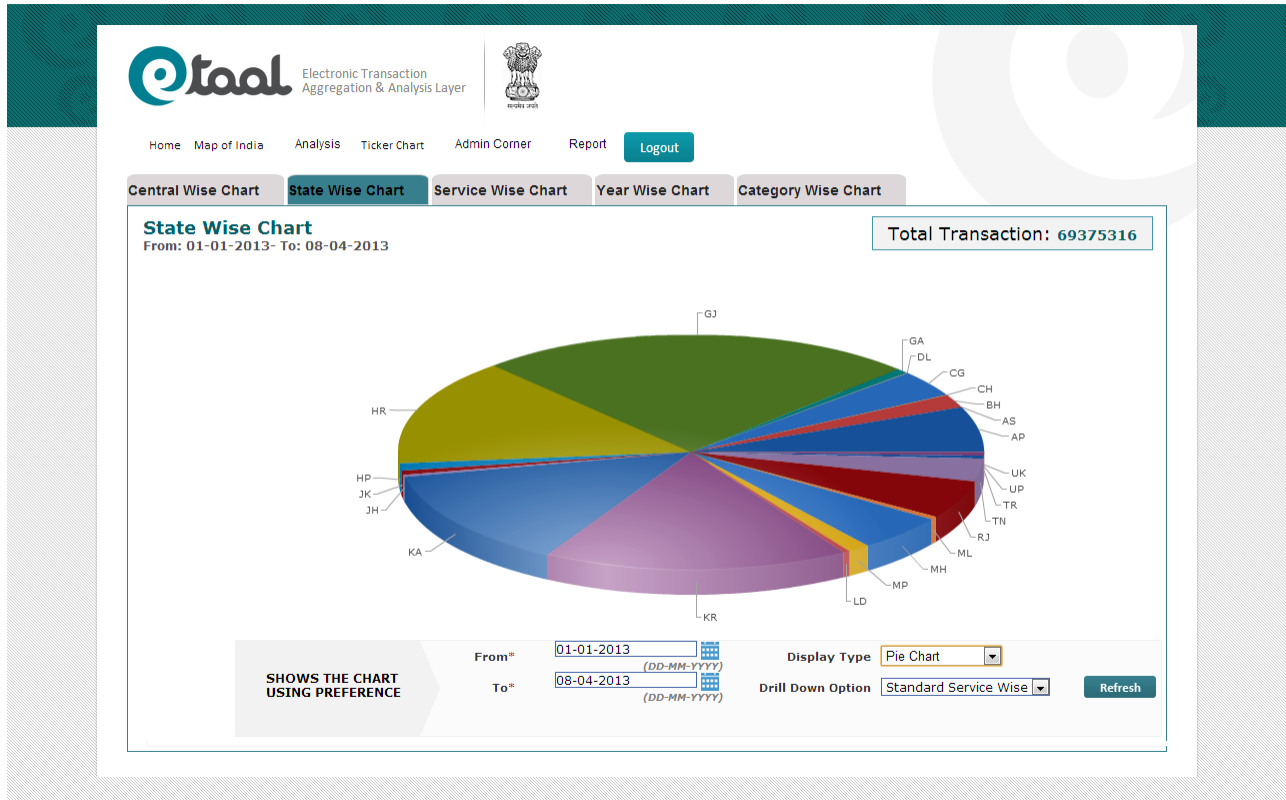


Transactions are categorized on following criteria.

Category			
A	B	C	D
<ul style="list-style-type: none"> ▪ All statutory/ Non-statutory services in G2C, G2B segment ▪ Payment of taxes by citizens (Income Tax/VAT etc) ▪ Payment of subsidies/ Scholarships/ Social welfare transfers (DBT etc.) ▪ Services delivered under PDS/Rural development schemes ▪ Web based e-Gov transactions by citizen 	<ul style="list-style-type: none"> ▪ Utility Bill payments (Water bill, telephone bill, electricity bill, etc.) 	<ul style="list-style-type: none"> ▪ Other B2C Transactions (e.g. ticket bookings, banking transactions, addition of mobile numbers in Do Not Call registry by Telecom service providers etc.) 	<ul style="list-style-type: none"> ▪ Information access from various e-Governance Portals/Websites ▪ Down loading of forms ▪ Enquiry (such as Passport Status, dial.gov.in service, Railway PNR enquiry, result of an examination etc.)

4.10 Other Chart Types

Pie Chart: Following screenshot shows admin view of transactions (State Wise Chart) in Pie chart form.



- Each 3D Pie piece depicts states identified by different color.
- Size of each Pie Piece shows total transactions occurred in that State, during the period entered by user (by default last 7 days)
- Same data can be displayed in other two representation by selecting from the drop-down list provided under the chart.

Following screenshot shows admin view of transactions (state wise) in Tabular form.



Home Map of India Analysis Ticker Chart Admin Corner Report Logout

Central Wise Chart **State Wise Chart** Service Wise Chart Year Wise Chart Category Wise Chart

State Wise Chart Total Transaction: 69375316
From: 01-01-2013- To: 08-04-2013

Sl. No.	State Name	Total Transaction
1	Andhra Pradesh	4356731
2	Assam	6054
3	Bihar	1250593
4	Chandigarh	11919
5	Chattisgarh	2529431
6	Delhi	35051
7	Goa	479307
8	Gujarat	16837953
9	Haryana	10251976
10	Himachal Pradesh	684523
11	Jammu Kashmir	389615
12	Jharkhand	195351
13	Karnataka	9363502
14	Kerala	11681134
15	Lakshadweep	242224
16	Madhya Pradesh	861213
17	Maharashtra	3491736
18	Meghalaya	277820
19	Mizoram	715
20	Odisha	207
21	Puducherry	340
22	Punjab	5199
23	Rajasthan	3644647
24	Tamil Nadu	2175687
25	Tripura	264873
26	Uttar Pradesh	324920
27	Uttarakhand	12595
	Total Transaction	69375316

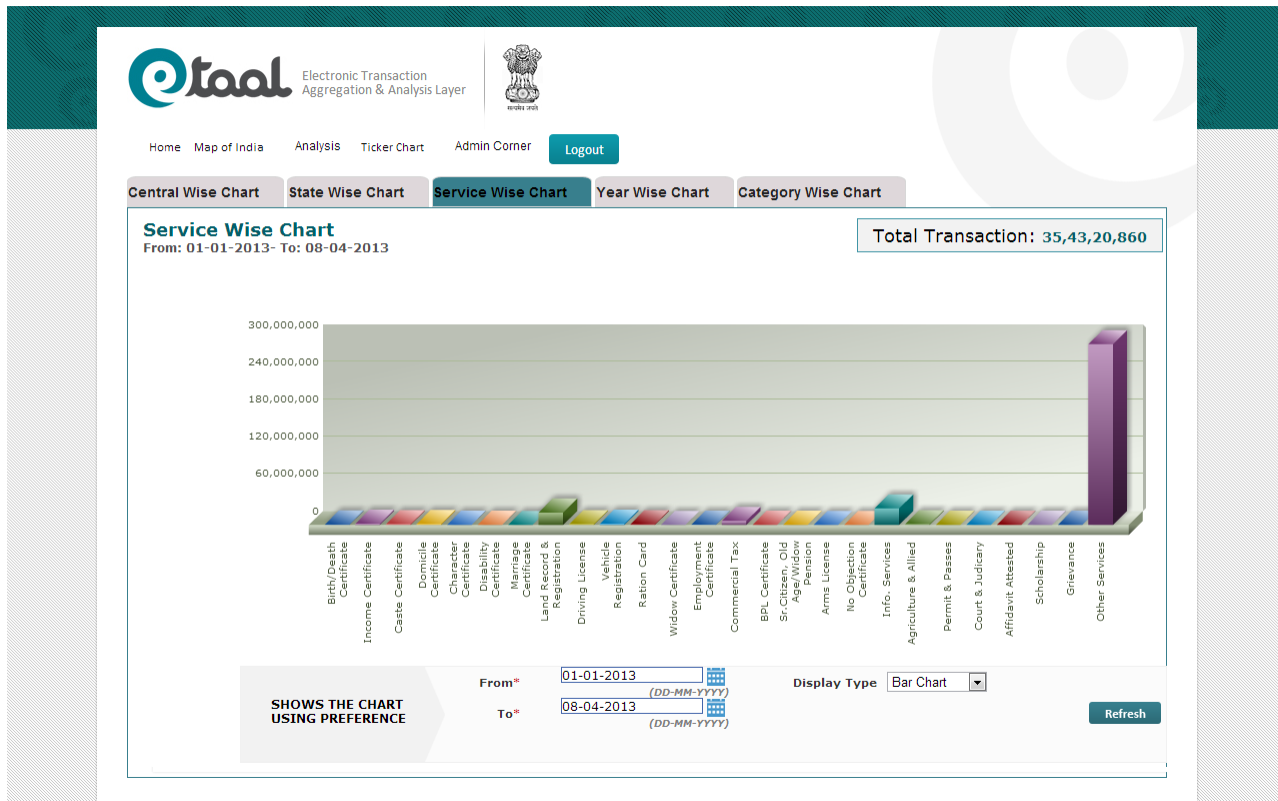
SHOWS THE CHART USING PREFERENCE

From* 01-01-2013 (DD-MM-YYYY)
To* 08-04-2013 (DD-MM-YYYY)

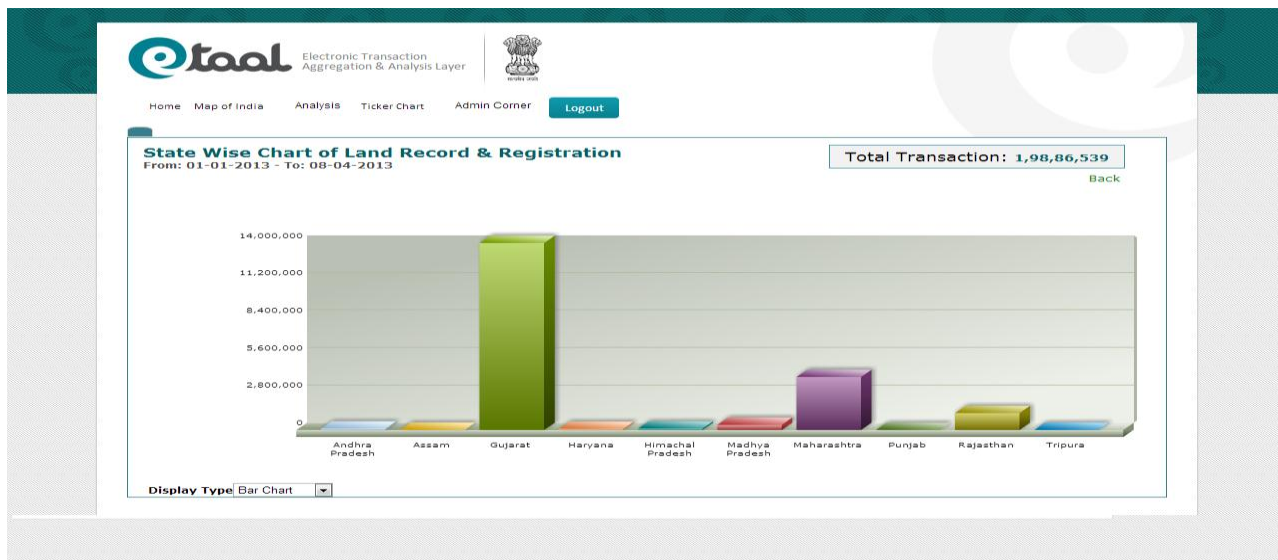
Display Type Tabular Data
Drill Down Option Standard Service Wise Refresh

Above screenshot shows list of states and total transaction number in simple tabular format.

Following screenshot shows admin view of transactions (Service Wise Chart) in Column Chart



Now Service Wise Chart can be further drilled down to show data according to Certificates



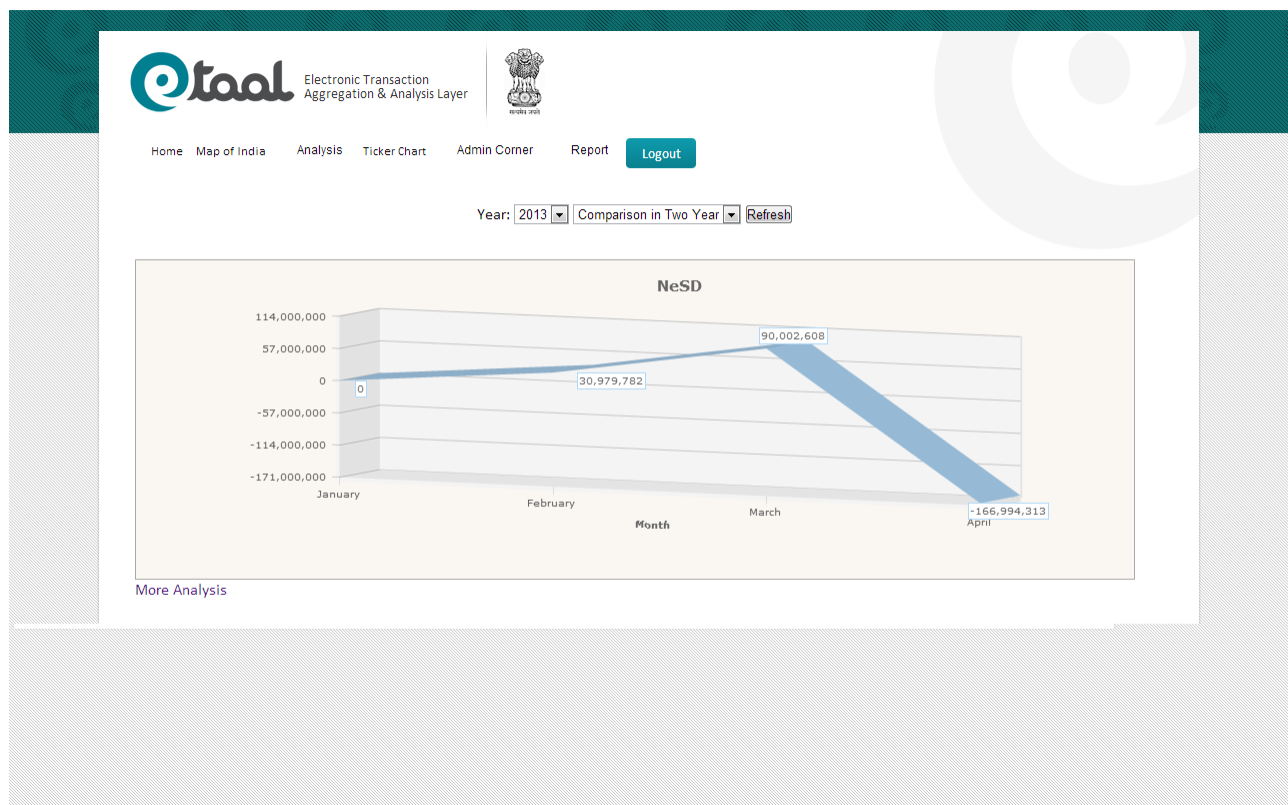
Above snapshot shows that Gujarat and Tamil Nadu have Domicile Certificate entry in that time period.

Chapter 5: Analysis in eTaal

5.1 Introduction: Graphical analysis can be done on the historical data available in database. Few analyses are given in next section.

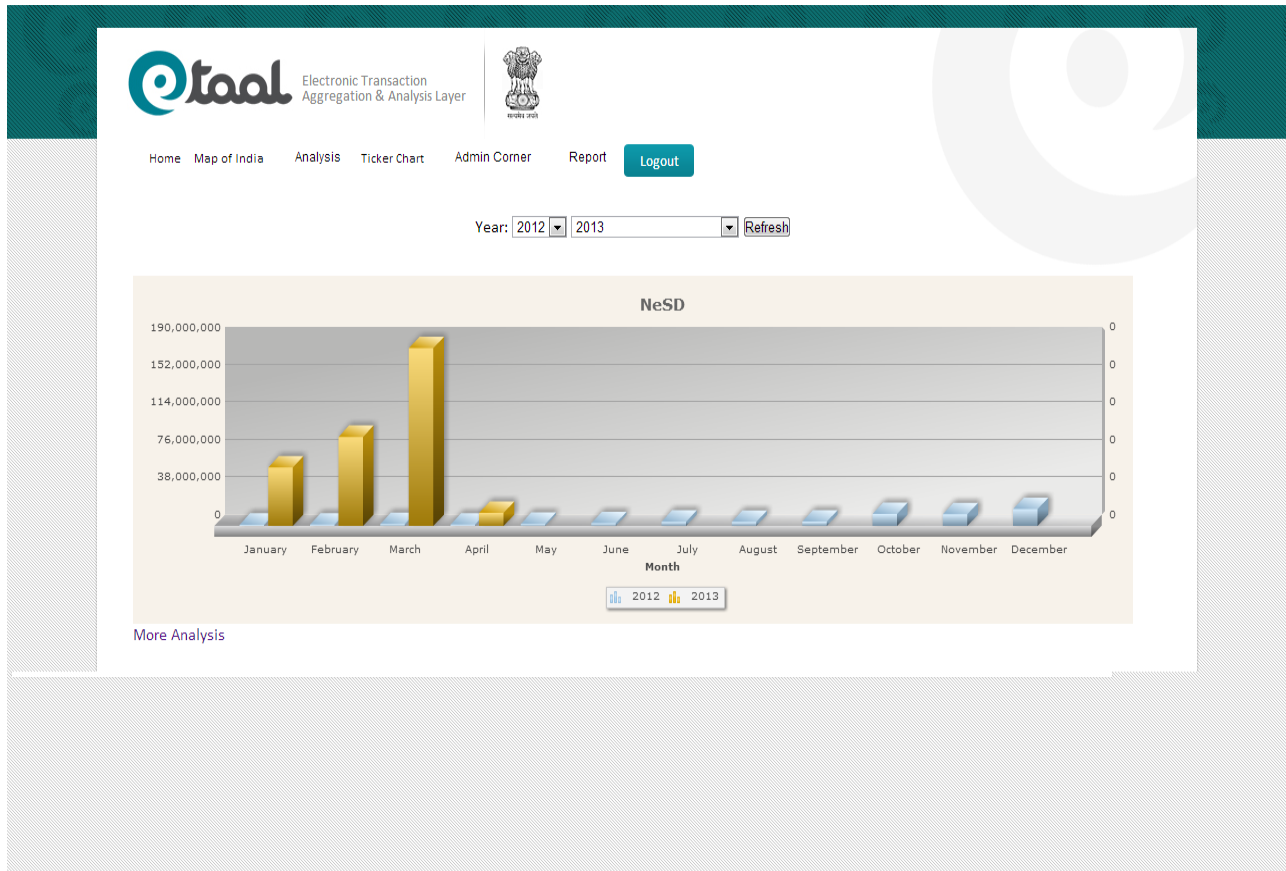
5.2 Comparative Analysis: Increase in services since preceding month:

- (i) Progress of the current year is shown automatically.



Graph shows monthly transactions difference between two years. This graph shows automatically by comparing current and previous year transactions.

- (ii) To see progress comparison between two different years (month wise), select required year in both dropdown lists.

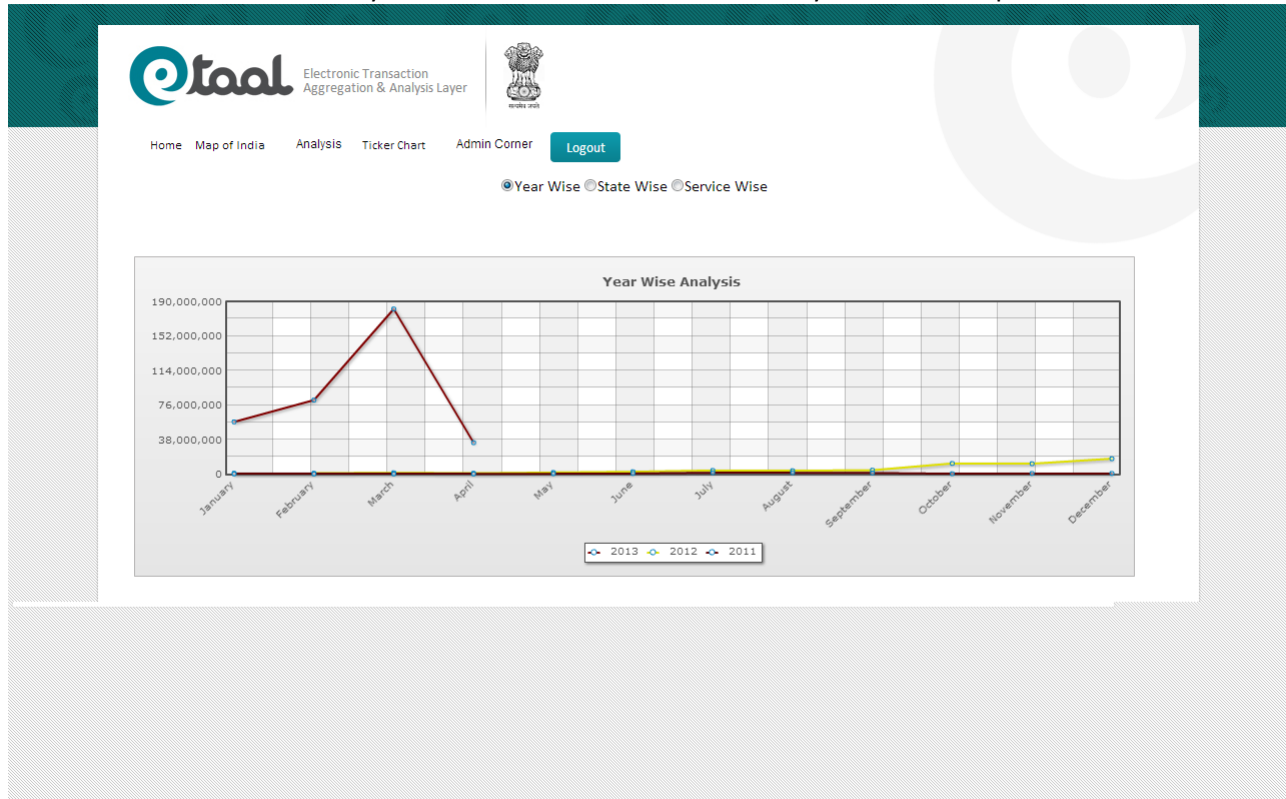


This graph shows advanced view of comparison, in which graph shows month wise progress done in a selected year. User can select desired year from the dropdown list in which comparison has to be done.

Where in graph color depicts a year (Example: In the above graph 2012 year is shown in blue color and 2013 year is shown in yellow color). This graph is very useful in comparison analyses (especially when comparison is done in years).

5.3 Line Chart Analysis: This page is provided with three radio buttons which give three different analysis options, this analysis uses line chart:

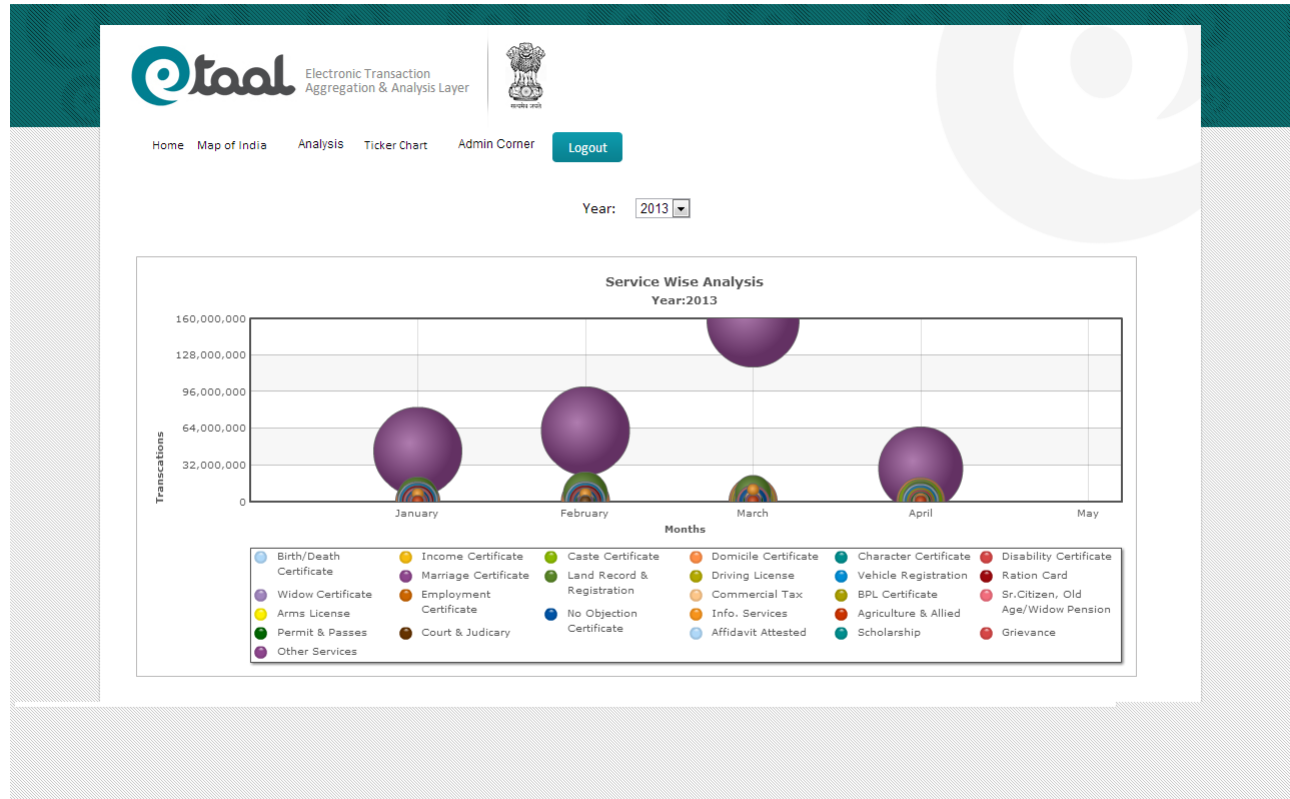
- Year Wise analysis: This graph shows lines each represents a year and monthly progress is shown.
- State Wise Analysis: This graph shows lines each represents a state and monthly progress of state with selected year is shown. Year can be selected by user from dropdown list.
- Service wise analysis: This graph shows lines each represents a service and monthly progress of service with selected year is shown. Year can be selected by user from dropdown list.



Above graph is an example of year-wise analysis of the year 2013.

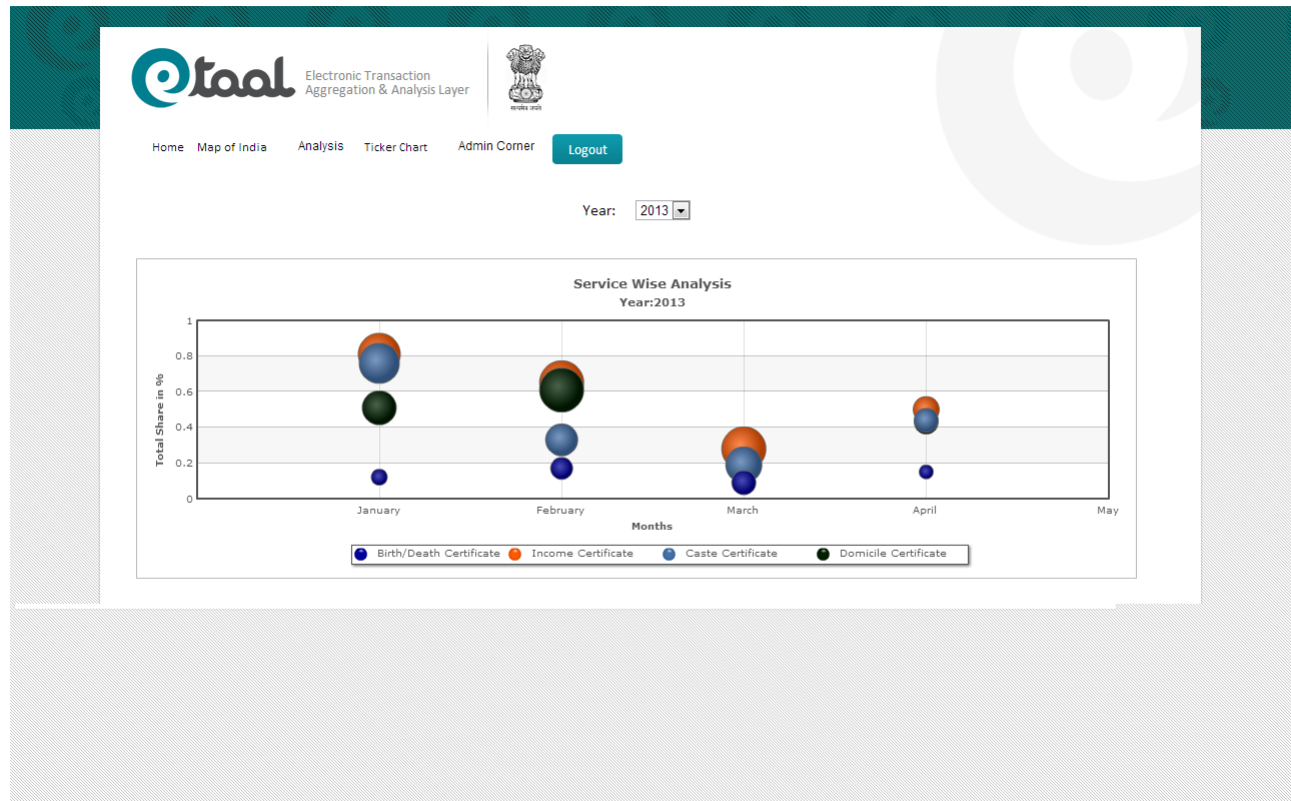
eTaal is also capable of showing three dimensional data in a single chart. eTaal uses bubble chart to represents 3D data. (Represented by X-Axis position, Y-Axis position and Size of Bubble)

5.4 Analysis of Services: To see month, number of transactions, and number of services in a particular Standard Service in eTaal.



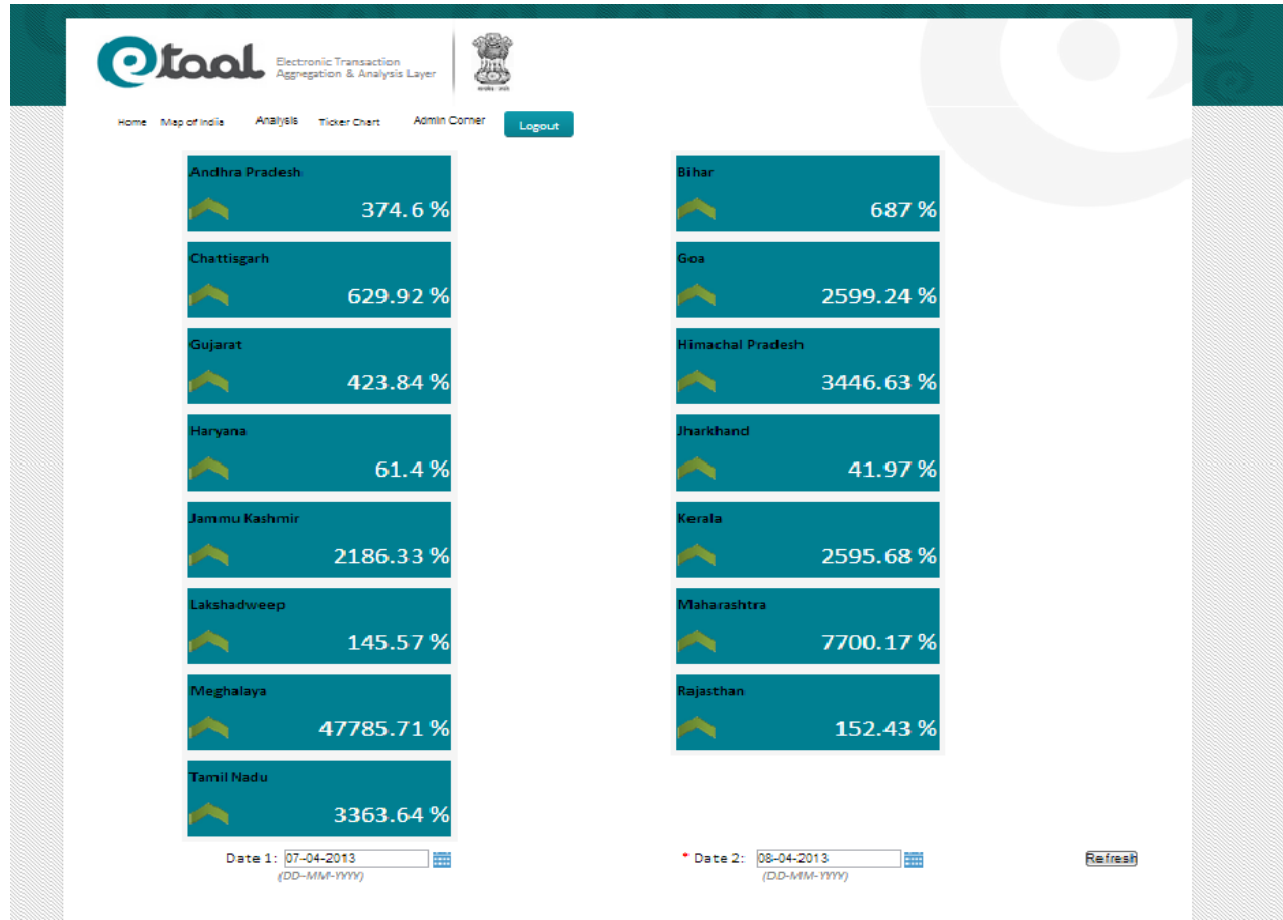
Above chart shows all Standard services available in eTaal which are represented by different color, each bubble shows transaction count on Y axis and size of bubble represents number of states in that standard service. Each Standard service bubble is created for every month. User can select desired year from drop down list provided.

5.5 % Share of Services: To see number of standard services with percent of share in the month and number of states in it.



Above chart shows all Standard services (Except Other services) available in eTaal which are represented by different color, each bubble shows transaction share (in percentage) on Y axis and size of bubble represents number of states in that standard service. Each Standard service bubble is created for every month. User can select desired year from drop down list provided.

5.6 Progress Monitoring: To see Progress of each state on basis of two dates. This page shows increase or decrease in transaction of each state in the form of tiles.

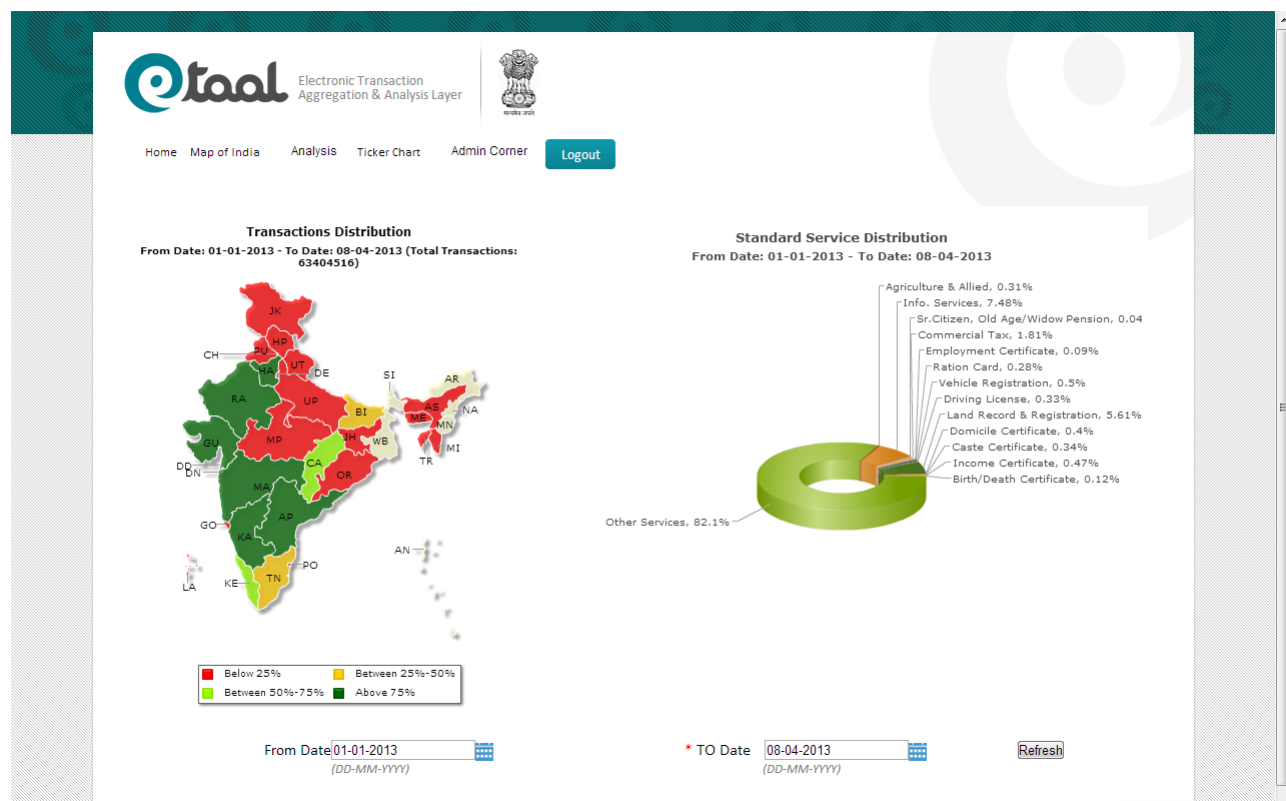


Each tile gives information of a state in which percentage shows the increment or decrement in transactions number of two different days entered by user. Default setting shows status of two previous days.

Chapter 6: Map Chart

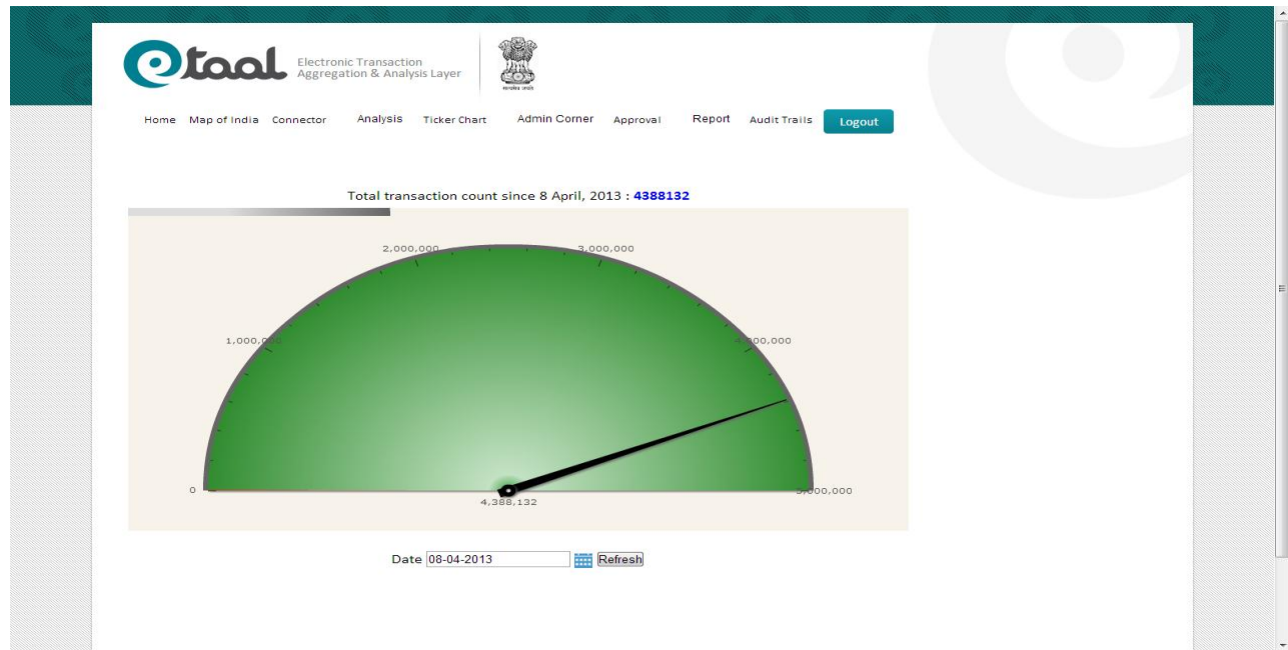
Map Chart:

This special chart shows very useful information by showing map of India with all states differ by color (using color scale) depending on transaction density (in given period of days). The states are generated with button so to get detailed information of that state, by showing Standard Service distribution across the state.



Chapter 7: Gauges Used

Ticker Chart: To see total number of transactions of a particular day occurred in a country can be seeing on special gauge called ticker gauge.



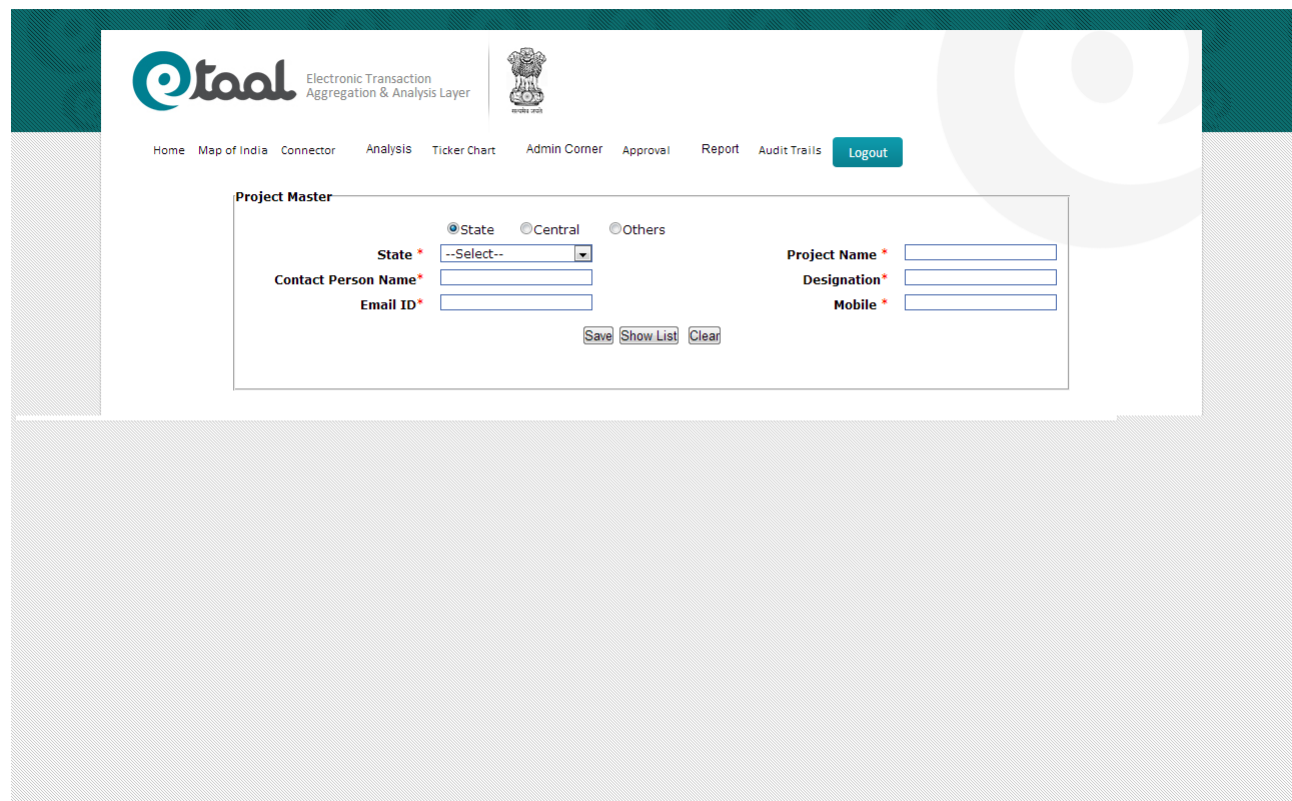
Ticker gauge

Chapter 8: Administrator's Corner

Administrator's corner is reserved for administrator for approving the Project creation, Service creation and 'Self Registration of web service' by owner of the project.

8.1 Project Creation:

Creation of project is initiated by the owner of the project. He needs to specify the Project name along with the person who has requested for the creation of it. Screenshot of the project creation page is shown below:



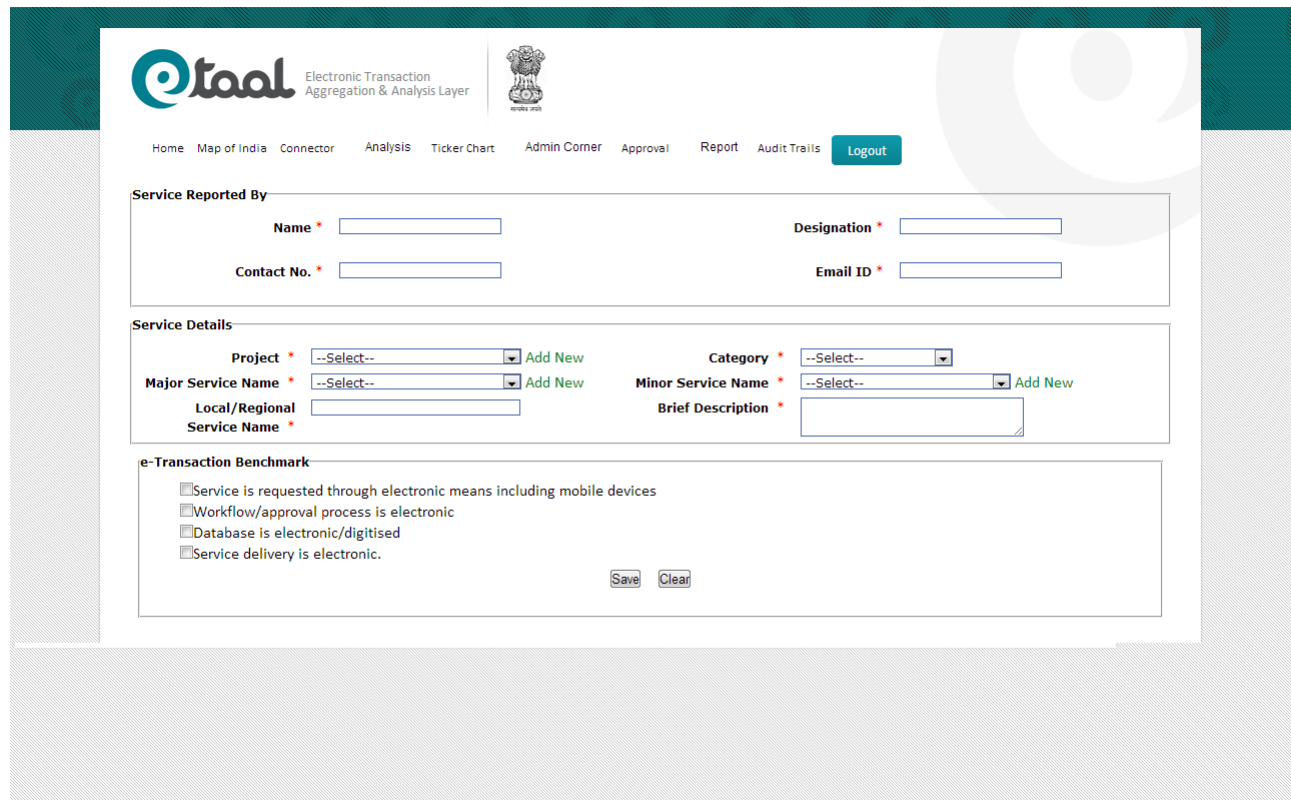
The screenshot shows the 'Project Master' form in the 'Admin Corner' of the eTool application. The form is titled 'Project Master' and includes the following elements:

- Navigation menu: Home, Map of India, Connector, Analysis, Ticker Chart, **Admin Corner**, Approval, Report, Audit Trails, Logout
- Radio buttons: State, Central, Others
- Form fields:
 - State * (Dropdown menu with "--Select--")
 - Contact Person Name * (Text input)
 - Email ID * (Text input)
 - Project Name * (Text input)
 - Designation * (Text input)
 - Mobile * (Text input)
- Buttons: Save, Show List, Clear

Once complete detail of the person along with the Project name are entered, it can be saved by clicking the Save Button. Complete list of the project can be viewed by clicking 'Show List' Button. Clear Button is used to clear the details already entered in the current screen. The Approve Button is used to approve the list and save it permanently in the database.

8.2 Service Creation:

Creation of service is initiated by the owner of the project. He needs to specify the Service name along with the person who has requested for the creation of it. Screenshot of the service creation page is shown below:



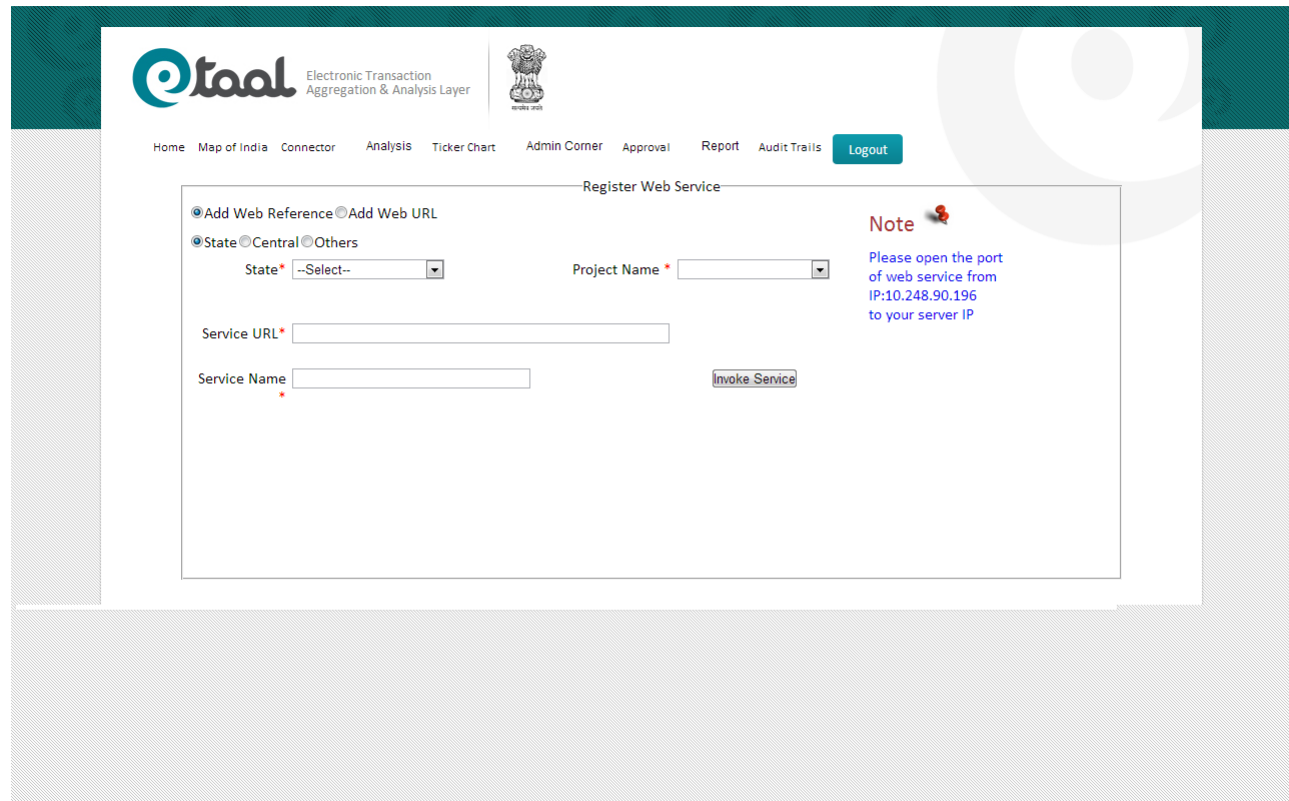
Service creation consists of three sub-sections:

- i) 'Service Reported By' Section: In this section, detail of the person who is reporting the service is entered. The name, designation, contact no. and email id is captured here.
- ii) 'Service Details' Section: In this section, details of services are entered in following format:
 - a. Select Major Service (Standard Service), Minor Service (Sub Standard Service), and Category (A, B, C or D).
 - b. Enter local name of service to be added.
 - c. And Brief description of the service.
- iii) E-Transaction Benchmark: At least of the benchmark is required to be fulfilled by the e-Service to participate in eTaol which are as follows:
 - a. Service is requested through electronic means including mobile devices
 - b. Workflow/approval process is electric

- c. Database is electronic/digitized
- d. Service delivery is electronic

8.3 Self Register Web Service:

Web service can be registered by owner of the project. He needs to register the Web Service along with the details. This module is smart enough to identify and verify the correctness of the input parameter and output parameter.

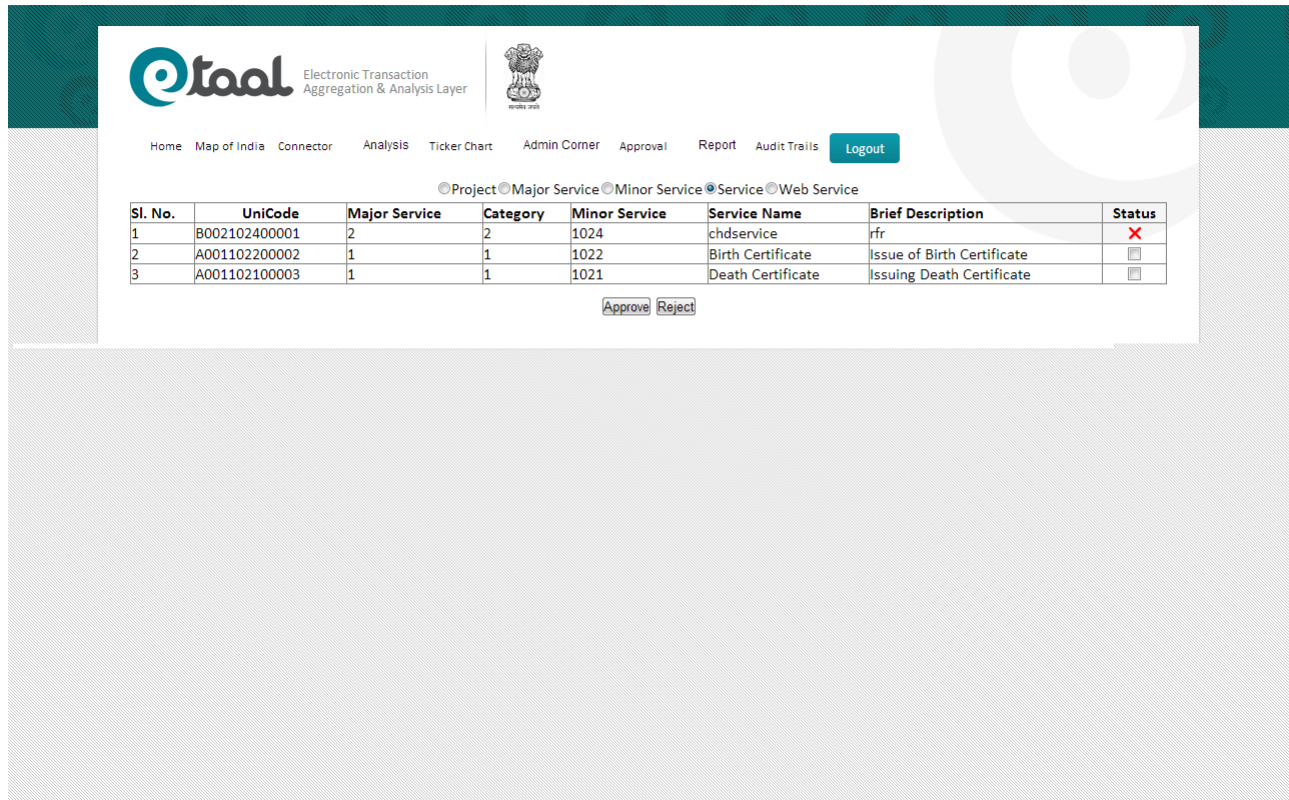


Data exchange in eTaal is based on web service. This page is used to add new web services/URLs in following five steps:

- i) Select type of web service: Whether it is Web Reference Based or Web URL based
- ii) Select State and Project Name
- iii) Enter the complete URL of web service
- iv) Enter 'Web Service Name' (Name of the class used in web service) and press 'Invoke Service'
- v) System will show all the methods available under selected web service
- vi) Select the desired method name, system will show all the input parameters available under that selected web method. At the same time, it shows Return type of the method
- vii) It provides Test Area which accepts the value of the input parameter and tests the output of the service using 'Get Data' button
- viii) Click on 'Save URL' button to save the web service in eTaal application.

8.4. Approval of Project, Major Service, Minor Service and Web Reference

One point approval page for all the four type of entry is provided here. Screenshot is given below:



Sl. No.	UniCode	Major Service	Category	Minor Service	Service Name	Brief Description	Status
1	B002102400001	2	2	1024	chdservice	rfr	X
2	A001102200002	1	1	1022	Birth Certificate	Issue of Birth Certificate	<input type="checkbox"/>
3	A001102100003	1	1	1021	Death Certificate	Issuing Death Certificate	<input type="checkbox"/>

Request for adding new Projects, Major/Minor/Local Services or newly web service can be approved by this page by following steps:

- i) Select the field to be approved.
- ii) Mark the status.
- iii) Click Approve or reject button.

Contact Details:

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