eTaal:
ELECTRONIC TRANSACTION AGGREGATION & ANALYSIS LAYER

To measure the impact of various e-Governance initiatives at national and state levels, NIC in collaboration with Department of Electronics and Information Technology (DeitY) has developed eTaal application. It provides an integrated view of e-Transactions taking place under various e-Governance applications implemented in Government including Mission Mode Projects (MMPs) under National e-Governance Plan (NeGP) on the basis of transaction count shared by them in an automated manner using Web Services technology.

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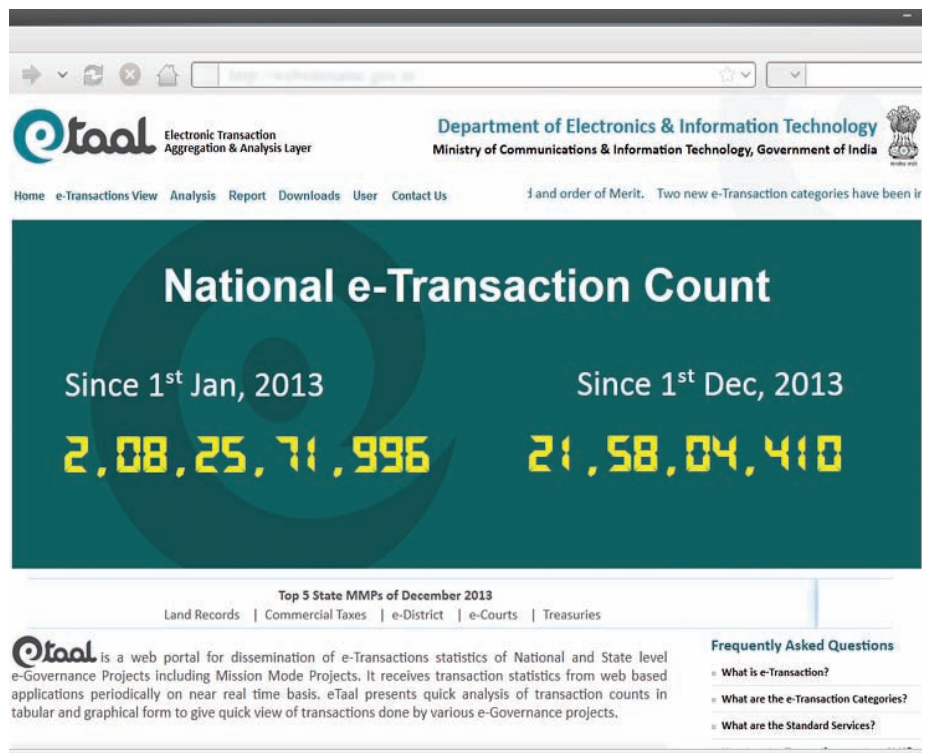sethi@nic.in

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PROJECT IN BRIEF

Numerous e-Governance initiatives are being implemented by the Central and State/UT Governments. While some applications have specific internal performance measurement mechanisms defined through service levels and Key Performance Indicators (KPIs), there exists no standard Government-wide criterion or metric to evaluate the impact of all initiatives. DeitY and National Informatics Centre (NIC) have identified the number of end-to-end electronic transactions as the best indicator for measuring the real-time performance of e-Governance services in terms of service delivery to citizens. A transaction in delivering a public service which uses Information Technology complies with the following four conditions:

a. Service is requested through electronic means including mobile devices;

b. Workflow/approval process is electronic;

c. Database is electronic/digitized;

d. Service delivery is electronic.

DeitY and NIC have developed eTaal, an electronic dashboard providing a real-time aggregated view of e-Services delivered at different levels of governments- Central, State, District and sub-District (Tehsil/Block) level. eTaal automatically pulls the e-Transaction count from applications integrated with it in real-time using Web Services technology.

National e-Transaction Count

Since 1st Jan, 2013 — 2,08,25,71,996

Since 1st Dec, 2013 — 21,58,04,410

Top 5 State MMPs of December 2013
Land Records | Commercial Taxes | e-District | e-Courts | Treasuries

eTaal is a web portal for dissemination of e-Transactions statistics of National and State level e-Governance Projects including Mission Mode Projects. It receives transaction statistics from web based applications periodically on near real time basis. eTaal presents quick analysis of transaction counts in tabular and graphical form to give quick view of transactions done by various e-Governance projects.

Frequently Asked Questions
- What is e-Transaction?
- What are the e-Transaction Categories?
- What are the Standard Services?

The dashboard also facilitates quick analysis of transaction data in tabular and graphical forms enabling users to drill down to lowest level without compromising on privacy, security or integrity of the application software. Users can view consolidated e-Transaction statistics of e-Governance projects across the country and visualize their real-time utilization status.

The project covers all Central Ministries and State/UT governments. As on December 31, 2013, 2035 services from 21 Ministries and all the 35 states/UTs have been integrated with eTaal.

PROJECT OBJECTIVES

eTaal project is based on the principle: "You can MANAGE effectively, what you can MEASURE". The objectives of the project are:

1. Providing quick view of transactions performed electronically (self-service or assisted access mode)

2. Measuring the number of transactions performed by various e-Governance applications on a real time basis.

3. Act as an indicator of scale of services being delivered to the citizens

4. Providing quick analysis of transactions in tabular and graphical form– analysis by the service, by the time-period, by the State/Department, or by the geography, instantaneously

5. Enable the Ministries/Departments implementing e-Gov projects in getting a real-time view of the impact of their projects and take remedial steps, interventions where needed

LIST OF STANDARD SERVICES

A large number of services are being offered by various Ministries/Departments/Organizations at Central and State Governments. However, the name of a particular service may vary across the states. For example, the Record of Right (RoR) is known as Pahani, Khatauni, Patta etc. in different states. For ease of classification, grouping and presentation in a uniform manner, the services have been defined by NIC and DeitY. These are depicted in the table-1.

Sl. No.	Standard Services	Sl. No.	Standard Services
1	Certificates	16	Grievance
2	Licenses and Permits	17	RTI
3	Land Records	18	Information Service
4	Integrated Finance Management Services	19	Property Registration
5	Commercial Tax	20	Health
6	Utility Services and Bill Payment	21	Rural Development
7	Social Welfare and Pension	22	Employment
8	Transport	23	e-Procurement
9	Education	24	Industry and Commerce
10	Public Distribution System	25	Urban Development including Municipality Services
11	Agriculture & Allied	26	Passport and Visa Services
12	Court and Judiciary	27	Financial Inclusion
13	Election	28	Skill Development
14	Police	29	State Specific Services
15	Personnel and Admin	30	Other Services

TABLE 1. List of Standard Services

CHANGE MANAGEMENT

State-wise workshops are being organised across India to sensitize State level Departments and to bring all e-Governance applications on board. During the early stages, a large number of services were compiled as potential candidates for integration with eTaal. However, the services having partial electronic workflow and partial manual processes were not included. This in turn, had a positive impact and encouraged departments to bridge the gaps through effective process re-engineering and evolve existing e-Governance services into end-to-end electronic workflows, thereby leading to efficiency gains and optimal realisation of the potential of Information Technology. eTaal is acting as a motivating factor for different departments to provide more services online and linking them to eTaal which is a step towards outcome-oriented approach.

HIGHLIGHTS OF THE PROJECT

The most important facet of the initiative is that it provides the means to evaluate performance in the highly technical IT/e-Governance field through a completely non-technical metric and places real-time information proactively in the public domain allowing the users to drill down to the lowest denominator. The only restrictions are with respect to individual privacy and cyber-security. Hence, eTaal not only provides information to administrators and citizens, but also provides them the means to objectively evaluate their performance and identify areas for improvement.

Most of the projects designed on the principle of consolidation work on a push mechanism. However, eTaal is distinctive because it pulls the data from clients in real-time. The eTaal Data Pulling Engine collects the data automatically in real time through a synchronization mechanism between the Data Server Connector hosted centrally at NIC's National Data Centre and the Data Client Connectors hosted at the respective servers hosting the connected applications. After a synchronization frequency is set, the Data Pulling Engine automatically draws out the data from respective client server. Thus, eTaal is a

unique offering in the sense that there is no overhead on the users for synchronizing the data in terms of manpower or monetary resource requirements.

TECHNICAL ARCHITECTURE

eTaal is broadly composed of the following three components:

1. Dashboard Server Connector (DSC): Dashboard Server Connector (DSC) runs as a service on Central Server of eTaal with inherent pulling engine mechanism to pull the e-Transaction count from various servers located at state and centre.

2. Dashboard Client Connector (DCC): Dashboard Client Connector (DCC) runs as a service on the servers which are providing the e-Transaction count.

3. eTaal Portal: eTaal Portal is a web portal to give view of dashboard.

IMPACT OF eTAAL ON SOCIETY

eTaal has been in nation-wide operation since 2012 and 2035 e-Services from 21 Central Ministries and all 35 states and UTs have been linked to the dashboard with over 208 crore e-Transactions recorded as on December 31, 2013. This reflects the Government-wide acceptability of the initiative in terms of its utility and importance.

WORKSHOP ORGANIZED ON INTEGRATION OF SERVICES WITH eTAAL, E GOV APP STORE AND MEGHRAJ (CLOUD INFRASTRUCTURE) AT RANCHI, JHARKHAND

A day long workshop was organized at Ranchi on 20th Nov'13 for integration of services with eTaal, eGov app store and Meghraj. The workshop was attended by Shri J Satyanarayana, Secretary DeitY, Shri R S Sharma, Chief Secretary, Jharkhand, Shri Rajiv Gauba, Addl. Secretary, Shri N N Sinha, Principal Secretary, IT Jharkhand, Dr. Shefali Dash, DG NIC and many senior officials from Govt. of Jharkhand, NIC and media.

Shri I P S Sethi, STD, NIC gave a detail presentation on eTaal which gives a national count of e-transactions done in the country. Ms. Renu Budhiraja, Sr. Director, DeitY dealt in depth about the facilities available over Meghraj – the cloud services of the Govt. of India. During the workshop the 'Mobile Apps' developed under e-Nagrik sewa for application status updation and 'Employee Portal' - Govt. of Jharkhand was also inaugurated by the Secretary, DeitY.

RECOGNITION & AWARDS

eTaal has won recognition at National level with Platinum Award and Order of Merit at Skoch Digital Inclusion Awards 2013. It has been appreciated by Minister (Communications & IT), GoI, Secretaries to Govt of India, and the State Governments. Exclusive state-specific views have been developed on demand by the states. It has been observed that introduction of eTaal has led to a significant degree of healthy competition among states and departments in providing more services online. Thus, the application is turning out to be instrumental in promoting outcome-oriented implementation of e-Governance projects in the country.

e-Taal team with the Award

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