Government of Karnataka Commercial Taxes Department

e-SUGAM

Simple Uploading of Goods Arrival and Movement

Transforming checkposts . . .

Implemented as part of "Project Transformation"

Documentation Supported By:

Department of Administrative Reforms and Public Grievances
Ministry of Personnel, Public Grievances and Pension
Government of India



Table of Contents

1	A Background	3
2	Checkposts Situation before initiative	3
3	Key challenges in manual process	5
4	Need for the initiative	6
5	Paradigm shift	7
6	About the initiative	7
7	Key challenges in implementation	15
8	Change in policy / law	15
9	Change in process - Technology intervention	16
10	Capacity Building	20
11	Implementation strategy	22
12	Dedicated team - Governance structure	23
13	Results and Benefits	25
14	Lessons learnt	27
15	Key Reasons for Success	28
16	Awards and recognition	28
17	On Ground survey results	29
18	Sustainability	30
19	Replicability	30
20	The road ahead	32



List of Abbreviations

SI. No.	Abbreviation	Full form	
	CTD	Commercial Taxes Department	
	VAT	Value Added Tax	
	DN	Delivery Note	
	SUGAM	Simple Uploading of Goods Arrival and Movement	
	LVO	Local VAT Office	
	DVO	Divisional VAT Office	
	VSO	VAT Sub Office	
	e-CST	Electronic-Central Sales Tax	
	e-SUVEGA	Electronic -Simple Upload about Vehicle on Entry and Go Across	
	ICT	Information and Communication Technology	
	UPS	Uninterrupted Power Supply	
,	DG Sets	Diesel Generator sets	
	FAQs	Frequently Asked Questions	
	WAN	Wide Area Network	
	GST	Goods and Service Tax	
	FKCCI	Federation of Karnataka Chambers of Commerce and Industry	
	UAT	User Acceptance Testing	
	MPLS	Multi Protocol Label Switching	
	VSAT	Very Small Aperture Terminal	
	STPI	Software Technology Parks of India	



The Nine Tax Acts administered by CTD, Karnataka are:

- Value Added Tax Act, 2003
- Central Sales Tax Act, 1956
- Karnataka Sales Tax Act, 1957
- Karnataka Luxuries Tax Act, 1979
- Karnataka Entry of Goods Act, 1979
- Mysore Betting Tax Act, 1932
- Karnataka Entertainments Tax Act, 1958
- Karnataka Tax on Professions, Trades, Callings and Employments Act, 1976
- Agricultural Income Tax Act, 1957

The key stakeholders of CTD, Karnataka are:



1. A Background

The Commercial Taxes Department (CTD), Karnataka

The Commercial Taxes Department (CTD) is the major source of revenue for the Government of Karnataka, accounting for more than 60% of its own tax revenues. Today, the CTD, Karnataka renders services to more than 4.5 lakhs dealers (Tax Payers) registered under the provisions of the Karnataka Value Added Tax (VAT) Act apart from tax payers under eight other Acts. Karnataka has been implementing VAT since April 2005.

The Commissioner is the administrative head of the Department. The field formations comprise of three categories of functional wings namely Administration, Enforcement (Including checkposts) and Appeal. There are 13 Administrative divisions with 118 VAT offices, 9 Enforcement divisions including one separate division exclusively for static checkposts in and around Bangalore, and 13 Appeal divisions. CTD has a total employee strength of about 7,250 including about 1,000 officers and 6250 officials.

The key stakeholders in the Department are listed along side.

2 Checkposts Situation before initiative

Mandate, objective and the process involved

Key activities performed at Checkposts

Like in other States, Commercial Taxes Department in Karnataka has set up checkposts on commercially important roads to keep a vigil over goods vehicles passing through so as to ensure payment of taxes on corresponding transactions. The functions of checkposts are:

- Capturing data relating to goods movement originating from within the state and also receipt of goods from outside the state.
- Ensuring exit of transit vehicles through the State, to their destinations outside the State with their original consignment.

Intra/Interstate goods movement

The objective - The state aims to capture the information about sales made by a dealer so as to recover tax due on such transactions. Any retail sale has to be preceded by a 'bulk transaction / sale' which would take place via trucks moving in and out of the state. The checkposts are set up to monitor these bulk transaction / sales.





- Manual Process for goods movement
- Dealers visited department offices for obtaining DNs



Mammoth system of baggaging of the received DNs at DVOs



- The selling dealer is referred to as the 'Consignor' and the recipient dealer and is referred to as the 'Consignee'.
- The law mandates that each consignment in any vehicle transporting goods in the State is required to be accompanied with prescribed documents containing details of the transaction.

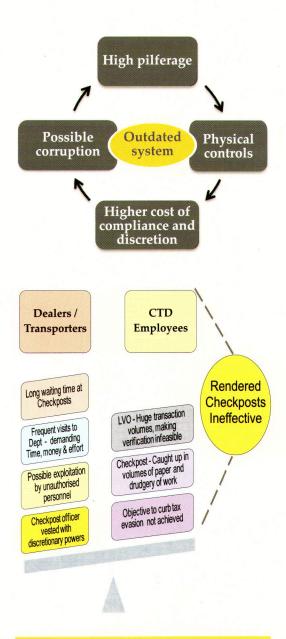
Need and introduction of delivery note

- As the prescribed document on the dealers own stationery could be manipulated or fabricated to suppress information related to actual transaction, Department felt that it would be better if these transactions were reported on Department issued stationery. The utilization of the same could then be monitored and accounted for.
- Hence, the Department decided to issue specialized stationery called "Delivery Notes" (DNs) to dealers of evasion prone commodities.
- These were specialized stationery with known serial numbers and built in safety features as well as appropriate fields to capture the required data. These were introduced to ensure proper accounting of the bulk transactions by the dealers which necessarily were through trucks.

The manual process for goods movement

- Dealer obtained DNs from Department on payment of fixed fees.
- Department issues DNs to dealers in triplicate. The first copy was for surrender at the check-post; the second copy was for carrying along with the truck and the third was for retention by the dealer.
- These DNs submitted by the transporters at check-posts were checked for correctness against goods carried. Original of the two DNs was collected by check-post officer.
- The original was sent back to the jurisdictional VAT Office for sorting and filing in dealer records.
- These paper copies were stored in offices for reference and record, and were used for verification at a later date against the details in the monthly returns filed. This involved storage of huge number of records in CTD offices, as shown.
- A dealer to obtain new set of DNs was also required to file a 'Utilisation statement' of last issued DNs.
- Any discrepancy in the sale/purchase quantum declared via the DNs and the transaction details declared in the monthly return would imply evasion of tax, and would require CTD to initiate action.





Department and checkpost officers exposed to complaints of complacency, which was more due to sheer burden and volumes involved in the manual paper based system.

3. Key challenges in manual process

The high volumes

The functions performed at checkposts were fairly simple, however, the sheer volumes involved in these transactions made it impossible to do needful filing and cross verification. Karnataka has 18 static checkposts and several mobile checkposts. At some of the busy checkposts as many as 3000 trucks reported per day. To aggravate the problem further, each truck would carry as many as 20 different consignments. Thus, a normal checkpost would get about 12,000 to 15,000 documents per day. Hence, for such huge volumes, the task at hand became impossible for the deployed staff. This resulted in long waiting times and huge delays in clearing the goods vehicles at check-post.

73000+ requests per day for delivery notes from Jan - July, 2012.

Dealers' and transporters' perspective

- Dealers were required to visit the Departmental offices to obtain blank DNs. Frequent visits consumed time, cost and effort.
- Faced difficulty in obtaining blank DNs because of pre-occupation of the staff, time involved in manual verification of utilization statements etc.
- Long waiting time for clearance at check-posts for the vehicles.
- The officers were vested with discretionary power while clearing vehicles (scope for corruption).
- Possible exploitation by unauthorised agents for speedy clearance at check-posts.

Huge effort required on part of dealers just to move goods.

The Department's perspective

- Process of issuance of DNs required lot of time and effort as it required collection and cross-verification of utilisation statement of the DNs from dealers.
- Collection of DNs itself was a huge challenge as a few dealers consciously avoided checkposts.
- Even collection of DNs at checkpost did not guarantee that dealer would account the transaction truly and pay tax. It was possible for dealers to make different entries in original, duplicate and triplicate copies, and also use forged/fake DNs.
- At the check-post, there was no tool available for officers to verify the credentials of dealers.

Number of DNs collected per day at check-posts was huge thus, any meaningful verification in terms of sorting and filing of DNs into corresponding dealer files and cross-verification with return filed was virtually impossible for officers.



4. Need for the initiative

Towards better tax administration and increased transparency

The CTD was motivated towards trying a new approach so as to transform the check-posts. In turn, the tax administration could become more efficient and at the same time also be dealer friendly. In other words, the aim was to reduce the hardships of the trading community, but at the same time ensure better tax compliance. The key drivers of new initiative were as follows:

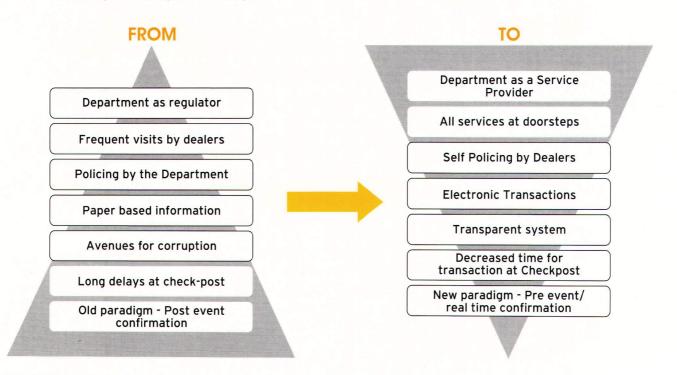
- Providing convenience to dealers and hassle free movement of goods vehicles through check-posts
 - · Easier methods for declaration of goods movement.
 - Reduce time spent at check-posts and detention of vehicles.
 - · Anytime anywhere service availability.

Increasing Department Efficiency

- Provide congenial environment for improving tax compliance by dealers.
- Enable faster processing of data furnished by the dealers.
- Easier identification of attempts of tax evasion.
- * Achieve efficient resource utilization.

Transparency

- Have check on discretionary powers vested with the officers.
- · Removal of need for unauthorized agents.
- Eliminate scope for corruption at checkposts.





5. Paradigm shift

'Self declaration rather than departmental policing'

The sales tax administrations was based on the philosophy that a dealer would first issue an invoice and afterwards duly reflect all the invoices in his/her return and accounts. Thus, the entire tax administration was geared towards making the dealer to issue the invoice first and then ensure that invoice was reflected in his books of accounts, ending up in remittance of tax to the Government.

A new process was thus required which would ensure that a dealer, prior to dispatch of goods via a truck, would inform each transaction's details to the tax department, obtain an acknowledgment number for having thus informed, and then use this acknowledgment number as a valid document accompanying the truck. This would ensure that most of the sales get accounted in the tax returns and there is higher tax compliance.

The above would have been difficult a few years back. However, with widespread use of computers, higher Internet penetration and the Department already implementing several e-Governance initiatives, it was possible.

The idea was that the dealer be made to upload the details of each bulk transaction to a central 'Server' through the Internet, and once uploaded, the 'Server' would automatically generate a document similar to DN with a unique number. This unique number could accompany the goods vehicle as a proof of having uploaded the details of the transaction. Such a system would by itself guarantee that once a document is issued, there could be no avenue of non-accounting by the dealer.

Thus, the paradigm shift was from "Departmental Policing model" - a post transaction capture model at the check-posts towards a "Self declaration model", where in the dealers declare the details of the goods under transportation prior to the transaction and check-post officers only ensure correctness of the details uploaded.

6. About the initiative

e-SUGAM

• Simple Uploading of Goods Arrival and Movement

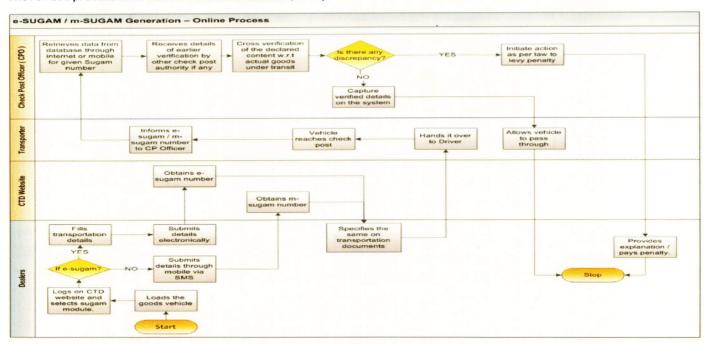
The concept and the system

- Under the concept of e-Delivery Note, the law mandated every dealer to inform the department about a goods movement transaction (bulk) prior to commencement of the goods movement, as against the old practice of dealers moving the goods first and then informing the department later, on a periodic basis.
- The dealer can inform the department by uploading the details in the format available on CTD website.
- On the CTD website, each dealer is required to identify himself / herself through a unique username and password to access the online system, which has been issued to him / her by the Department.
- On upload of details, the system validates and generated an e-Delivery note. The dealer was required to carry three print outs of this electronic delivery note as original, duplicate and triplicate, to the check-post. Original was collected at check-post, seal was affixed on duplicate and handed over to transporter, and the triplicate copy was retained by the dealer.
- Since print outs were difficult to obtain by some dealers, the e-Delivery Note process was reformed to e-SUGAM. Under e-SUGAM, the system on receipt of transaction details from the dealer, validates and generates a unique number as an acknowledgment, called the e-SUGAM number. This number then becomes the passport for the transport vehicle at the check-post.



- The e-SUGAM number is presented by the transporter to the check-post officer (CPO). CPO verifies it against the actual goods under transport vis-a-vis the details displayed by the system and records his agreement in the system. In case of any discrepancy, the officer records his remarks in the system and takes necessary action, as per law. This process ensures that sales are properly accounted for by the dealers and there is higher tax compliance.
- The enforcement officers are also no longer required to carry voluminous documents for cross verification to the dealers'
 premises. Rather, they can obtain dealer wise information on the system and carry printout of only the doubtful transactions
 and cross verify the same.
- Verification of e-SUGAM The check-post or mobile check-post officer while verifying the e-SUGAM from the computer system can view the critical data of a dealer who has generated the SUGAM and also the other dealer who receives the goods (provided the receiver is a dealer registered in Karnataka) on the same screen. The registration details like date of registration, status, commodity dealt in, place of business etc. details of turnover declared for the last six months, number of SUGAM obtained, turnover involved in SUGAM, and comparison of turnovers as declared in the return vis-a-vis as available in the SUGAMs obtained etc, are instantly available. With this information and the MIS tool in hand, the check-post officer can verify the credentials of the dealer. In case of any discrepancy he / she can initiate appropriate action, either on his own or through officers in the Enforcement / Audit wings. This verification tool has enabled the Department to prevent the evasion of tax by the unscrupulous dealers who try to transport the goods without declaring the corresponding turnover in their tax return.
- Methods of SUGAM number generation The SUGAM number can be obtained by the dealer either through the online web based system or through an SMS using the dealers registered mobile number.
- Cancellation of SUGAM number The system also provisioned for a dealer to be able to cancel a generated SUGAM number, in case it had an error or was not required due to any reason.

The revised process after the e-SUGAM introduction, is as presented below:





Use of e-Sugam in reporting, analysis and dashboards

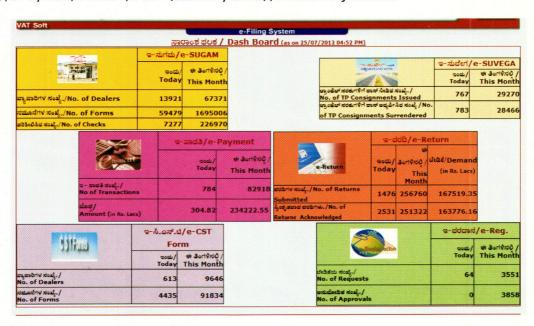
Post automation of goods movement process (inward and outward); the information is captured dealer-wise in an electronic format. This has enabled the Department to generate a series of statistical and analytical reports on an instantaneous basis. Further, these reports have the option of drill down or analysis across several parameters such as location, officer, dealer, time period etc., these reports help the Department to monitor for tax compliance and evasion. These reports are available for following stakeholders

- Department Senior Management Executive dashboards
- Dealers own transaction summary reports
- Check-post officers SUGAM Verification Reports
- LVO officers Summary and analytical reports
- Enforcement/Audit Officers Summary and analytical reports

Senior management - The dashboard

Instantaneous dashboards are generated electronically for the senior management to enable required action comprising of several parameters, where in SUGAM is one of the inputs. Several such dashboards have been created, as below -

• Live Dashboard for Headquarters capturing Department statistics across the State for e-SUGAM, e-SUVEGA (transit pass issuance), e-Payment, e-Return, e-CST (Statutory forms), e-Dealer Registration.



• LVO wise dashboard This is similar to above dashboard but for a given LVO.

Dealers

Following reports are made available to dealers in their login under the 'Reports' section with regards to SUGAM, for their reference-

1. **e-SUGAM forms issued** - A summary of SUGAM numbers issued and cancelled is available for printing and display to dealers. The dealer can choose a range of dates between which SUGAM details will be retrieved by the system.



2. e-SUGAM Other Party This provides the details of e-SUGAM issued in favour of the login dealer by other parties i.e. he is the "Consignee" or the recipient of goods from other dealers.



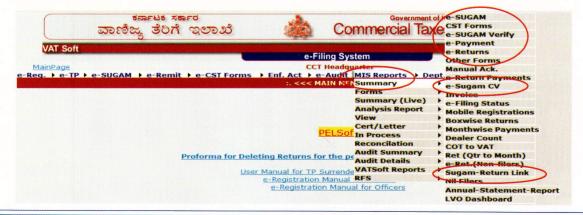
Checkpost officer

e-SUGAM Verification at Checkpost module allows the officer to get the list of officers who have verified the SUGAM against a particular vehicle along with their observations, and also update his observations in the system for the vehicle.



LVO / Audit / Enforcement / Checkpost officers

With regard to e-SUGAM, following key reports are available to LVO / Audit / Enforcement officers for analysis and action - e-SUGAM Summary, e-SUGAM Verify, e- SUGAM CV, e-SUGAM Return link, General Report on SUGAM. These are explained ahead.





DEPARTMENT OF COMMERCIAL TAXES

1. **e-SUGAM Summary -** This report provides a summary of the SUGAM transactions across the State between the selected time period. The report is categorized by Officer, Commodity, Transaction, TIN, TIN and commodity.



2. e-SUGAM - Verify - This report details the number of verifications done at the checkpost, date wise or Officer-wise. The report is used by the Head Office or the Enforcement Wing Head to monitor the working of officers on the field level at the checkposts and also used for monitoring performance of the officers.

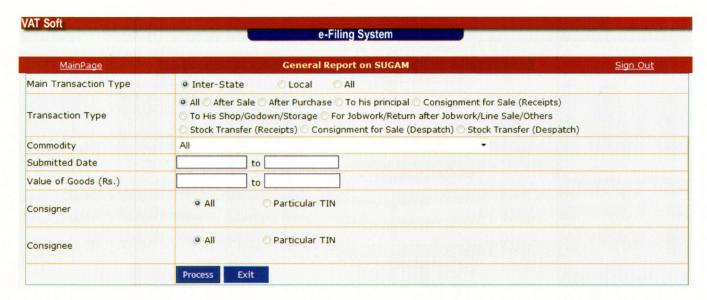


3. e-SUGAM Return Link- This report gives office-wise information of sales value contained in the e-SUGAM with sales value declared in the return, TIN wise. Whereever there is discrepancy i.e. value of goods transacted as per SUGAM is higher than the value declared in the monthly return, the audit / enforcement officer selects it for audit / inspection, and causes investigation for tax evasion of the concerned dealer.



DEPARTMENT OF COMMERCIAL TAXES

4. General Report on e-SUGAM - This report is a State level report which allows for report to be categorized on several parameters, as presented below .-



Analytical Reports for LVO / Audit / Enforcement officers

Following key reports are generated for LVO / Audit / Enforcement officers for the purpose of analysis for tax evasion by the dealers -

1. Purchases SUGAM vs Return

This report gives instantaneous information on the dealers having a variation in the value of purchases declared in their monthly returns vs. the purchases value as deduced from the SUGAM numbers issued against them. Officers then initiate action to recover the evaded tax. This can be obtained for a given month for selected LVO.



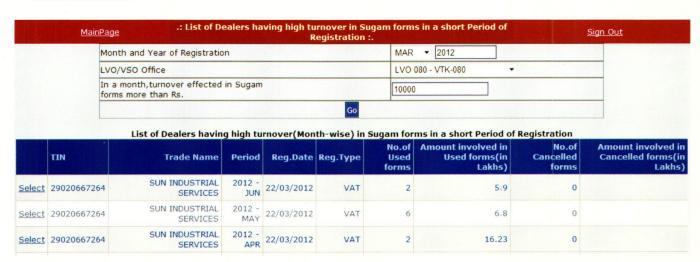
2. Sales SUGAM vs. Return

Similarly, this report gives instantaneous information on dealers having a variation in the value of sales declared in their monthly returns vs. the purchases value as deduced from the SUGAM numbers issued to them. Officers then initiate action to recover the evaded tax. This too can be obtained for a given month for selected LVO.



3. SUGAM by new dealers

This report highlights the dealers who have recently registered and have high value or any given value of goods movement against them. The LVO / audit officers regularly verify their business transactions in detail for any unfiled returns or under declared turnover.



4. VAT Chain in SUGAM

This report is generated on the basis of dealer's TIN and is available to Audit / Enforcement / LVO officers. This report lists for a given period, the consignees to whom a particular dealer has raised e-SUGAM (has sent goods), along with the goods value. The officer then uses this information to check against the electronic records of the consignees for declaration of a corresponding amount of purchases and initiates action in case of gap. Officer gets the complete information about the consignee on click of the link alongside. The analysis is possible for the consignees registered under Karnataka VAT Act only.

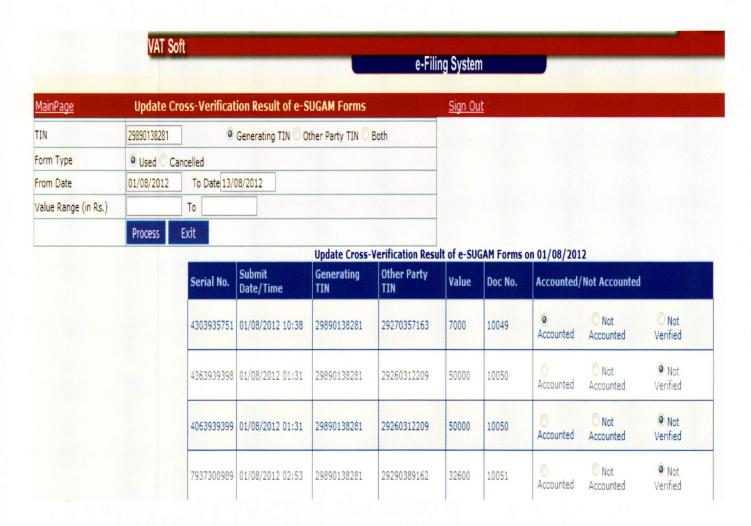




Enforcement/Audit officers

Following key reports are available in to Enforcement and Audit officers - e-SUGAM List, Update CV, e-SUGAM Checkpost Verification and Nil Filers.

- 1. **Nil filers -** This report generates a list of dealers who are downloading e-SUGAM numbers but are reporting nil turnover. Reporting is done LVO wise. This helps the LVO to take necessary action.
- 2. **e-SUGAM List** This report generates the list of SUGAM numbers issued to a particular dealer on entering his TIN. This list is provided for the dealer either as consignee or as a consignor.
- 3. **Update CV (Update Cross-verification result of e- SUGAM forms)** This report is generated on basis of dealer TIN and gives the list of all SUGAM numbers issued in a particular period for a given dealer. The officer then manually verifies and updates the system if each value is accounted for or not by the dealer in his returns.

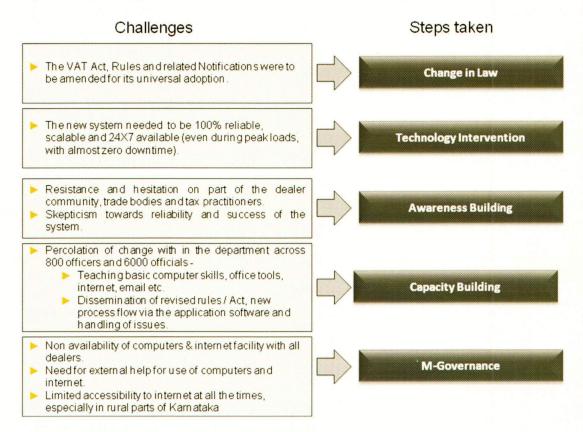


The ease and instant availability of information and analytical reports has helped the department in increasing tax compliance, higher tax revenues and reduction in scope of tax evasion.



7. Key challenges in implementation

The key challenges faced by the department in implementation of e-SUGAM were as given below -



Each of the steps taken by the department is elaborated next.

8. Change in policy / law

Before the Department could implement the technology enabled process and the change in the entire state, the corresponding law was required to be changed. The earlier provision of law required that each goods consignment carried in a vehicle should be accompanied by a DN or an invoice. This provision required amendment to stipulate that before dispatch of goods, a trader shall upload the details of the transaction on a specified website. Further it would be sufficient compliance if he established proof of uploading the details on the website, on being checked.

The earlier corresponding provision of Law read as below:

"Every registered dealer shall keep and maintain a true and correct account of all his purchases, receipts, sales and other disposals."

Hence, the below mentioned provision was inserted in the Act, with effect from 1 April, 2010.

- a. "53(2A) Notwithstanding anything contained in the clause (c) of sub-section (2), the owner or person incharge of the goods vehicle carrying goods of any specified class of goods or any specified class of dealers or as a result of any specified class of transactions as may be notified by the Commissioner.-
 - (a) Shall report at the first check post or barrier situated on the route ordinarily taken from the place in the State, from which the movement of goods commences, to its destination; and



DEPARTMENT OF COMMERCIAL TAXES

- b. Shall produce proof of entering in the website, particulars of the goods carried by the consignor or consignee of the goods as may be specified in the notification, before the check post officer specified in sub-section (2); and
- c. On such production, the check post officer may allow the goods vehicle to pass through."

However, it took time to amend the Act as required. Hence, to begin with, the Department piloted the e-Delivery Note service for a select group of dealers, through an administrative order (under the existing Rules) in Dec'08. The service was rolled out to all dealers in Dec'09. The series of Notifications issued by the Department are as below:

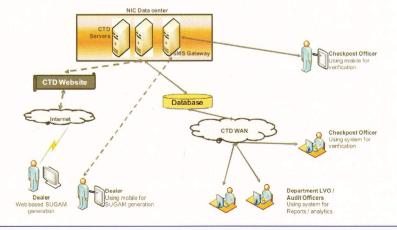
- Dated 1 December, 2008 To announce and explain the procedure under e-Delivery Note and associated guidelines/URLs and pilot projects for the dealers of two offices in Bangalore was commenced.
- Dated 21 March, 2009 The notification was issued to extend the scope of DN implementation to three additional offices in Bangalore.
- Dated 31 December, 2009 e-Delivery Note scope was extended to all LVOs and all dealers in the State.
- Post amendment of Act in April 2010, notification dated 24 May, 2010 The notification was issued to launch e-SUGAM along
 with associated guidelines and URLs, informing all dealers that it was now necessary by law to make use of e-SUGAM. The
 mandate to carry 3 printouts of the electronically generated Delivery Note by the transporters to the check-posts was done
 away with, instead the Unique number e-SUGAM was sufficient.
- The last notification was issued on 23 December, 2011, which superseded all the previous notifications. The same gave an updated list of commodities and the updated minimum transaction value requiring use of e-SUGAM.

9. Change in process - Technology intervention

The Department shifted from a paper based manual process to an electronic mode of service delivery by

- Abolishing of paper based forms for DN
- Using information and communication technology tools
 - To provide an online mechanism to the dealer for data upload and online submission.
 - To generate a unique acknowledgment number for the dealer to record uploading of data.
 - To make this information available to the check-post officers for cross-verification via online and centrally connected database systems.
 - To use electronic data for generation of dealer wise reports to analyse for tax compliance or evasion.

Key points about technology used and its architecture is detailed below:





DEPARTMENT OF COMMERCIAL TAXES

- Architecture Web based architecture is used, consisting of a web layer, a business logic layer and a database layer. It
 primarily revolves around a web based system for the dealers to access, establish their identity on the system with a
 designated username and password, and request SUGAM number by providing required details.
- **Process** The client request once raised reaches the central servers housed at NIC Data Center in Bangalore and an appropriate response is sent back to the client.
- Connectivity For the Department, the connectivity is established through intra department Wide Area Network (CTD WAN). CTDWAN is established for networking all the 160+ VAT offices including 18 check-posts. It connects more than 2000 computers back to the central server. The CTDWAN ensures all time connectivity through two means. The primary connectivity is provided through optical fiber (MPLS based leased line with bandwidth of 16 Mbps at the Headquarters to 526 kbps as a last mile connection in remote check-posts / VAT offices) and the secondary connectivity is provided via VSAT.
- Access For the department and checkpost officers, the SUGAM related dealer data and various reports can be accessed via
 the Employee portal, which is accessible through their desktops, which are in turn connected to the central servers via
 CTDWAN.
- **Disaster Recovery (DR) Planning** The DR site is established at the NIC Data Centre located outside the State. The primary site and the DR site are inter-connected and are in continuous synchronisation.
- Application Software The application software has been developed by an in-house team of NIC. The database used is Oracle, the web technology being ASP, .NET, and C# is used for the software application.
- Redundancy Three parallel websites are also provided to the dealers for download of SUGAM number as an alternate during peak loads so as not to delay their movement of goods due to the compliance required.

IT infrastructure provisioned

The Department offices and checkposts were enabled with IT infrastructure and connectivity so as to shift towards electronic service delivery from a paper based manual system. Details are as mentioned below

- Static Checkposts The static checkposts were provisioned with following -
 - Thin Clients Number of Counters + 2, Printer 1
 - Network connectivity to the central server Through VSAT connectivity provisioned by STPI. Later on, this was replaced by leased line (MPLS) connectivity. Further, one data card was provided to each check-post officer.
- Mobile Check-post officers were provided with one laptop and one data card each.
- **Department officers** All officers and staff were provided with the following Desktops, Printers, LAN connectivity through MPLS based leased line. Data cards were also issued to all officers.

Change Management Awareness building

Challenge - The e-SUGAM initiative would not have been successful without the acceptance by the target audience of four Lakh+ dealers and the tax practitioners. Convincing the four lakh dealers and tax practitioners about adoption of e-SUGAM was the key challenge, overcoming their hesitation and resistance. Following key measures were adopted

- Involvement of the dealer community in the initiative
- Environment building and support to dealers
- Seminars / Workshops and
- Advertisements



DEPARTMENT OF COMMERCIAL TAXES

Their involvement - To gain their acceptance, representatives of the trade bodies were involved in design of the system. Each major step in the system was vetted by the trade bodies and their feedback was incorporated.

Environment Building Support to dealers

- Administrative instructions were issued by the Commissioner that any truck had e-SUGAM, it should not be detained or penalised for technical errors.
- The dealers were advised periodically about the features of e-SUGAM and how to prevent misuse e-SUGAM.
- USP HIGHLIGHTED TO DEALERS The project was presented to the dealers as a WIN-WIN situation, with them no longer needing to visit CTD offices and prospect of faster clearance at check-posts.

Awareness Building - Seminars and Workshops

The Department carried out multiple awareness building and familiarization sessions for dealers and tax practitioners by way of WORKSHOPS. These were organised all over the State and were well attended. Dealers were advised that they could approach any office of the department to learn or clarify any aspect of e-SUGAM. The intent of the workshops was three-fold

- a) to communicate and train dealers / tax practitioners on change,
- b) to resolve any issues with respect to the initiative, and
- c) to receive any suggestions/feedback.

Success was seen when trade bodies themselves started organising training programmes to train dealers for adoption of e-SUGAM.

Unique selling point for dealers

Electronic C-forms already been introduced, trading community was happy with Department's move towards e-governance and service quality.

Dealers no longer needed to visit tax offices to obtain 'Delivery Notes' and the trucks would get faster clearance at checkposts

Anytime anywhere accessibility of the service - reduction in cost, time and effort spent on the SUGAM generation.

End of Delay, harassment and . . .

One of the Awareness Seminars conducted by the Department



Meeting of CTD officers and FKCCI members





DEPARTMENT OF COMMERCIAL TAXES

Awareness building Advertisements

- Print media was extensively used to spread the benefits of the initiative. Awareness was built through advertisements in leading national and local newspapers, in the Official website, and by distribution of pamphlets and other manuals.
- Detailed advertisements were prepared highlighting the new service, its objective, relevant URLs, helpdesk details. They were launched in both English and the regional language Kannada. These were found to be effective. One of the paper ads is presented below.
- One-on-One, word of mouth was another effective approach wherein employees were the instruments of awareness and dealers registered under a VAT office were covered through the same.
- User manuals prepared were also helpful and cleared the doubts of both dealers and officers in terms of the new process.
 Effective communication was possible through examples in the user manuals. User manual can be downloaded for reference at
- http://sugam.kar.nic.in/web_common/VATDownload/esugamusermanualV3.pdf and http://sugam.kar.nic.in/web_common/VATDownload/m-Sugam User Manual.pdf
- The Department published these advertisements more than six times to ensure ample communication to end users.



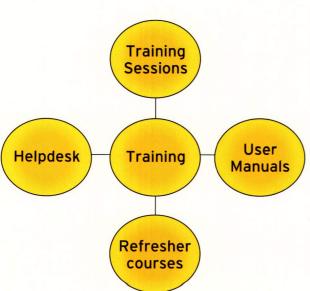


Hands on training session



Class room based training on e-SUGAM





10. Capacity Building

Training to officers and staff

- Challenge The key challenge was to train about 800 officers and about 6000 officials of the Department and equip them to handle the change effectively.
- Solution A Training Needs Assessment exercise was conducted at the Administrative Training Institute, Mysore.
- As a result, it was planned to impart week long training on the e-SUGAM initiative and basic Computer skills to all officers and officials.
- Venue Administrative Training Institute, Mysore was used for Officers' training and District Training Institutes were used for officials' trainings.
- Trainers The trainers were a mix of experts from outside and from within the department.
- Method A class room based training methodology was adopted for training and each session consisted of both theory and practical sessions with Hands on training to officers / officials.
- Content The training focused on educating the employee on e-SUGAM, application software, and basic computer skills. In the e-SUGAM training, following was explained about the initiative - why / what / how / change / impact, need for change, new system and processes, change in Act.
- Train the trainer, approach was also used for training. Nodal
 officers of the rank of Deputy Commissioners of Commercial
 Taxes were nominated in each Division. These were officers
 who had better knowledge of the IT initiative. They acted as
 mentors for their colleagues. These officers, who were trained
 by Head Office, then imparted the training to staff in their
 LVOs/VSOs.
- Reference material Various user manuals from an officers view point were also prepared on the module, for later reference.
- Refresher courses are carried out periodically for all employees to communicate about enhancements or clarify issues.



m-Governance Mobile based Sugam

- **Need** For the benefit of the dealers who did not have easy access to computers and the internet, the Department introduced an alternate method for obtaining SUGAM number via mobiles. Mobiles were chosen since they are easily available with every dealer, who are also well versed in mobile usage.
- Process This mobile based system requires the dealers to request for SUGAM number from the department by sending six critical parameters, through an SMS to a designated mobile number. Once the SMS is received, the system validates the details received and returns a SUGAM number along with date of generation via an SMS. The dealer can then share this number with the transporter, who can show it at the State Check posts. The only pre-requisite for this service is the prior registration of the dealer mobile number in department's server records.
- *Format The SMS format and its description is as follows
 KSR'TYPE''CAT''OTHER_PARTY''INV_NO' 'INV_VAL''COMM_CODE''OTHER_PARTY_LOCATION

Parameter	Description
KSR	Keyword with full form as "Karnataka SUGAM Request"
TYPE	indicates whether the transaction is within the state or outside the state
CAT	Indicates type of the transaction being carried out
OTHER_PARTY	Indicates the TIN of the other Party
INV_NO	Indicates the document/invoice number of the transaction
INV_VAL	Indicates the value of the invoice/document/goods
COMM_CODE	Indicates the commodity code given on the dept website for this commodity
OTHER_PARTY_LOCATION	Indicates the place where the goods are moved to.

Other SMS based services

- KSR HELP Returns the template for m-SUGAM to the user.
- KSR? Returns the template for m-SUGAM to the user.
- KSR COMM Returns the list of commodity codes to the user.
- M-SUGAM alert SMS based daily alert is sent to dealer on
- SUGAM numbers downloaded from his account.

Mobile services for the department officials

- M-SUGAM verify This allows the Checkpost officers to verify the SUGAM numbers via SMS using their mobiles.
- Mobile squads are enabled to verify the validity of SUGAM Number shown by transporters and update their verification findings in the system by sending SMS.

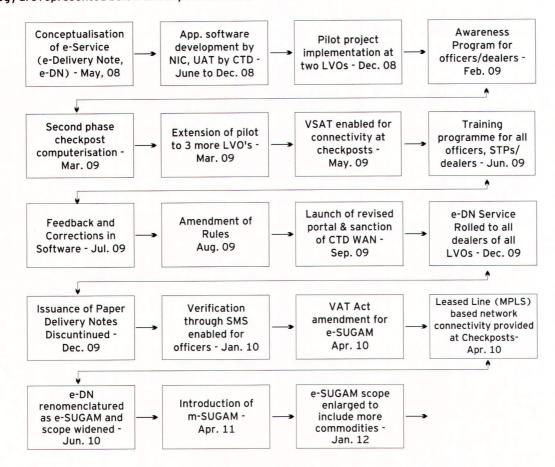




11. Implementation strategy

Phased-wise approach

 Pilot roll out followed by a full scale implementation was the chosen implementation strategy. Key milestones of the strategy are represented below and explained ahead -



- Software development Department adopted a phased-wise implementation approach for the initiative. Once the e-SUGAM
 was conceptualized, as an enhancement of e-Delivery Note service, the corresponding software application was developed
 by NIC. The application was then tested by the officials from the Department.
- Pilot implementation Once the application testing was completed, a pilot roll out was carried out at 2 LVOs LVO 10 and LVO 30 in Bangalore in December 08 January 2009. The dealers registered under these two LVOs were issued login ID and password for the web enabled system. Dealers were enabled to upload goods details on the website and print a delivery note (The concept of acknowledgment number was introduced afterwards). At the check post a copy of the printed delivery note was collected. Requisite training was imparted to both the dealers, sales tax practitioners and department officials and check-post officers.
- Infrastructure and Connectivity Provision In March 2009, meanwhile, all check-posts were provisioned with enhanced IT infrastructure such as desktops, printers and thin clients. VSAT connectivity was provided at all Department offices and check-posts by STPI in May 2009.

- Awareness Building and Training programme for all officers, STPs / dealers were started in June 2009.
- Extension of pilot Post the success of pilot roll out, the pilot was extended to three additional LVOs in March 2009. It was
 followed by extending the scope of e-Delivery Note to all dealers of all LVOs by issue of notification in December 2009. In
 parallel, the issue of paper Delivery Notes was discontinued and the use of DNs already available with the dealers was
 prohibited.
- Feedback on web portal Changes in web portal were made based on feedback and was re-launched in Sep. 09.
- e-SUGAM introduction The VAT Act amendment was done in April 2010 and e-Delivery Note culminated to e-SUGAM in June 2010. The printing of online generated Delivery note was substituted with a unique acknowledgment number e-SUGAM number. The check-posts were directed to substitute collection of delivery notes with mere verification of the acknowledgment number i.e. SUGAM number.
- Technology enhancements made over time As dealers and officers became comfortable with the electronic service mode, enhancements were made to the system. SMS enabled verification was initiated for officers in Jan. 2010. Mobile based SUGAM number generation was introduced for dealers in April 2011.

12. Dedicated team - Governance structure

The other key strategy adopted by the Department was formulation of a dedicated Governance structure for the implementation and monitoring of the initiative, with each section playing an assigned role, as detailed below

Commissioner, CTD - Project owner and leader

Policy & Law -Amendment of Law, Intelligence and co-ordination - Issue of circulars and guidelines

E-GOVERNANCE CELL - Requirement finalisation, Design process and data flow, User Acceptance Testing, Monitoring, Change Management and Training

> TESTING TEAM -One officer from each Division of ACCT Rank of UAT

NIC - Application Software Development and technology advisory

> EXTERNAL SUPPORT -Hardware and Networking vendors

HELPDESK -24 X 7 Helpline for officers and dealers



DEPARTMENT OF COMMERCIAL TAXES

Senior Leadership

The automation of delivery notes initiative was conceptualized around December 2008 by then Commissioner Shri Harish Gowda, IAS, in the form of e-Delivery notes. It was transformed to e-SUGAM initiative by Shri P.S. Kharola, IAS, Commissioner, CTD from July 2009 onwards. They were supported in the initiative by officers working with him in the Policy & Law, and Intelligence and Co-ordination sections. Key members of the team consisted of Shri Ramalinge Gowda, Additional Commissioner (Vigilance); Smt. Kavery Monnappa, Additional Commissioner (HQ II); Shri H.D. Arun Kumar, Additional Commissioner (GST) who worked earlier as Joint Commissioner (Policy and Law), Shri Putte Gowda, Additional Commissioner (Intelligence and Coordination).

Senior Leadership

The department constituted an e-Governance cell consisting of Officers with appropriate aptitude and technical exposure to monitor and implementation of the project, its administration, awareness building and change management, along with NIC in the role of guiding agency. This cell performed the key aspect of co-ordination with various entities involved in accordance with Service Level Agreements (SLAs) and ensuring stakeholder participation. Key roles and responsibilities are detailed as below:

- Finalising the functional specifications and requirements through interactions with NIC.
- Software roll out planning, and implementation monitoring.
- User Acceptance Testing of the application software.
- User Manuals review and finalisation.
- Software Roll out planning, implementation and monitoring.
- Awareness building, Design and conduction of awareness campaigns for internal and external stakeholders.
- Helpdesk setup Provide handholding and issue resolution through telephonic and e-mail / mobile based 24X7 helpdesk.
- Evaluation and incorporation of suggestions / feedback from internal / external users for enhancement of the initiative, and planning for new modules.
- Point of contact for LVO / DVO officers for any employee / dealer account level changes.
 - National Informatics Centre (NIC)

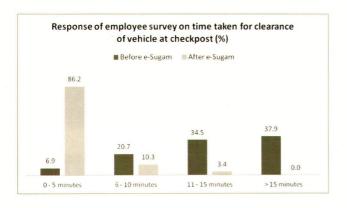
NIC Bangalore worked closely with Commercial Taxes Department, to develop the application software as per the requirements of the Department. Shri P.V. Bhat, Senior Technical Director, NIC, Bangalore has been leading the initiative since 2006. Key roles and responsibilities of NIC are:

- Design and Development of application software system and advise on technical architecture.
- Technology Advisory Hardware, System software, Data center, Networking etc.
- Oversee procurement, installation and support by selected vendors for hardware and network equipment.
- Provide support for any customisations, version and change management wrt application software.
- Training of officers and staff on E-SUGAM modules.









13. Results and Benefits

Following key results have been achieved with the initiation of e-SUGAM-

Result 1: Convenience to dealers

- Anytime anywhere access to service through multiple channels web/mobile.
- Dealers are no longer required to visit the tax offices to obtain the delivery notes.
- About 15,000 visits saved per day.

Result 2: Transparent system

- Transparency in system automated procedures, no officer interaction, no officer approval required, no hassle of obtaining Delivery Notes, no delay at checkposts.
- Minimised scope for corruption in new system.

Result 3: Fast track clearance and hassle free checkposts

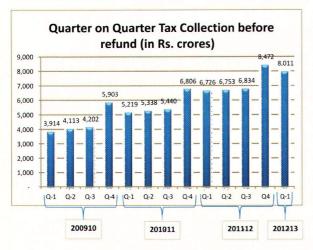
- Long delays at checkposts done away with.
- Instantaneous clearance of vehicles at the checkpost saves time, and is hassle free.
- Time taken for vehicle clearance at the checkposts has reduced on an average from more than 15 minutes to less than 5 minutes.

The impact can also be seen from the fact that the reputed transporters all over the country do not book goods to Karnataka unless provided with SUGAM numbers by the dealers.

DEPARTMENT OF COMMERCIAL TAXES



Tax collection post e-SUGAM (not attributed to e-SUGAM only).



The outreach ...

E-SUGAM – Key statistics

- 4,50,000+ dealers of the State enabled.
- Dealers download about 70,000 SUGAM numbers every day on an average.
- Electronic Database captures 2.5+ Crore high value invoice records every year.
- 10,000+ SUGAM numbers get verified every day at checkposts.

Month (2012)	Sugam Downloaded	Sugam verified by checkpost officers
January	2,139,327	340,691
February	2,135,134	332,052
March	2,340,993	345,057
April	2,125,230	301,942
May	2,147,177	305,121
June	2,274,543	293,757
July	2,265,126	301,764
Average per month	2,203,933	317,198
Average per day	73,464	10,573
Average per day per checkpost (18 static checkposts)	4,081	587

Result 4: Efficient tax administration and increased tax compliance

- Check-post officers are no longer required to collect any documents. There is an automatic capture and filing of voluminous data which hitherto was impossible.
- The drudgery of check-post officer has reduced and his/ her accountability has increased.
- With the online system, and electronic data monitoring and verification by the check-post officer has eased.
- The Local VAT Officer does not have to waste time on mundane activities like issuing delivery notes etc., and they get more time to do analytical work.
- Availability of instantaneous analytical tools and MIS reports has enabled the Department to:
 - Perform stringent and regular monitoring
 - Enforce higher compliance to tax laws
 - Initiate action against dealers trying to evade tax

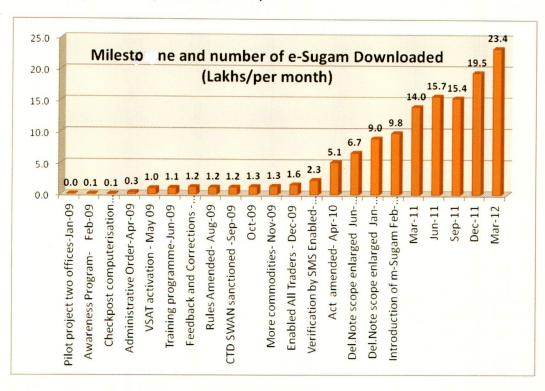
Thus, due to the automation, tax compliance has increased, resulting in better tax collection.

Result 5: Environment friendly processes

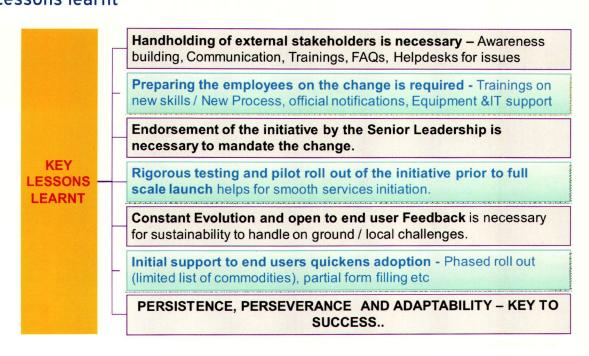
- About 70,000 to 80,000 SUGAM numbers are being downloaded per day (average of Jan, 2012 to July, 2012). As per the earlier system, each of these dealers was required to prepare the delivery note copy in triplicate. With the advent e-SUGAM, no printout is required. Thus, an equivalent amount of paper, about one tonne of paper is saved / day.
- The change is irreversible and saving of paper is perpetual.
- The initiative also saves waiting time and fuel consumption at check-posts for transporters.



Trend of e-SUGAM usage and adoption since inception



14. Lessons learnt





15. Key Reasons for Success

Home grown model

- Functional requirements specified by Department.
- Software development by NIC and continuous support for customisation and enhancement.
- Inputs taken from the trading community and other stakeholders at every stage.

Convergence of Government resources and agencies

- Project Financing Funds provided by the Government of India under the CTMMP, along with the State Funds
- Funds for Training were a grant from Department of Personnel and Training to ATI.
- Data Centers and SMS gateway from NIC.

Reliable system and Ease of use

- Multiple modes of user access Internet, Mobile, XML upload.
- Layers of redundancies provided within the system with 2 alternate links for SUGAM number generation.
- Project has been in operation for almost last three years and system has not failed even once.

16. Awards and recognition

The Department efforts with regards to e-Sugam have been recognized at several important forums and following is the list of awards and recognition won by the Department for this initiative:

- e SUGAM won the Golden Award in National e-governance Awards for 2011-12, under the category "Excellence in Government Process Re-engineering".
- e SUGAM made it to the second round for 'PRIME MINISTER'S AWARDS FOR EXCELLENCE IN PUBLIC ADMINISTRATION' during 2010-2011.
- BUSINESS INDIA magazine (11th Dec, 2011) appreciated the SUGAM initiative.
- e SUGAM was one of the ten initiatives shortlisted in the semi-final stage of CAPAM 2012 Awards, under the category "Innovative use of technology in Public Sector".



17. On Ground survey results

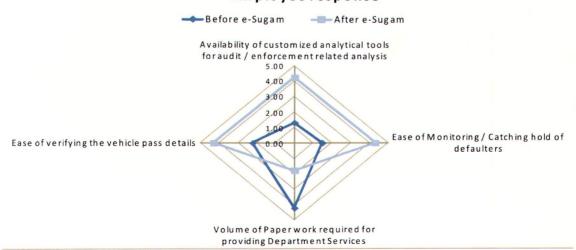
An employee survey was conducted with a sample size of 114 employees representing all divisions, to obtain feedback on change in the Department service delivery post initiation of e-Services. Feedback was also taken on check-post related services such as e-SUGAM. Feedback was sought on parameters as service delivery quality, effectiveness, transparency, ease of use, error rate by dealers, information availability, reliability of system etc. The survey was conducted using an online questionnaire with a five point like rt scale (rating from very low, low, average, high, very high or from 1, 2, 3, 4 and 5) as options for response. Following are some of the key results as received from the department employees -

- Reduction in 'time spent by the transporter at the check post'
- Higher 'number of vehicles cleared per day'
- Lower 'number of defaulters at the check post' due to increased tax compliance
- 'Availability of customized analytical tools' for audit / enforcement related analysis
- 'Ease of verifying SUGAM details' for check-post officers
- 'Ease of monitoring, and catching defaulters'
- 'Ease of information access and updation'
- Decrease in 'volume of paper work' involved

The average statistic result against each of the above parameters is detailed below

Parameter	Before e- Sugam	After e-Sugam
Average time taken for clearance of each vehicle	11 - 15 minutes	0 to 5 minutes
Average number of offenders (goods vehicles without proper document) caught per day	6-10 vehicles per day	0-5 vehicles per day (Higher compliance)

Employee response





18. Sustainability

The e-SUGAM initiative is not only sustainable but also irreversible as neither the dealers nor the Department officials want to revert to the old paper based manual process, due to the merits explained below -

Irreversible

- Hassle free Dealers do not wish to visit the department offices for the task.
- Cost effective method of availing service e-Sugam has reached time and effort involved in availing service and hence has decreased the overall compliance cost for dealers. New technology i.e., m-Sugam has offered functional alternative to even the smallest of the dealers.
- Transparent system and Improved Service (faster clearance at checkposts).

Instituionalised

- Change in related law has been made to mandate the process.
- Change is permanent Initiative is part of a larger technology enabled transformation of the department process and electronic service delivery.
- Department's way of service delivery has changed Department has adopted electronic and paperless service delivery mechanisms which has decreased drudgery of work for checkpost officer and eased the work for LVO officer.

Reliable Technology systems

- Redundancy built in the service for high availability via alternate web links.
- DR site planned in case of disaster.
- Online and telephonic helpdesks for issue resolution.

The above advantages make e-SUGAM an irreversible system for all concerned parties.

19. Replicability

The system has already been replicated and in use in the following States -

S.No.	State	Implemented in	Implemented by
1	Bihar	June 2012	TCS Ltd
2	Manipur	April 2012	NIC
3	Mizoram	April 2012	NIC
4	Nagaland	April 2012	NIC
5	Tripura	April 2012	NIC

The system has also been studied in detail by the following States Arunachal Pradesh, Delhi, Haryana, Rajasthan, Uttar Pradesh, Uttarakhand and by following UTs Daman and Diu, and Pondicherry.



Key pre-requisites for replication

The following are the key pre-requisites for adoption of e-SUGAM in a State -



A. Technology

- Centralised Database Architecture This is necessary to develop a single unified view of the system all across the State.
- **Software Application -** Initial application development with inputs from Department, feedback from trading community, and continuous enhancements to handle on ground feedback and local challenges.
- Web enabled interface for the dealers/tax payers to access the system.
- **Disaster Recovery planning** to have critical data backed up and ready to provide service in case of the primary data center/site being disable due to any disaster.
- Mobile service integration to provide access to the non-internet savvy consumers of the service.

B. iT infrastructure enablement of Department offices and Checkposts

- **Site preparation** Each of the department offices and checkposts to be enabled with required furniture, electrical wiring and power points with earthing to house the ICT equipment. UPS/DG Sets if required to be provisioned.
- Network Connectivity
 - Wide Area Network (WAN) A WAN connecting all department offices and the checkposts to the central server is necessary.
- IT Hardware/System software Each of the department offices and checkposts to be enabled with hardware and software to enable centralized application software access.
 - Hardware Desktops/Thin clients, printers, scanners, UPS, local backup drives (pen drive or HDD).
 - **System software -** Operating system, internet browser, office tools such as word/Excel/presentations, PDF file readers for any scanned document, Antivirus etc.



A. Amendment in relevant Acts, Rules and issue of notifications

 The relevant State Act to be amended to incorporate use of electronic service system for acceptance of request and delivery of services.

B. Change management

- Awareness building amongst the external stakeholders (dealers) is necessary for successful adoption and percolation
 of change. It may be done through seminars, advertisements, trade body meets, constant communication in print and
 word of mouth, pamphlets, brochures, meetings with trade bodies, notifications about change in process, law etc
- Internal and External Training
- Internal capacity building via training on computer skills and e-governance initiative
- External Training via workshops, helpdesks, user manuals, FAQs, Training videos etc.
- Support to dealers during initial implementation phase to be given by measures as Leniency in compliance, make initiative mandatory for select commodities in beginning etc.
- Issuance and distribution of User IDs / passwords to registered Dealers for web interface is a must.

C. Effective Leadership and dedicated team

- A senior level officer needs to spearhead the mission involving himself at all levels at least in the initial stages of implementation
- Formation of a suitable team of officers at the headquarters is required to actively implement and innovate.

D. Sustainability Helpdesk setup

- A Helpdesk to resolve issues and guide the employees /dealers / tax practitioners on the new system shall be required.

 The modes of helpdesk may be as follows -
- Online grievance redressal mechanism
- Telephonic helpline 24 X 7 or minimum during business hours
- LVO wise helpdesk A dedicated officer for resolving queries, may be deployed in each division on rotation basis for the purpose.

20. The road ahead

Going forward, following is the Department's plan with regards to SUGAM -

- SUGAM 2 The double ended SUGAM In the present system, only the selling dealer uploads the transaction. In the advanced version, as soon as the seller uploads the transaction, the buying dealer with in the state would be required to confirm it. For the same, an SMS would be sent to the mobile phone of the buying dealer, who would have to confirm the transaction by sending a return message. Only then a SUGAM number would get generated. This would ensure a 100% perfect system for accounting all transactions.
- Discussions are also being held with the other states for introduction of inter-state SUGAM.
- Phasing out of static check-posts Once a transaction is uploaded, its reflection in the dealers' books of accounts is
 assured and so also is the tax payment. The check posts are required to only verify if the actual consignment tallies with
 the description uploaded. In order to ensure this, random checks of goods vehicles should be sufficient. Thus, in future
 the static check posts would pave the way for mobile check posts which would carry out checks randomly.

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