



**GOVERNMENT OF KARNATAKA**

**EVALUATION OF FUNCTIONING AND  
EFFECTIVENESS OF INDUSTRY RELATED  
SERVICES MODULES OF MAJOR GOVERNMENT  
DEPARTMENTS IN PROMOTING INVESTOR  
FRIENDLY BUSINESS ENVIRONMENT FOR  
INDUSTRIES IN KARNATAKA STATE, 2019-20**



ಕರ್ನಾಟಕ ಮೌಲ್ಯಮಾಪನ ಪ್ರಾಧಿಕಾರ  
Karnataka Evaluation Authority

**KARNATAKA EVALUATION AUTHORITY  
DEPARTMENT OF PLANNING, PROGRAMME MONITORING AND STATISTICS  
GOVERNMENT OF KARNATAKA  
JUNE 2021**



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NAME OF ECO: KPMG ADVISORY SERVICES PRIVATE LIMITED

DEPARTMENT NAME: KARNATAKA UDYOG MITRA



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## FOREWORD

Karnataka State is emerging as one of the most preferred destination for industrial investors. Several reforms have been introduced to promote investor friendly environment. Yet, to boost the investment process and attract the new investors in competitive markets, it is essential to have a robust automated system wherein businesses can be facilitated with end-to end service delivery. In this context, evaluation of functionality of fifty-seven industry related service modules of seventeen major Line Departments is initiated by Karnataka Udyog Mitra through Karnataka Evaluation Authority (KEA). The objective is to understand the effectiveness of these modules in delivering the services to the investors and identify gaps if any, to make necessary corrections, and reengineering of these services to make them more investor friendly to boost the investment process and improve the competitive strength of the State. The study is taken up by KPMG Advisory Services under the guidance of KEA.

The study is based on both primary and secondary data collected for 57 services from the 17-line Departments and discussions with Dept. officers and opinion survey of 120 investors and 10 Focus Group Discussions across the four divisions. Key inferences are drawn from NeSDA assessment and applicant data analysis of all these services. The major findings of the study indicate that some Departments like - Inspector General of Registration & Stamps, Department of Factories Boilers Industrial Safety & Health, and Bangalore Water Supply and Sewerage Board are leading departments with high process efficiency, IT enablement and stakeholder connect. 14 Departments that need focus to promote service delivery are BBMP, BDA, dept. of metrology, Labour dept., KIADB, Registrar of Cooperative Societies etc. Majority of them require IT enablement and better stakeholder connect.

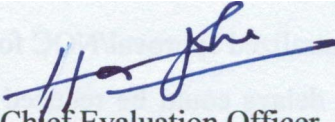
Centralized approval/NOC for the industry through single window system is not seamless, and the delays could be reduced if line departments such as BESCO, Electrical Inspectorate, KSPCB, Karnataka State Fire Department and BWSSB streamline their processes and expedite approvals, as there is a significant, positive correlation between process efficiency and stakeholder connect,

The major recommendations cover enhancing process and IT efficiency of services, to improve the functioning of existing investor reforms and to improve the functioning of the state single window platform. Approval of Boilers, Certificate for recognition as Boiler / Boiler Component manufacturer. and Change of Property Ownership these are currently end-to-end offline and should be made available online. KUM should provide investors with a unified

access to multiple regulatory authorities by integrating eBiz portal with all concerned line department portals, and provide all these clearances without any physical touchpoints like Andhra Pradesh and UP models, deploy a chatbot or information wizard to ensure that investors get a quick view of all the clearances/NOCs, provide a centralized mechanism to address all grievances, Single window meetings, at the district level, must be conducted regularly, SAKALA mission to perform audit of line departments to assess adherence with SAKALA timelines, KUM/DICs proactively reach out to investors to understand their issues/challenges, state government could consider capping the escalation cost levied by KIADB/KSSIDC at the time of execution of lease cum sales agreement. The Government of Karnataka could also consider cash infusions/incentives and waivers to help the MSME sector to tide over the pandemic. Many of these recommendations flow from Andhra Pradesh model.

I expect that the findings and recommendations of the study will be useful to the Government-Karnataka Udyog Mitra and Department of Industries and Commerce to improve the efficiency of service delivery and implement the reforms effectively to improve the ranking of the State in Ease of Doing Business and to promote the investor friendly business environment in the State.

The study received support and guidance of the Additional Chief Secretary Planning, Programme Monitoring and Statistics Department, Government of Karnataka. The report was approved in 50<sup>th</sup> Technical Committee meeting. The review of the draft report by KEA, members of the Technical Committee and an Independent Assessor, has provided useful insights and suggestions to enhance the quality of the report. I duly acknowledge the assistance rendered by all in successful completion of the study.



Chief Evaluation Officer

Karnataka Evaluation Authority

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We would also like to extend our thanks to the Commissioner, Commerce and Industries, Government of Karnataka; Managing Director, Karnataka Udyog Mitra (KUM); Deputy Director, KUM and the interviewed Joint Directors at District Industries Centers for their enthusiastic support, inputs and timely information. Despite the fact that many Government departments/organisations were significantly impacted by the COVID-19 pandemic during the study, it was heartening to receive timely support and information from nodal officers across all the 17 participating line departments.

Further, we greatly appreciate the inputs provided by members of industry bodies – such as Karnataka Small Scale Industries Association (KASSIA), Federation of Karnataka Chamber of Commerce and Industries (FKCCI), American Chamber of Commerce in India (AMCHAM), Consortium of Electronic Industries of Karnataka (CLIK), Bangalore Chamber of Industries and Commerce (BCIC), Peenya Industries Association, and Mysore Chamber of Commerce and Industry – in the form of their responses to the investor survey questionnaire or their participation in the Focused Group Discussions (FGDs).

— Study team, led by Prasad Unnikrishnan, Principal Investigator





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## List of Acronyms

<b>AHOW</b>	<b>Authorisation under Hazardous and other Waste</b>
<b>BBMP</b>	<b>Bruhat Bengaluru Mahanagara Palike</b>
<b>BDA</b>	<b>Bangalore Development Authority</b>
<b>BESCOM</b>	<b>Bangalore Electricity Supply Company</b>
<b>BOCW</b>	<b>Building and other construction workers</b>
<b>BP</b>	<b>Building Plan</b>
<b>BPR</b>	<b>Business Process Re-engineering</b>
<b>BRAP</b>	<b>Business Reform Action Plan</b>
<b>BWSSB</b>	<b>Bangalore Water Supply and Sewerage Board</b>
<b>CAF</b>	<b>Combined Application Form</b>
<b>CAGR</b>	<b>Compound Annual Growth Rate</b>
<b>CERSAI</b>	<b>Central Registry of Securitization Asset Reconstruction and Security Interest</b>
<b>COE</b>	<b>Consent for Establishment/Expansion</b>
<b>COO</b>	<b>Consent for Operations</b>
<b>CPI</b>	<b>Consumer Price Index</b>
<b>DC</b>	<b>Deputy Commissioner</b>
<b>DIC</b>	<b>District Industries Center</b>
<b>DIL</b>	<b>Direct Industrial Licences</b>
<b>DLSWCC</b>	<b>District Level Single Window Clearance Committee</b>
<b>DMA</b>	<b>Directorate of Municipal Administration</b>
<b>DPAR</b>	<b>Department of Personnel and Administrative Reforms</b>
<b>DPIIT</b>	<b>Department for Promotion of Industry and Internal Trade</b>
<b>E.g.</b>	<b>Example</b>
<b>EC</b>	<b>Encumbrance Certificate</b>
<b>EIA</b>	<b>Environmental Impact Assessment</b>
<b>EMD</b>	<b>Earnest Money Deposit</b>
<b>EoDB</b>	<b>Ease of Doing Business</b>
<b>FAQ</b>	<b>Frequently Asked Question</b>
<b>FDI</b>	<b>Foreign Direct Investment</b>
<b>FGD</b>	<b>Focus Group Discussion</b>
<b>FTNC</b>	<b>Fast Track Network Connection</b>
<b>GIGW</b>	<b>Guidelines for Indian Government Websites</b>
<b>GO</b>	<b>Government Order</b>
<b>GOK</b>	<b>Government of Karnataka</b>

<b>GSDP</b>	<b>Gross State Domestic Product</b>
<b>GSVA</b>	<b>Gross State Value Added</b>
<b>HTTPS</b>	<b>Hypertext Transfer Protocol</b>
<b>ID</b>	<b>Identification</b>
<b>IDI</b>	<b>In-Depth Interviews</b>
<b>IEM</b>	<b>Industrial Entrepreneur Memoranda</b>
<b>IGR</b>	<b>Inspector General of Registration and Stamps</b>
<b>INR</b>	<b>Indian Rupee</b>
<b>ISMW</b>	<b>Interstate migration worker</b>
<b>KIADB</b>	<b>Karnataka Industrial Areas Development Board</b>
<b>KM</b>	<b>Kilometre</b>
<b>KSPCB</b>	<b>Karnataka Pollution Control Board</b>
<b>KUM</b>	<b>Karnataka Udyog Mitra</b>
<b>KW</b>	<b>Kilowatt</b>
<b>LBPAS</b>	<b>Land and building plan approval system</b>
<b>LCSA</b>	<b>Lease Cum Sales Agreement</b>
<b>LOI</b>	<b>Letter of Intent</b>
<b>LT</b>	<b>Low Tension</b>
<b>MeitY</b>	<b>Ministry of Electronics and Information Technology</b>
<b>MOU</b>	<b>Memorandum of Understanding</b>
<b>MSME</b>	<b>Micro, Small and Medium Enterprises</b>
<b>NA</b>	<b>Not Applicable</b>
<b>NeSDA</b>	<b>National e-Governance Service Delivery Assessment</b>
<b>NGSP</b>	<b>National Government Services Portal</b>
<b>NOC</b>	<b>No Objection Certificate</b>
<b>OTP</b>	<b>One Time Password</b>
<b>PAN</b>	<b>Permanent Account Number</b>
<b>RDA</b>	<b>Resource Description and Access</b>
<b>ROR</b>	<b>Record of Rights</b>
<b>SHLCC</b>	<b>State High Level Clearance Committee</b>
<b>SIR</b>	<b>Special Investment Region</b>
<b>SLSWCC</b>	<b>State Level Single Window Clearance Committee</b>
<b>SMS</b>	<b>Short Message Service</b>
<b>STQC</b>	<b>Standardisation Testing and Quality Certification</b>
<b>SUC</b>	<b>Single Unit Complex</b>
<b>TOR</b>	<b>Terms of Reference</b>
<b>UGD</b>	<b>Underground Drainage</b>
<b>UTs</b>	<b>Union Territories</b>
<b>VFA</b>	<b>Value of Fixed Assets</b>
<b>W3C</b>	<b>World Wide Web Consortium</b>



## Executive Summary

This study evaluates the effectiveness of fifty-seven industry and citizen services<sup>1</sup> across seventeen-line departments of the Government of Karnataka such as BBMP; BDA; KIADB; KSPCB; Revenue; Labour; Factories, Boilers, Industrial Safety & Health; BWSSB and others. It undertakes a detailed evaluation to assess the efficacy of these services and identify improvement areas and leading practices with an aim to enhance transparency and governance to catalyze domestic and foreign investments in State.

Broadly, the study examines the following for the time period between 1<sup>st</sup> April 2019 and 31<sup>st</sup> March 2020:

- 1 Applications serviced data, sourced from SAKALA, to analyze extent of applications processed, approval/rejection rate, rejection reasons and compliance with SAKALA timelines
- 2 Opinion of key department personnel on service delivery through In-Depth Interviews (IDIs)
- 3 Mode of delivery of these services – whether it is online or offline, including assessment of services that are online using NeSDA (National e-Governance Service Delivery Assessment) framework to evaluate accessibility, ease of use, content availability, and information security and privacy
- 4 Investor perceptions about industry services through a brief survey and Focus Group Discussions (FGD)

The combined findings from the aforementioned instruments are used to formulate recommendations. The report also provides key recommendations for improving functioning of state single window system, for land allotment & industrial approval and in providing Micro Small, and Medium Enterprises (MSME) support.

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<sup>1</sup> List of services as detailed in section 3.1 of Inception Report for Evaluation Study of Business Reforms Karnataka submitted to KEA

## Key observations from the study:

The assessed departments, when segregated based on performance, could be categorized into “leading departments” and “focus departments.” The leading departments are above average (above 70%) on parameters such as “process efficiency” characterized by adherence to SAKALA timelines, “IT enablement” quantified by NeSDA score and “stakeholder connect” characterized by approval/rejection rate. The focus departments, however, require improvements in one or all three parameters.

Lower approval rate, or higher rejection rate, is taken as a proxy for lower “stakeholder connect” as documents getting approved or rejected, regardless of the rejection reasons, have an impact on stakeholder perception. Importantly, proactive and accurate communication from the department on the process/documentation required is likely to minimize rejections to a great extent.

- **Leading departments:** These departments are Inspector General of Registration & Stamps, Department of Factories Boilers Industrial Safety & Health, and Bangalore Water Supply and Sewerage Board.

### Analysis of leading departments:

State Line Department	Name of the Service offered	Approval Rate	SAKALA Adherence	NeSDA Score	Remarks
Inspector General of Registration and Stamps	Registration of Land/property	85%	100%	70%	The department’s SAKALA adherence and approval ratings are amongst the highest. Its Kaveri portal is quite well-designed contributing to high ease of use and end service delivery.
	Registration of FIRMS	100%	75%	70%	
Department of Factories	Approval of Factory Building Plan	87%	70%	84%	While the department enjoys high approval rate and above average adherence with SAKALA timelines, two services are end-to-end offline.
	Registration of Factories and Issue of license	86%	70%	84%	
	Approval of Boiler	95%	70%	NA - Offline	The ones that are online require some manual touchpoints (such as physical inspections and document verification), especially for service such as Approval of Building Plan.
	Registration of Boilers	92%	70%	84%	
	Certificate for recognition as Boiler	92%	77%	NA - Offline	
Bangalore Water Supply and Sewerage Board	Permission for new connection for water	81%	70%	87%	Majority of the queries that the department gets is on application processes/procedures. While the department scores high on approval rate, delays in processing are largely attributed to inadequate documentation provided by applicants.

- **Focus departments:** These line departments have a lower score (less than 70%) in one or all the aforementioned parameters. The table below identifies parameters where improvements are required for these departments. The succeeding table provides detailed scores across all assessed services.

Line Departments	Requires Process Efficiency	Requires IT Enablement	Requires Better Stakeholder Connects
Bruhat Bengaluru Mahanagara Palike (BBMP)		☑	☑
Bangalore Development Authority (BDA)		☑	
Department of Legal Metrology	☑	☑	☑
Drug Control Department		☑	
Labour Department		☑	
Revenue Department	☑	☑	☑
Karnataka State Pollution Control Board	☑		
Karnataka Industrial Area Development Board	☑	☑	☑
Karnataka Fire & Emergency Service Department			☑
BESCOM			☑
Commercial Tax Department		☑	
Directorate of Municipal Administration			☑
Registrar of Co-operative Societies		☑	☑
Department of Electrical Inspectorate			☑

**Analysis of focus departments:**

State Line Department	Name of the Service offered	Approval Rate	SAKALA Adherence	NeSDA Score	Remarks
<b>Commercial Tax Department</b>	Issue of registration under the Karnataka Tax on Professions	100%	100%	<b>53%</b>	While the department scores 100% in approval rate and SAKALA adherence, its portal where the service is hosted requires considerable improvement in areas such as information security, application request tracking and availability of information in Kannada.
<b>Karnataka State Pollution Control Board</b>	Consent for Establishment/Expansion (COE) Green	97%	<b>53%</b>	93%	Department has low score for red category services on SAKALA timeline adherence which is primarily due to higher scrutiny required for such applications.  However, for green category, the department officials attributed low SAKALA adherence to back and forth on inspection observations and submission of inadequate supporting documents by applicants
	COE Red Category Non-EIA (Environmental Impact Assessment)	92%	<b>41%</b>	93%	
	Consent for Operation (CFO) Green	99%	78%	93%	
	CFO Orange excluding Infrastructure projects	96%	74%	93%	
	CFO Orange category Infrastructure projects	98%	71%	93%	
	CFO Red EIA Projects	95%	<b>57%</b>	93%	
	CFO Red Non-EIA Projects	96%	<b>43%</b>	93%	
	Authorization under Hazardous and Other Waste (AHOW) Green	96%	84%	93%	
	AHOW Orange	99%	76%	93%	
AHOW Red	90%	<b>35%</b>	93%		
<b>Karnataka Fire and Emergency</b>	NOCs for high-rise buildings	79%	<b>39%</b>	76%	Inspection noncompliance by applicants and multiple interaction with other line departments were primary reasons for these delays. Services delivered by departments still had manual interventions and offline interactions.
	Clearance certificate	100%	<b>2%</b>	76%	

State Line Department	Name of the Service offered	Approval Rate	SAKALA Adherence	NeSDA Score	Remarks
<b>BESCOM</b>	Application for additional/new Connection-LT2 & LT3	79%	<b>67%</b>	89%	Department's comparatively low approval and adherence rate has been attributed to following reasons: 1) Mis match of information submitted by applicants such as address, construction stage, bore size etc. 2) Rejection due to nonpayment of applicant fees, non-submission of supporting such as building photo, NOCs from other department 3) Submission of applications in wrong jurisdiction
<b>Labour Department</b>	Registration under the Karnataka Shops and Establishments	87%	<b>68%</b>	70%	Labour department's NeSDA assessment score is consistently low primarily due to observations below: 1) Users are unable to effectively track the status of their requests and obtain timely updates 2) Non-availability of website content in Kannada language 3) Non-availability of a feature to log complaints/grievances and provide feedback 4) Inadequate information security
	Registration of Principal employer	94%	70%	<b>63%</b>	
	License to the contractor	96%	80%	<b>63%</b>	
	Registration of Establishment under the Building and Other Construction Workers	96%	70%	<b>63%</b>	
	Registration of Building and other Construction Workers	96%	80%	<b>48%</b>	
	Registration Inter State Migration Workers	75%	75%	<b>63%</b>	
<b>Drug Control Department</b>	Grant of Fresh Drug Manufacturing License	<b>No applicants</b>	<b>No applicants</b>	<b>47%</b>	The department's website scores low on information accessibility and ease of use, especially the portal for drug manufacturing license. Users are also unable to effectively track the status of their requests Information security measures need considerable improvement
	Retail License for Sales	99%	72%	70%	

## Analysis of focus departments:

State Line Department	Name of the Service offered	Approval Rate	SAKALA Adherence	NeSDA Score	Remarks
Directorate of Municipal Administration	Issue of Trade license	93%	33%	69%	Processes and procedures requiring multiple interactions with associated line departments is often cited as a reason for delays resulting in low SAKALA adherence. Multiple interactions owing to inspections and compliance with inspection observations is also seen as contributing to the delay. It should be noted here that one service is end-to-end offline.
	Building License Issuance	83%	23%	76%	
	Permission for water supply and UGD	99%	31%	71%	
	Occupancy certificate Issuance	97%	65%	76%	
	Change of Property Ownership	86%	23%	NA – offline	
	Road Cutting (Right of way)	99%	87%	76%	
Registrar of Co-operative Societies	Registration of Societies	100%	43%	64%	The manual touchpoint in the process (physical verification of documents submitted and any back-and-forth on these documents) often contribute to the delay. The web portal also needs considerable improvement on information accessibility, ease of use and ability of users to track the status of their requests.
Bangalore Development Authority (BDA)	Obtaining Possession Certificate	93%	75%	31%	Department website needs considerable improvement in terms of information accessibility, ease of use, and information security.
Revenue Department	Conversion of agriculture land to non-agriculture purpose	59%	68%	69%	Delay in processing applications attributed to multiple interactions involved with other concerned department officials.

State Line Department	Name of the Service offered	Approval Rate	SAKALA Adherence	NeSDA Score	Remarks
Department of Legal Metrology	Issue of New License	53%	45%	73%	Interactions with department officials revealed that inadequate process knowledge, inadequate supporting documents and inspections were primary reasons for delays and rejections.
Karnataka Industrial Area Development Board	Land Allotment	80%	51%	67%	Inspections and ensuing back and forth on compliance of inspection observations are often cited as the reason for delays. Supporting documents are still being submitted through offline modes in many instances. Central tendency measurement for the applications processed indicates department on average requires more than 7x of the sanctioned time for land allotment and 16x of the sanctioned time for BP approval.
	Sanction of building plan	32%	25%	67%	
Bruhat Bengaluru Mahanagara Palike (BBMP)	Trade License	94%	73%	60%	Primary reasons observed for delays were due to inadequate supporting documents submitted by applicants, non-compliance with building by laws, wrong jurisdiction, lack of submission of original documents. Interactions with officials also revealed that offline submission of documents is still prevalent. Also, update to users, on the status of their applications, are provided intermittently i.e., on case-to-case basis.
	Sanction of Building Plan	89%	47%	67%	
	Tree Felling & Transit Permission	64%	52%	47%	
	Right of Way permission	Data not available	Data not available	49%	For occupancy certificate and commencement certificate only, partial data (for 4 out of 10 zones) was made available by the department. For occupancy certificate issuance department takes more than 27x, for commencement certificate issuance more than 9x of the sanctioned time. NeSDA score are not considered due to very low rate of adherence.
	Khata Registration	Data not available	Data not available	73%	
	Building Completion Certificate	Data not available	Data not available	65%	Note: Applicant data for Khata registration, right of way and completion certificate were not made available by concerned department for analysis. As per comments received from department completion certificate is not a standalone service but an application form for obtaining Occupancy certificate.
	Obtain Occupancy Certificate	Data not available	3%	NA	
Obtain Commencement Certificate	Data not available	2%	NA		

Top 10 services ranked by process efficiency, stakeholder connect and IT enablement are tabulated as below.

Top 10 Services	For SAKALA Adherence Score indicative of High Process efficiency	For NeSDA Score indicative of relatively high level of IT enablement	For Approval rate indicative of efficient stakeholder connect
1	Registration of Land/property	Approval of Factory Building Plan	Registration of FIRMS
2	Issue of registration under the Karnataka Tax on Professions	Registration of Factories and Issue of license	Retail License for Sales by Drug Control
3	Road Cutting (Right of way) by DMA	Registration of Boilers	Clearance Certificate for Fire
4	Authorization under Hazardous and Other Waste (AHOW) Green	Permission for new connection for water	Issue of registration under the Karnataka Tax on Professions
5	License to the contractor	Trade License	Registration of Societies
6	Registration of Building and other Construction Workers	Sanction of Building Plan	Permission for water supply and UGD by DMA
7	Authorization under Hazardous and Other Waste (AHOW) Orange	Application for additional/new Connection- LT2 & LT3	Road Cutting (Right of way) by DMA
8	Consent for Operation (CFO) Green	All KSPCB services across categories for Consent against Water and Air act	Commissioning Approval Industrial Installations
9	CFO Orange excluding Infrastructure projects	Approval of drawings of electrical installation	CFO Orange category Infrastructure projects
10	Registration Inter State Migration Workers	Commissioning Approval Industrial Installations	Consent for Operation (CFO) Green

Bottom 10 services ranked by process efficiency, stakeholder connect and IT enablement is tabulated as below.

Below 10 Services	For SAKALA Adherence Score indicative of High Process efficiency	For NeSDA Score indicative of relatively high level of IT enablement	For Approval rate indicative of efficient stakeholder connect
1	Obtain Occupancy Certificate by BBMP	Obtaining Possession Certificate by BDA	Sanction of building plan by KIADB
2	Obtain Commencement Certificate by BBMP	Issue of registration under the Karnataka Tax on Professions	Conversion of agriculture land to non-agriculture purpose by Revenue Department
3	Fire Clearance Certificate	Right of Way permission by BBMP	Issue of New Drug License
4	Change of Property Ownership by DMA	Grant of Fresh Drug Manufacturing License by Drug	Tree Felling & Transit Permission by BBMP
5	Building License Issuance by DMA	Right of Way permission by BBMP	Registration Inter State Migration Workers
6	Sanction of building plan by KIADB	Tree Felling & Transit Permission by BBMP	Fire NOC for High- rise building
7	Permission for water supply and UGD by DMA	Registration Inter State Migration Workers	Application for additional/new Connection- LT2 & LT3
8	Issue of Trade license by DMA	Registration of Societies	Land Allotment by KIADB
9	Authorization under Hazardous and Other Waste (AHOW) Red	Issue of Trade license by DMA	Building License Issuance by DMA
10	NOC for High- rise building by Fire	Land Allotment by KIADB	Change of Property Ownership by DMA

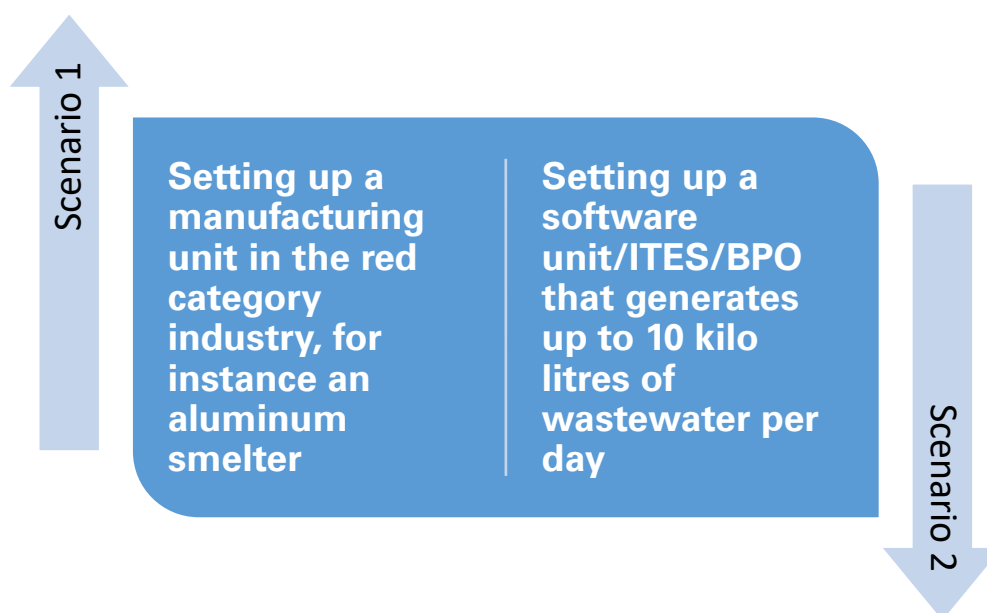
## Other observations (inter-departmental analysis and investor perception)

A regression analysis was performed to understand the associations between process efficiency, IT enablement, and stakeholder connect (see annexure in section 7.1 for details). The services where data was available for all the three parameters, i.e., 45 services across 17 departments, were assessed for understanding the relationship between them.

The analysis of association between process efficiency (indicated by adherence to SAKALA timelines) and stakeholder connect (indicated by approval rate) indicate that there is a significant, positive correlation between these two parameters. The relationship between the two parameters could be explained by the linear equation  $\text{Approval Rate} = 0.64 + 0.37 * (\text{SAKALA Adherence})$ .

This makes sense as both 'approval rate' and 'SAKALA adherence' are indicative of efficient service delivery. In other words, any improvements to service delivery by the department usually results in improvement in both the aforementioned parameters.

Another aspect that has been assessed is the collective effectiveness of related services across line departments in terms of dependency and service delivery timelines. Scenario analysis has been used to make this assessment. Towards that end, the following two scenarios, involving establishing an industry at the opposite ends of the spectrum (red and green categories), were considered (see figure below).









The scenarios considered above have been categorised in four stages for setting up of a unit in Karnataka and results observed for any delays at these stages have been tabulated below.

Delay Observed (If any) in below stages	In Scenario 1 (In Days)	In Scenario 2 (In Days)	Concerned Line Departments
Pre-Establishment Clearances	<b>44.3</b>	<b>2.5</b>	DMA/BBMP, <b>KSPCB</b> , Factories
Service Connections	<b>86.1</b>	<b>86.1</b>	<b>ESCOM, BWSSB, Electrical Inspectorate</b>
Labour Related Clearances	No delays	<b>No delays</b>	Labour
Consent for Operations	<b>71.2</b>	<b>3</b>	<b>KSPCB, Electrical Inspectorate, Factories</b>

Departments contributing the delay are highlighted in red

It was noted that there were significant delays in both the scenarios i.e. in three out of the four stages of setting up a manufacturing or service unit in the state. Moreover, delays are almost 50% higher in cases of setting up a manufacturing unit compared to delays observed in setting up a services unit.

The delays could be reduced if line departments such as BESCO, Electrical Inspectorate, KSPCB, Karnataka State Fire Dept. and BWSSB streamline their processes and expedite approvals. In case of red category industries, it is understandable that KSPCB takes more time to consider the pros and cons of setting-up the industry. However, delays were observed for providing consent to green category industries as well.

Above observations of delays from the concerned line departments is further strengthened and corroborated by findings from the industry stakeholders' interactions that were conducted across all the four divisions of the state. Some of the key findings from these interactions are summarised below:

- The State's single window and its counterparts at the district level function in a decentralized manner. The DICs enjoy considerable autonomy. While this structure has its advantages, on the flip side, it is contributing to a high level of variance across the districts on the way in which these DICs function. As highlighted by industry representatives in our Focus Group Discussions, this often leads to ambiguity and inconsistent service standards.
- The State's single window (KUM) and the line departments assessed need to work more cohesively, especially regarding industry-related services. As of now, investors must individually follow-up with concerned line departments for approval after getting a go-ahead from KUM. Such findings are further confirmed by the opinion survey where majority of investors (i.e. 80%) opined to have reached out to line departments for availing investor services in the state and mostly (i.e. 78%) through offline channels
- Specifically, land and construction-related approvals for a project in the state requires multiple follow ups from the concerned investors with different line departments involved instead of via a one-stop single window system nodal

office (DIC) functioning in the district. This contributes to considerable delays in project implementation at the ground level. Some of these delays in delivery of specific services or cumulative delay in delivery of related services have been highlighted previously in this section (refer to pages 13 through 17).

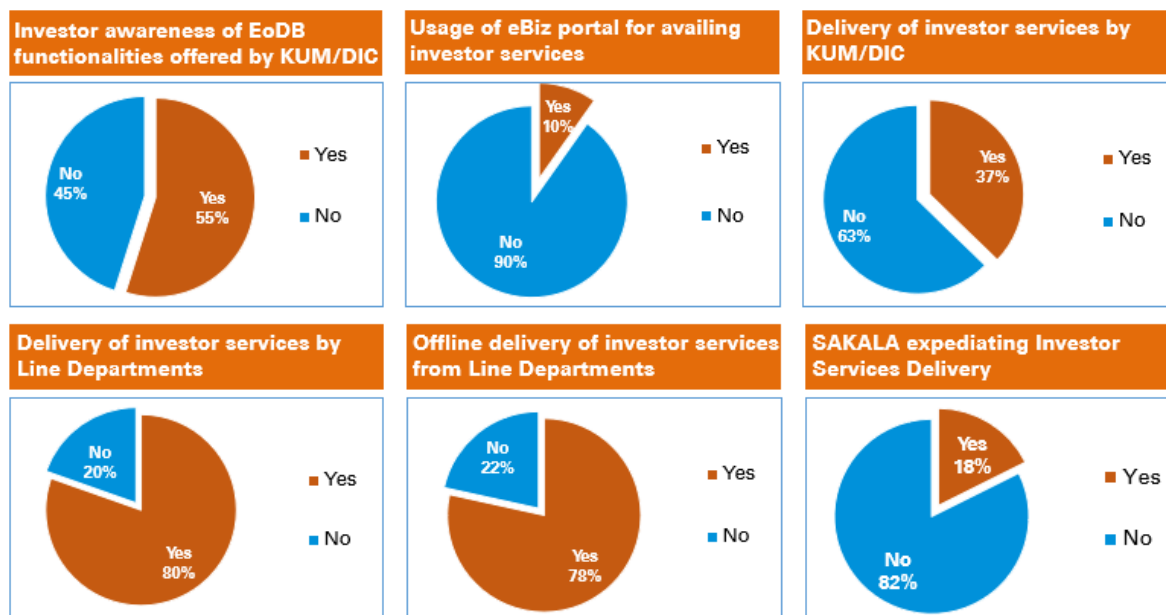
- Centralized approval/NOC for the industry through single window system is not seamless and it requires multiple follow-ups by applicants with other departments.
- Investors opined that there is a need to expedite land allotment by state institutions as any significant delays could result in cost escalations, for instance due to increased allotment price, making projects unviable, at times.
- Grievance redressal for the investors at taluk or district level offices such as DIC or nodal officers from line departments have been found to be working intermittently with little to no digitization of such processes in these offices.
- KUM/DICs need to engage MSMEs and their associations better through workshops, seminars etc.

Key observations from the investor opinion survey conducted among the investors in the state are listed as below:

- Relatively low awareness (i.e. 55%) among investors about the functionalities about investor services offered by KUM/DIC
- Low usage of eBiz portal observed among investors (i.e. 10%) and only 37% utilised KUM/DIC services in the state
- While most of the services assessed were online, it appears many investors (78%) are not aware that they can avail these services online. Alternatively, they may have found these portals less user friendly (as NeSDA scores for some services indicate). This is because majority of them (i.e. 80%) indicated that they have availed industry services through offline channels.
- Majority of investors (i.e. 78%) opined SAKALA has not expedited service delivery to investors in the state. This could be because adherence to SAKALA timelines is found to be low across majority of the assessed services/line departments. It could also be because SAKALA timelines themselves are

found to be 2x to more than 10x higher than notified service delivery timelines in States like AP and UP (see page 128 for comparison).

## Investor Opinion Survey Findings



Source: Survey respondents

No. of responses: 51

Recommendations for improvement of service delivery, including e-service delivery, for all the concerned departments are detailed later in this report. Some of the overarching recommendations are as listed below:

- 1) Interactions with most departments indicate that many cases of delays in approval are a result of insufficient understanding of the process or inadequate submission of required documents by applicants. This could be addressed by helping applicants get a better understanding of the application process through online how-to guides and physical helpdesks at department offices.
- 2) SAKALA adherence is noticeably less in services that require approval of architectural drawings owing to the back-and-forth interactions between departments and applicants. An intelligent system that analyses AUTO-CAD drawings of building plans to provide a compliance report (similar to the one implemented by AP's Factories Department) could help.

- 3) In services where inspections are causing process delays, prudent use self-certifications and auto-renewals could help address the issue.
- 4) Business facilitation rules (SAKALA) could be strengthened to provide more powers to SAKALA Mission/KUM to enforce the prescribed timelines.
- 5) KUM, DICs and concerned line departments need to function more cohesively and offer services on a single, integrated, online platform to investors. One portal, one email and one helpline number, similar to AP's Single Window, could be adopted to offer all industry services in an integrated manner. It would help if KUM's eBizz portal could adopt wizards and chatbots to help investors get to the right information quickly.
- 6) KUM should provide a centralized mechanism (including a hotline) to address all investor grievances whether it is concerning KUM or DICs or for that matter concerned line departments offering industry services. Additionally, KUM/DICs should engage more frequently with industry associations similar to AP Single Window's Governance Cell.

# 1. Introduction

## 1.1. Background

An economy's growth, as recognized by several empirical studies, is positively correlated with ease of doing business, leading to enhanced job creation, increased per capita income and the high level of economic activity. The "ease of doing business" stems from regulatory lucidity, fewer and faster procedures, and expeditious approvals.

Since 2014, Department for Promotion of Industry and Internal Trade (DPIIT) has spearheaded a national level exercise to rank all the States/UTs in the country on the reforms undertaken by them on designated parameters. The aim of this exercise is to create conducive business environment by streamlining regulatory structures and creating an investor-friendly business climate by cutting down red tape. In the latest edition of State Business Reform Action Plan (BRAP) 2019 ranking, **Karnataka's ranking has reduced to 17<sup>th</sup> position in the country from last year's 8<sup>th</sup> position<sup>2</sup>**. It is to be noted here that this edition of BRAP ranking was completely based on 'users' feedback as against the State's declaration of reforms implemented (the latter contributed to 60% of the score in the previous editions). Given that the introduction of this new methodology coincides with the State's decreased ranking, it can be inferred that the entrepreneurs have not been receiving the true benefits of the reforms implemented by the State.

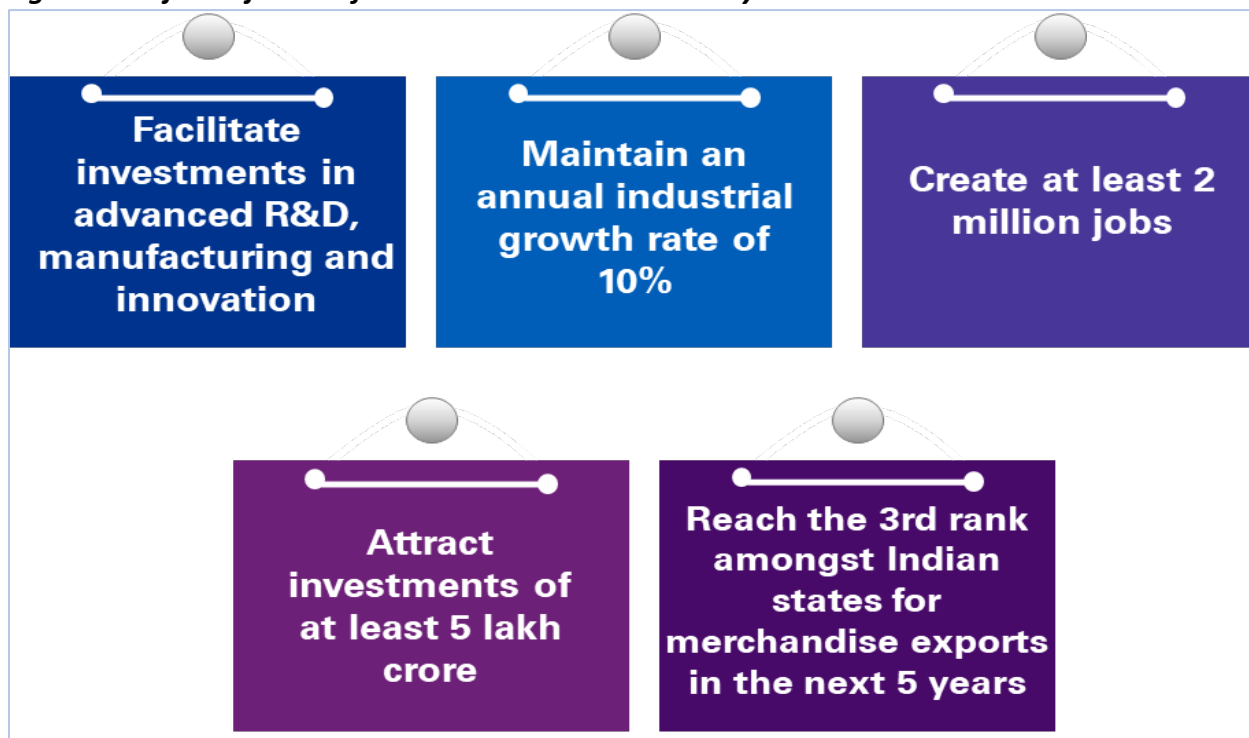
However, recently Government of Karnataka has fast-tracked its efforts to attract investors with measures like amendments to the Land Reforms Act and Karnataka Industrial (Facilitation) Act. In its bid to attract more investors and industries, the State Government has come up with ordinances that enhances "ease of doing business". The **Karnataka Industrial Policy 2020-25 is aimed at the states holistic development and the promotion of industrially backward districts**. The policy, innovatively, offers incentives and concessions based on production to promote production-based performance, especially for MSMEs. It also envisages to set-aside 30% of the available land in industrial areas for MSMEs in the state. Apart from the its industrial policy, the state government has recently relaxed many

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<sup>2</sup> Department for Promotion of Industry and Internal Trade, Government of India

regulations, including land acquisition and labour laws to attract investments. These include removing restrictions on non-agriculturists purchasing agricultural land; increasing overtime to 125 hours per quarter; linking wage revisions to factors such as Consumer Price Index (CPI) and inflation; and allowing companies to start operations after it is cleared by high-level committees without waiting for further clearances and approvals from concerned line departments. Few of the major objectives for the Industrial Policy 2020-25 are depicted below:

**Figure 1 Major Objectives for Karnataka Industrial Policy 2020-25**



## 1.2. Need for the project

In this context, this evaluation study of the industry related services modules of major line departments in Karnataka is undertaken **to take stock of the de facto reality of the effectiveness of these modules in delivering desired services to the investors, identify gaps and suggest improvements** to make them more investor friendly and thus boost the investment climate of the state.

This would help state to further improve its regulatory process and attract new investors to invest in Karnataka state in this competitive market, by offering them a robust automated











system in the state wherein businesses are facilitated with end-to end service delivery by creating smooth transition from receiving an investment proposal to the implementation and operationalization of the project and its after care through adequate monitoring.

The scope of this assignment was to undertake a detailed diagnostic study to understand the effectiveness of fifty-seven service modules across seventeen-line departments (detailed in the sanctioned Terms of Reference for the study) in delivering the services to the investors and identify gaps if any to adopt best practices across modules which will result in transparency, governance and catalyses investment grounding in the state. **The service delivery for the investor applications collected and analysed are for all the applications received from 01/04/2019 to 31/03/2020.**

### 1.3. Objectives

Primary objectives for the study as stated in the Terms of Reference (ToR) is depicted below:

**Figure 2 Primary objectives of the Evaluation Study**

1	To Study the role played by Karnataka Udyog Mitra (KUM) as single window portal and the service it offers to investors in the state to facilitate investments	
2	To compare and benchmark the best practices adopted by Indian states in EoDB	
3	To critically analyse the service delivery mechanism for respective line departments on parameters of adherence to timelines and the approval workflow process	
4	To scrutinize the requisite documentation and procedures involved in obtaining a service to ensure minimal redundancy and adherence to timelines across all kind of investor groups	
5	To analyse ease of accessibility, submission of application, access to information on the portal, ease of handling, and e-payments across the group of investors and regions	
6	To carry out gap assessment exercise for all the identified service modules and recommend measures to substantially improve process efficiency	
7	To examine the impact of service delivery on the growth of investment by enterprises and entrepreneurs in the state	
8	To benchmark and adopt the best practices in EoDB from across the Indian states and/or from other economies with an objective to be the top performer state in India for EoDB	

## 1.4. Scope of work

The scope of the project as derived from the ToR (Attached as Annexure) of the project can be summarised as follows:

1. Literature study for the EoDB practices in Karnataka and India
2. Study of EoDB practice in Karnataka
3. Study of service delivery procedure for all the seventeen-line department and identified services
4. Study of digitization of identified services by deploying NeSDA assessment framework
5. Study of service delivery impact on investors in terms of investments, growth in projects and industrial units
6. Study of act and policies related to EoDB
7. Identification of issues and constraints and assessment of efficiency/success of investor service delivery in Karnataka
8. Recommendation for making investor reforms more efficient, transparent and inclusive in state

## 1.5. Chapterisation

- Chapter 1 introduces the assignment with its objectives and scope of work.
- Chapter 2 details the relevant literature review for the study and the adopted evaluation methodology
- Chapter 3 describes the functional and service delivery procedure for each department
- Chapter 4 critically analyses the performance of investor reforms in Karnataka through primary and secondary data and information, focus group discussion, interviews and site visits to draw out critical findings
- Chapter 5 brings out benchmark case studies from other top performing states
- Chapter 6 contains the recommendations to further improve service delivery to investors to promote investor friendly business environment

## 2. Literature review and evaluation methodology

### 2.1. Relevant literature for the study

Since 2014, Department for Promotion of Industry and Internal Trade (DPIIT) has spearheaded a national level exercise to rank all the States/UTs in the country on the reforms undertaken by them on designated parameters. The aim of this exercise is to create conducive business environment by streamlining regulatory structures and creating an investor-friendly business climate by cutting down red tape. India a federally structured nation, States/UTs play a vital role in promoting investor confidence. The process of assessing State level reforms has been a journey of evolution and is an ongoing process.

In 2014, the representatives of the State Government identified reforms to be undertaken by them and a new measure of competitiveness was initiated. Subsequently, a report titled “Assessment of State implementation of Business Reforms” was released in September 2015 capturing the findings and status of reforms implemented by States/UTs.

In 2016, DPIIT released a 340-point action plan which was drafted in consultation with all States/UTs. It included recommendations on 58 regulatory processes, policies and process spread across 10 reform areas spanning the lifecycle of a typical business. Such an action plan was the first of its kind in India which promoted both competitive and cooperative federalism among the States/UTs. Subsequently, an online portal ([www.eodb.dipp.gov.in](http://www.eodb.dipp.gov.in)) showcasing dynamic real time rankings was developed and launched in April 2016 which is the first such platform for knowledge sharing on regulatory compliance requirements.

Final ranking of States/UTs on implementation of the 340 points were released in November 2016. The national implementation average stood at 48.93% higher than 2015's national average of 32% and 12 States achieved more than 90% implementation score.

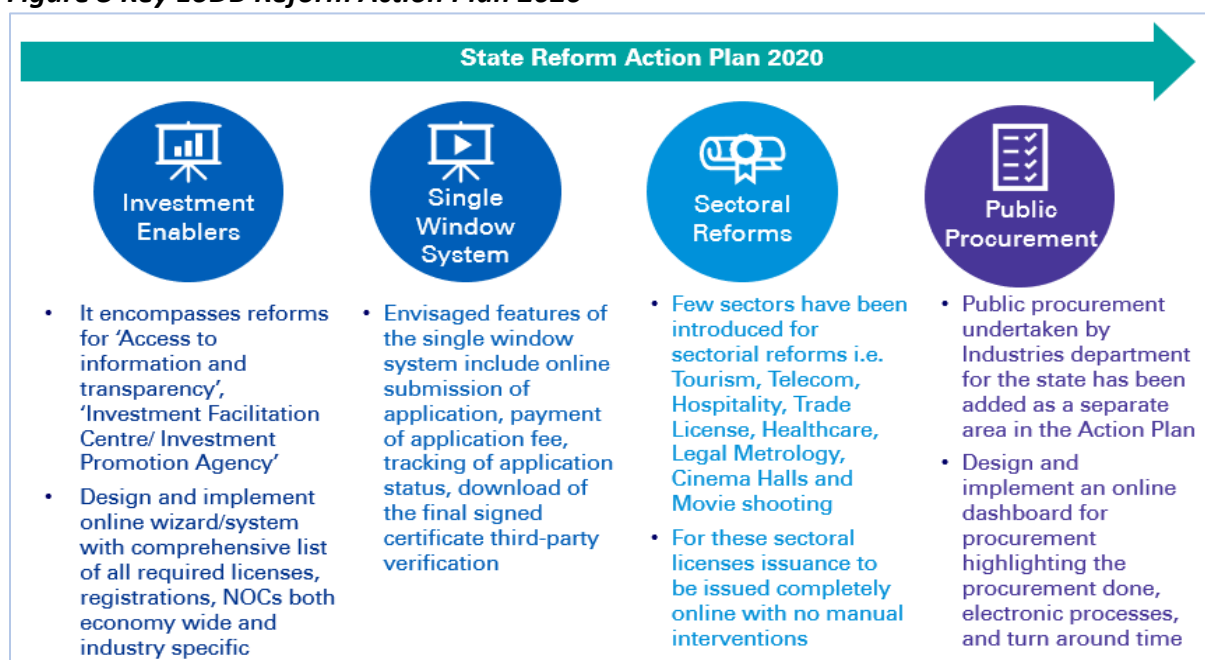
BRAP 2017-18 was updated to 372 action points with addition of new sectors such as Healthcare and Hospitality, Central Inspection system, Trade License, Registration under Legal Metrology, and Registration of Partnership Firms & Societies.

An important addition to methodology under BRAP 2017-18 was the inclusion of feedback exercise where feedback was sought on 78 reform points from actual users of new system. The respondent data in various categories was provided by the States/UTs. For BRAP 2019, DPIIT undertook 100% feedback-based assessment on all 80 recommendations for reforms on regulatory processes, policies, practices and procedures spread across reform areas.

The latest rankings released in September 2020 are based on the performance of states on a wide-ranging list of 180 reform points covering 12 business regulatory areas such as Access to Information, Single Window System, Labour, Environment, etc<sup>3</sup>.

Starting with a 98-point Reform action Plan in 2014, successive State Reforms Action Plans have been released by DPIIT covering more areas of reform. The objective of the successive action plans is to layout the series of reforms targeted at increasing transparency and improving the efficiency and effectiveness of regulatory framework and services for businesses in India. The Action Plan for the next year 2020 consists of 301 Reform points spread across 15 Areas<sup>4</sup>. Key highlights of the state reform action plan are depicted below:

**Figure 3 Key EoDB Reform Action Plan 2020**



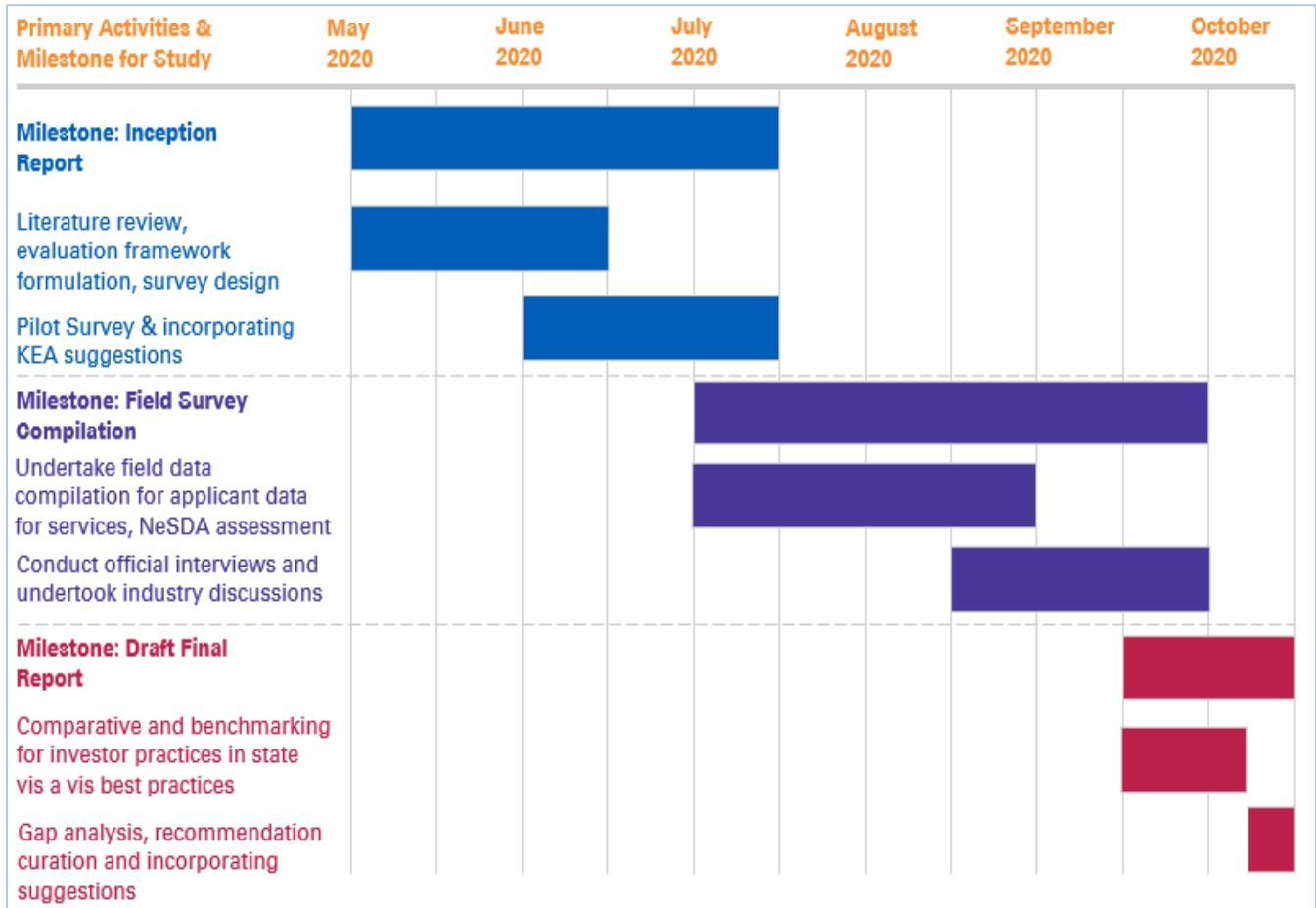
<sup>3</sup> [Business Reforms Action Plan \(dipp.gov.in\)](https://dipp.gov.in)

<sup>4</sup> Implementation guide for State Reforms Action Plan, 2020 accessed from <https://eodb.dipp.gov.in/PublicDoc/Download/30337>

## 2.2. Evaluation and data collection methodology

The methodology for the evaluation study (has been derived in the purview of the broad area of evaluation and the scope of work for the study) **consisting of analysis of primary and secondary information availed through policy document reviews, documents and reports, site visits, primary survey and department applicant data.** Secondary research has been undertaken for understanding EoDB policies and processes prevalent at state level. Data collected through primary and secondary means have been statistically analysed to reveal trends and facts. Field survey was done across industry state holders to understand the investor business reforms process. Inferences have been compared and compiled to arrive at short term and long-term proposals for making investor reforms in the state more efficient, effective and industry friendly. Brief bar activity chart lists down the major activities undertaken for the purpose of evaluation study.

**Figure 4 Overall methodology for the evaluation study**



Evaluation matrix for the study presented below has been developed on the conceptual framework discussed above and in cognizance of various business reforms adopted practices of better performing economies. It focuses on the terms of reference of the study i.e. main evaluation questions, main evaluation sub-questions, key indicators for the evaluation questions, sources of data, collection and analysis methodology for the collected data.

**Table 1 Detailed Evaluation Matrix for the Study**

Sl. No.	Main Questions	Sub Questions	Indicators	Sources of Data	Method of Data collection	Data Analysis
1.	Applicant analysis for service delivery by respective line departments	a) Applications serviced by departments during assessment period b) Time-line analysis of the serviced applications c) Seamlessness of the services offered under investor applications d) Line department wise analysis for services & processes adopted	a) Approval rates b) Rejection rates c) Time-line adherence d) Online availability of services e) Payment security offered f) Effective tracking mechanism g) Redressal mechanism	a) In depth Interviews with KUM/DIC officials b) In depth Interviews with Line dept. officials c) Investor opinion survey d) Investor applications received between 01/04/2019 to 31/03/2020 list from KUM	a) Survey tools b) 120 serviced applications from KUM between 01/04/2019 to 31/03/2020 c) GO/Orders/ Minutes/Discussion Papers etc. d) Discussions with Officials, Industry & Investors	a) Quantitative analysis b) Qualitative analysis c) BPR for process workflow improvement d) Benchmarking for National & International Best Practices

Sl. No.	Main Questions	Sub Questions	Indicators	Sources of Data	Method of Data collection	Data Analysis
		e) Information & Handholding activities				
2.	Service Website Assessment	<p>a) Website analysis for ease of accessibility, submission of application, access to information on the portal, ease of handling the process, workflow, ease of applying, document upload, tracking applications, downloading final certificate and online payments across the group of investors and regions</p> <p>b) Analysis of service delivery interdependence</p>	<p>a) Ease of access</p> <p>b) Security Aspects</p> <p>c) Application Tracking</p> <p>d) Approval Rate</p> <p>e) Adherence of Timelines</p> <p>f) Low fees of service delivery</p> <p>g) Minimal procedural steps for delivery</p> <p>h) Security &amp; encryption</p>	<p>a) In depth Interviews with KUM/DIC officials</p> <p>b) In depth Interviews with concerned line dept. officials</p> <p>c) Investor opinion survey</p> <p>d) Investor applications received between 01/04/2019 to 31/03/2020 list from KUM</p>	<p>a) Survey tools</p> <p>b) Department Official Discussions</p> <p>c) GO/Orders/ Minutes/Discussion Papers on Investor Reforms</p> <p>d) Secondary Research</p>	<p>NeSDA framework illustrated below is leveraged to assess the websites</p>

Sl. No.	Main Questions	Sub Questions	Indicators	Sources of Data	Method of Data collection	Data Analysis
		across departments c) Analysis of cost and other resources incurred by investors to obtain the services				
3.	Functional aspects of service modules including eBiz Portal Karnataka	a) Workflow process end to end application approval b) End to end integration of services rendered online by concerned departments c) Browsers compliance standards d) Bilingual Support e) W3C Compliance f) Security Compliance	a) Modules accessibility, quality and usability b) Workflow ease for documents/ services/ c) Bilingual & security features offered	a) Test results of dummy logins for all services rendered online b) Opinion survey with applicants c) IDI's with department officials	a) Dummy login tests b) Prototype testing c) Survey Tools	NeSDA framework illustrated below is leveraged to assess the websites




Sl. No.	Main Questions	Sub Questions	Indicators	Sources of Data	Method of Data collection	Data Analysis
4.	Service Delivery Impact on Investors	<p>a) Analyse the percentage increase in growth of industries/business services in pre and post Sakala period in the State and percentage change decrease in time taken for final approvals</p> <p>b) Analyse the service delivery trends across the services and Departments as against the scheduled time period.</p> <p>c) Examine construction</p>	<p>a) Trends for Industries/ Business in Karnataka post Sakala Act</p> <p>b) Trends for Investment Realised by state post Sakala Act</p> <p>c) Pendency Rate</p> <p>d) Correlation Rate among Dept</p> <p>e) Observations from AS IS analysis</p>	<p>a) Focused Group Discussion with Industry &amp; Investors</p> <p>b) Secondary Research</p> <p>c) In depth Interviews with KUM/DIC officials</p> <p>d) In depth Interviews with Line dept. officials</p> <p>e) Investor Applications from &amp; questionnaire</p>	<p>a) Focused Group Discussion with Industry &amp; Investors</p> <p>b) Investor &amp; Industry Opinion Survey</p> <p>c) Investor application data from SAKALA and departments</p> <p>d) Secondary Research</p>	<p>a) Quantitative analysis</p> <p>b) Qualitative analysis</p> <p>c) BPR for process workflow improvement</p> <p>d) Benchmarking for National &amp; International Best Practices</p>

Sl. No.	Main Questions	Sub Questions	Indicators	Sources of Data	Method of Data collection	Data Analysis
		permits timelines d) Benchmarking & Gap Analysis for AS IS of Investor Reforms to adopt best in class practices e) Review functioning of grievance redressal mechanism f) Investor Opinion/Perception Survey				

The qualitative field survey research for the study was conducted by means of structured questionnaire-based survey with officials and industry in form of interviews and focused group discussion. Quantitative data for the study for all the fifty-seven services as per the scope of the study was sourced from SAKALA and in some cases from the concerned department. Thus, primary data for the study is based on the survey research conducted in form of SAKALA and department data, field interviews, focused group discussions and online assessment by leveraging National e-Governance Service Delivery Assessment (NeSDA) assessment framework as below. All the website for services were examined on the below parameters and scores were awarded for existence or nonexistence of a feature. Detailed scoring is provided in Annexure of the document.

**Figure 5 NeSDA Assessment Parameters**

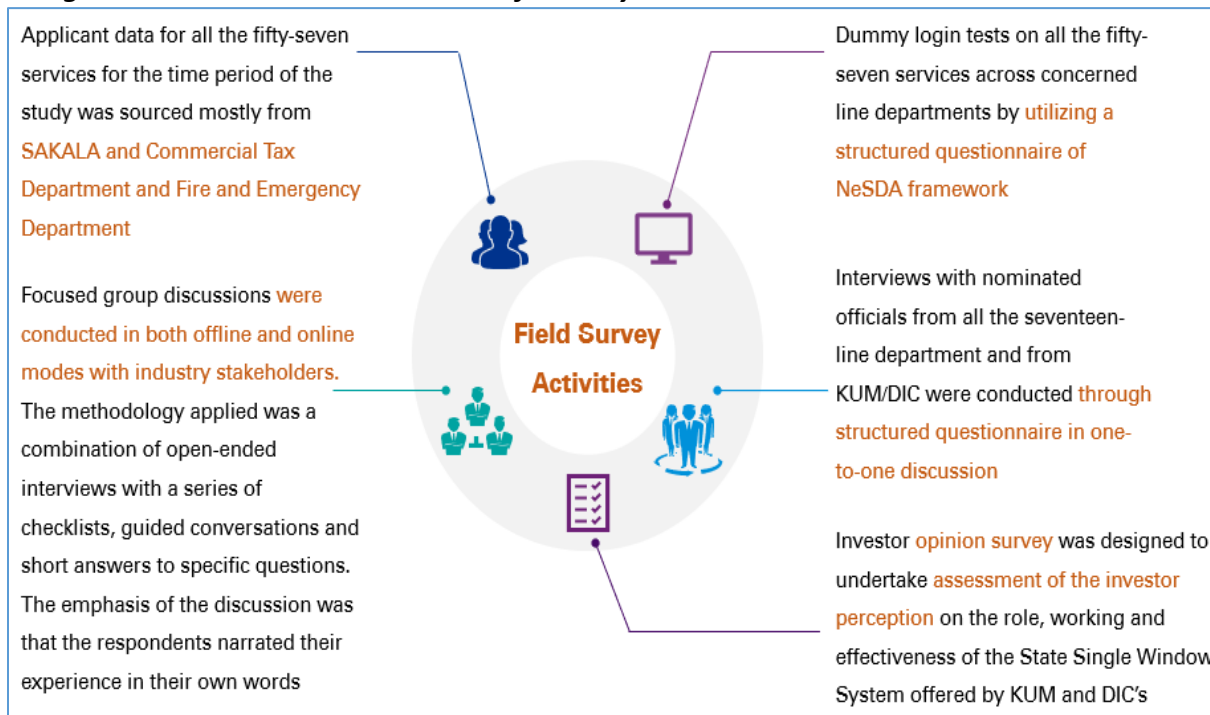
 <b>NeSDA Framework</b> <b>Parameters Assessed for State Department Portals</b>						
Accessibility	Content Availability	Ease of Use	End Service Delivery	Information Security & Privacy	Integrated service delivery	Status and request tracking
<ul style="list-style-type: none"> <li>• Existence of Service links</li> <li>• Bilingual Content</li> <li>• Nodal officer information</li> <li>• Contact-us</li> <li>• Downloadable forms</li> <li>• Multi navigation routes</li> <li>• Personal user profiles</li> <li>• Service history</li> <li>• Compatibility</li> </ul>	<ul style="list-style-type: none"> <li>• FAQ section</li> <li>• Site map</li> <li>• Updated content</li> <li>• Service counters</li> <li>• Feedback/grievances logging feature</li> <li>• Know how for Digital Signature</li> </ul>	<ul style="list-style-type: none"> <li>• Service to be available at two clicks</li> <li>• Social media</li> <li>• Top 5 results in search engine</li> <li>• Search feature for website</li> <li>• Internal workflow</li> <li>• How-to guides and help manuals</li> </ul>	<ul style="list-style-type: none"> <li>• Mode for end service delivery</li> <li>• OTP authentication</li> <li>• Mandates department visits</li> <li>• Manual interventions</li> </ul>	<ul style="list-style-type: none"> <li>• HTTPS complaint</li> <li>• Third party security alliance</li> <li>• W3C compliance</li> <li>• Two factor authentication</li> <li>• Password expiry/unauthorized access reminders</li> </ul>	<ul style="list-style-type: none"> <li>• Payment gateway integration</li> <li>• Multiple payment option provision</li> <li>• Unique sign on for users</li> <li>• Digital signature for NOC/Approvals</li> <li>• Auto population of related content</li> </ul>	<ul style="list-style-type: none"> <li>• Application tracking</li> <li>• Application status intimation</li> <li>• Grievances/ Complaints tracking</li> <li>• Feedback feature for users</li> <li>• Dedicated webpage for payment resolution</li> </ul>


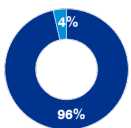



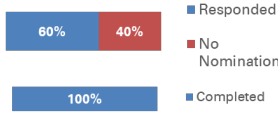
Key Parameters

### 2.3. Field survey activities and limitations

Activities undertaken for collection of primary data and its status is depicted as below, details of all the below analysis are amended in annexure of this document:

**Figure 6 Field data collection status for study**



Study Sample	Brief status of the Data received	Status
 <b>Applicant Data:</b> For 57 Services	<ul style="list-style-type: none"> <li>For 49 services, Data has been validated and analysed</li> <li>For 06 services, Partial data facilitated by BBMP</li> <li>For 02 services, no data facilitated by BBMP</li> </ul>	 <ul style="list-style-type: none"> <li>Data Analyzed</li> <li>Data not Received</li> </ul>
 <b>Online Module Assessment:</b> For 57 Services	<ul style="list-style-type: none"> <li>For 57 services, NeSDA assessment completed across all departments</li> </ul>	 <ul style="list-style-type: none"> <li>Completed</li> </ul>
 <b>Survey Samples:</b> 75 IDI 10 FGD 120 Opinion Survey	<ul style="list-style-type: none"> <li>IDI: 35 with Line Departments and 10 with KUM &amp; DIC completed</li> <li>FGD: 10 Completed, 5 Offline &amp; 5 Online</li> <li>Opinion Survey: 51 response received via Online Investor opinion survey link (<a href="https://www.research.net/r/ebizkarnataka">https://www.research.net/r/ebizkarnataka</a>)</li> </ul>	 <ul style="list-style-type: none"> <li>IDI: Responded (60%), No Nomination (40%)</li> <li>FGD: Completed (100%)</li> </ul> <p><i>Opinion Survey conducted over a restricted sample of 51 responses (as agreed with KEA), from active Industry Association members across the state.</i></p>

Above field data collection approach and methodology has few limitations which are discussed as below:

- A. For the dummy login tests of the online service modules, utilizing the NeSDA assessment framework could not test the integration of payment gateways and its performance. However, such experiences were captured through interviews and discussions conducted with officials and investors respectively.
- B. For the dummy login tests of the online service modules, utilizing the NeSDA assessment framework could not test the end service delivery i.e. receipt of delivery by applicants and matters thereon. However, such experiences were captured through interviews and discussions conducted with officials and investors respectively.
- C. For the planned focused group discussions, five out of ten planned discussions were conducted through online mode due to prevailing outbreak of COVID 19. However, other five were conducted offline and covered all the four divisions of the state i.e. Mysore, Shimoga, Hubballi and Kalburgi. For the discussions conducted online it was ensured that industry stakeholders participations are from across the state.
- D. Interviews with all the District Industries Centre could not be completed due to non-availability of information and nominations from concerned departments. However, interviews with six major DIC's nodal officers were conducted with sufficient representation from Karnataka Udyog Mitra (KUM).
- E. Applicant data for the services sourced from SAKALA contains cases where the date of processing of application is before the application submission date, this is due to entry error on format of data performed at the time of feeding data by the concerned line departments to the SAKALA database. However, such cases are restricted to less than 10% of the total applications for a given service.
- F. Applicant data for the services sourced from SAKALA does not consistently provide details on the reasons for rejected applications or applications that are delayed and fail to adhere to SAKALA timelines. However, such information was sourced from interviews conducted with concerned line department officials.



### 3. Service delivery assessment for State departments

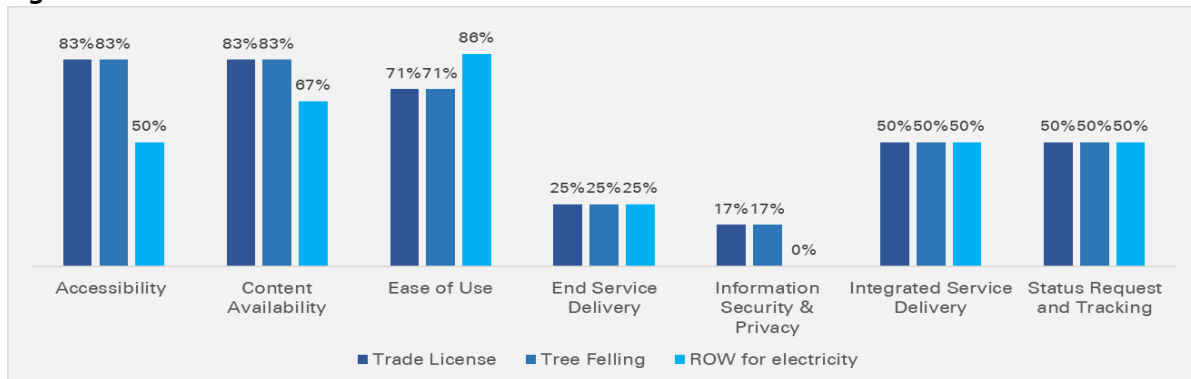
As elaborated in earlier sections, evaluation study for industry services modules undertakes a detailed diagnostic study to understand the efficacy of fifty-seven service modules across seventeen-line departments in delivering the services to the investors and identify gaps if any to adopt best practices across modules which will result in transparency, governance and catalyses investment grounding in the state.

This study examines the performance delivery of industry related services as per timeline, process of delivery, clarity of service delivery and challenges faced by the industry. Service delivery by the concerned line department in the time period of the study i.e. 1st April 2019 to 31st March 2020 is assessed against the scheduled number of mandatory days for delivery of service, functional aspects and mode of service delivery across all the modules. Findings based on available data for the time period of the study is categorised department wise in below sections.

#### 3.1. Bruhat Bengaluru Mahanagara Palike (BBMP)

There were total of eight services under the study scope for the department namely trade license, building plan sanction/approval, tree felling, right of way, Khata registration, completion certificate, occupancy certificate, commencement certificate. Key inferences from NeSDA assessment and applicant data analysis of all these services is as below.

**Figure 7 BBMP services: NeSDA scores**



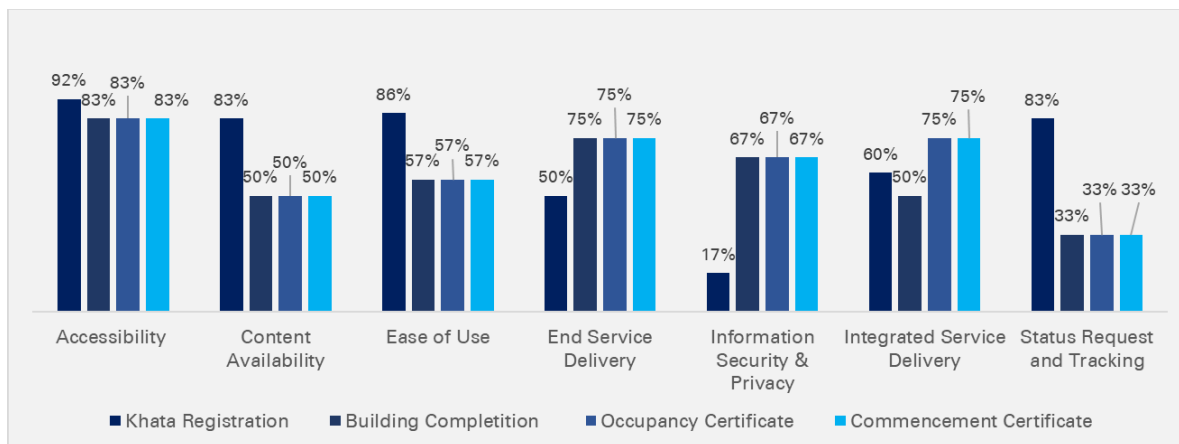


Figure above graphically depicts the NeSDA assessment scores for all the services for BBMP (detailed score in Annexure). Major improvement areas for these services are listed as below:

**Table 2 BBMP e-service delivery - Focus areas**

SI. No.	BBMP Service	Mode of Delivery	Focus Areas for each of the services
1	Trade License	Department Website i.e. <a href="http://bbmp.gov.in/trade-license">http://bbmp.gov.in/trade-license</a>	<ul style="list-style-type: none"> <li>Provision for users to make personal login profiles</li> <li>Integration of information security features such as https protocol, lock symbol, W3C compliance</li> <li>Integration of feature to log complaints/grievances and provide feedback</li> </ul>
2	Sanction of Building Plan	BPAS Website i.e. <a href="https://bpas.bbgov.in/BPAM_SClient4/Default.aspx">https://bpas.bbgov.in/BPAM_SClient4/Default.aspx</a>	<ul style="list-style-type: none"> <li>Web site content should also be available in Kannada</li> <li>Provision of search feature for website content</li> <li>Web site should be in Top 5 results of search engine</li> </ul>



Sl. No.	BBMP Service	Mode of Delivery	Focus Areas for each of the services
			<ul style="list-style-type: none"> <li>Manual touch point for scrutiny of the drawing plan and site inspection should be rationalised</li> </ul>
3	Tree Felling & Transit Permission	Department Website i.e. <a href="http://bbmp.gov.in/tree-cutting">http://bbmp.gov.in/tree-cutting</a>	<ul style="list-style-type: none"> <li>Provision for users to make personal login profiles</li> <li>OTP authentication feature could be integrated</li> <li>Integration of feature to log complaints/grievances and provide feedback</li> <li>Offline provision for application submission could be removed</li> </ul>
4	Right of Way permission for new electricity connection	Department Website i.e. <a href="http://bbmp.gov.in/road-cutting">http://bbmp.gov.in/road-cutting</a>	<ul style="list-style-type: none"> <li>Web site content should also be available in Kannada</li> <li>Manual touch point of physical inspection and scrutiny by department officials should be rationalised</li> <li>Integration of information security features such as https protocol, lock symbol, W3C compliance</li> <li>Integration of feature to log complaints/grievances and provide feedback</li> </ul>
5	Khata registration	SAKALA website i.e. <a href="http://www.sakala.kar.nic.in/online/bbmp/registration.aspx">http://www.sakala.kar.nic.in/online/bbmp/registration.aspx</a>	<ul style="list-style-type: none"> <li>Web site link should be given at department web site</li> <li>Manual touch point for inspection of the site location should be rationalised</li> <li>A dedicated link should be integrated for subjects pertaining to payment for service</li> </ul>

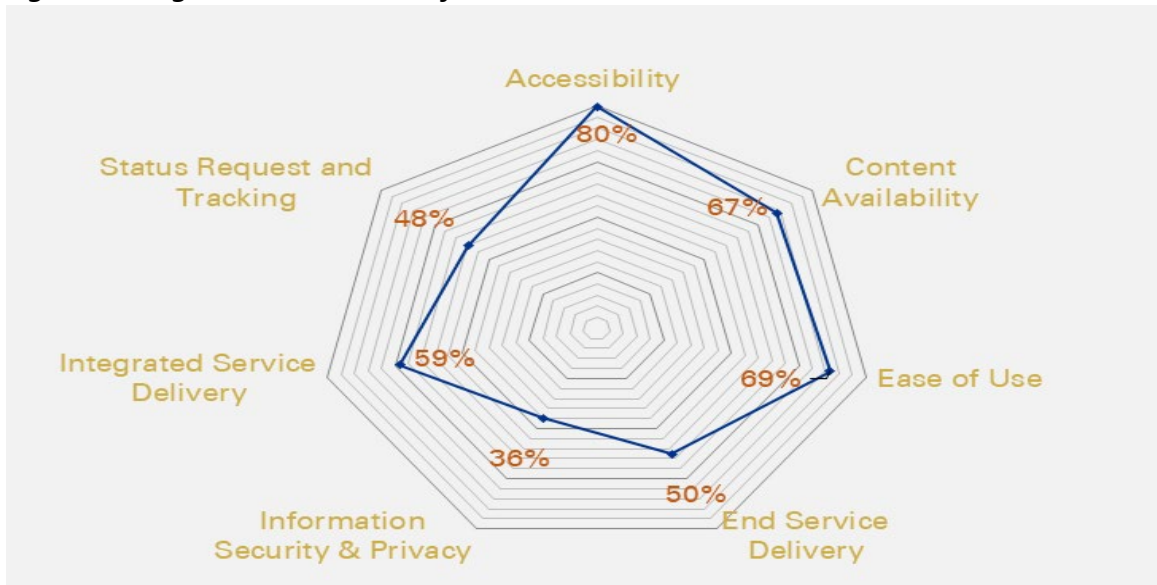
SI. No.	BBMP Service	Mode of Delivery	Focus Areas for each of the services
			<ul style="list-style-type: none"> <li>Provision for online payment to be integrated currently, only payment through Bangalore One center is accepted</li> </ul>
6	Building completion certificate	It's not a stand-alone service but a mandatory document obtained offline required to apply for Occupancy Certificate	NA
7	To obtain occupancy certificate	BPAS Website i.e. <a href="https://bpas.bbm pgov.in/BPAMSC lient4/Default.asp x">https://bpas.bbm pgov.in/BPAMSC lient4/Default.asp x</a>	<ul style="list-style-type: none"> <li>Web site content should also be available in Kannada</li> <li>Provision of search feature for website content</li> </ul>
9	To obtain Commencement Certificate for beginning the construction work in respect of cases where Building plan approval is already obtained <sup>5</sup>	BPAS Website i.e. <a href="https://bpas.bbm pgov.in/BPAMSC lient4/Default.asp x">https://bpas.bbm pgov.in/BPAMSC lient4/Default.asp x</a>	<ul style="list-style-type: none"> <li>Web site should be in Top 5 results of search engine</li> <li>Manual touch point for scrutiny of the drawing plan and site inspection should be rationalised</li> <li>Integration of feature to log complaints/grievances and provide feedback</li> </ul>
10	Building plan approval for Sites and Civic Amenities Sites in BDA Layouts and BDA approved private layouts not handed over to BBMP yet	BPAS Website i.e. <a href="https://bpas.bbm pgov.in/BPAMSC lient4/Default.asp x">https://bpas.bbm pgov.in/BPAMSC lient4/Default.asp x</a>	

<sup>5</sup>CC and BP Approval in Bangalore since 2017 is being offered by BBMP and not BDA




Sl. No.	BBMP Service	Mode of Delivery	Focus Areas for each of the services
11	Obtaining Commencement Certificate for the land, where Change of land use is already approved, as per section 14a(3) of KTCP Act 1961	BPAS Website i.e. <a href="https://bpas.bbmp.gov.in/BPAMSClient4/Default.aspx">https://bpas.bbmp.gov.in/BPAMSCClient4/Default.aspx</a>	

Overall average score for all above BBMP services is depicted in figure below, major areas of improvement for these services is identified as **Content availability, Information security and privacy and Status request and tracking**. Below improvement features in these areas would further enhance the transparency, better user experience and reduce service delivery discrepancies. Recommended features are tabulated as below with its significance below.

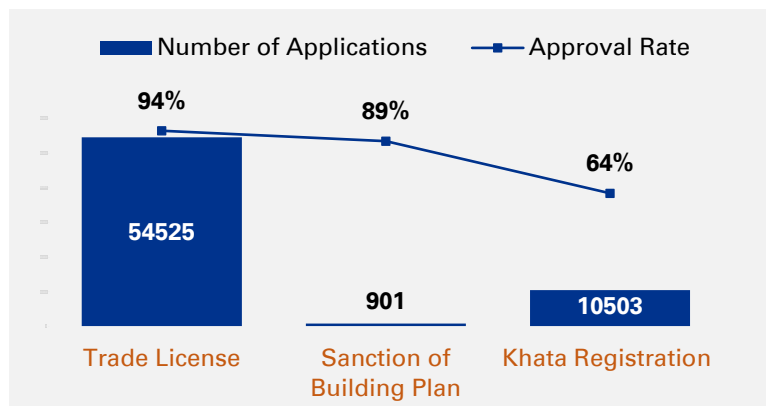
**Figure 8 Integrated NeSDA score for BBMP**



**Figure 9 Recommendations for BBMP portal**

Parameters	Improvement Areas	Recommendations & Significance
 <p>Content Availability</p>	<ul style="list-style-type: none"> <li>Ensuring Help manuals and dedicated FAQ section at the portal</li> <li>Integration of site maps and feature to provide feedback and comments</li> <li>Providing know how on digital signature feature</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY Content Management Framework</b> with aim to improve presentation, usability and consistency of state portal</li> <li>Access to relevant and useful information enables better user experience and improves transparency</li> </ul>
 <p>Information Security &amp; Privacy</p>	<ul style="list-style-type: none"> <li>Integration of online security measures such as hosting on https compliance, W3C compliance, lock symbol</li> <li>Intimating users for password update or unauthorized access to profile</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY ePramaan Framework</b> guidelines for eAuthentication for user identifications</li> <li>Increases the trust of citizens in service delivery which in turn increases adoption and helps increase reach and coverage</li> </ul>
 <p>Status and request tracking</p>	<ul style="list-style-type: none"> <li>Integration of features to intimate users in status change/update of applications</li> <li>Provision for users to leave feedback and track status of complaints</li> <li>Provide dedicated webpage for subjects related to payment for services</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY Digital service standard</b> to adopt practices for end to end status tracking with unique identifiers</li> <li>Improves efficiency and increases transparency for service delivery. Empowers citizens by enhancing trust in Government</li> </ul>

Applicant data analysed for the evaluation period illustrates that most utilised service for the departments is trade license and lowest approval rate is observed for Khata registration. Primary rejection reasons are tabulated as below.



**Figure 10 Applications for BBMP services 19-20**

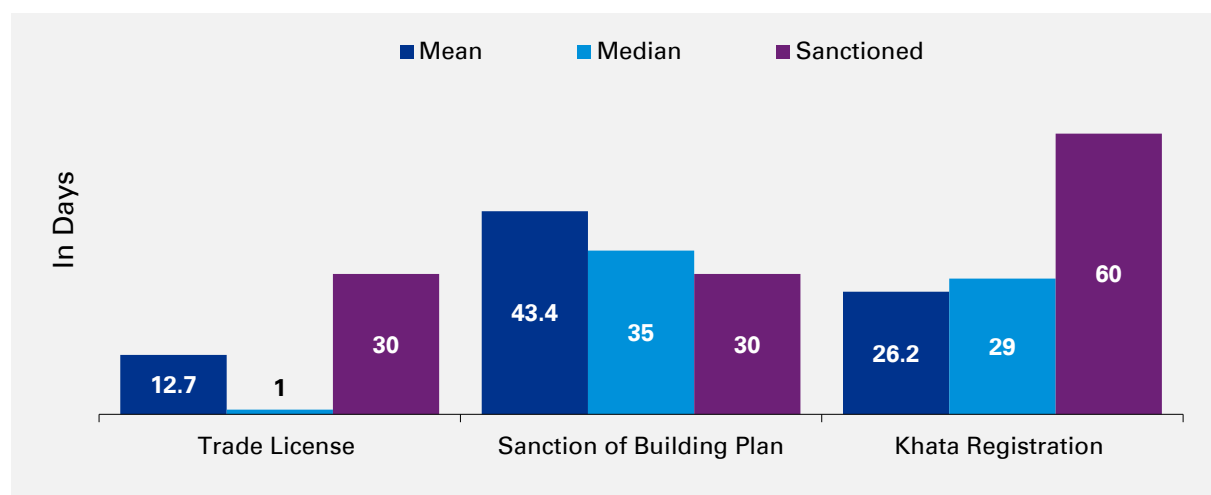
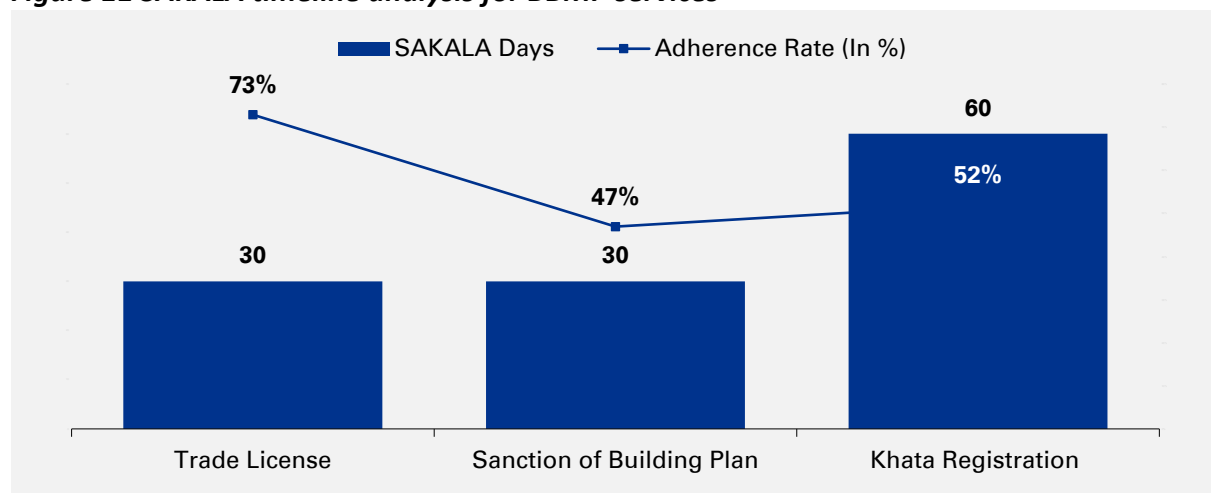
Source SAKALA DPAR, Government of Karnataka (GoK)

Adherence to SAKALA timeline was observed among lowest for the Building plan sanction and highest for trade license.

**Table 3 Rejection reasons for BBMP services**

For Trade License	For Sanction of Building Plan	For Khata Registration
<ul style="list-style-type: none"> <li>• <b>Lack of sufficient supporting documents</b> like bank challan, allotment letter, building plan copy, Vendor MOU, lease agreement errors</li> <li>• <b>Noncompliance to rules, regulations and violations</b> such as building laws violation</li> <li>• Submission done to <b>wrong jurisdiction</b></li> <li>• Misinformation in applicant information</li> <li>• <b>Court case or complaints</b> from residents</li> <li>• Uploaded documents not legible and duplication</li> <li>• <b>Rejections during inspection</b> due to noncompliance to fire &amp; safety norms, waste management measures etc.</li> <li>• Allotment to nonresidential area</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Supporting documents submitted non-compliant</b> such as incorrect drawings, stamp papers etc.</li> <li>• Nonpayment of application fees</li> <li>• <b>Site location non-compliant</b> with comprehensive development plan or located in environmental buffer zones</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Lack of supporting documents</b> such as tax payments, invalid Aadhar signature</li> <li>• Duplicate applications by applicants</li> <li>• Objections raised by third party approval</li> <li>• <b>Change in authority of response from BDA to BBMP</b></li> <li>• <b>Mis matched information</b> by applicant and disputed property</li> <li>• Applicant <b>failed to submit original documents</b> NOC, conversion order, death certificate, conversion order</li> <li>• Litigation cases and nonpayment of improvement fees</li> <li>• Khata not recorded correctly, registered in other records</li> </ul>

**Figure 11 SAKALA timeline analysis for BBMP services**



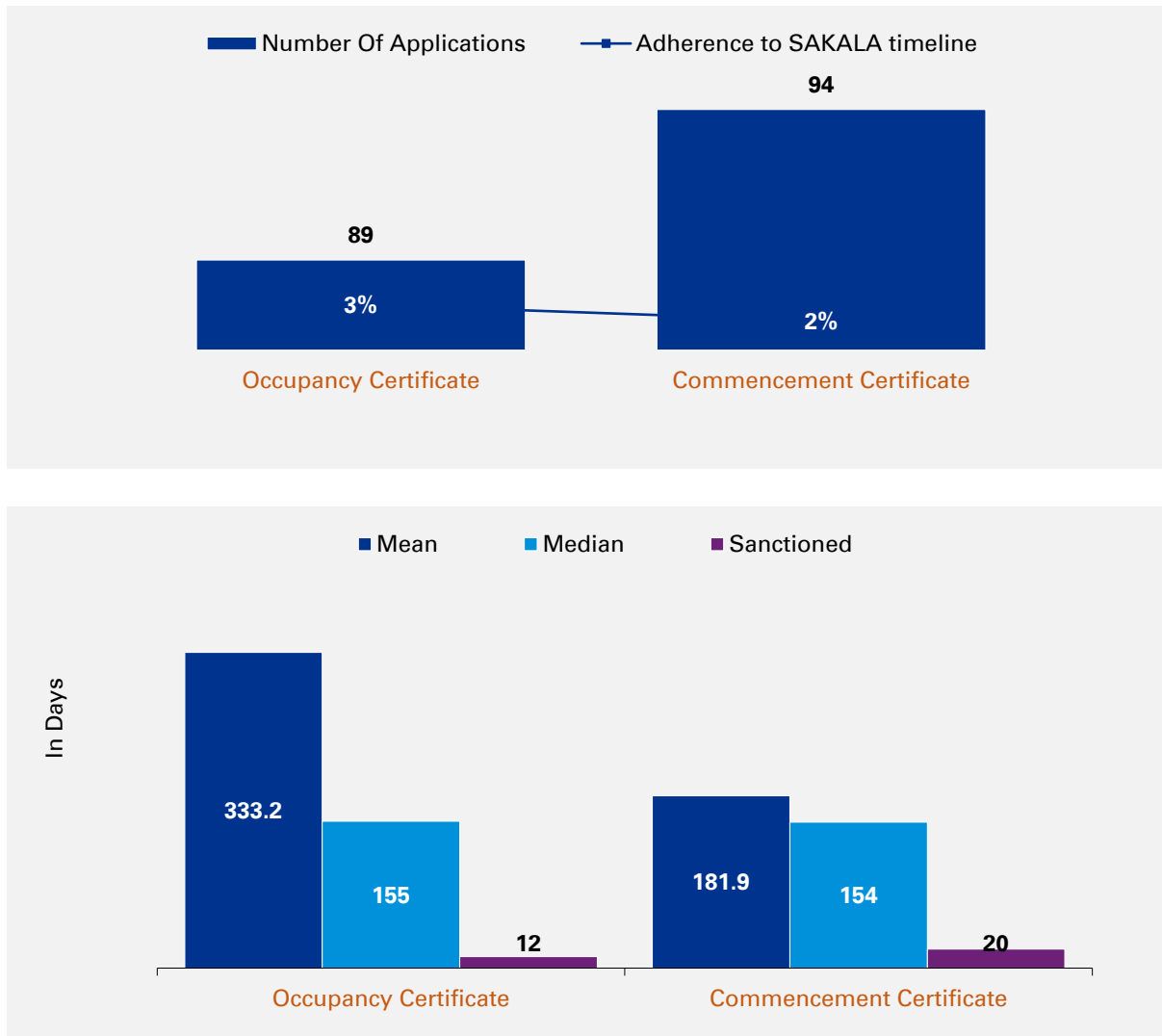
Sanctioned SAKALA time is observed to be overshoot very frequently for Sanctioning of Building Plan. For Sanction of building plan having lowest adherence rate at 47%, interaction with department officials revealed that primary reasons for such instances is lack of submission of supporting documents by applicants. Such interactions also revealed that offline submission of documents is still prevalent and update to users are provided intermittently i.e. on case to case basis.

For occupancy certificate and commencement certificate only, partial data was made available by the department. Adherence to SAKALA timeline was observed among lowest for all the services across any department. Interaction with department officials revealed

that primary reasons for such delays were due to noncompliance of inspections observations by applicants.

Central tendency measurement for the applications processed indicates that for occupancy certificate issuance department takes more than 27x, for commencement certificate issuance more than 9x of the sanctioned time.

**Figure 12 SAKALA timeline analysis for BBMP services**



*Note: Partial data for four zones out of 10 BBMP zones were made available for occupancy certificate and commencement certificate. As per the comments received from department Completion certificate is not a standalone service but an application form for obtaining Occupancy certificate. Applicant data for tree felling, right of way, were not made available by concerned department for analysis.*

*Summary of facts and figures across all services of BBMP*

**Table 4 Summary of figures across all services of BBMP**

Service	Applications	Approval Rate	SAKALA Adherence	NeSDA Score	Mean SAKALA timeline (in days)
Trade License	54525	94%	73%	60%	12.7
Sanction of Building Plan	901	89%	47%	67%	43.4
Tree Felling & Transit Permission	10503	64%	52%	47%	



### 3.2. Bangalore Development Authority (BDA)

There are four services under the study scope for the department. However, as per the department, the services such as **building plan approval**, **commencement certificate where change of land use is already approved**, and **commencement certificate where building plan is already approved** are being offered via BBMP. Therefore, only the service – **obtaining possession certificate** – was evaluated. Key inferences from NeSDA assessment and applicant data analysis for the service is as below.

**Figure 13 BDA services: NeSDA score**

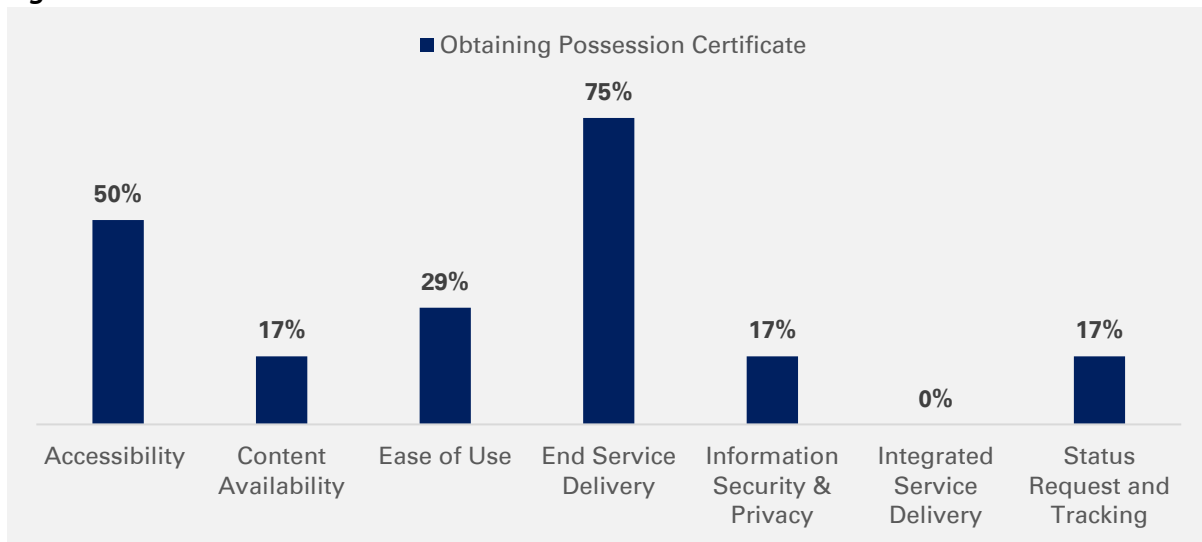


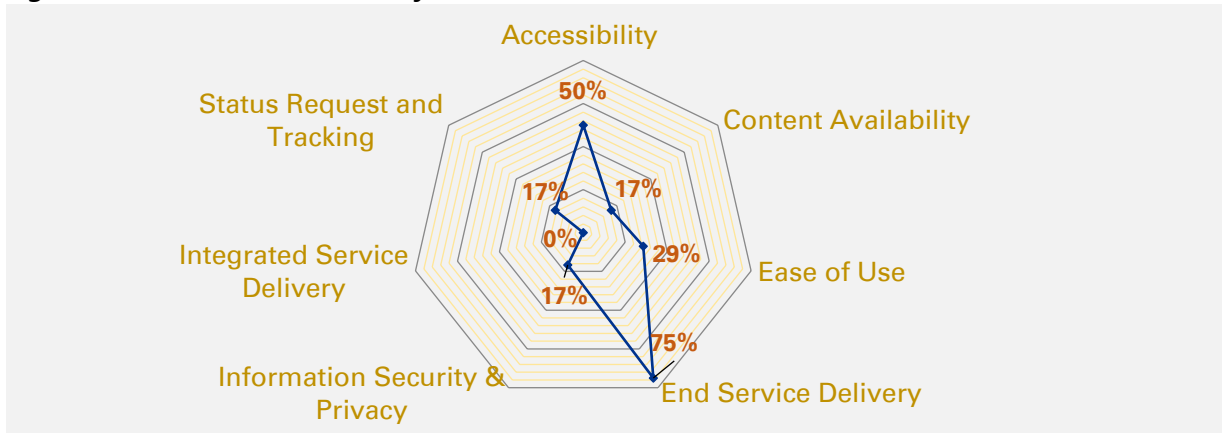
Figure above graphically depicts the NeSDA assessment scores for the aforementioned service of BDA. Major improvement areas for these services are listed as below.

**Table 5 BDA e-service delivery - Improvement areas**

Sl. No.	BDA Service	Mode of Delivery	Improvement Areas for each of the services
1	Obtaining Possession certificate	SAKALA Website i.e. <a href="http://www.sakala.kar.nic.in/sakalaonline/OnlineServices.aspx?Dep_Code=BD">http://www.sakala.kar.nic.in/sakalaonline/OnlineServices.aspx?Dep_Code=BD</a>	<ul style="list-style-type: none"> <li>• Explicit information on BDA department website about the service should be made available</li> <li>• Web site to be in Top 5 results of search engine</li> <li>• Help manuals and how to guide should be made available for the users</li> <li>• OTP authentication feature should be integrated</li> </ul>



			<ul style="list-style-type: none"> <li>• Integration of information security features such as https protocol, lock symbol, W3C compliance</li> <li>• Integration of feature to log complaints/grievances and provide feedback</li> </ul>
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**Figure 14 Overall NeSDA Score for BDA**

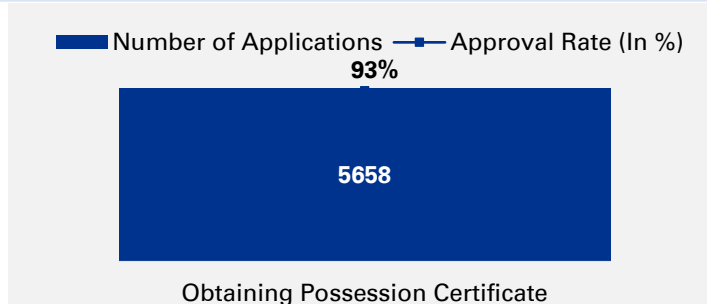


As seen from figure above, apart from Accessibility and End Service Delivery all other assessment parameters require major improvement in areas such as **Content availability, Ease of Use, Information security and privacy, Integrated Service Delivery and Status request and tracking.**

**Figure 15 Recommendations for BDA portal**

Parameters	Improvement Areas	Recommendations & Significance
 Content Availability	<ul style="list-style-type: none"> <li>Ensuring Help manuals and dedicated FAQ section at the portal</li> <li>Integration of site maps and feature to provide feedback and comments</li> <li>Providing know how on digital signature</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY Content Management Framework</b> with aim to improve presentation, usability and consistency of state portal</li> <li>Access to useful information enables better user experience and improves transparency</li> </ul>
 Ease of Use	<ul style="list-style-type: none"> <li>Website search engine results should be available in Top 5 results</li> <li>Integration of features such as how to guides, search feature for website</li> </ul>	<ul style="list-style-type: none"> <li>It is a significant parameter that influences the ambit of e-service quality measurement and aids in <b>reducing digital divide by providing better accessibility</b> of the e-Government services</li> </ul>
 Information Security & Privacy	<ul style="list-style-type: none"> <li>Integration of online security measures such as hosting on https compliance, W3C compliance, lock symbol</li> <li>Intimating users for password update or unauthorized access to profile</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY ePramaan Framework</b> guidelines for eAuthentication for users</li> <li>Increases the trust of citizens in service delivery which in turn increases adoption and helps increase reach and coverage</li> </ul>
 Integrated service delivery	<ul style="list-style-type: none"> <li>Providing secure payment gateway to users with provision of multiple payment options</li> <li>Inter dependent service should allow for auto population of common data</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY India Enterprise Architecture</b> guidelines for better interoperability</li> <li>Increases the coordination between government agencies with reduced costs and provides a transparent payment mechanism</li> </ul>
 Status and request tracking	<ul style="list-style-type: none"> <li>Integration of features to intimate users in status change/update of applications</li> <li>Provision for users to leave feedback</li> <li>Provide dedicated webpage for subjects related to payment for services</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY Digital service standard</b> to adopt practices for end to end status tracking Improves efficiency and increases transparency for service delivery. Empowers citizens by enhancing trust in Government</li> </ul>

Applicant data analysed for the evaluation period reveals an approval rate of 93% with primary rejections tabulated below.



**Figure 16 Applications for BDA Service 19-20**

Source: SAKALA DPAR, GoK

**Table 6 Rejection reasons for BDA**

For Obtaining Possession Certificate
<ul style="list-style-type: none"> <li>Selection of <b>wrong jurisdiction</b></li> <li>Submission of <b>incorrect document</b> submission</li> <li>Original Lease cum sales agreement (<b>LCSA</b>) <b>not submitted</b></li> <li>Duplicate applications</li> </ul>

Adherence rate for SAKALA timeline was found to be 75%, interactions with department officials revealed that lack of due diligence while submission of application by applicants was primary reasons for delays. Central tendency measurement for the applications processed indicates sanctioned days could be reduced to 30 days.

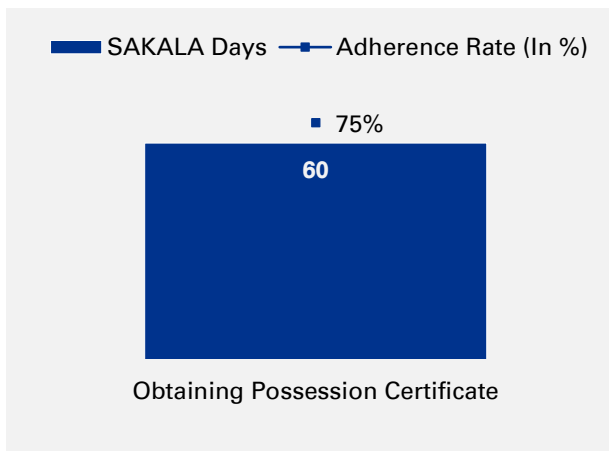
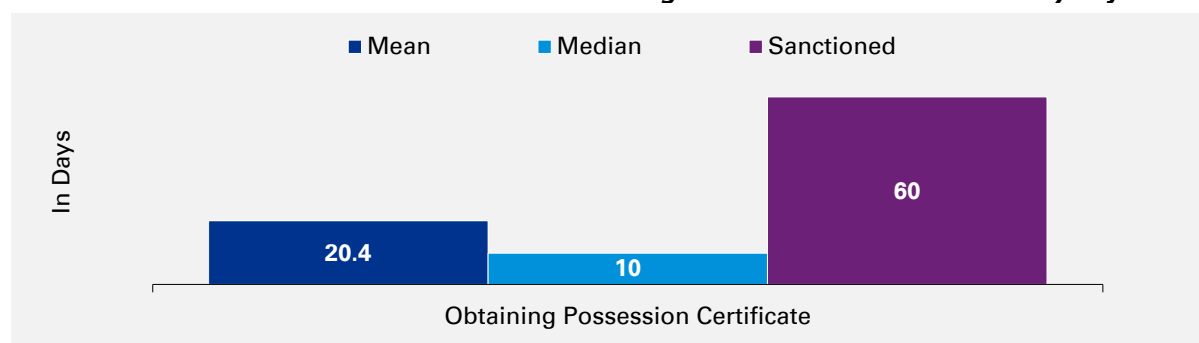


Figure 17 SAKALA timeline analysis for BDA



Department officials’ interactions revealed that **offline submission of documents is still prevalent and update to users are provided intermittently** i.e. on case to case basis.

Summary of facts and figures across all services of BDA

Table 7 Summary of figures across all services of BDA

Service	Applications	Approval Rate	SAKALA Adherence	NeSDA Score	Mean SAKALA timeline (in days)
Obtaining Possession Certificate	5658	93%	75%	31%	20.4

### 3.3. Department of Legal Metrology

There is one service under the study scope for the department namely **issue of new license to manufacturer/dealer/repairer possession certificate**, key inferences from NeSDA assessment and applicant data analysis for the service is as below.

**Figure 18 Legal metrology services NeSDA score**

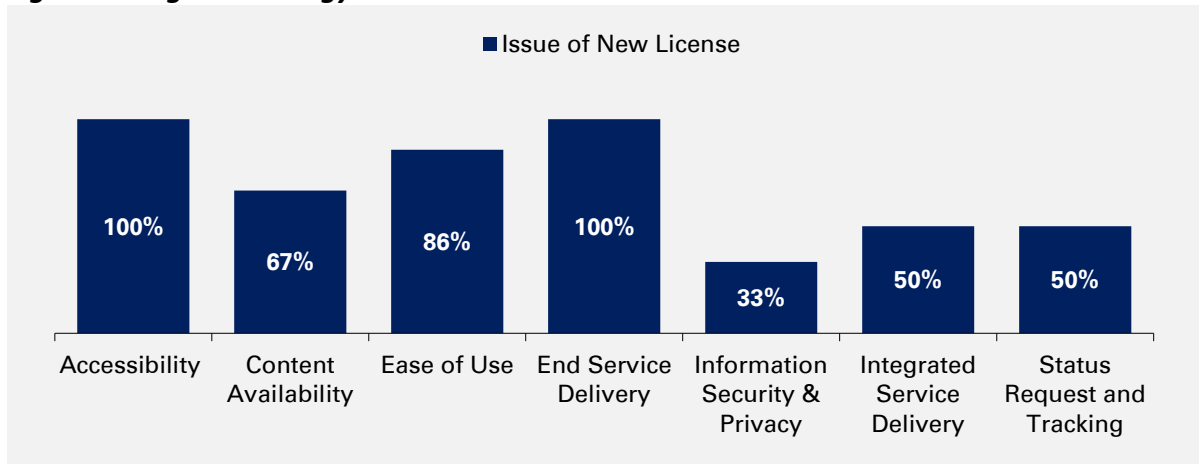


Figure above graphically depicts the NeSDA assessment scores for the service for Legal Metrology (detailed score in Annexure). Major improvement areas for these services are listed as below.

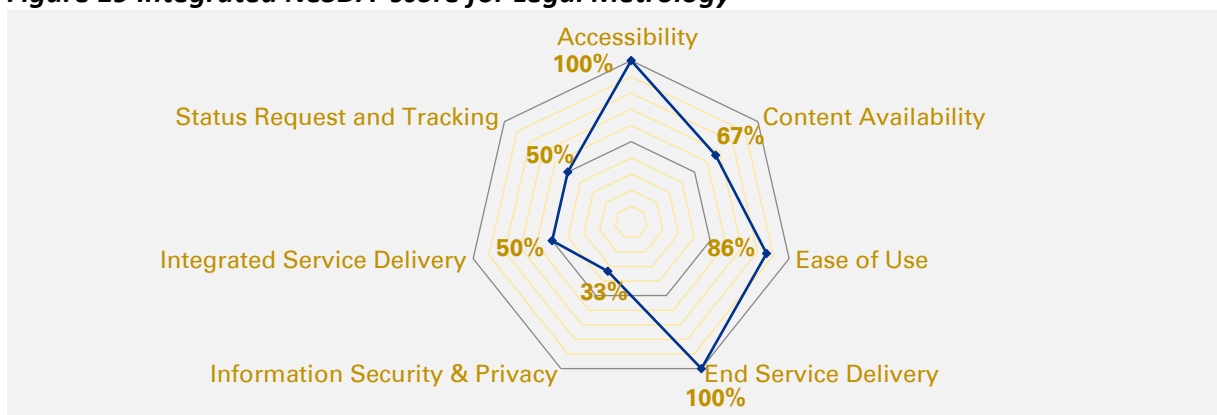
**Table 8 Legal metrology e-service delivery - Focus areas**

Sl. No.	Legal Metrology Service	Mode of Delivery	Focus Areas for each of the services
1	Issue of New License to Manufacturer/Dealer/Repairer	Emapan Website i.e. <a href="http://www.emapan.karnataka.gov.in/">http://www.emapan.karnataka.gov.in/</a>	<ul style="list-style-type: none"> <li>• Integration of information security features such as W3C compliance</li> <li>• Payment gateway could be integrated for the payment of service fees</li> <li>• Integration of feature to log complaints/grievances and provide feedback</li> <li>• Integrate features to provide users of status change/update for their applications</li> </ul>

			<ul style="list-style-type: none"> <li>Manual intervention in form of site inspection by officials should be rationalised</li> </ul>
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As seen from figure below, major improvement in areas such as **Content availability, Information security and privacy, Integrated Service Delivery and Status request and tracking.**

**Figure 19 Integrated NeSDA score for Legal Metrology**



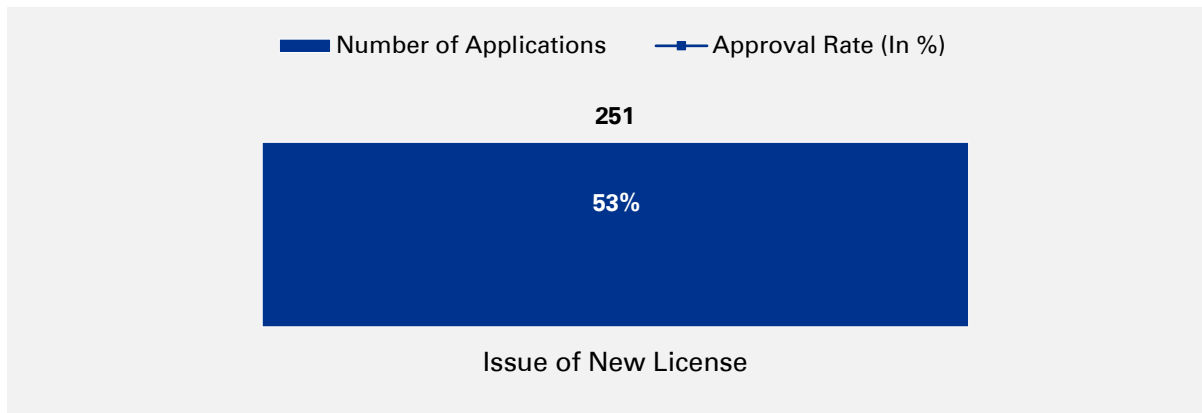
**Figure 20 Recommendations for Legal Metrology portal**

Parameters	Improvement Areas	Recommendations & Significance
 Content Availability	<ul style="list-style-type: none"> <li>Ensuring Help manuals and dedicated FAQ section at the portal</li> <li>Integration of site maps and feature to provide feedback and comments</li> <li>Providing know how on digital signature</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY Content Management Framework</b> with aim to improve presentation, usability and consistency of state portal</li> <li>Access to useful information enables better user experience and improves transparency</li> </ul>
 Information Security & Privacy	<ul style="list-style-type: none"> <li>Integration of online security measures such as hosting on https compliance, W3C compliance, lock symbol</li> <li>Intimating users for password update or unauthorized access to profile</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY ePramaan Framework</b> guidelines for eAuthentication for users</li> <li>Increases the trust of citizens in service delivery which in turn increases adoption and helps increase reach and coverage</li> </ul>
 Integrated service delivery	<ul style="list-style-type: none"> <li>Providing secure payment gateway to users with provision of multiple payment options</li> <li>Inter dependent service should allow for auto population of common data</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY India Enterprise Architecture</b> guidelines for better interoperability</li> <li>Increases the coordination between government agencies with reduced costs and provides a transparent payment mechanism</li> </ul>
 Status and request tracking	<ul style="list-style-type: none"> <li>Integration of features to intimate users in status change/update of applications</li> <li>Provision for users to leave feedback</li> <li>Provide dedicated webpage for subjects related to payment for services</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY Digital service standard</b> to adopt practices for end to end status tracking Improves efficiency and increases transparency for service delivery. Empowers citizens by enhancing trust in Government</li> </ul>

Applicant data analysed for the evaluation period reveals a remarkably low approval rate of 53% with primary rejections tabulated below.

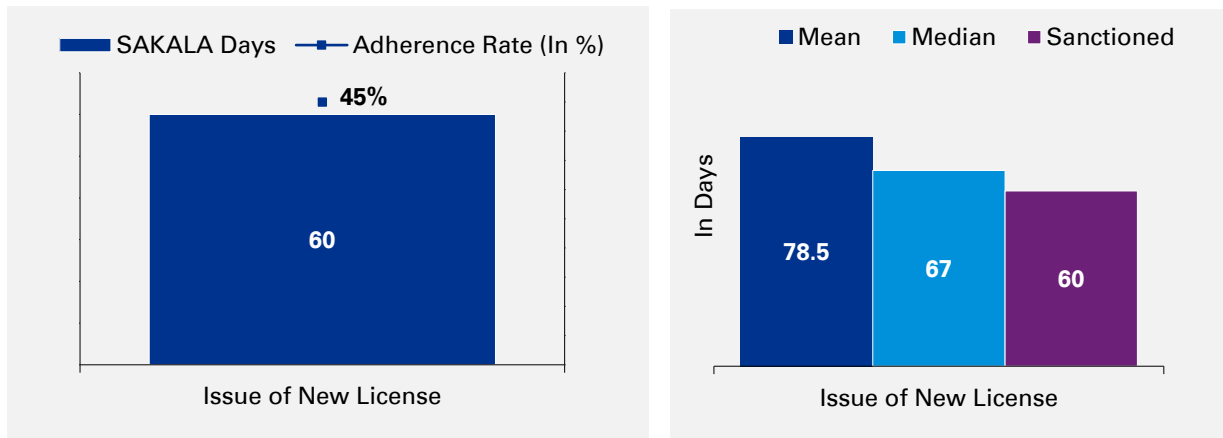
For Issue of New License
<ul style="list-style-type: none"> <li>• Applicant <b>not having required qualification</b></li> <li>• Submission to <b>incorrect jurisdiction</b></li> <li>• Lack of submission of required documents and non-payment of fees</li> <li>• <b>Failure to submit original</b> documents by applicants</li> </ul>

**Figure 21 Applications for legal metrology, Source SAKALA DPAR, GoK**



Adherence rate for SAKALA timeline was found to be 45%, interactions with department officials revealed that lack of due diligence, lack of submitting supporting documents and inspection were primary reasons for delays. Central tendency measurement for the applications processed indicates **department takes on average require 30% more than the sanctioned time.**

**Figure 22 SAKALA timeline analysis for Legal Metrology services**



Department officials’ interactions also revealed that **offline submission of supporting documents is still prevalent however update to users are provided instantly through emapan website.**

*Summary of facts and figures across all services of Department of Legal Metrology*

**Table 9 Summary of figures across all services of Legal Metrology department**

Service	Applicants	Approval Rate	SAKALA Adherence	NeSDA Score	Mean SAKALA timeline (in days)
Issue of New License	251	53%	45%	73%	78.5



### 3.4. Drug Control Department

There are two service under the study scope for the department namely **grant of fresh drug manufacturing license and retail license for sales establishment**, key inferences from NeSDA assessment and applicant data analysis for the service is as below.

**Figure 23 NeSDA scores for Drug Control department services**

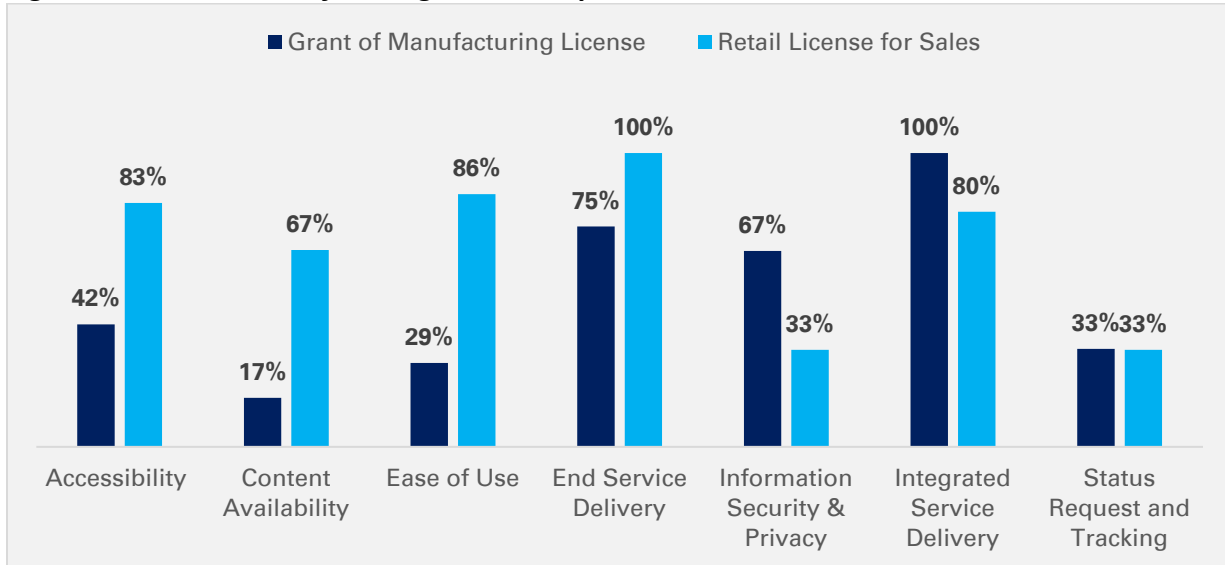


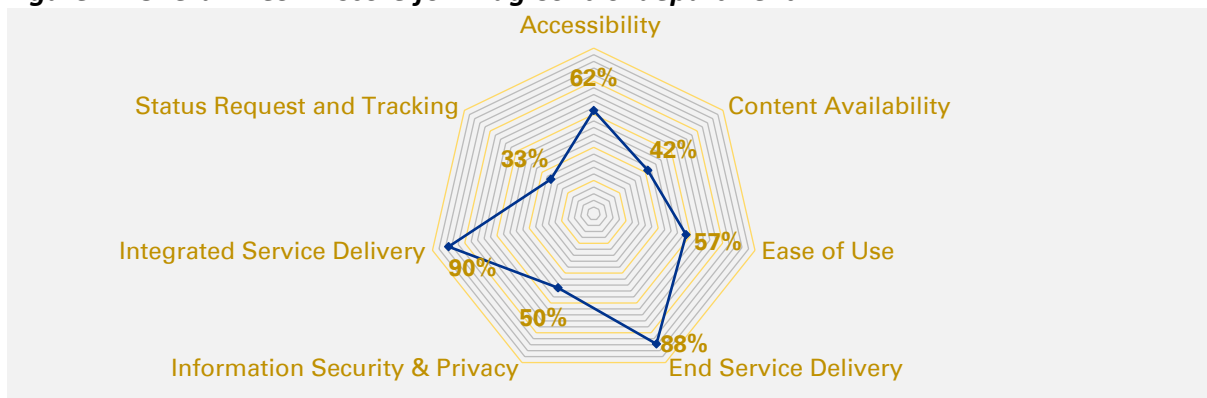
Figure above graphically depicts the NeSDA assessment scores for the service for Drug Control (detailed score in Annexure). Major improvement areas for these services are listed as below.

**Table 10 Drug Control e-service delivery - Improvement areas**

Sl. No.	Drug Control Service	Mode of Delivery	Improvement Areas for each of the services
1	Grant of Fresh Drug Manufacturing License	NIC Website <a href="https://dcd.kar.nic.in/idmla/">https://dcd.kar.nic.in/idmla/</a>	<ul style="list-style-type: none"> <li>• Explicit information on Drug Control department website about the service should be made available</li> <li>• Registration link must be made accessible to users in a conventional way</li> <li>• Web site content should be available in Kannada</li> <li>• Web site results to be in top 5 of search engine</li> </ul>






Sl. No.	Drug Control Service	Mode of Delivery	Improvement Areas for each of the services
			<ul style="list-style-type: none"> <li>To remove manual touch point at registration stage of obtaining case worker approval</li> <li>Integration of information security features such as W3C compliance</li> <li>Integration of feature to log complaints/grievances and provide feedback</li> </ul>
2	Retail License for Sales Establishment	Department Website <a href="http://drugs.kar.nic.in/index.html#block-menu-menu-topmenu">http://drugs.kar.nic.in/index.html#block-menu-menu-topmenu</a>	<ul style="list-style-type: none"> <li>Web site content should also be available in Kannada</li> <li>Integration of information security features such as https protocol, lock symbol, W3C compliance</li> <li>Integration of feature to log complaints/grievances and provide feedback</li> </ul>

**Figure 24 Overall NeSDA score for Drug Control department**



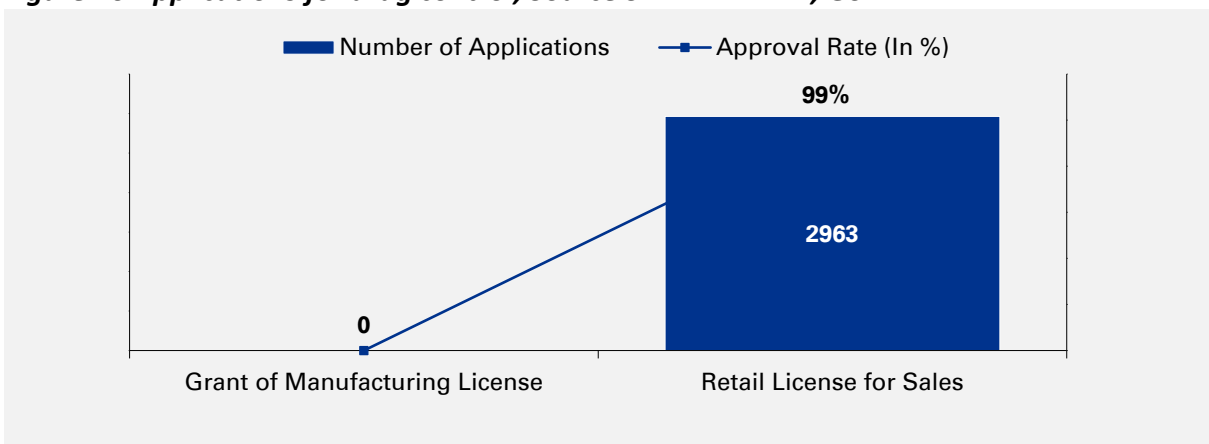
As seen from figure above, improvement areas are Accessibility, Content availability, Ease of use, Information security and privacy, and Status request and tracking.

**Figure 25 Recommendations for Drug Control department portal**

Parameters	Improvement Areas	Recommendations & Significance
 <p>Accessibility</p>	<ul style="list-style-type: none"> <li>Ensuring website content also in local language</li> <li>Ensuring dedicated section on help manual/checklist and information on nodal officer</li> </ul>	<ul style="list-style-type: none"> <li>Adoption of MeitY GIGW standards for e-Governance. Placement of GIGW logo or W3C logo on websites</li> <li>Enables reach and coverage for the e-services</li> </ul>
 <p>Content Availability</p>	<ul style="list-style-type: none"> <li>Ensuring Help manuals and dedicated FAQ section at the portal</li> <li>Integration of site maps and feature to provide feedback and comments</li> <li>Providing know how on digital signature</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY Content Management Framework</b> with aim to improve presentation, usability and consistency of state portal</li> <li>Access to useful information enables better user experience and improves transparency</li> </ul>
 <p>Ease of Use</p>	<ul style="list-style-type: none"> <li>Website search engine results should be available in Top 5 results</li> <li>Integration of features such as how to guides, search feature for website</li> </ul>	<ul style="list-style-type: none"> <li>Influences the ambit of e-service quality measurement and aids in <b>reducing digital divide by providing better accessibility</b> of the e-Government services</li> </ul>
 <p>Information Security &amp; Privacy</p>	<ul style="list-style-type: none"> <li>Integration of online security measures such as hosting on https compliance, W3C compliance, lock symbol</li> <li>Intimating users for password update or unauthorized access to profile</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY ePramaan Framework</b> guidelines for eAuthentication for users</li> <li>Increases the trust of citizens in service delivery which in turn increases adoption and helps increase reach and coverage</li> </ul>
 <p>Status and request tracking</p>	<ul style="list-style-type: none"> <li>Integration of features to intimate users in status change/update of applications</li> <li>Provision for users to leave feedback</li> <li>Provide dedicated webpage for subjects related to payment for services</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY Digital service standard</b> to adopt practices for end to end status tracking Improves efficiency and increases transparency for service delivery. Empowers citizens by enhancing trust in Government</li> </ul>

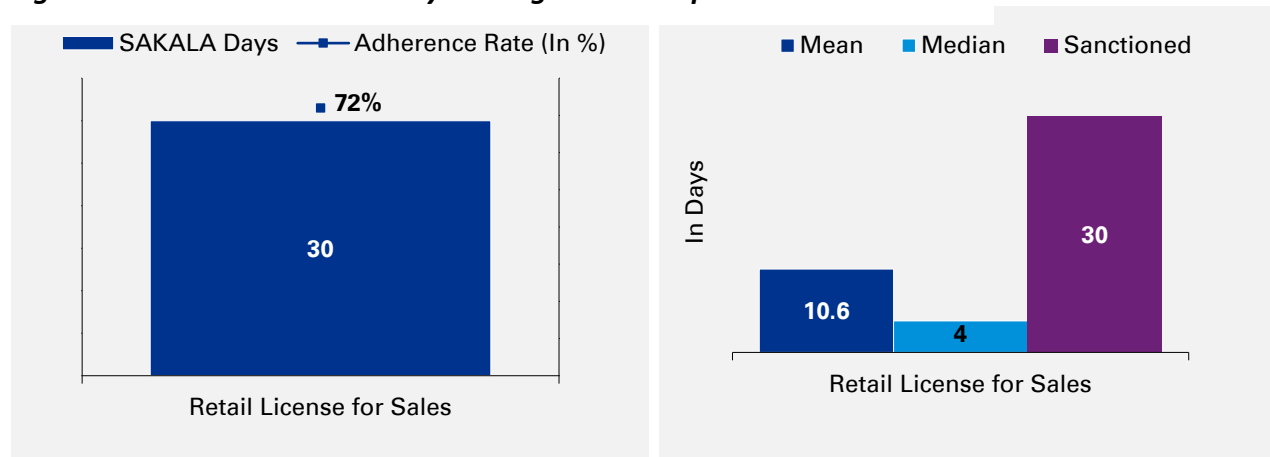
Applicant data analysed for the evaluation period reveals a high approval rate of 99% for the retail license and there were no applicants in time period for grant of manufacturing license.

**Figure 26 Applications for drug control, Source SAKALA DPAR, GoK**



Adherence rate for SAKALA timeline was found to be 72%, interactions with department officials revealed that lack of due diligence by applicants and inspections clarifications were primary reasons for delays. Supporting documents are still being submitted through offline modes in many instances. Central tendency measurement for the applications processed indicates **department takes on average require 30% more than the sanctioned time.**

**Figure 27 SAKALA timeline analysis Drug Control department services**



Summary of facts and figures across all services of Drug Control Department

**Table 11 Summary of figures across all services of Drug Control department**

Service	Applicants	Approval Rate	SAKALA Adherence	NeSDA Score	Mean SAKALA timeline (in days)
Retail License for Sale	2963	99%	72%	70%	10.6

### 3.5. Department of Factories, Boilers, Industrial Safety & Health

There are a total of five service under the study scope for the department namely **approval of factory building plan, registration of factories, approval of boiler, registration of boilers, certificate for recognition as boiler/component manufacturer**, key inferences from NeSDA assessment and applicant data analysis for the service is as below.

Approval of boiler and certificate for recognition as boiler/component manufacturer **are both offline services to be applied through Director of Factories** and payment for these are made through Khajane 2. NeSDA assessment scores depicted below for these services.

**Figure 28 Department of Factories: NeSDA Score**

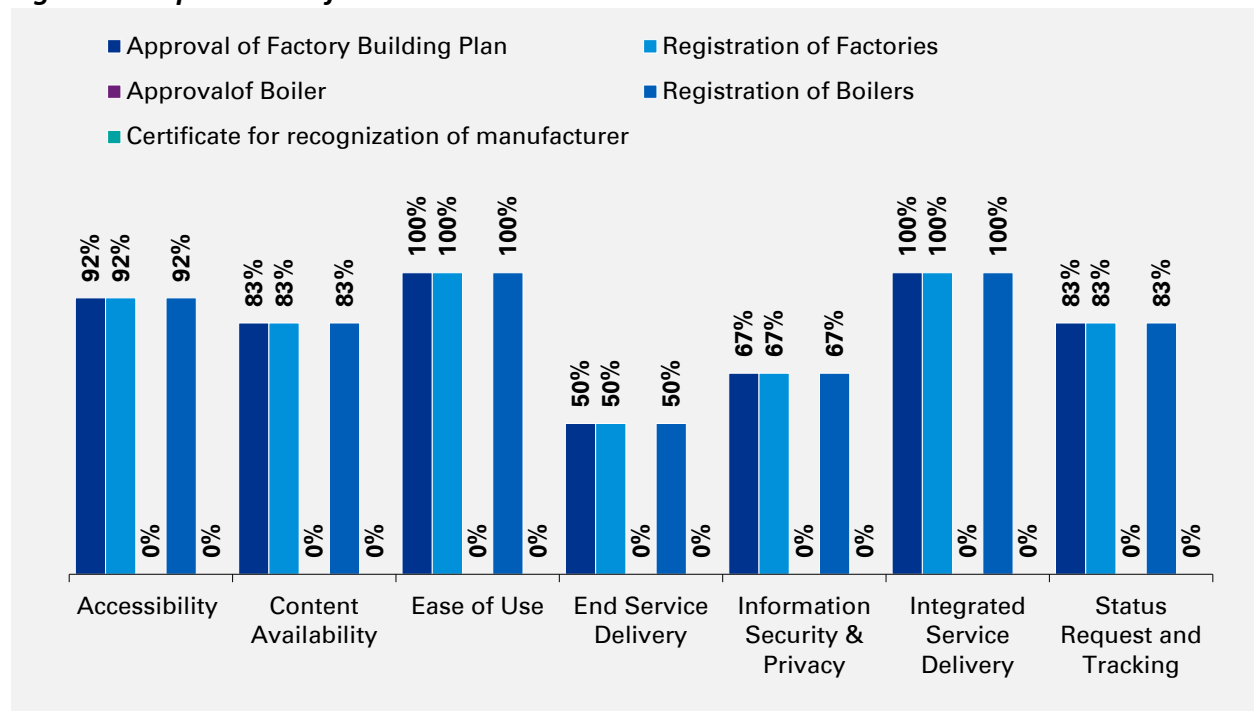


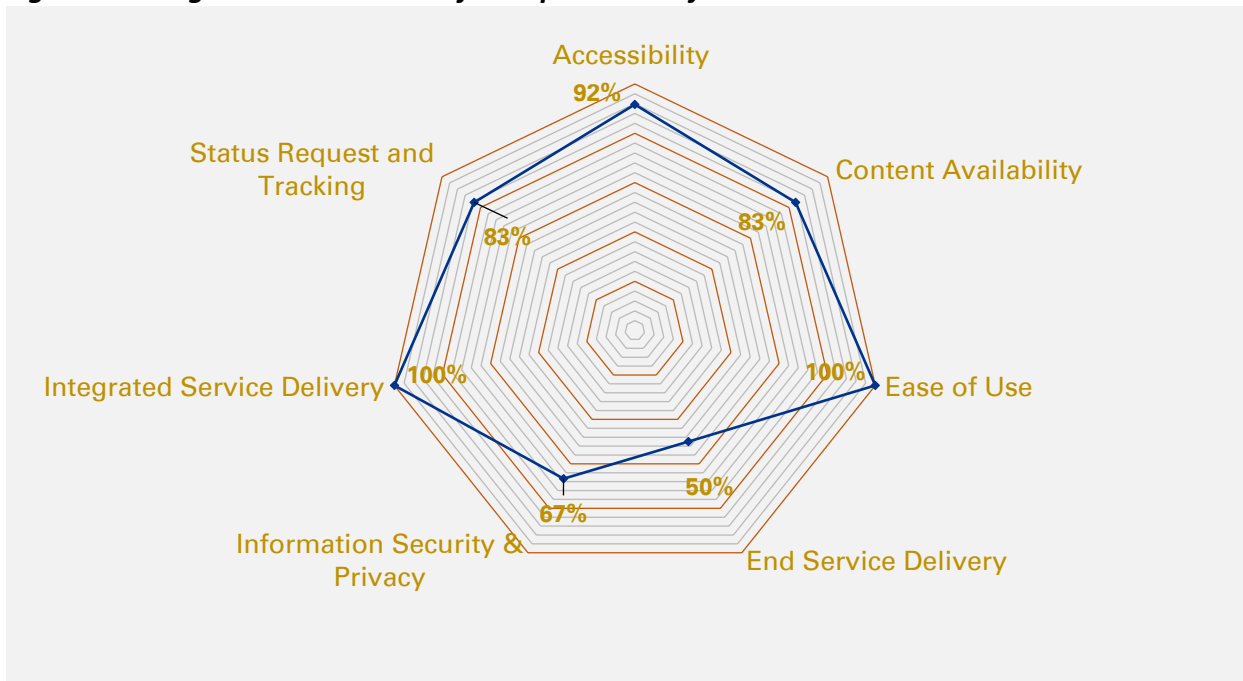
Figure above graphically depicts the NeSDA assessment scores for the service for Department of Factories (detailed score in Annexure). Major improvement areas for these services are listed as below.

**Table 12 Department of Factories e-service delivery - Focus areas**

Sl. No.	Department of Factories	Mode of Delivery	Focus areas for each of the services
1	Approval of Factory Building plan	Department Website <a href="http://164.100.133.11:9080/FBIS/onlineSurakshath.e.jsp">http://164.100.133.11:9080/FBIS/onlineSurakshath.e.jsp</a>	<ul style="list-style-type: none"> <li>Provision of making payments offline as well could be removed and made to accept only online mode of payments</li> <li>Feature for users to be intimated by SMS/email alerts for change of status in application</li> <li>Provision for users to be verified with a two-factor authentication should be integrated</li> </ul>
2	Registration of Factories and Issue of license	Department Website <a href="http://164.100.133.11:9080/FBIS/onlineSurakshath.e.jsp">http://164.100.133.11:9080/FBIS/onlineSurakshath.e.jsp</a>	<ul style="list-style-type: none"> <li>Provision of making payments offline as well could be removed and made to accept only online mode of payments</li> <li>Feature for users to be intimated by SMS/email alerts for change of status in application</li> <li>Provision for users to be verified with a two-factor authentication should be integrated</li> </ul>
3	Approval of Boiler and Pressure part Manufacturing drawing/Steam pipeline	Offline Service delivered through office of Director of Factories	<ul style="list-style-type: none"> <li>Service should be made online and should be compliant to suggestions made in recommendations section of this report</li> </ul>
4	Registration of Boilers, Economisers and Steam Pipelines and pipeline layout drawings	Department Website <a href="http://164.100.133.11:9080/FBIS/onlineSurakshath.e.jsp">http://164.100.133.11:9080/FBIS/onlineSurakshath.e.jsp</a>	<ul style="list-style-type: none"> <li>Provision of making payments offline as well could be removed and made to accept only online mode of payments</li> <li>Feature for users to be intimated by SMS/email alerts for change of status in application</li> <li>Provision for users to be verified with a two-factor authentication should be integrated</li> </ul>



Sl. No.	Department of Factories	Mode of Delivery	Focus areas for each of the services
5	Certificate for recognition as Boiler / Boiler Component manufacturer and renewal	Offline Service delivered through office of Director of Factories	<ul style="list-style-type: none"> <li>Service should be made online and should be compliant to suggestions made in recommendations section of this report</li> </ul>

**Figure 29 Integrated NeSDA score for Department of Factories**



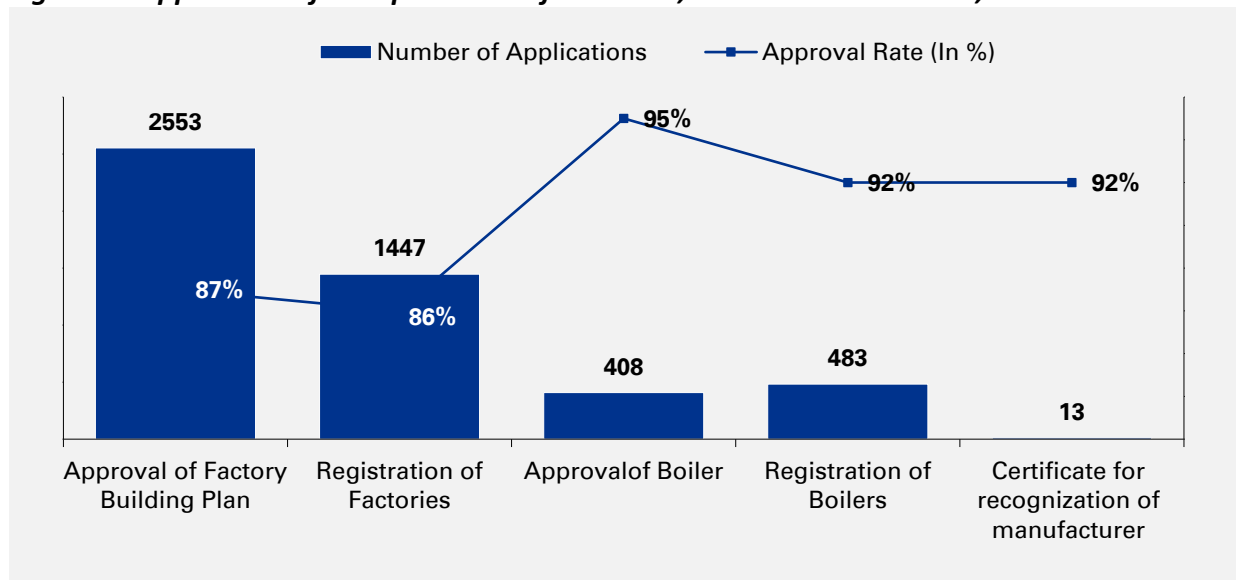
As seen from figure above, improvement areas are **End Service Delivery** and **Information security and privacy**.

**Figure 30 Recommendations for Department of Factories portal**

Parameters	Improvement Areas	Recommendations & Significance
 End Service Delivery	<ul style="list-style-type: none"> <li>Provisions for making offline payments could be removed to accept only online payment mode</li> <li>Manual effort to obtain the service should be removed</li> </ul>	<ul style="list-style-type: none"> <li>Integration and limitation to online payments leads to transparency and consistency in service delivery</li> <li>Manual processes should be eliminated in service delivery</li> </ul>
 Information Security & Privacy	<ul style="list-style-type: none"> <li>Integration of online security measures such as two factor authentication</li> <li>Intimating users for password update or unauthorized access to profile</li> </ul>	<ul style="list-style-type: none"> <li>Leverage MeitY ePramaan Framework guidelines for eAuthentication for users</li> <li>Increases the trust of citizens in service delivery which in turn increases adoption and helps increase reach and coverage</li> </ul>

Applicant data analysed for the evaluation period reveals a consistently high approval rate across services and **an overall approval rate of 88% for the department.**

**Figure 31 Applications for Department of Factories, Source SAKALA DPAR, GoK**





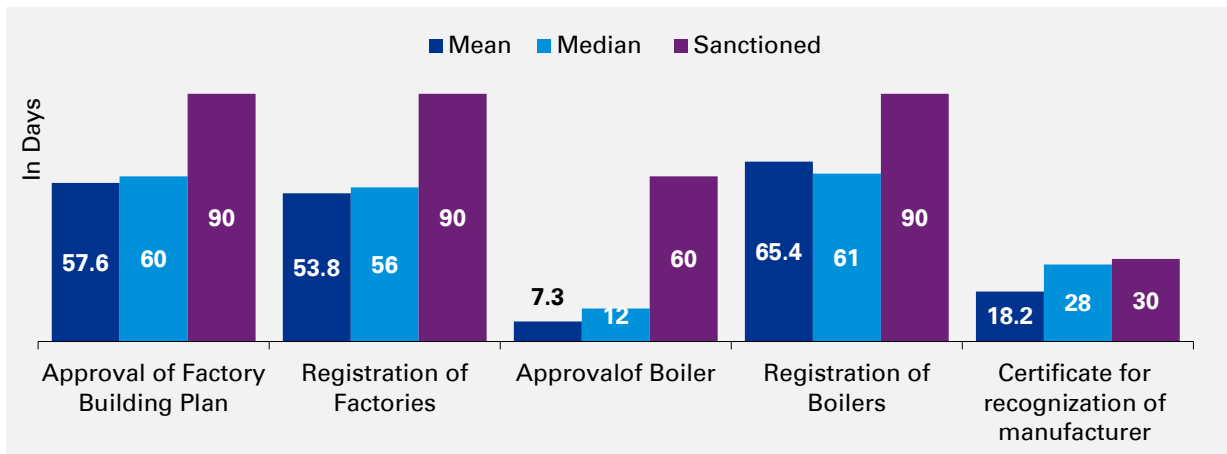
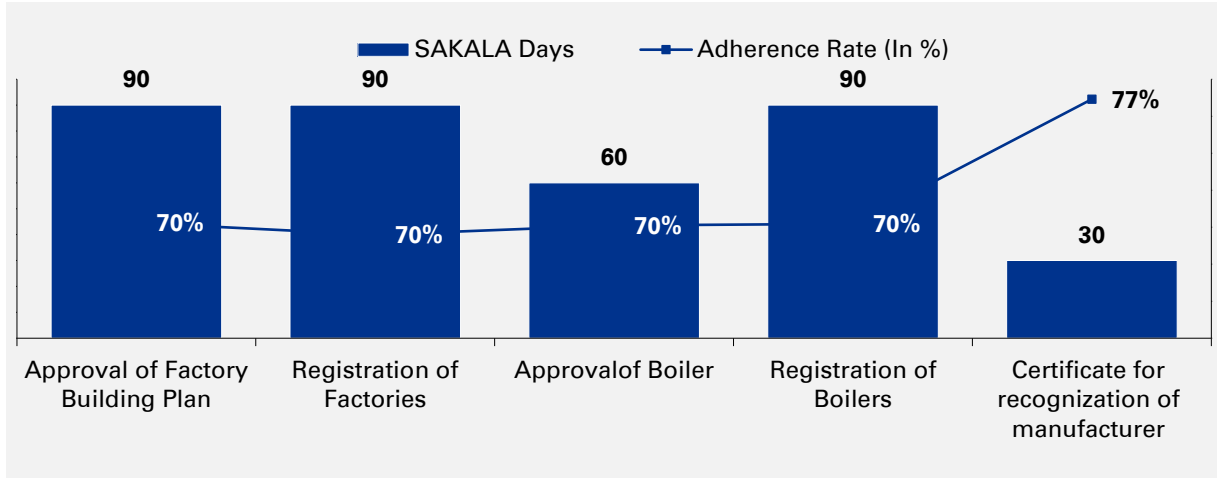
Primary reasons observed for rejections are tabulated as below for each of the services.

For Approval of Factory Plan	For Registration of Factories	For Approval of Boilers
<ul style="list-style-type: none"> <li>• Non submission of supporting documents such as agreement copy, onsite emergency copy, drawings and write up, land conversion document, Form 1A, within the stipulated time</li> <li>• Submission with incomplete address and with incomplete information</li> <li>• Submission of non-legible documents</li> <li>• Building plan not approved</li> <li>• Nonpayment of application fees</li> <li>• Non submission of onsite emergency plan and noncompliance to inspection observations</li> </ul>	<ul style="list-style-type: none"> <li>• Non submission of revised document like plan layout, drawings etc.</li> <li>• Submission to wrong jurisdiction</li> <li>• Non approval of building plan</li> <li>• Construction in progress</li> <li>• Submission of application with incorrect information and non-legible information</li> <li>• Non submission of supporting documents such as land conversion, Form 12, rent deed, building and machinery layout plan etc.</li> <li>• Nonpayment of application fees</li> <li>• Noncompliance to factories act and inspection observations</li> </ul>	<ul style="list-style-type: none"> <li>• Non submission of supporting documents</li> <li>• Missing mandatory information such as pressure and temperature data</li> <li>• Incorrect calculation values for pressure and temperature</li> </ul>
For Registration of Boilers	For Certificate for Boiler Manufacturing	
<ul style="list-style-type: none"> <li>• Non submission of supporting documents</li> <li>• Test certificate not in order</li> <li>• Noncompliance to departments observations</li> <li>• Failure to submit original documents by applicants</li> </ul>	<ul style="list-style-type: none"> <li>• Nonpayment of application fees</li> </ul>	

Adherence rate for SAKALA timeline was found to be in range of 70 to 77% for all services, interactions with department officials revealed that lack of supporting documents and due diligence by applicants were primary reasons for delays. Services delivered by

departments still had manual interventions and offline interactions. Supporting documents are still being submitted through offline modes in many instances. Central tendency measurement for the applications processed indicates **department processes most of the application within the sanctioned time.**

**Figure 32 SAKALA timeline analysis for Department of Factories services**



*Summary of facts and figures across all services of Department of Factories, Boilers, Industrial Safety and Health*

**Table 13 Summary of figures across all services of Department of Factories**

Service	Applicants	Approval Rate	SAKALA Adherence	NeSDA Score	Mean SAKALA timeline (in days)
Approval of Factory Building Plan	2553	87%	70%	84%	57.59
Registration of Factories and Issue of license	1447	86%	70%	84%	53.82
Approval of Boiler	408	95%	70%	0	7.26
Registration of Boilers	483	92%	70%	84%	65.36
Certificate for recognition as Boiler	13	92%	77%	0	18.15

### 3.6. Labour Department

There are a total of six services under the study scope for the Labour department namely registration under shops and establishment act, registration of principal employer, license to the contractor, registration of establishment, registration of building and other construction workers, registration inter-state migration worker (ISMW) act, key inferences from NeSDA assessment and applicant data analysis for the service is as below.

**Figure 33 Labour Department Services: NeSDA scores**

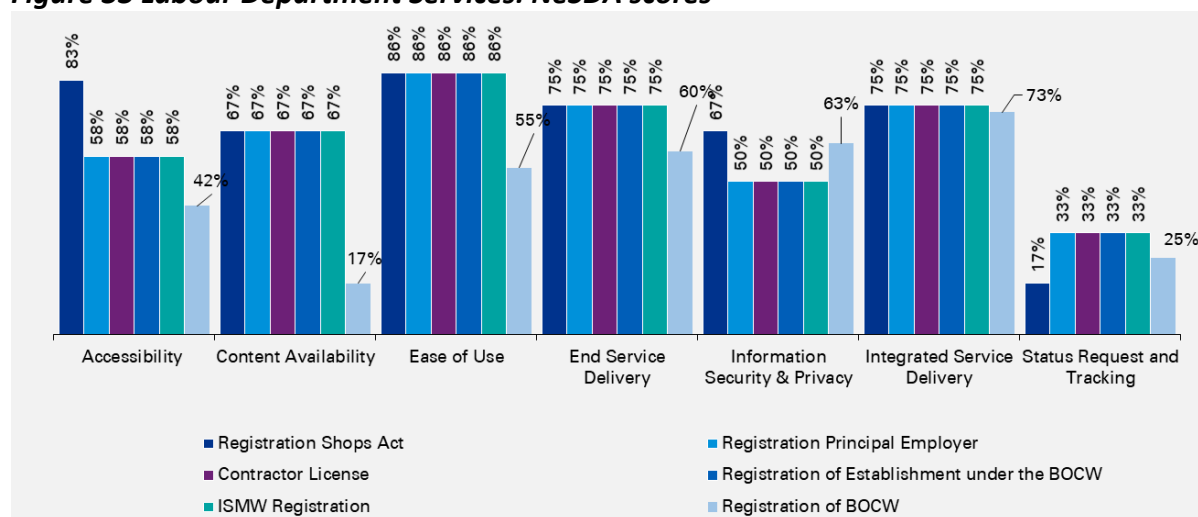


Figure above graphically depicts the NeSDA assessment scores for the service for Labour Department (detailed score in Annexure). Major improvement areas for these services are listed as below.

**Table 14 Labour Department services- Improvement areas**

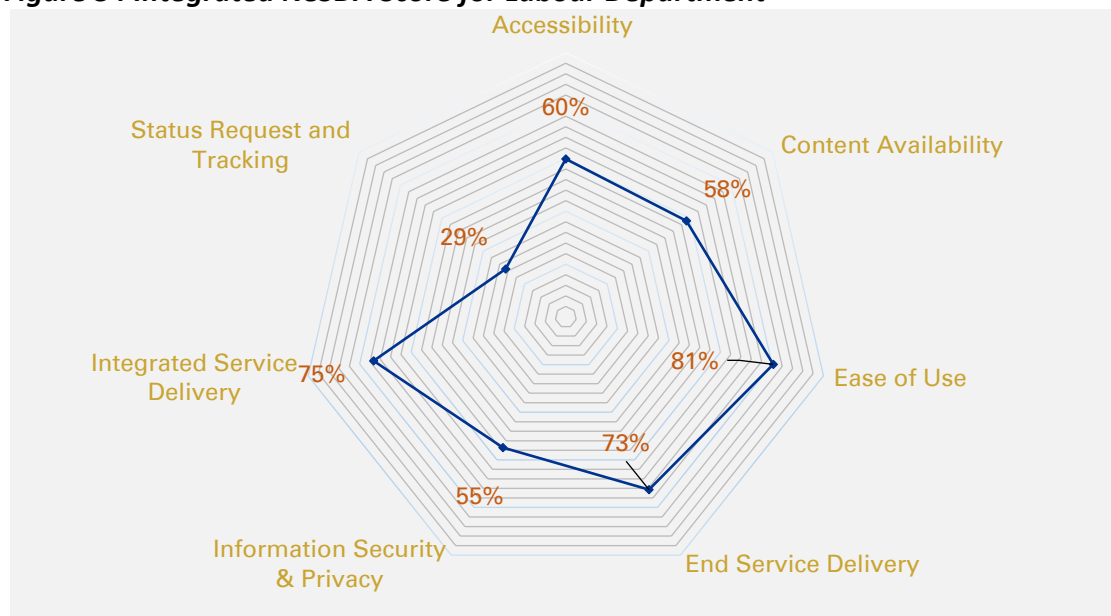
Sl. No.	Labour Department Services	Mode of Delivery	Improvement Areas for each of the services
1	Registration under the Karnataka Shops and Commercial	ekarmika website <a href="http://164.100.133.176/ekarmika/satic/home.aspx">http://164.100.133.176/ekarmika/satic/home.aspx</a>	<ul style="list-style-type: none"> <li>Integration of feature to log complaints/grievances and provide feedback</li> <li>Integration of information security features such as https protocol, lock symbol, W3C compliance</li> </ul>

Sl. No.	Labour Department Services	Mode of Delivery	Improvement Areas for each of the services
	Establishments Act, 1961		<ul style="list-style-type: none"> <li>Integration of a payments gateway</li> </ul>
2	Registration of Principal employer under Contract Labour Act	Department Website <a href="https://labouronline.kar.nic.in/PublicForms/FormRegistration.aspx">https://labouronline.kar.nic.in/PublicForms/FormRegistration.aspx</a>	<ul style="list-style-type: none"> <li>Web site content should be available in Kannada</li> <li>Provision for users to create personal login profiles</li> <li>Integration of security features such as two factor authentications</li> <li>Integration of feature to log complaints/grievances and provide feedback</li> <li>Provision for users to be notified for status change in application</li> </ul>
3	License to the contractor under the Contract Labour Act, 1970	Department Website <a href="https://labouronline.kar.nic.in/PublicForms/FormRegistration.aspx">https://labouronline.kar.nic.in/PublicForms/FormRegistration.aspx</a>	
4	Registration of Establishment under the BOCW (Regulation of employment and Conditions) Act, 1996	Department Website <a href="https://labouronline.kar.nic.in/PublicForms/FormRegistration.aspx">https://labouronline.kar.nic.in/PublicForms/FormRegistration.aspx</a>	
5	Registration of Building and other Construction Workers	Delivered through Seva Sindhu portal <a href="https://serviceonline.gov.in/karnataka/">https://serviceonline.gov.in/karnataka/</a>	<ul style="list-style-type: none"> <li>The service is hosted on Seva Sindhu, an integrated portal for G2C services, that offers Aadhar-based Single Sign On, two-factor authentication and other useful measures information security measures</li> <li>However, applicants do not get key department information from the portal such as contact details of key Government officials, department helpdesk/hotline, FAQs</li> </ul>

Sl. No.	Labour Department Services	Mode of Delivery	Improvement Areas for each of the services
			about the service and charters for service delivery
6	Registration ISMW Act,1979	Department Website <a href="https://labouronline.kar.nic.in/InterStateMigrantWorkmen/InterStateMagReg.aspx">https://labouronline.kar.nic.in/InterStateMigrantWorkmen/InterStateMagReg.aspx</a>	<ul style="list-style-type: none"> <li>• Web site content should be available in Kannada</li> <li>• Provision for users to make personal login profiles</li> <li>• Integration of security features such as two factor authentications</li> <li>• Integration of feature to log complaints/grievances and provide feedback</li> <li>• Provision for users to be notified for status change in application</li> </ul>








Overall average score for all above Labour department services is depicted in figure below, major areas of improvement for these services is identified as **Accessibility, Content availability, Information security & privacy and Status request & tracking.**

**Figure 34 Integrated NeSDA Score for Labour Department**



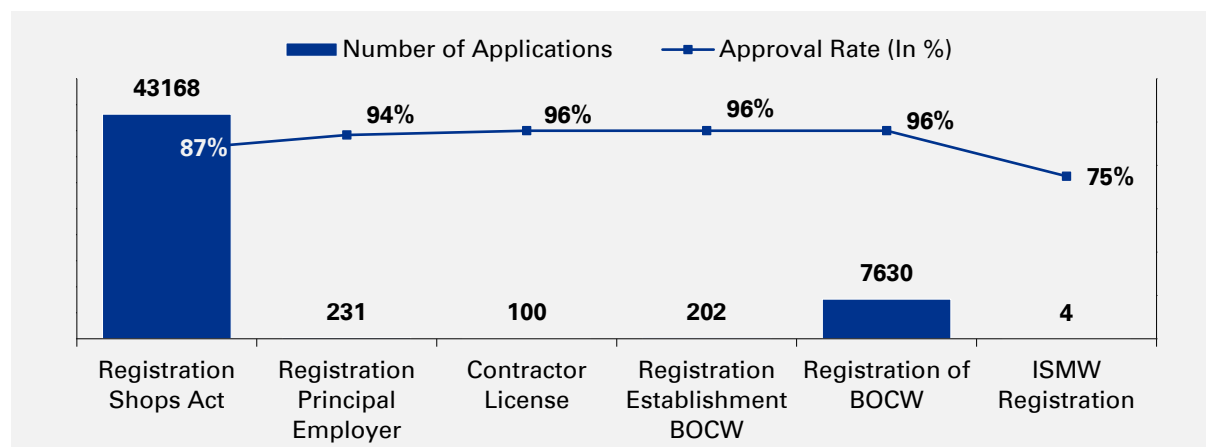
Below improvement features would further enhance the transparency, better user experience and reduce service delivery discrepancies.

**Figure 35 Recommendation for Labour Department portal**

 <b>Parameters</b>	 <b>Improvement Areas</b>	 <b>Recommendations &amp; Significance</b>
 <b>Accessibility</b>	<ul style="list-style-type: none"> <li>Ensuring website content also in local language</li> <li>Ensuring dedicated section on help manual/checklist and information on nodal officer</li> </ul>	<ul style="list-style-type: none"> <li>Adoption of MeitY GIGW standards for e-Governance. Placement of GIGW logo or W3C logo on websites</li> <li>Enables reach and coverage for the e-services</li> </ul>
 <b>Content Availability</b>	<ul style="list-style-type: none"> <li>Ensuring Help manuals and dedicated FAQ section at the portal</li> <li>Integration of site maps and feature to provide feedback and comments</li> <li>Providing know how on digital signature</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY Content Management Framework</b> with aim to improve presentation, usability and consistency of state portal</li> <li>Access to useful information enables better user experience and improves transparency</li> </ul>
 <b>Information Security &amp; Privacy</b>	<ul style="list-style-type: none"> <li>Integration of online security measures such as hosting on https compliance, W3C compliance, lock symbol</li> <li>Intimating users for password update or unauthorized access to profile</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY ePramaan Framework</b> guidelines for eAuthentication for users</li> <li>Increases the trust of citizens in service delivery which in turn increases adoption and helps increase reach and coverage</li> </ul>
 <b>Status and request tracking</b>	<ul style="list-style-type: none"> <li>Integration of features to intimate users in status change/update of applications</li> <li>Provision for users to leave feedback</li> <li>Provide dedicated webpage for subjects related to payment for services</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY Digital service standard</b> to adopt practices for end to end status tracking Improves efficiency and increases transparency for service delivery. Empowers citizens by enhancing trust in Government</li> </ul>

Applicant data analysed for the evaluation period illustrates that most utilised service for the departments is registration under shops and establishment act and lowest utilised being ISMW registration. Consistently high approval rate is observed for all services.

**Figure 36 Applications for Labour Department, Source SAKALA DPAR, GoK**



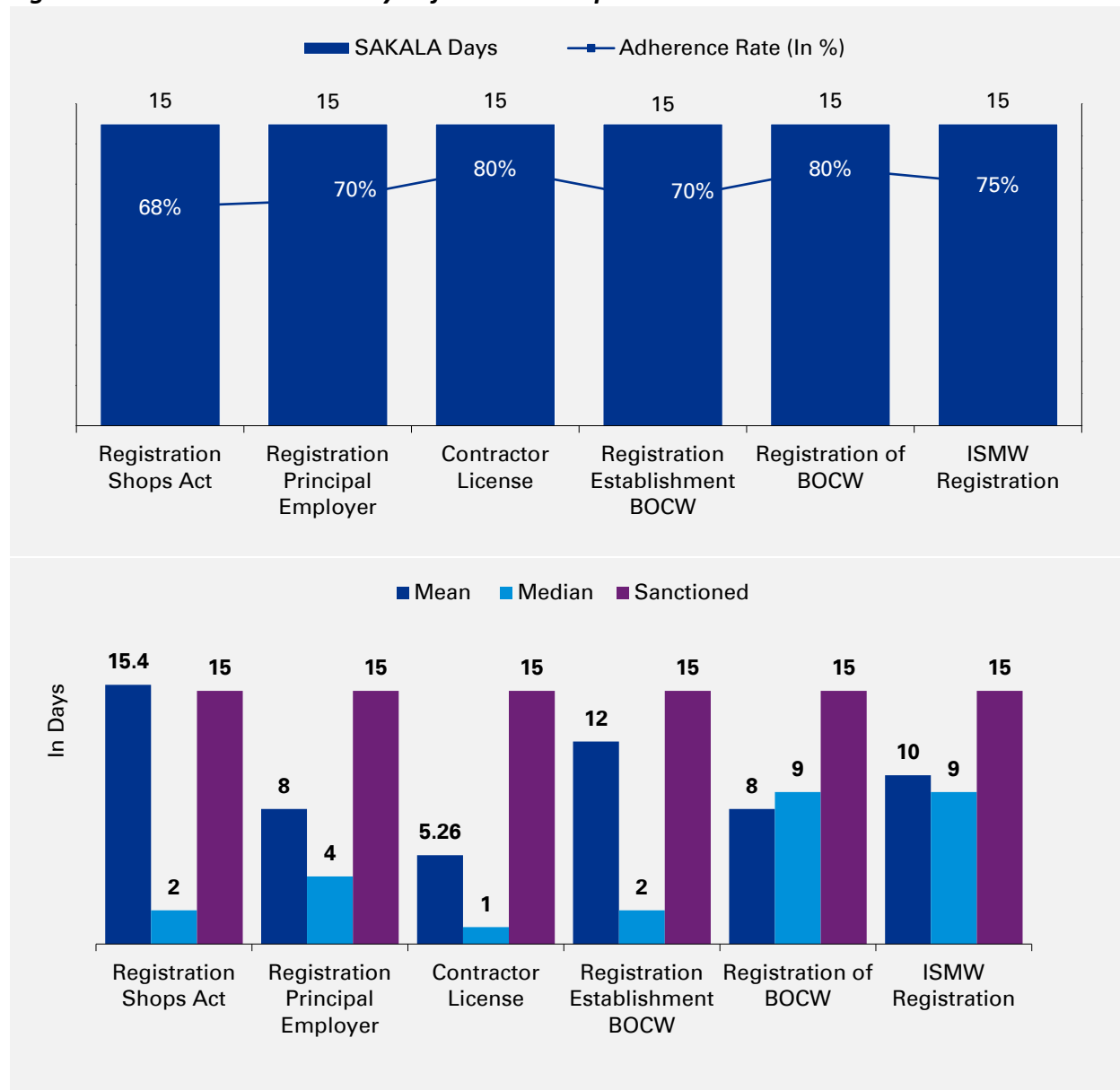
Primary reasons observed for rejections are tabulated as below for each of the services.

For Registration under shops and establishment act	For Registration of Principal employer	For Approval of Boilers
<ul style="list-style-type: none"> <li>Submission with <b>incomplete and mismatching information</b></li> <li>Non submission of <b>supporting documents</b> such as sales deed, rental agreement, Form A etc.</li> <li>Nonpayment of fees or with incorrect challan number</li> <li>Submission to incorrect jurisdiction</li> <li>Submission with non-legible documents</li> </ul>	<ul style="list-style-type: none"> <li>Submission with invalid documents</li> <li>Duplicate applications</li> </ul>	<ul style="list-style-type: none"> <li>Submission with invalid documents</li> <li>Duplicate applications</li> </ul>
For Registration of BOCW		
<ul style="list-style-type: none"> <li>Submission of duplicate requests and in wrong jurisdiction</li> <li>Non submission of mandatory supporting documents</li> <li>Submission with incorrect and missing information</li> </ul>		



Adherence rate for SAKALA timeline was found to be comparatively low at 68% for registration under shops act to rest of the services. Even for rest of the services it was in a range of 70% to 80%, interactions with department officials revealed that lack of supporting documents and due diligence by applicants were primary reasons for delays. Central tendency measurement for the applications processed indicates **department processes most of the application within the sanctioned time.**

**Figure 37 SAKALA timeline analysis for Labour Department**



*Summary of facts and figures across all services of Labour Department*

**Table 15 Summary of figures across all services of Labour Department**

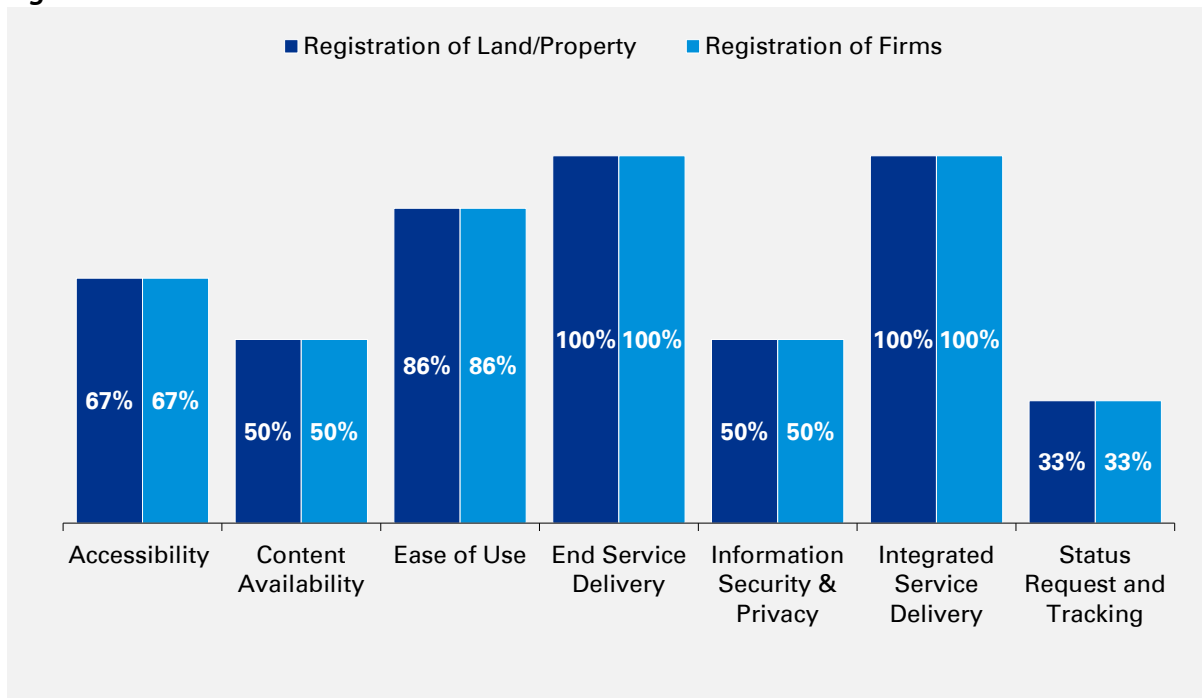
Service	Applicants	Approval Rate	SAKALA Adherence	NeSDA Score	Mean SAKALA timeline (in days)
Registration under the Karnataka Shops and Establishments	43168	87%	68%	70%	15.36
Registration of Principal employer	231	94%	70%	63%	8.00
License to the contractor	100	96%	80%	63%	5.26
Registration of Establishment under the Building and Other Construction Workers	202	96%	70%	63%	12.00
Registration of Building and other Construction Workers	7630	96%	80%	48%	8.00
Registration Inter State Migration Workers	4	75%	75%	63%	10.00

### 3.7. Inspector General of Registration and Stamps

There is a total of two services under the study scope for the Inspector General of Registration and Stamps department namely **registration of land/property and registration of firms under Indian partnership act 1932**, key inferences from NeSDA assessment and applicant data analysis for the service is as below.

Figure below graphically depicts the NeSDA assessment scores for the service for Labour Department (detailed score in Annexure). Major improvement areas for these services are listed as below.

**Figure 38 IGR Services: NeSDA Score**

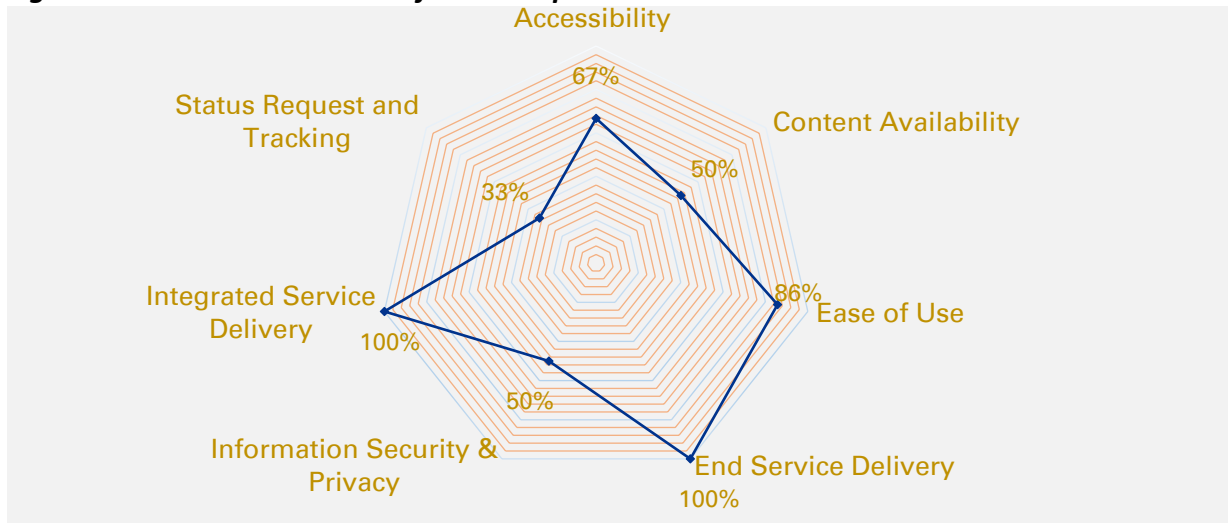


**Table 16 IGR Department e-service delivery - Focus areas**

Sl. No.	IGR Department Services	Mode of Delivery	Improvement Areas for each of the services
1	Registration of Land/property	Kaveri website <a href="https://kaverionline.karnataka.gov.in/">https://kaverionline.karnataka.gov.in/</a>	<ul style="list-style-type: none"> <li>• To provide dedicated webpage for contact-us section and information on nodal officers responsible for provision of the service</li> <li>• Integration of security features such as two factor authentications and W3C compliance</li> <li>• Integration of feature to log complaints/grievances and provide feedback</li> <li>• Provision for users to be notified for status change in application</li> <li>• For registration of firms there is manual intervention in process flow of submitting all original documents in registrar office. This could be rationalised</li> </ul>
2	Registration of FIRMS under Indian Partnership Act, 1932		








Overall average score for all above IGR services is depicted in figure 39 below, major areas of improvement for these services is identified as **Accessibility, Content availability, Information security & privacy and Status request & tracking.**

**Figure 39 Overall NeSDA Score for IGR Department**



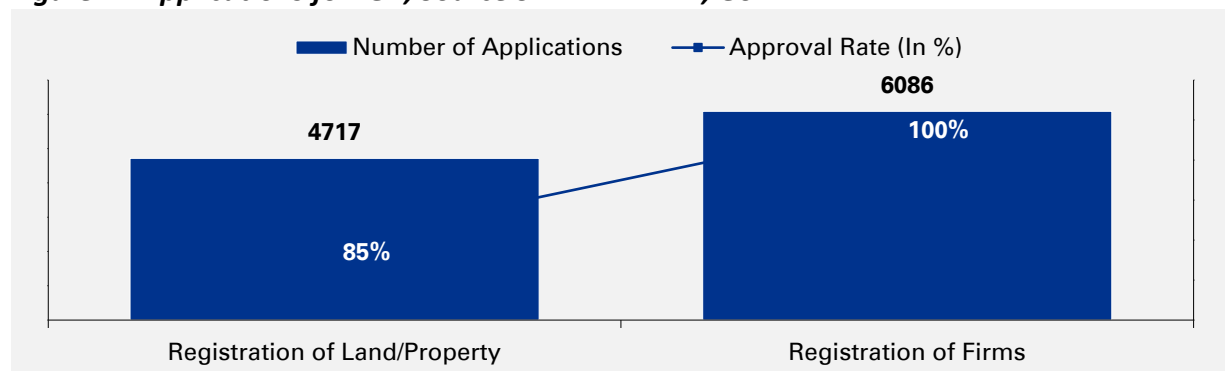
Below improvement features (figure 40) would further enhance the transparency, better user experience and reduce service delivery discrepancies.

**Figure 40 Recommendations for IGR department portal**

Parameters	Improvement Areas	Recommendations & Significance
 <b>Parameters</b>	 <b>Improvement Areas</b>	 <b>Recommendations &amp; Significance</b>
 <b>Accessibility</b>	<ul style="list-style-type: none"> <li>Ensuring website content also in local language</li> <li>Ensuring dedicated section on help manual/checklist and information on nodal officer</li> </ul>	<ul style="list-style-type: none"> <li>Adoption of MeitY GIGW standards for e-Governance. Placement of GIGW logo or W3C logo on websites</li> <li>Enables reach and coverage for the e-services</li> </ul>
 <b>Content Availability</b>	<ul style="list-style-type: none"> <li>Ensuring Help manuals and dedicated FAQ section at the portal</li> <li>Integration of site maps and feature to provide feedback and comments</li> <li>Providing know how on digital signature</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY Content Management Framework</b> with aim to improve presentation, usability and consistency of state portal</li> <li>Access to useful information enables better user experience and improves transparency</li> </ul>
 <b>Information Security &amp; Privacy</b>	<ul style="list-style-type: none"> <li>Integration of online security measures such as hosting on https compliance, W3C compliance, lock symbol</li> <li>Intimating users for password update or unauthorized access to profile</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY ePramaan Framework</b> guidelines for eAuthentication for users</li> <li>Increases the trust of citizens in service delivery which in turn increases adoption and helps increase reach and coverage</li> </ul>
 <b>Status and request tracking</b>	<ul style="list-style-type: none"> <li>Integration of features to intimate users in status change/update of applications</li> <li>Provision for users to leave feedback</li> <li>Provide dedicated webpage for subjects related to payment for services</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY Digital service standard</b> to adopt practices for end to end status tracking Improves efficiency and increases transparency for service delivery. Empowers citizens by enhancing trust in Government</li> </ul>

Applicant data analysed for the evaluation period illustrates that most utilised service for the departments is registration of firms (please note that data for this service is just for one day due to huge voluminous of data). For registration of firms 100% approval rate was observed.

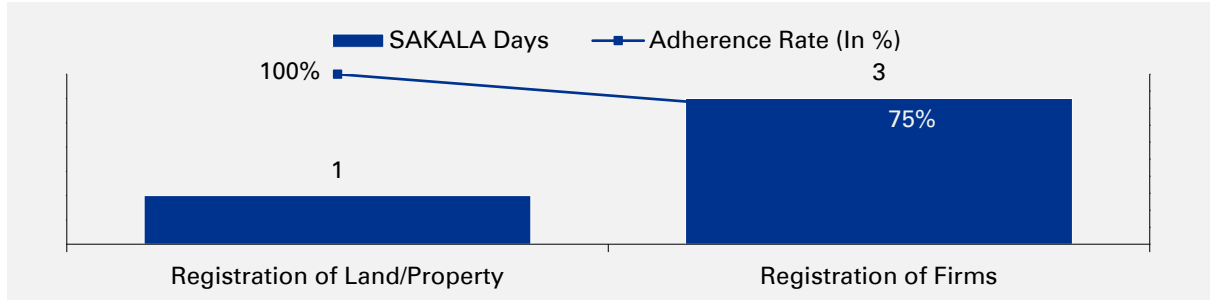
**Figure 41 Applications for IGR, Source SAKALA DPAR, GoK**



Primary reasons observed for rejections are tabulated as below for each of the services.

For Registration of Land/Property	For Registration of Firms
<ul style="list-style-type: none"> <li>• Non submission of <b>supporting documents</b></li> <li>• Applications <b>withdrawn</b> by applicant</li> </ul>	<ul style="list-style-type: none"> <li>• Non submission of <b>supporting documents</b> such as rent agreement</li> <li>• First partnership deed not registered with specified office</li> <li>• Submitted to <b>wrong jurisdiction</b></li> <li>• <b>Nonpayment</b> of stamp duty</li> </ul>

Adherence rate for SAKALA timeline was found to be 100% for registration of land/property and 75% for registration of firms, interactions with department officials revealed that lack of supporting documents and procedural delays were primary reasons for delays. Services delivered by departments still had manual interventions and offline interactions such as submission of supporting documents.



*Summary of facts & figures across services of Inspector General Registration & Stamps*

**Table 17 Summary of figures across all services of IGR**

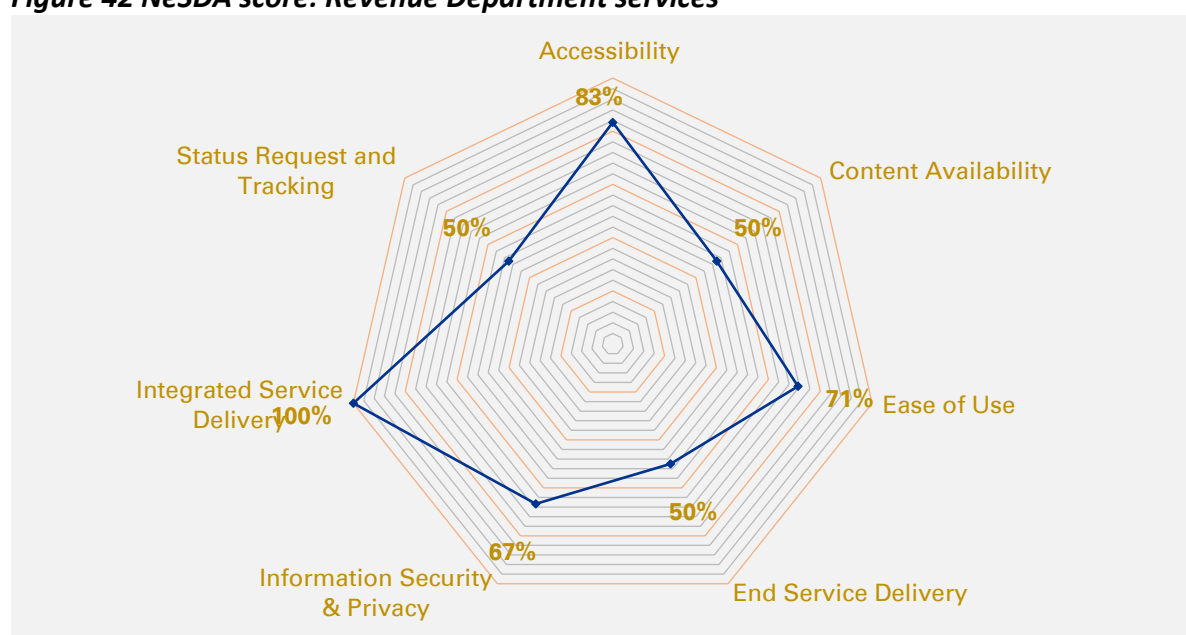
Service	Applicants	Approval Rate	SAKALA Adherence	NeSDA Score
Registration of Land/property	4717	85%	100%	70%
Registration of FIRMS	6086	100%	75%	70%

### 3.8. Revenue Department

There is one service under the study scope for the Revenue department namely **conversion of agriculture land to non-agriculture purpose**, key inferences from NeSDA assessment and applicant data analysis for the service is as below.

Figure below graphically depicts the NeSDA assessment scores for the service for Revenue Department (detailed score in Annexure). Major improvement areas for these services are tabulated below.

**Figure 42 NeSDA score: Revenue Department services**



**Table 18 Revenue Department e-service delivery - Improvement areas**








Sl. No.	Revenue Department	Mode of Delivery	Improvement Areas for each of the services
1	Conversion of agriculture land to non-agriculture purpose	Bhoomi website <a href="https://www.lan.drecords.karnataka.gov.in/service84">https://www.lan.drecords.karnataka.gov.in/service84</a>	<ul style="list-style-type: none"> <li>• Provision for providing information on checklist, procedures and timelines</li> <li>• To remove the manual touch point of submitting physical copy of notarized affidavit to DC/Taluk case worker</li> <li>• Integration of security features such as W3C</li> </ul>



Sl. No.	Revenue Department	Mode of Delivery	Improvement Areas for each of the services
			<ul style="list-style-type: none"> <li>Integration of feature to log complaints/grievances and provide feedback</li> <li>Provision for a dedicated web page for information on subject related to payment</li> </ul>

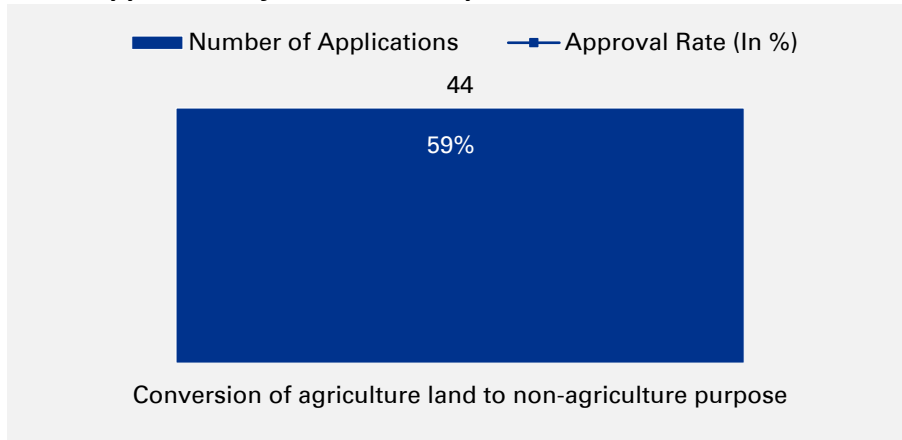
Overall score for revenue department services as depicted above highlights major areas of improvement such as **Content availability, End service delivery, Information security & privacy and Status request & tracking.**

**Figure 43 Recommendation for Revenue Department portal**

 Parameters	 Improvement Areas	 Recommendations & Significance
 Content Availability	<ul style="list-style-type: none"> <li>Ensuring Help manuals and dedicated FAQ section at the portal</li> <li>Integration of site maps and feature to provide feedback and comments</li> <li>Providing know how on digital signature</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY Content Management Framework</b> with aim to improve presentation, usability and consistency of state portal</li> <li>Access to useful information enables better user experience and improves transparency</li> </ul>
 End Service Delivery	<ul style="list-style-type: none"> <li>Provisions for making offline payments could be removed to accept only online payment mode</li> <li>Manual effort to obtain the service should be removed</li> </ul>	<ul style="list-style-type: none"> <li>Integration and limitation to online payments leads to transparency and consistency in service delivery</li> <li>Manual processes should be eliminated in service delivery</li> </ul>
 Information Security & Privacy	<ul style="list-style-type: none"> <li>Integration of online security measures such as hosting on https compliance, W3C compliance, lock symbol</li> <li>Intimating users for password update or unauthorized access to profile</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY ePramaan Framework</b> guidelines for eAuthentication for users</li> <li>Increases the trust of citizens in service delivery which in turn increases adoption and helps increase reach and coverage</li> </ul>
 Status and request tracking	<ul style="list-style-type: none"> <li>Integration of features to intimate users in status change/update of applications</li> <li>Provision for users to leave feedback</li> <li>Provide dedicated webpage for subjects related to payment for services</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY Digital service standard</b> to adopt practices for end to end status tracking Improves efficiency and increases transparency for service delivery. Empowers citizens by enhancing trust in Government</li> </ul>

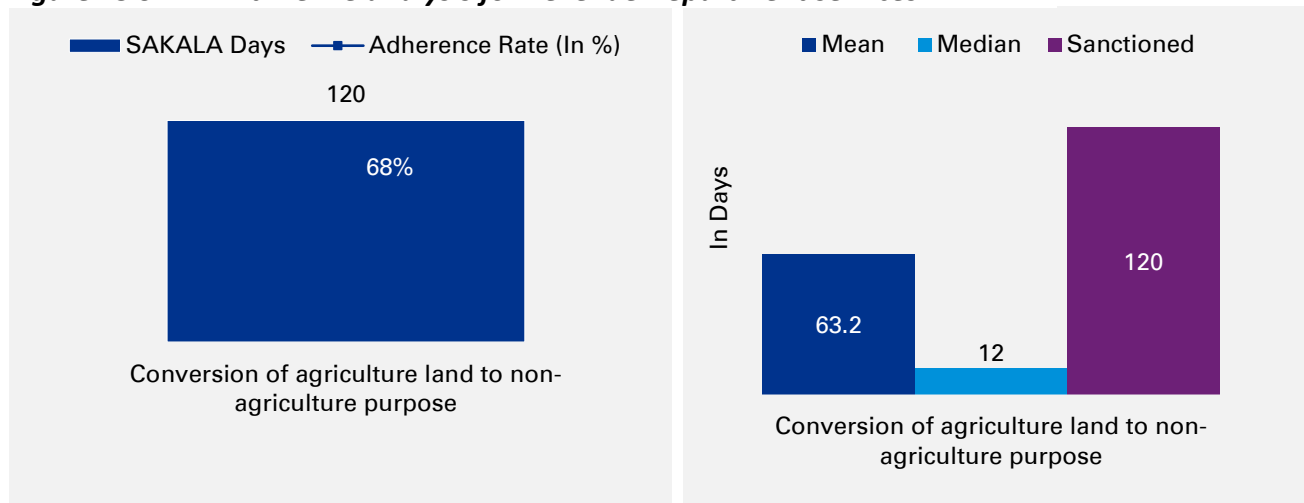
Applicant data analysed for the evaluation period illustrates that limited number of applications were received during the study period with high rejection rate of 41%.

**Figure 44 Applications for Revenue Department, Source SAKALA DPAR, GoK**



Adherence rate for SAKALA timeline was found to be comparatively low at 68%, interactions with department officials revealed that primary reason for delay was multiple interactions involved with other department officials. Central tendency measurement for the applications processed indicates **department processes most of the application within the sanctioned time.**

**Figure 45 SAKALA timeline analysis for Revenue Department services**



*Summary of facts & figures across services of Revenue Department***Table 19 Summary of figures across all services of Revenue Department**

Service	Applicants	Approval Rate	SAKALA Adherence	NeSDA Score
Conversion of agriculture land to non-agriculture purpose	44	59%	68%	69%

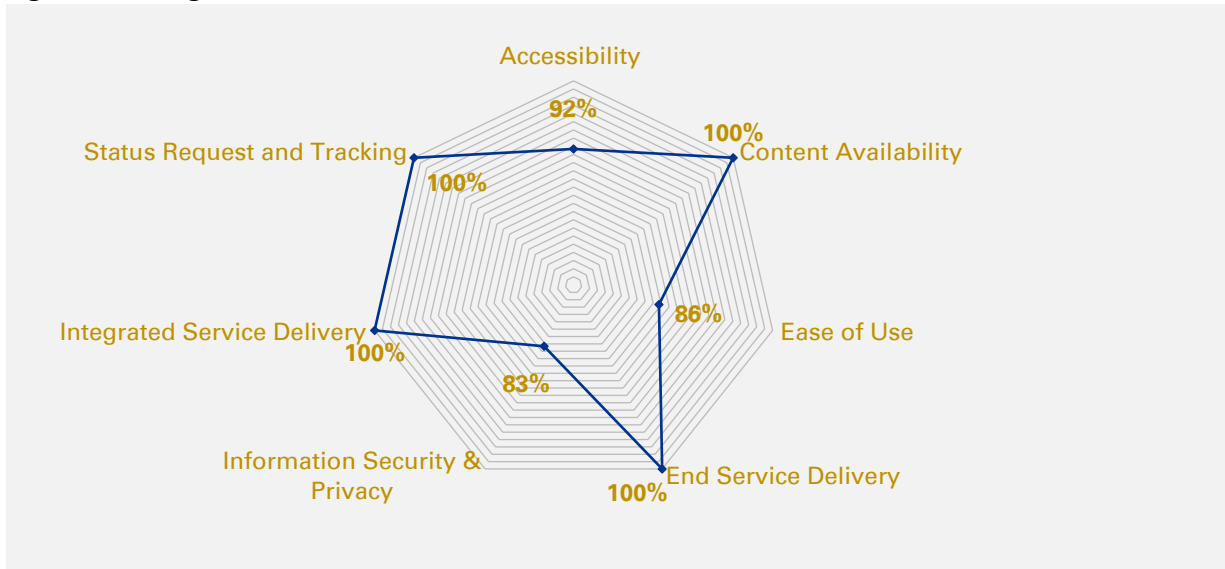
### 3.9. Karnataka State Pollution Control Board (KSPCB)

There is a total of ten services under the study scope for the department namely listed below:

1. Disposal of consent for establishment/expansion (COE) applications under water and air act green category
2. Consent for establishment/expansion applications under water and air act red category non-EIA (Environmental Impact Assessment)
3. Disposal of consent for operations (COO/CFO) applications under water and air act for green category
4. Disposal of consent for operations applications under water and air act for orange category excluding infrastructure projects
5. Disposal of consent for operations applications under water and air act for orange category infrastructure projects
6. Disposal of consent for operations applications under water and air act for red category EIA projects
7. Disposal of consent for operations applications under water and air act for red category non-EIA projects
8. Disposal of authorisation applications under hazardous and other waste green category
9. Disposal of authorisation applications under hazardous and other waste orange category
10. Disposal of authorisation applications under hazardous and other waste red category

Key inferences from NeSDA assessment and applicant data analysis for the service is as summarised below. Figure below graphically depicts the NeSDA assessment scores for the service for KSPCB (detailed score in Annexure). Major improvement areas for these services are listed as tabulated in table 20.

**Figure 46 Integrated NeSDA score: KSPCB**





**Table 20 KSPCB Department e-service delivery - Focus areas**

Sl. No.	KSPCB Department Services	Mode of Delivery	Improvement Areas for each of the services
1	For all consent applications for establishment/ expansion/ operation across all categories	XGN website <a href="http://kspcb.gov.in/XGN.html">http://kspcb.gov.in/XGN.html</a>	<ul style="list-style-type: none"> <li>• Web site content should be available in Kannada</li> <li>• Integration of information security features such as W3C compliance</li> </ul>

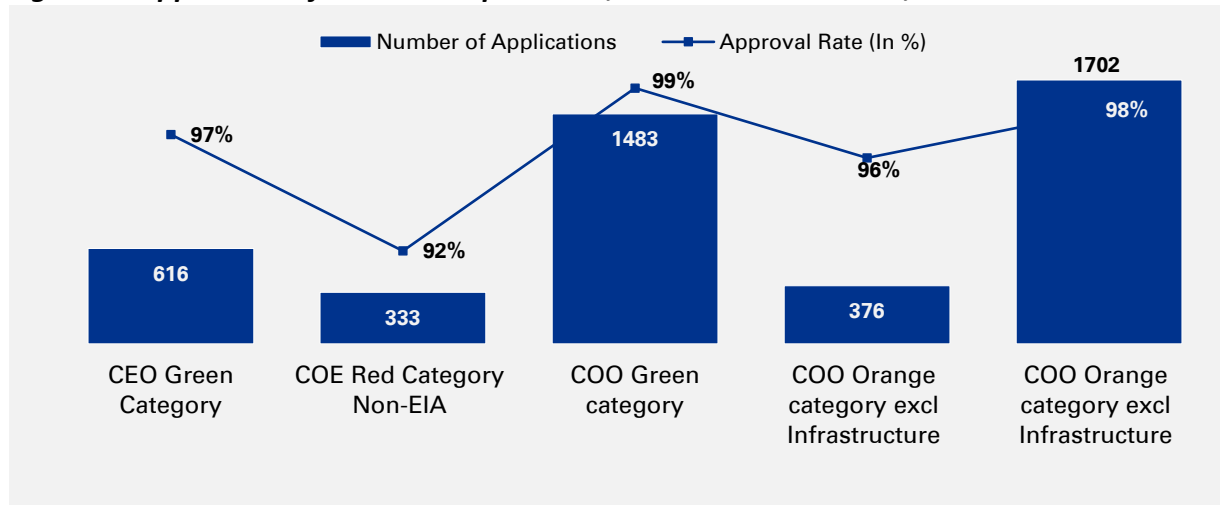
Major areas of improvement for these services is identified as **Ease of use & Information security and privacy.**

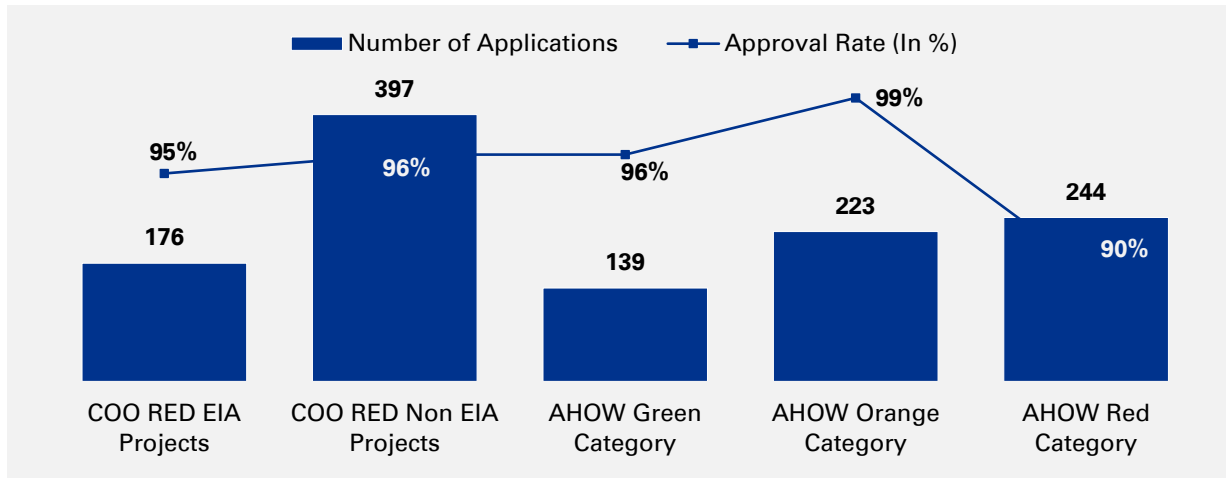
**Figure 47 Recommendations for KSPCB portal**

Parameters	Improvement Areas	Recommendations & Significance
 <p>Ease of Use</p>	<ul style="list-style-type: none"> <li>Website content should be available in local language</li> <li>Integration of features such as how to guides, search feature for website</li> </ul>	<ul style="list-style-type: none"> <li>It is a significant parameter that influences the ambit of e-service quality measurement and aids in <b>reducing digital divide by providing better accessibility</b> of the e-Government services</li> </ul>
 <p>Information Security &amp; Privacy</p>	<ul style="list-style-type: none"> <li>Integration of online security measures such as hosting on https compliance, W3C compliance, lock symbol</li> <li>Intimating users for password update or unauthorized access to profile</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY ePramaan Framework</b> guidelines for eAuthentication for users</li> <li>Increases the trust of citizens in service delivery which in turn increases adoption and helps increase reach and coverage</li> </ul>

Applicant data analysed for the evaluation period illustrates that most utilised service for the departments is COO for orange excluding infrastructure projects and COO for green category. Consistently high approval rate is observed for all services i.e. above 90% in each of the categories. Primary reason for rejection observed for applicants was non submission of supporting documents.

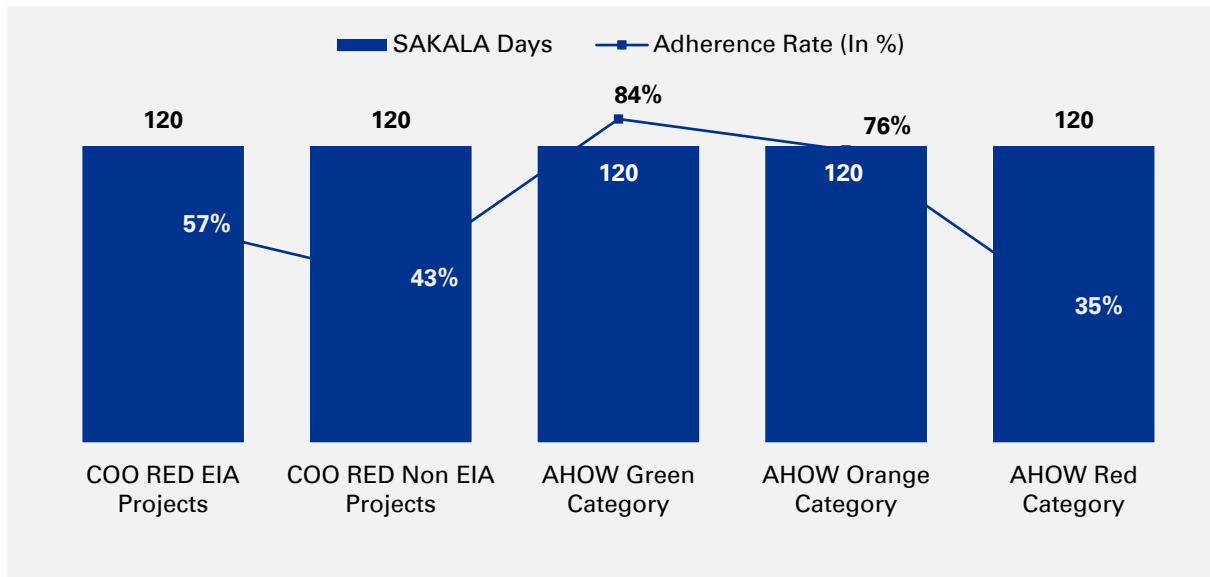
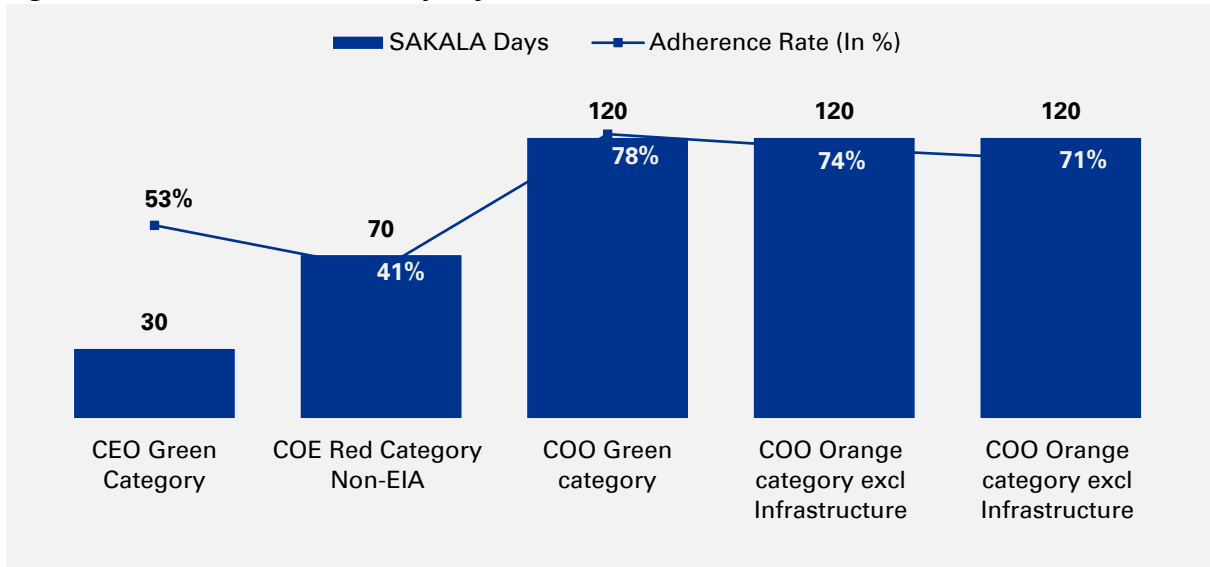
**Figure 48 Applications for KSPCB Department, Source SAKALA DPAR, GoK**



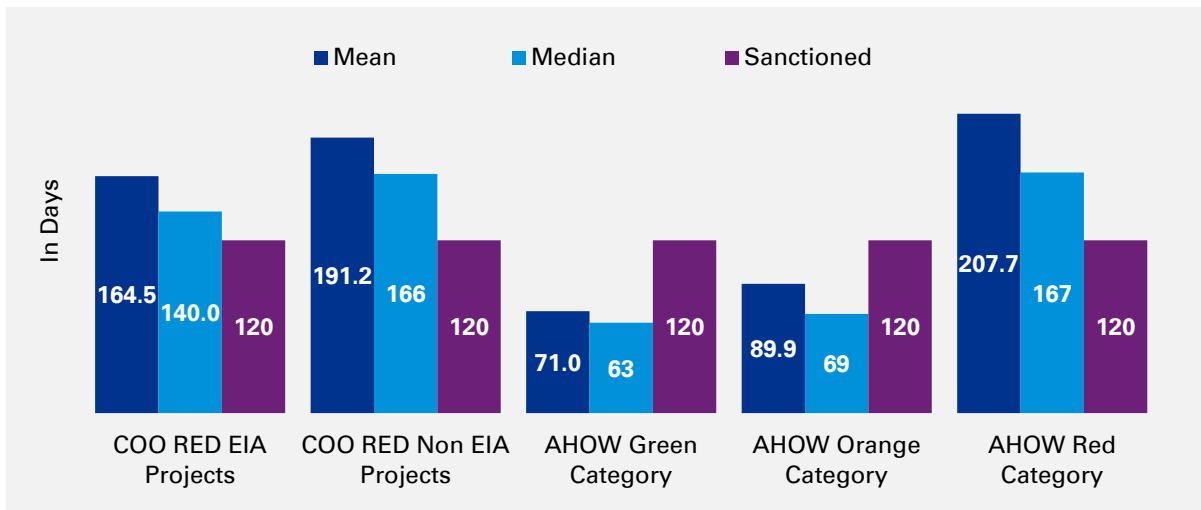
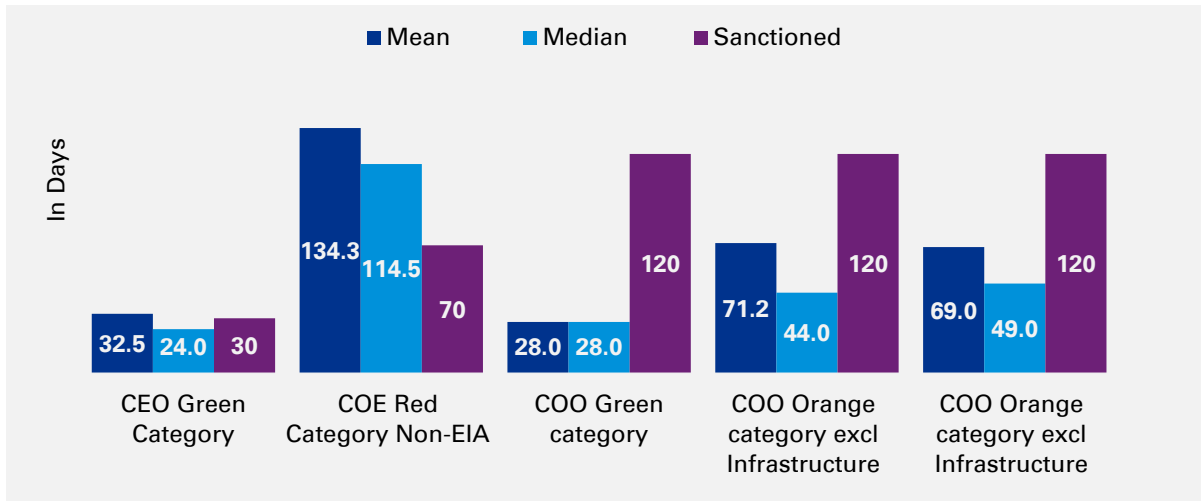


Adherence rate for SAKALA timeline was found to be below 50% for AHOW Red category, COE Red Non-EIA, COO Red non-EIA projects and COE Green category. Interactions with department officials revealed that lack of compliance with inspection observations and submission of supporting documents by applicants were primary reasons for delays. Compliance of SAKALA timeline in at least 75% of applications was observed only for three services i.e. AHOW green, COO green and AHOW orange category. **Central tendency measurement for the applications processed confirms indicates similar trends of processing timelines for application on average exceeding sanctioned SAKALA timelines i.e. COE green, COE red non-EIA, COO Red EIA and non-EIA and AHOW Red.**

**Figure 49 SAKALA timeline analysis for KSPCB services**







Summary of facts and figures across all services of KSPCB

**Table 21 Summary of figures across all services of KSPCB**

Service	Applicants	Approval Rate	SAKALA Adherence	NeSDA Score	Mean SAKALA timeline (in days)
Consent for Establishment /Expansion (COE) Green	616	97%	53%	93%	32.47
COE Red Category Non-EIA (Environmental Impact Assessment)	333	92%	41%	93%	134.25
Consent for Operation (CFO) Green	1483	99%	78%	93%	28.00
CFO Orange excluding Infrastructure projects	376	96%	74%	93%	71.20
CFO Orange category Infrastructure projects	1702	98%	71%	93%	69.04
CFO Red EIA Projects	176	95%	57%	93%	164.50
CFO Red Non-EIA Projects	397	96%	43%	93%	191.20
Authorization under Hazardous and Other Waste	139	96%	84%	93%	70.96

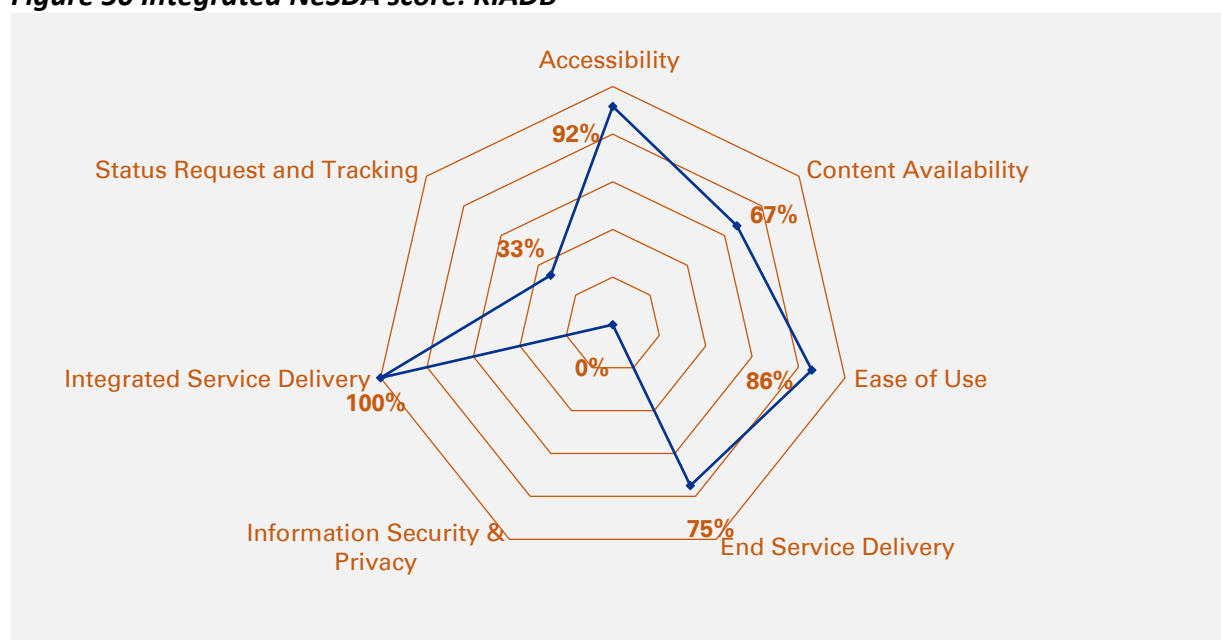
Service	Applicants	Approval Rate	SAKALA Adherence	NeSDA Score	Mean SAKALA timeline (in days)
(AHOW) Green					
AHOW Orange	223	99%	76%	93%	89.90
AHOW Red	244	90%	35%	93%	207.70

### 3.10. Karnataka Industrial Area Development Board (KIADB)

There is a total of two service under the study scope for the department namely **land allotment and sanction of building plan** (1. up to 2 acres, 2. more than 2 acres, 3. Single unit complex), key inferences from NeSDA assessment and applicant data analysis for the service is as below.

Figure below graphically depicts the NeSDA assessment scores for the service for Revenue Department (detailed score in Annexure). Major improvement areas for these services are tabulated below.

**Figure 50 Integrated NeSDA score: KIADB**









**Table 22 KIADB department e-service delivery - Focus areas**

Sl. No.	KIADB Department Services	Mode of Delivery	Focus Areas for each of the services
1	Land Allotment comprising following stages: 1. Intimation for payment of initial deposit and EMD	KIADB website <a href="http://109.75.172.116:8080/kiadb/pages/home.jsf">http://109.75.172.116:8080/kiadb/pages/home.jsf</a>	<ul style="list-style-type: none"> <li>Provision for users to make personal login profiles</li> </ul>

Sl. No.	KIADB Department Services	Mode of Delivery	Focus Areas for each of the services
	2. Issue of Allotment Letter 3. Issue of confirmatory letter 4. Issue of Possession Certificate 5. Execution of Lease cum-sale deed		<ul style="list-style-type: none"> <li>• Integration of feature to log complaints/grievances and provide feedback</li> <li>• Provision for users to be notified for status change in application or periodically</li> <li>• Integration of information security features such as https protocol, lock symbol, W3C compliance</li> <li>• Dedicated web page with information on service payment fee must be made available</li> </ul>
2.	Sanction of building plan 1. up to 2 acres 2. more than 2 acres 3. Single Unit Complex (SUC)		

Major areas of improvement for these services is identified as **Content availability, Information security & privacy and Status request & tracking.**

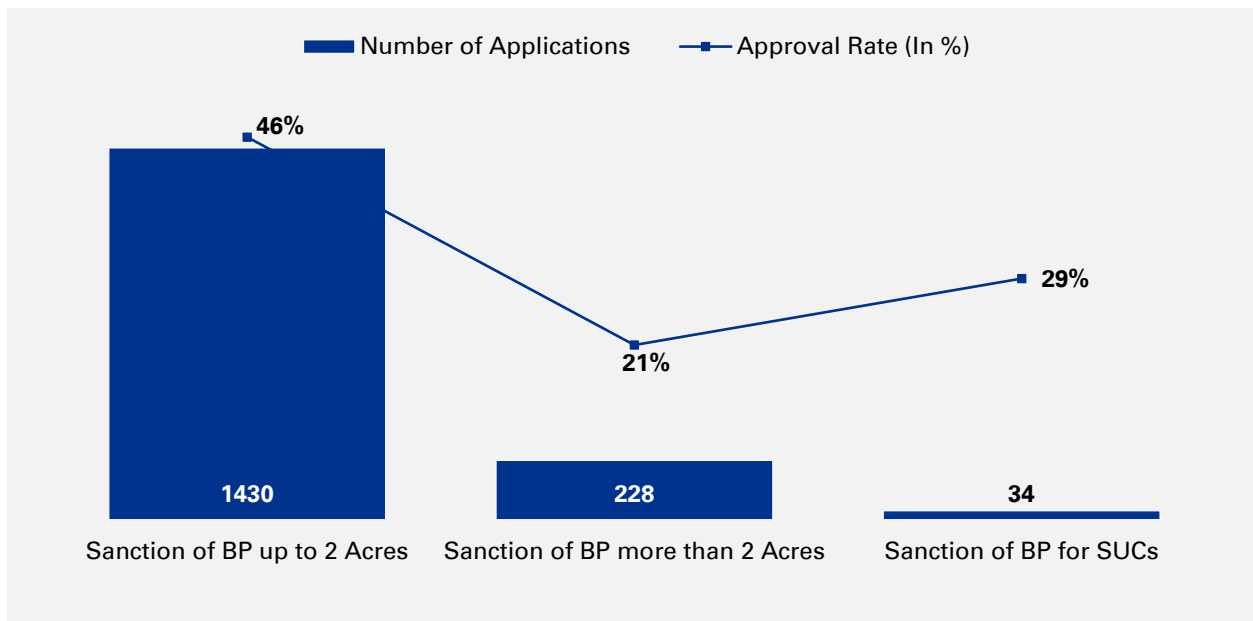
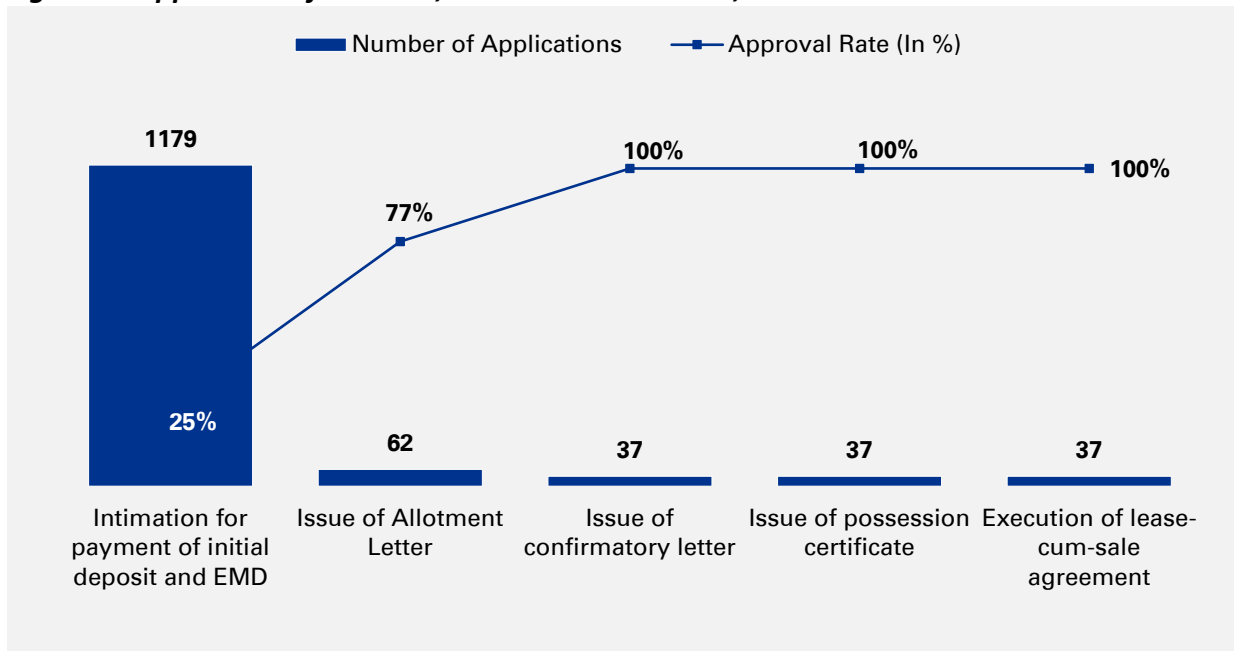
**Figure 51 Recommendation for KIADB portal**

 Parameters	 Improvement Areas	 Recommendations & Significance
 <b>Content Availability</b>	<ul style="list-style-type: none"> <li>• Ensuring Help manuals and dedicated FAQ section at the portal</li> <li>• Integration of site maps and feature to provide feedback and comments</li> <li>• Providing know how on digital signature</li> </ul>	<ul style="list-style-type: none"> <li>• Leverage <b>MeitY Content Management Framework</b> with aim to improve presentation, usability and consistency of state portal</li> <li>• Access to useful information enables better user experience and improves transparency</li> </ul>
 <b>Information Security &amp; Privacy</b>	<ul style="list-style-type: none"> <li>• Integration of online security measures such as hosting on https compliance, W3C compliance, lock symbol</li> <li>• Intimating users for password update or unauthorized access to profile</li> </ul>	<ul style="list-style-type: none"> <li>• Leverage <b>MeitY ePramaan Framework</b> guidelines for eAuthentication for users</li> <li>• Increases the trust of citizens in service delivery which in turn increases adoption and helps increase reach and coverage</li> </ul>
 <b>Status and request tracking</b>	<ul style="list-style-type: none"> <li>• Integration of features to intimate users in status change/update of applications</li> <li>• Provision for users to leave feedback</li> <li>• Provide dedicated webpage for subjects related to payment for services</li> </ul>	<ul style="list-style-type: none"> <li>• Leverage <b>MeitY Digital service standard</b> to adopt practices for end to end status tracking Improves efficiency and increases transparency for service delivery. Empowers citizens by enhancing trust in Government</li> </ul>

Above improvement features would further enhance the **transparency, better user experience and reduce service delivery discrepancies.**

Applicant data analysed for the evaluation period illustrates low rate of approval for land allotment process. Only 25% of the applications received by KIADB are processed to the second stage of issuing of allotment letter. **Overall approval rate for land allotment is one of the lowest across department at 31.4%.** Even for sanction of building plan, approval rate observed was low across categories **overall approval rate being 42.25 % with approval for BP over 2 acres being just 21%.**

**Figure 52 Applications for KIADB, Source SAKALA DPAR, GoK**



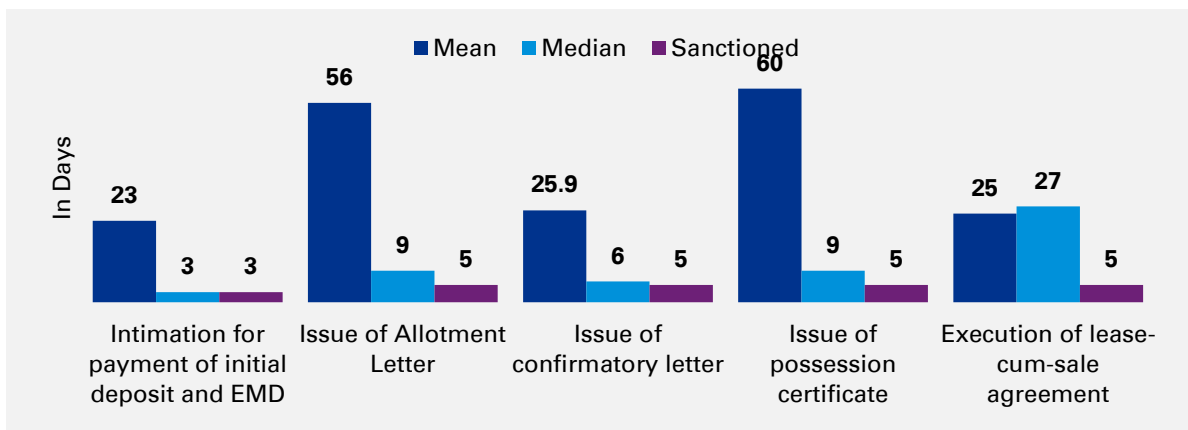
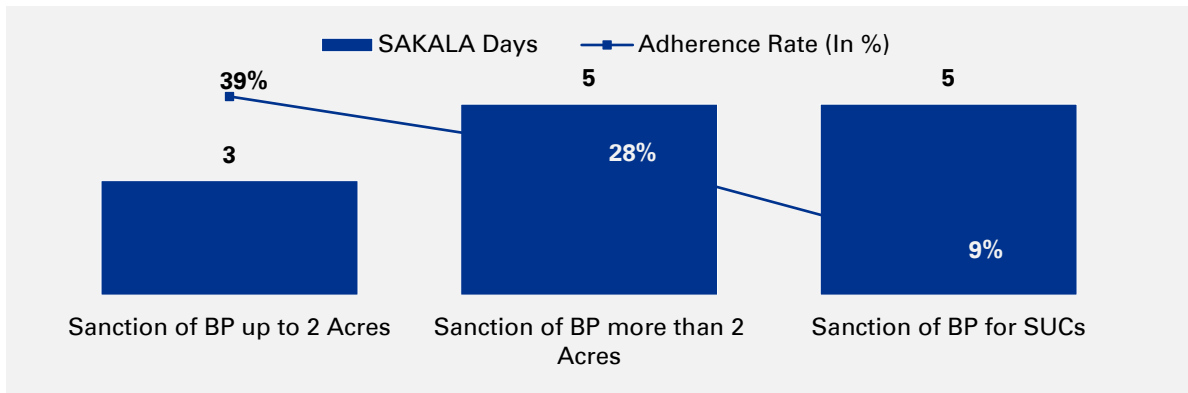
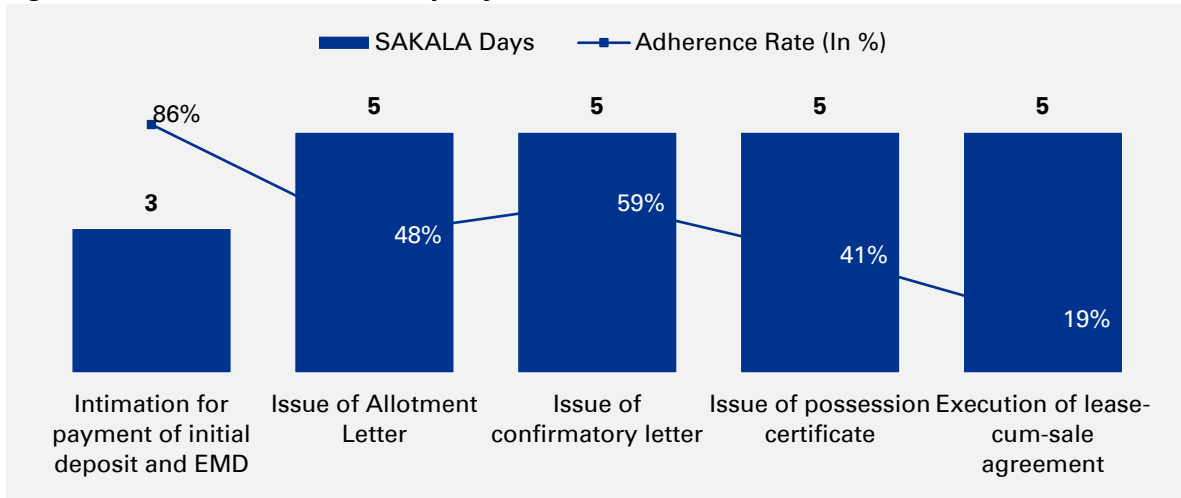
Primary reasons for rejections for each of the service observed are as below:

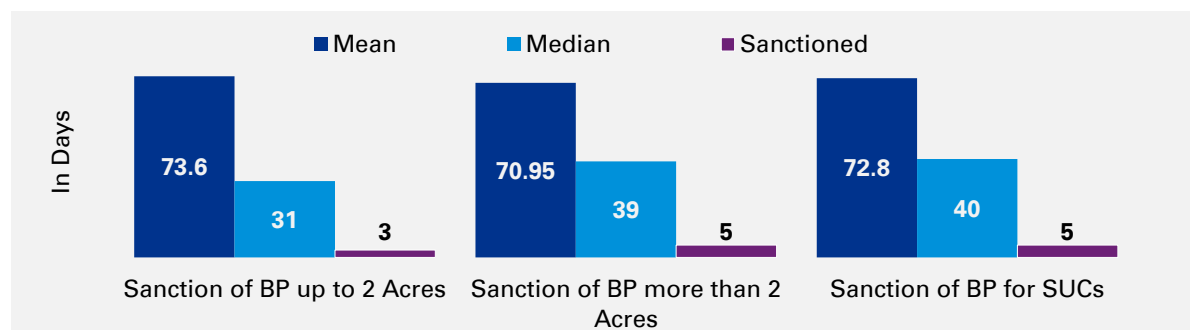
For Intimation of EMD		For Issue of Allotment letter	
<ul style="list-style-type: none"> <li>• Non submission of <b>supporting documents</b></li> <li>• <b>Duplicate requests</b> by applicants</li> <li>• <b>Approvals not issued</b> by competent authority</li> </ul>		<ul style="list-style-type: none"> <li>• Non submission of <b>supporting documents</b></li> <li>• <b>Plots not vacant</b> for allotment</li> <li>• <b>Duplicate requests</b> by applicants</li> </ul>	
For Sanction of BP up to 2 acres	For Sanction of BP more than 2 acres	For Sanction of BP for SUC	
<ul style="list-style-type: none"> <li>• <b>Amalgamation</b> found not to be in order</li> <li>• Project implementation <b>time period expired</b></li> <li>• <b>Non-compliant</b> drawing Plan</li> <li>• Non submission of <b>supporting documents</b></li> <li>• <b>Duplicate requests</b> by applicants</li> <li>• <b>Nonpayment</b> of service fees</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Amalgamation</b> found not to be in order</li> <li>• Project implementation <b>time period expired</b></li> <li>• <b>Non-compliant</b> drawing Plan</li> <li>• Non submission of <b>supporting documents</b></li> <li>• <b>Duplicate requests</b> by applicants</li> <li>• <b>Nonpayment</b> of service fees</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Amalgamation</b> found not to be in order</li> <li>• Project implementation <b>time period expired</b></li> <li>• <b>Non-compliant</b> drawing Plan</li> <li>• Non submission of <b>supporting documents</b></li> <li>• <b>Duplicate requests</b> by applicants</li> <li>• <b>Nonpayment</b> of service fees</li> </ul>	

Adherence rate for SAKALA timeline was found to be below 33.5% for the land allotment and 36.9% for BP approval across categories. Interactions with department officials revealed that lack of due diligence by applicants and inspections clarifications were primary reasons for delays. Supporting documents are still being submitted through offline modes in many instances. Central tendency measurement for the applications processed indicates **department on average requires more than 7x of the sanctioned time for land allotment and 16x of the sanctioned time for BP approval.**



**Figure 53 SAKALA time-line analysis for KIADB services**





Summary of facts & figures across services of KIADB

**Table 23 Summary of figures across all services of KIADB**

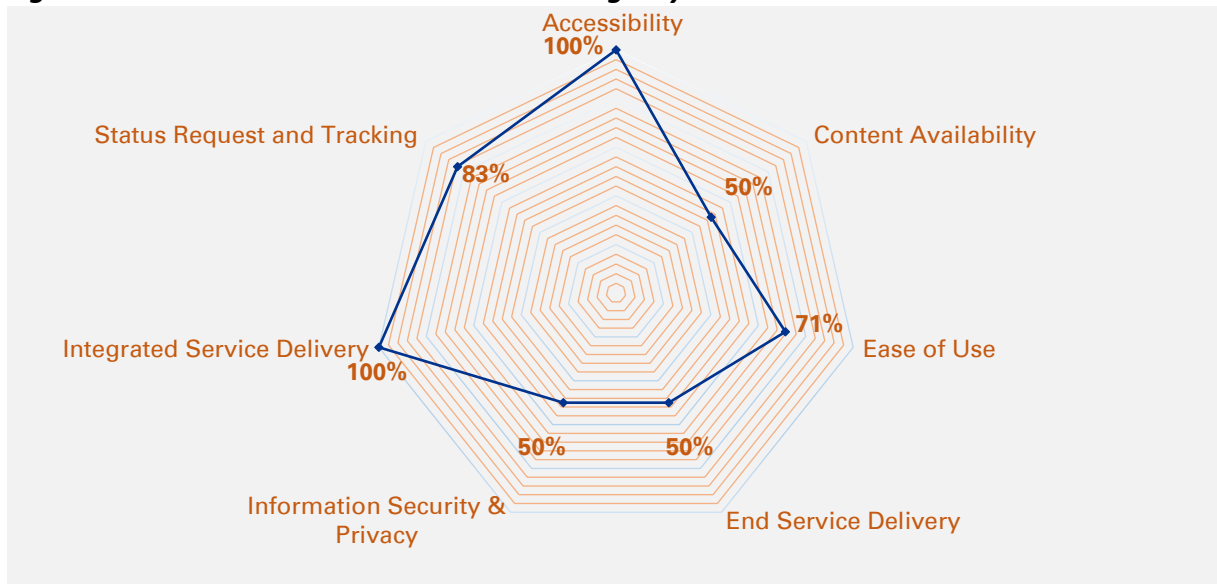
Service	Applicants	Approval Rate	SAKALA Adherence	NeSDA Score
Land Allotment	1352	80%	51%	67%
Sanction of building plan	1692	32%	25%	67%

### 3.11. Karnataka State Fire and Emergency Service Department

There are two service under the study scope for the department namely **NOC for high rise building and Clearance certificate for high rise building**, key inferences from NeSDA assessment and applicant data analysis for the service is as below.

Figure below graphically depicts the NeSDA assessment scores for the service for Fire Department (detailed score in Annexure). Major improvement areas for these services are tabulated below.

**Figure 54 Overall NeSDA score: Fire and Emergency service**







**Table 24 Fire department e-service delivery - Improvement areas**

Sl. No.	Fire Department Services	Mode of Delivery	Improvement Areas for each of the services
1	NOC for High rise building	Fire Department website	<ul style="list-style-type: none"> <li>Integration of information security features such as W3C compliance</li> <li>Manual touch point in form of inspection of premises should be rationalised</li> <li>Integration of feature to log complaints/grievances and feedback</li> <li>Web site should be in Top 5 results of search engine</li> </ul>
2.	Clearance certificate for high rise building	<a href="https://karunadu.karnataka.gov.in/ksfes/pages/home.aspx">https://karunadu.karnataka.gov.in/ksfes/pages/home.aspx</a>	

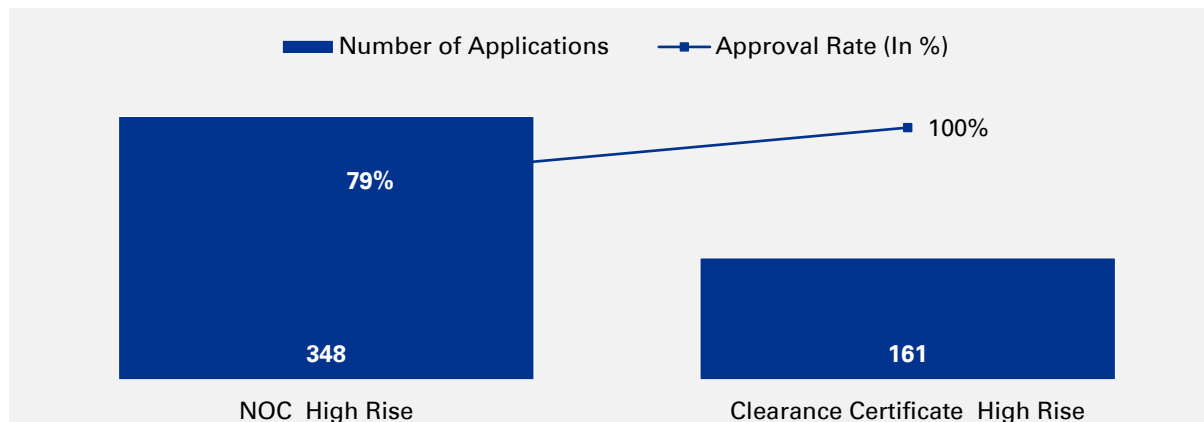
Major areas of improvement for these services is identified as **Content availability, Ease of Use, End service delivery and Information security and privacy**. Below suggested improvement features in these areas would further enhance the transparency, better user experience and reduce service delivery discrepancies.

**Figure 55 Recommendations for Fire Department portal**

Parameters	Improvement Areas	Recommendations & Significance
 <b>Content Availability</b>	<ul style="list-style-type: none"> <li>Ensuring Help manuals and dedicated FAQ section at the portal</li> <li>Integration of site maps and feature to provide feedback and comments</li> <li>Providing know how on digital signature</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY Content Management Framework</b> with aim to improve presentation, usability and consistency of state portal</li> <li>Access to useful information enables better user experience and improves transparency</li> </ul>
 <b>Ease of Use</b>	<ul style="list-style-type: none"> <li>Website search engine results should be available in Top 5 results</li> <li>Integration of features such as how to guides, search feature for website</li> </ul>	<ul style="list-style-type: none"> <li>Influences the ambit of e-service quality measurement and aids in <b>reducing digital divide by providing better accessibility</b> of the e-Government services</li> </ul>
 <b>End Service Delivery</b>	<ul style="list-style-type: none"> <li>Provisions for making offline payments could be removed to accept only online payment mode</li> <li>Manual effort to obtain the service should be removed</li> </ul>	<ul style="list-style-type: none"> <li>Integration and limitation to online payments leads to transparency and consistency in service delivery</li> <li>Manual processes should be eliminated in service delivery</li> </ul>
 <b>Information Security &amp; Privacy</b>	<ul style="list-style-type: none"> <li>Integration of online security measures such as hosting on https compliance, W3C compliance, lock symbol</li> <li>Intimating users for password update or unauthorized access to profile</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY ePramaan Framework</b> guidelines for eAuthentication for users</li> <li>Increases the trust of citizens in service delivery which in turn increases adoption and helps increase reach and coverage</li> </ul>

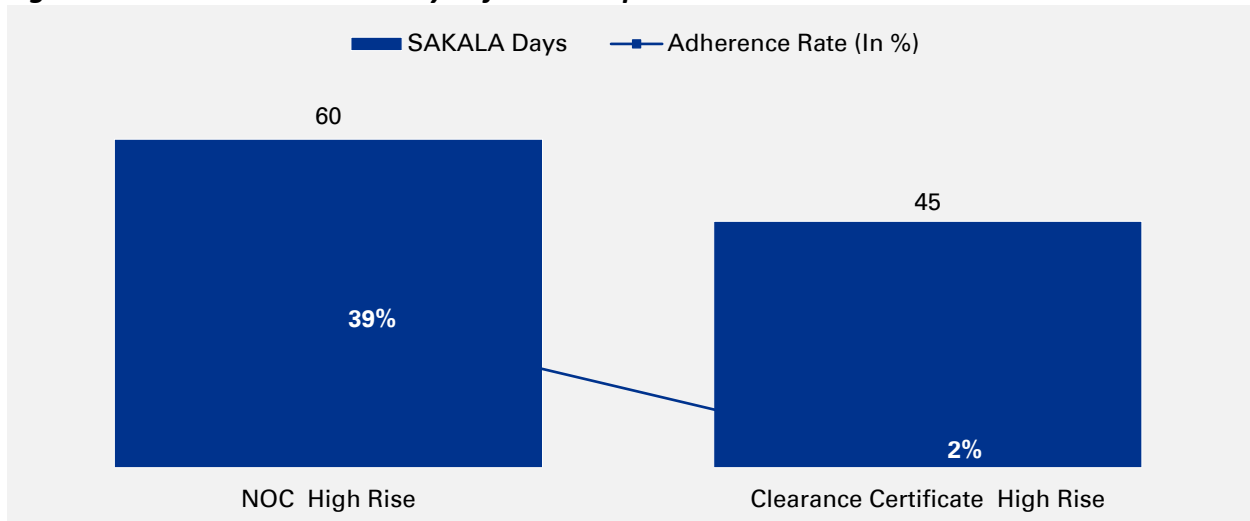
Applicant data analysed for the evaluation period illustrates **100% high approval rate for the applicants and 79% for the NOC high rise applicants**. Primary reasons for rejections was observed to be incorrect information provided (such as wrong address, construction ongoing etc.) and noncompliance with inspection observations.

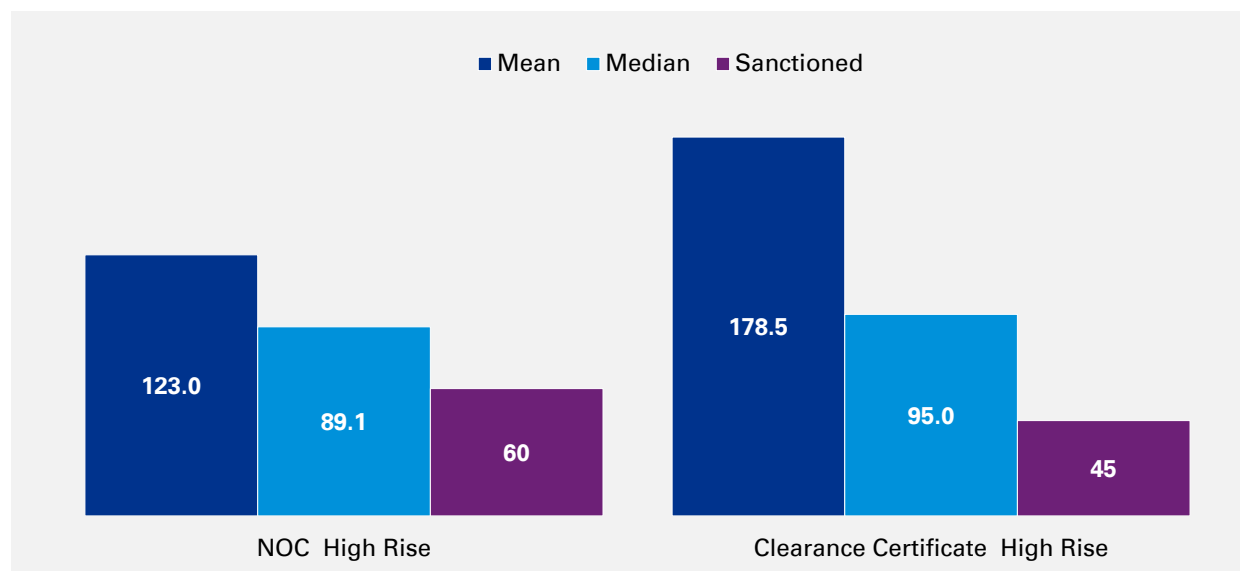
**Figure 56 Applications for Fire Department, Source Fire Department, GoK**



Adherence rate for SAKALA timeline was found to be among the lowest across departments for clearance certificate high rise it was as low as 2% and for NOC high rise it was below 40%. Interactions with department officials revealed that inspection noncompliance by applicants and multiple interaction with other line departments were primary reasons for these delays. Services delivered by departments still had manual interventions and offline interactions. Such interactions also revealed that supporting documents are still being submitted through offline modes in many instances. Central tendency measurement for the applications processed indicates **department on average requires more than 2x of the sanctioned time for NOC for high rise and nearly 4x of the sanctioned time for clearance certificate for high rise.**

**Figure 57 SAKALA timeline analysis for Fire Department services**





*Summary of facts & figures across services of Karnataka State Fire and Emergency Services Department*

**Table 25 Summary of figures across all services of Fire Department services**

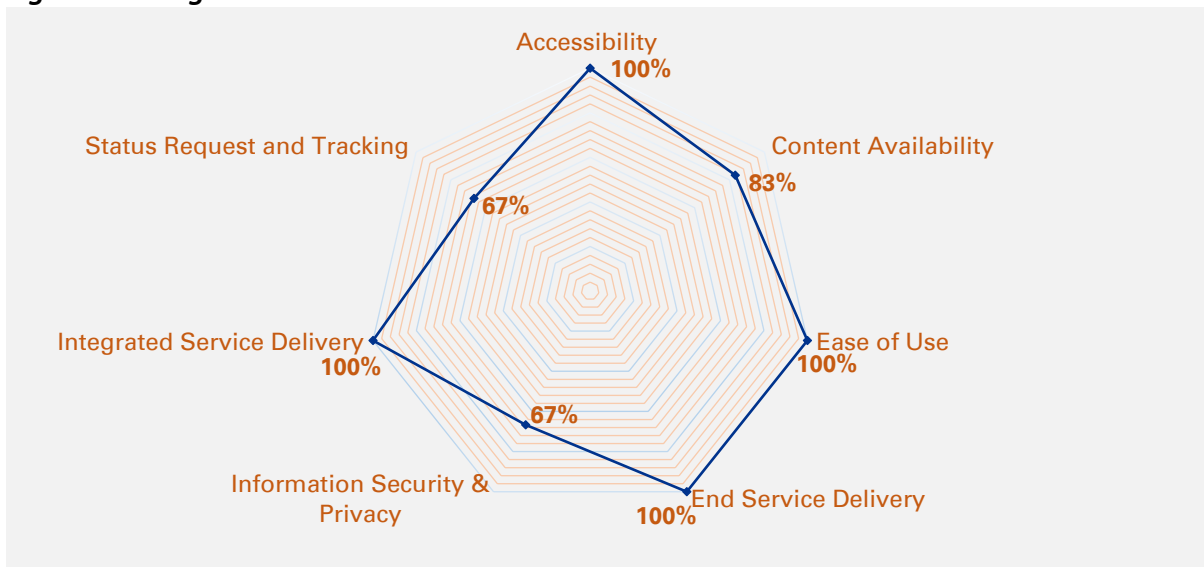
Service	Applicants	Approval Rate	SAKALA Adherence	NeSDA Score	Mean SAKALA timeline (in days)
NOCs for high-rise buildings	348	79%	39%	76%	123.00
Clearance certificate	161	100%	2%	76%	178.45

### 3.12. BESCO

There is one service under the study scope for the department namely **application for additional load/new connection – up to 7.5 KW for LT2 and LT3 new connection**, key inferences from NeSDA assessment and applicant data analysis for the service is as below.

Figure below graphically depicts the NeSDA assessment scores for the service for BESCO Department (detailed score in Annexure). Major improvement areas for these services are tabulated below.

**Figure 58 Integrated NeSDA score: BESCO**

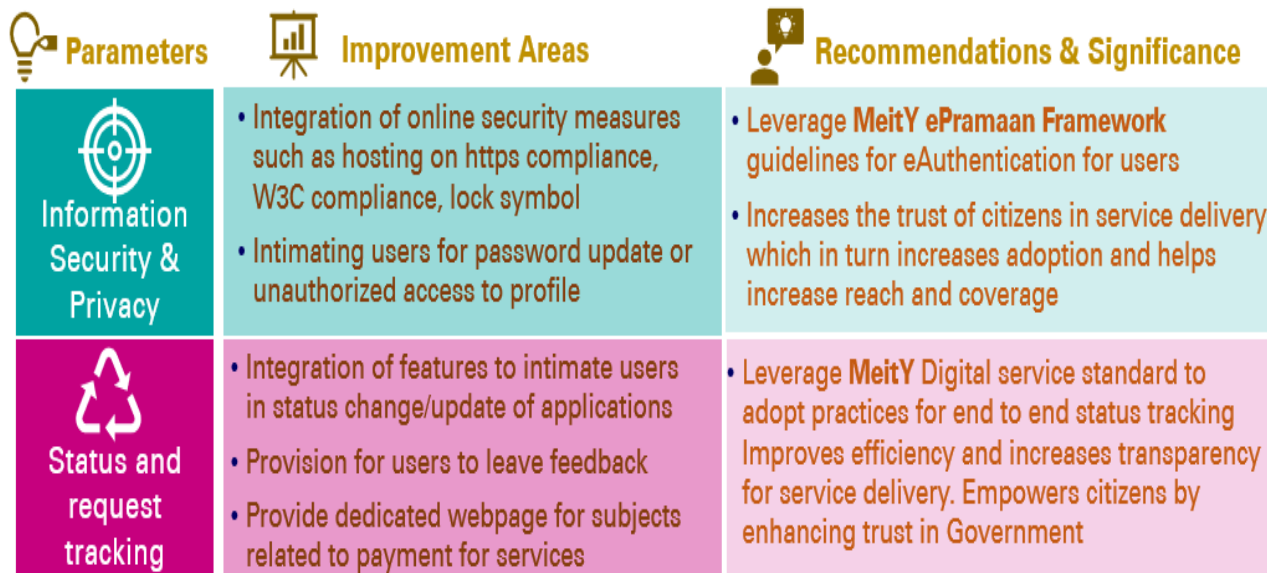


**Table 26 BESCO e-service delivery - Focus areas**

Sl. No.	BESCOM Service	Mode of Delivery	Focus Areas for each of the services
1	Application for Additional Load/ New Connection - FTNC up to 7.5 KW for LT2 and LT3 for new connection	Department website <a href="https://onlineservices.bescom.org/">https://onlineservices.bescom.org/</a>	<ul style="list-style-type: none"> <li>Provision for users to be verified with a two-factor authentication should be integrated</li> <li>Feature for users to be intimated by SMS/email alerts for change of status in application</li> <li>Integration of dedicated webpage for subjects pertaining to online payments</li> </ul>

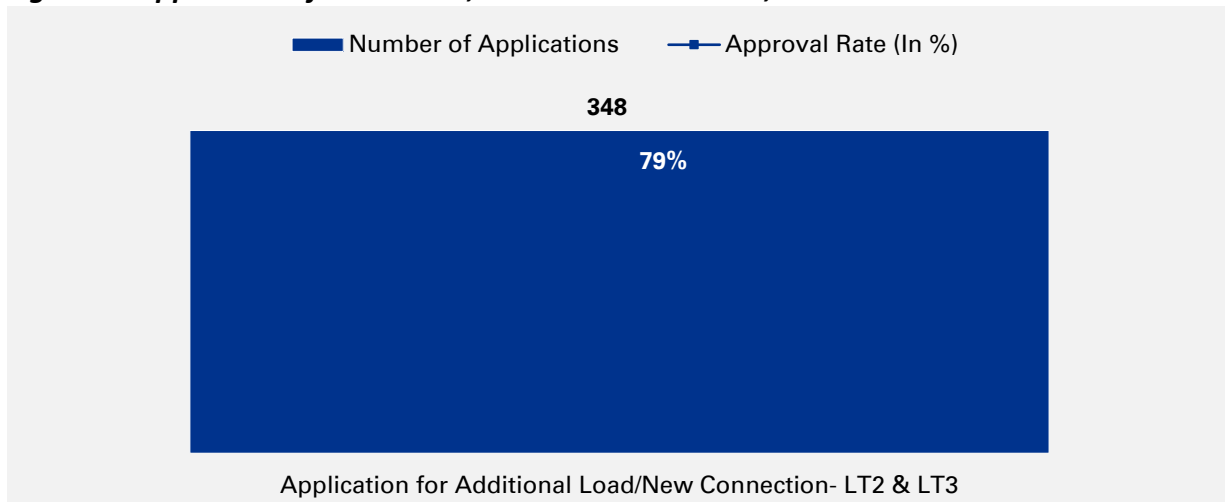
Overall average score for BESCO department services depicted above, reveals major areas of improvement i.e. **Information security & privacy** and **Status request & tracking**.

**Figure 59 Recommendations for BESCO portal**



Applicant data analysed for the evaluation period illustrates approval rate for the service is 79% and the most prominent reason for rejection is tabulated below.



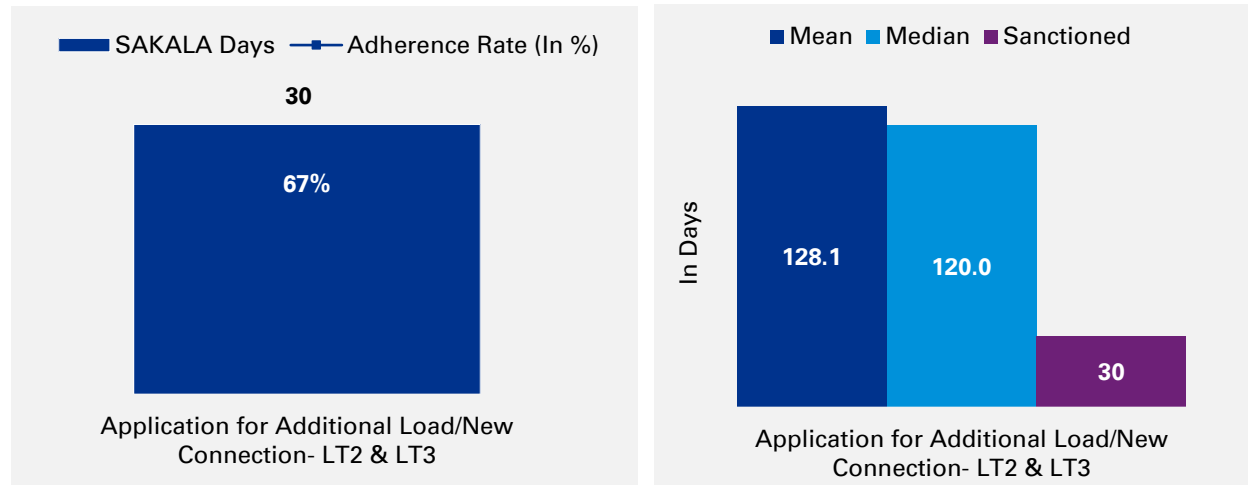
**Figure 60 Applications for BESCO, Source SAKALA DPAR, GoK**

#### For Application for Additional Load/New Connection – up to 7.5 KW LT2 & LT3

- **Mis match of information** submitted by applicants such as address, construction stage, bore size to build up area ration etc.
- Rejection due to nonpayment of **applicant fees, non-submission of supporting such as building photo, NOCs from other department, inspection reports, occupancy certificate, clearance certificate** etc.
- **Noncompliance** in construction of rainwater harvesting, sewage treatment plant etc.
- Submission of **duplicate requests**
- Submission of applications in **wrong jurisdiction**

Adherence rate for SAKALA timeline was found to be 67%, interactions with department officials revealed that lack of supporting documents and due diligence by applicants were primary reasons for delays. Service delivery for applicants required offline interactions in form of submission of supporting documents. Central tendency measurement for the applications processed indicates **on average department required more than 4x of the sanctioned time for applications to be processed.**

**Figure 61 SAKALA timeline analysis for BESCO services**



*Summary of facts & figures across services of BESCO*

**Table 27 Summary of figures across all services of BESCO**

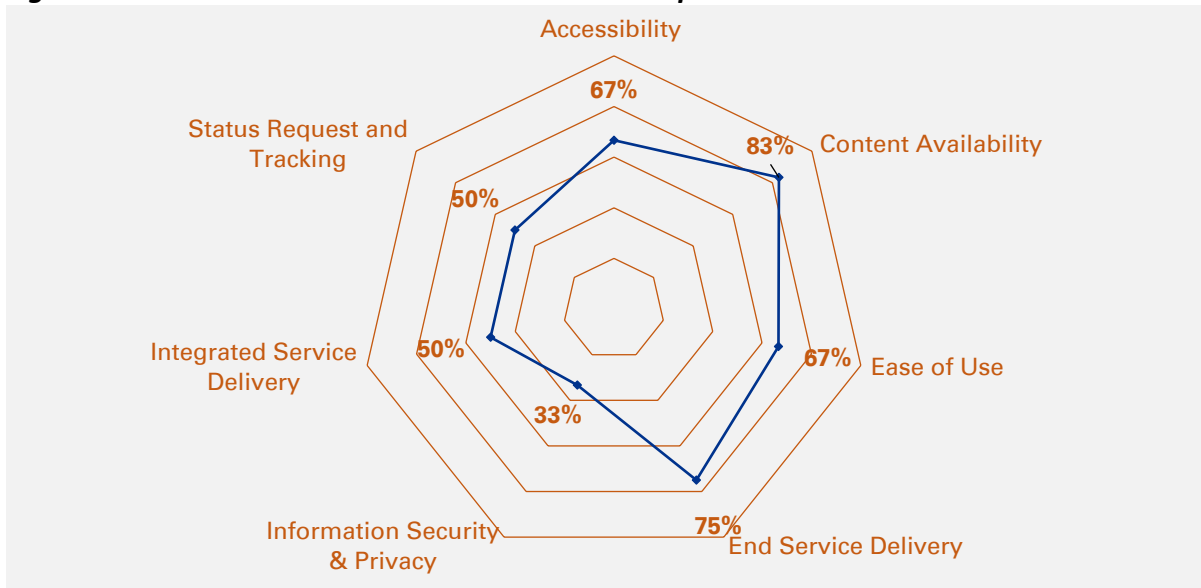
Service	Applicants	Approval Rate	SAKALA Adherence	NeSDA Score	Mean SAKALA timeline (in days)
Application for additional/new Connection- LT2 & LT3	348	79%	67%	89%	128.10

### 3.13. Commercial Tax Department

There is one service under the study scope for the department namely **issue of registration under the Karnataka tax on professions, trades, callings and employment act 1976**, key inferences from NeSDA assessment and applicant data analysis for the service is as below.

Figure below graphically depicts the NeSDA assessment scores for the service for Commercial Tax Department (detailed score in Annexure). Major improvement areas for these services are tabulated below.

**Figure 62 Overall NeSDA score: Commercial Tax Department**









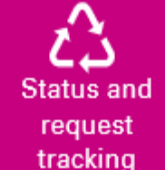
**Table 28 Commercial Tax e-service delivery - Improvement areas**

Sl. No.	Commercial Tax Service	Mode of Delivery	Improvement Areas for each of the services
1	Registration under the Karnataka tax on professions, trades, callings	e-PRERANA website <a href="https://pt.kar.nic.in/(S(r3rygnchlpwgds2iaxovwl1n))/Main.aspx">https://pt.kar.nic.in/(S(r3rygnchlpwgds2iaxovwl1n))/Main.aspx</a>	<ul style="list-style-type: none"> <li>• Web site content should also be available in Kannada</li> <li>• Provision for users to make personal login profiles</li> <li>• OTP authentication feature could be integrated</li> </ul>

Sl. No.	Commercial Tax Service	Mode of Delivery	Improvement Areas for each of the services
	and employment act 1976		<ul style="list-style-type: none"> <li>Integration of information security features such as W3C compliance</li> <li>Integration of feature to log complaints/grievances and provide feedback</li> </ul>

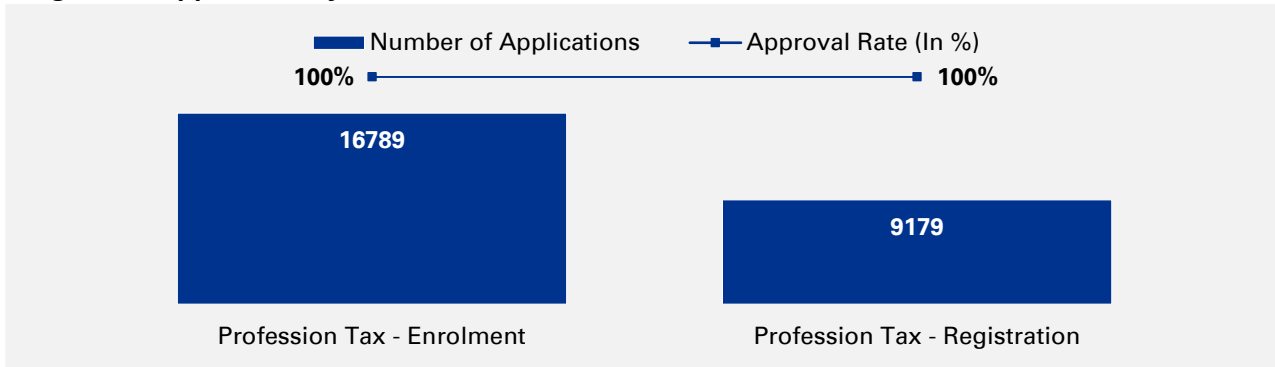
Major areas of improvement for these services is identified as **Accessibility, Content availability, Ease of Use, Information security & privacy, Integrated Service Delivery and Status request & tracking.**

**Figure 63 Recommendations for Commercial Tax portal**

 Parameters	 Improvement Areas	 Recommendations & Significance
 Accessibility	<ul style="list-style-type: none"> <li>Ensuring website content also in local language</li> <li>Ensuring dedicated section on help manual/checklist and information on nodal officer</li> </ul>	<ul style="list-style-type: none"> <li>Adoption of MeitY GIGW standards for e-Governance. Placement of GIGW logo or W3C logo on websites</li> <li>Enables reach and coverage for the e-services</li> </ul>
 Information Security & Privacy	<ul style="list-style-type: none"> <li>Integration of online security measures such as hosting on https compliance, W3C compliance, lock symbol</li> <li>Intimating users for password update or unauthorized access to profile</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY ePramaan Framework</b> guidelines for eAuthentication for users</li> <li>Increases the trust of citizens in service delivery which in turn increases adoption and helps increase reach and coverage</li> </ul>
 Integrated Service Delivery	<ul style="list-style-type: none"> <li>Provisions for making offline payments could be removed to accept only online payment mode</li> <li>Manual effort to obtain the service should be removed</li> </ul>	<ul style="list-style-type: none"> <li>Integration and limitation to online payments leads to transparency and consistency in service delivery</li> <li>Manual processes should be eliminated in service delivery</li> </ul>
 Status and request tracking	<ul style="list-style-type: none"> <li>Integration of features to intimate users in status change/update of applications</li> <li>Provision for users to leave feedback</li> <li>Provide dedicated webpage for subjects related to payment for services</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY Digital service standard</b> to adopt practices for end to end status tracking Improves efficiency and increases transparency for service delivery. Empowers citizens by enhancing trust in Government</li> </ul>

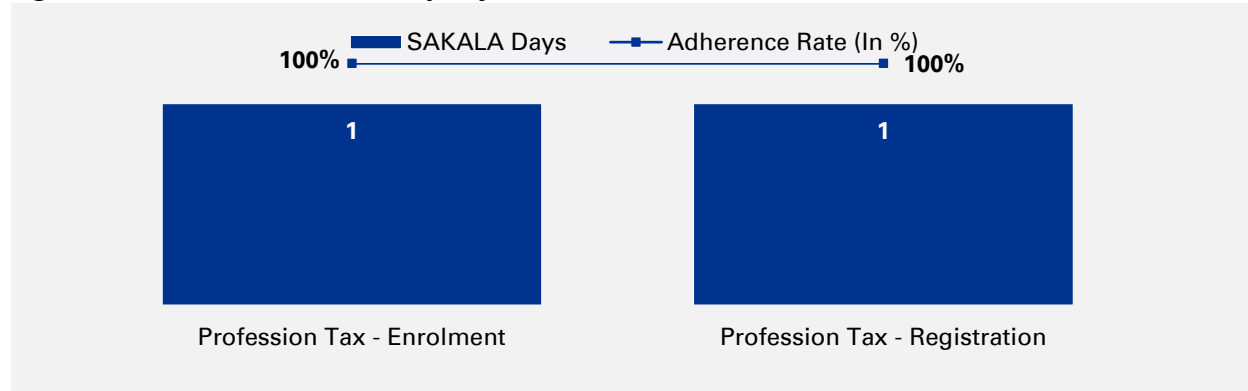
Applicant data analysed for the evaluation period reveals a remarkably high approval rate of 100% for professional tax enrollment for both individual and companies.

**Figure 64 Applications for Commercial Tax, Source SAKALA DPAR, GoK**



Adherence rate for SAKALA timeline was found also found to be 100% for both the categories of applicants.

**Figure 65 SAKALA timeline analysis for Commercial Tax services**



*Summary of facts & figures across services of Commercial Tax Department*

**Table 29 Summary of figures across all Commercial Tax services**

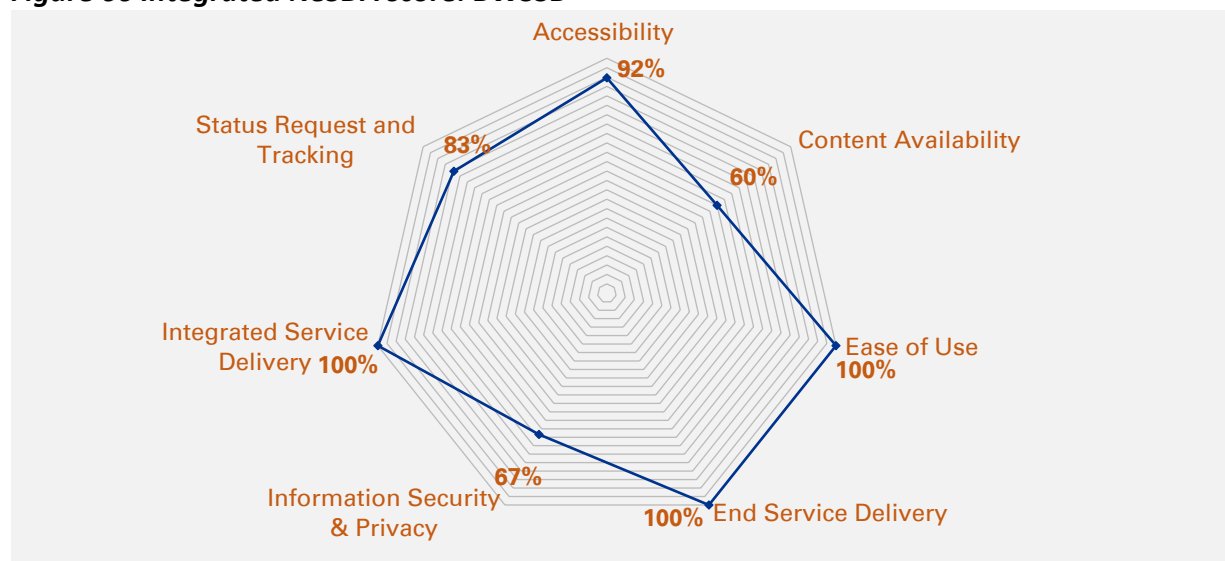
Service	Applicants	Approval Rate	SAKALA Adherence	NeSDA Score
Issue of registration under the Karnataka Tax on Professions	16789	100%	100%	53%

### 3.14. Bangalore Water Supply and Sewerage Board (BWSSB)

There is one service under the study scope for the department namely **permission for new connection/additional connection for water supply and under-ground drainage for multi storied buildings**, key inferences from NeSDA assessment and applicant data analysis for the service is as below.

Figure below graphically depicts the NeSDA assessment scores for the service for BWSSB Department (detailed score in Annexure). Major improvement areas for these services are tabulated below.

**Figure 66 Integrated NeSDA score: BWSSB**



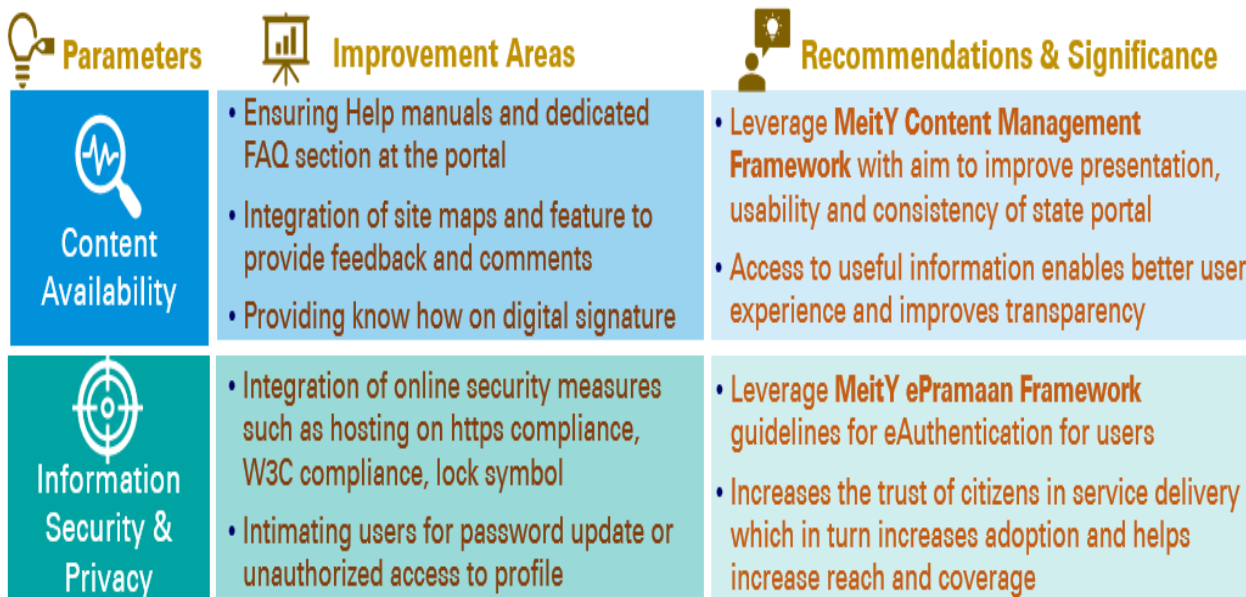
**Table 30 BWSSB e-service delivery - Focus areas**

SI. No.	BWSSB Service	Mode of Delivery	Focus Areas for each of the services
1	Permission for new connection/Additional Connection for water supply and under Ground	JALADHARE website <a href="https://owc.bwssb.gov.in/index.php/member">https://owc.bwssb.gov.in/index.php/member</a>	<ul style="list-style-type: none"> <li>Integration of feature to log complaints/grievances and provide feedback</li> <li>Integrate features to provide users of status change/update for their applications</li> </ul>

Sl. No.	BWSSB Service	Mode of Delivery	Focus Areas for each of the services
	Drainage for multistoried Buildings		

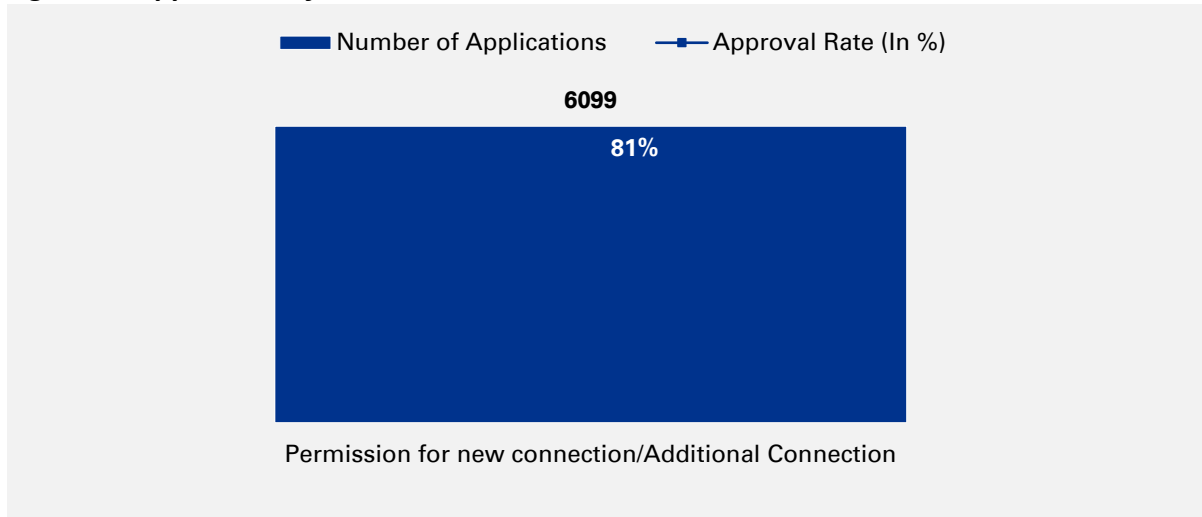
Major areas of improvement for these services is identified as **Content availability and Information security & privacy**.

**Figure 67 Recommendations for I BWSSB portal**



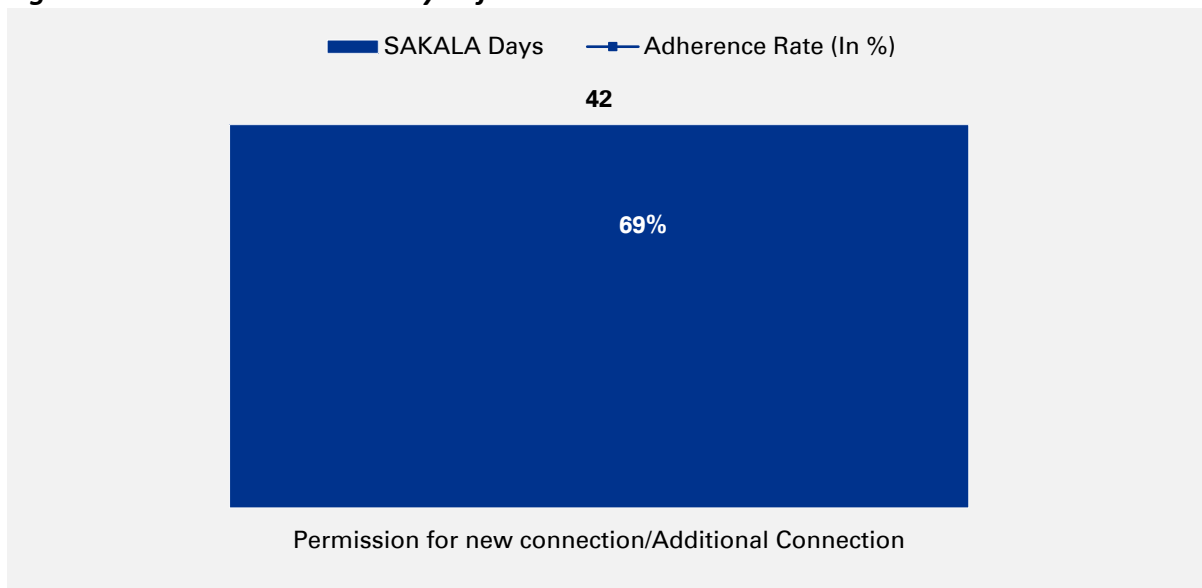
Applicant data analysed for the evaluation period reveals an 81% approval rate for the applications and primary rejections observed were lack of supporting documents or incorrect information such as wrong address, mismatching information etc.

**Figure 68 Applications for BWSSB, Source SAKALA DPAR, GoK**

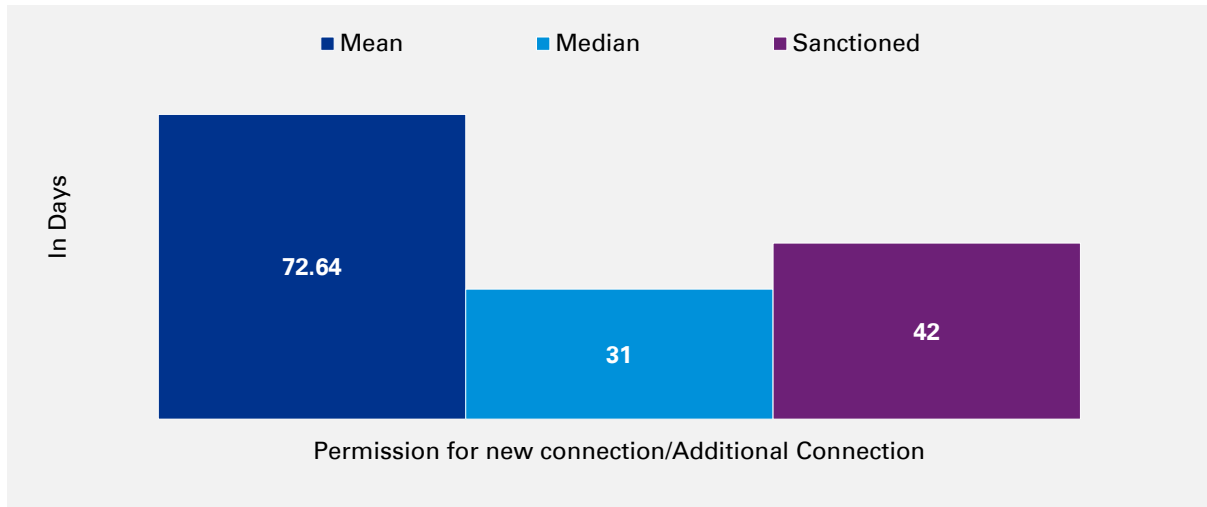


Adherence rate for SAKALA timeline was found to be 45%, interactions with department officials revealed that lack of due diligence, lack of submitting supporting documents and inspection were primary reasons for delays. Central tendency measurement for the applications processed indicates **department takes on average more than 1.5x of the sanctioned time on average for application processing.**

**Figure 69 SAKALA timeline analysis for BWSSB services**







*Summary of facts & figures across services of BWSSB*

**Table 31 Summary of figures across all services of BWSSB**

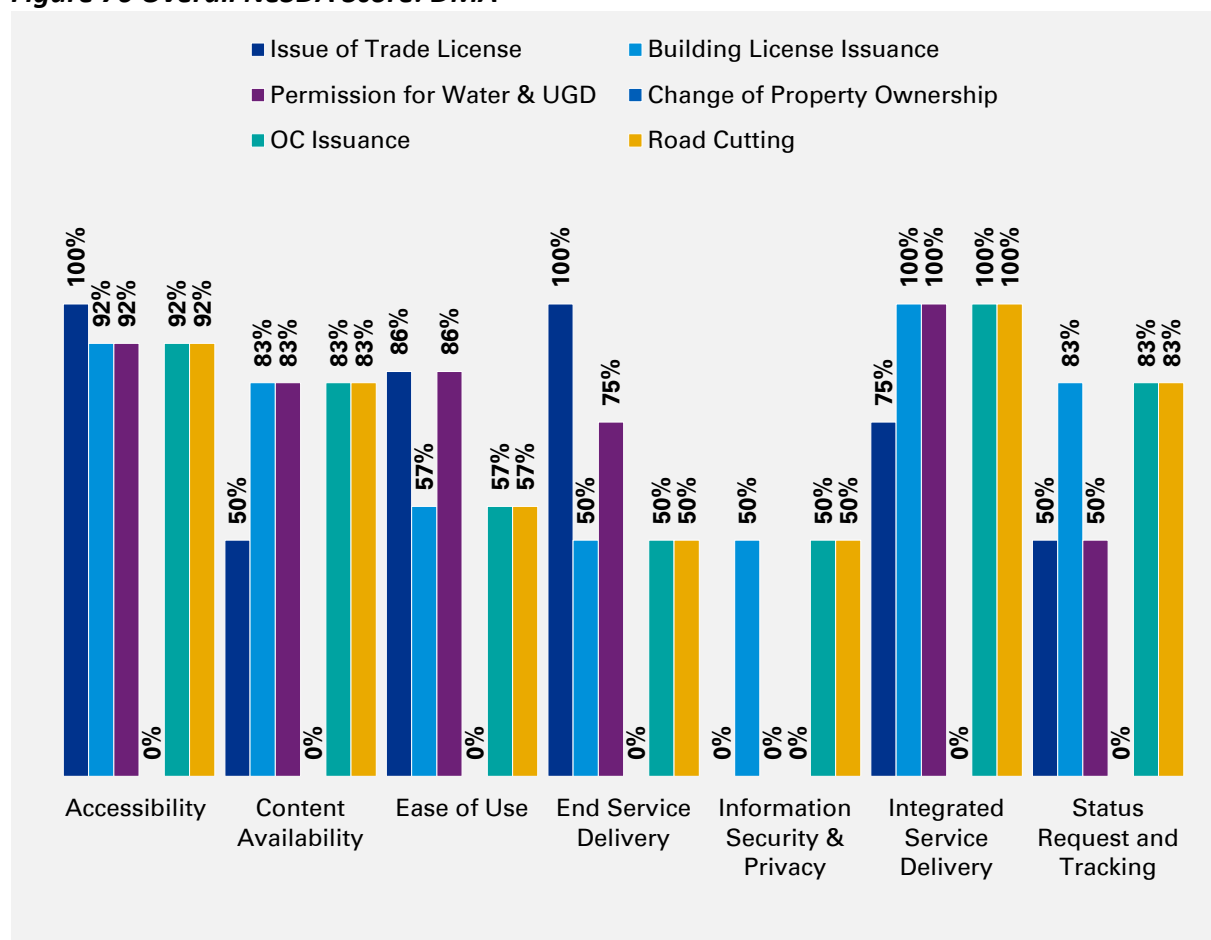
Service	Applicants	Approval Rate	SAKALA Adherence	NeSDA Score	Mean SAKALA timeline (in days)
Permission for new connection for water	6099	81%	70%	87%	72.64

### 3.15. Directorate of Municipal Administration (DMA)

There are a total of six service under the study scope for the department namely **issue of trade license, building license issuance, permission for water supply and underground connection, change of property ownership, occupancy certificate and road cutting for electricity connection**, key inferences from NeSDA assessment and applicant data analysis for the service is as below.

Change of property ownership **is an offline service through concerned district office**, Figure below graphically depicts the NeSDA assessment scores for the service for DMA (detailed score in Annexure). Major improvement areas for these services are listed as below.

**Figure 70 Overall NeSDA Score: DMA**



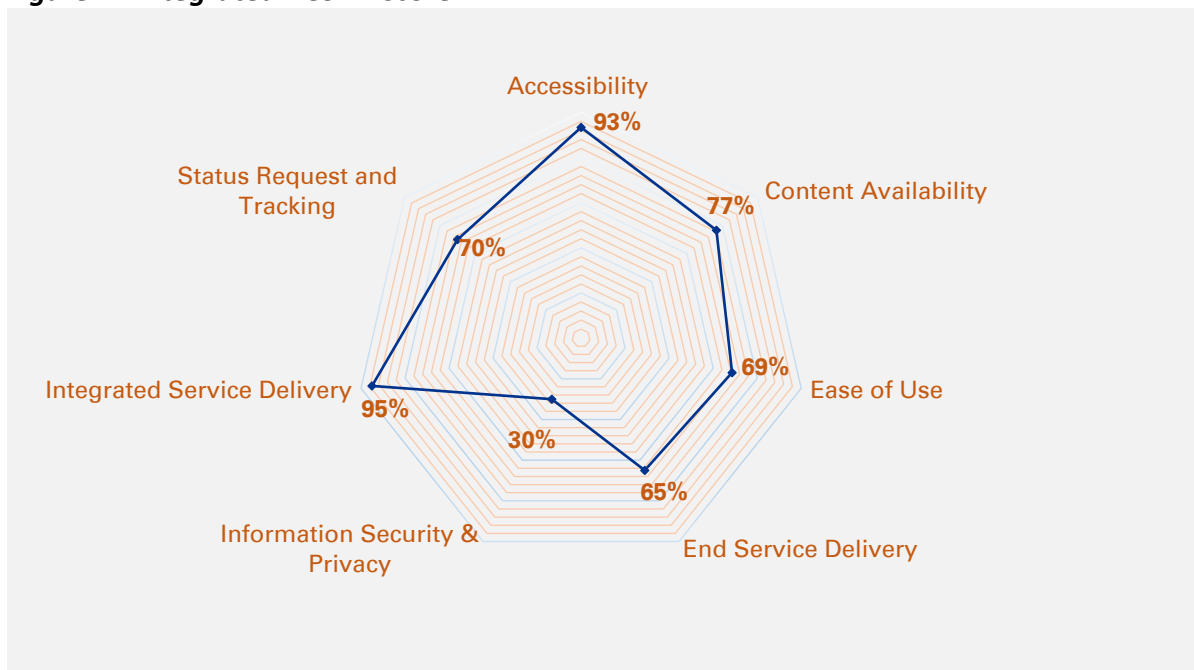
**Table 32 DMA e-service delivery - Improvement areas**

SI. No.	DMA Service	Mode of Delivery	Improvement Areas for each of the services
1	Issue of trade license	Vyapar website <a href="http://www.mrc.gov.in/TradeLicense/login">http://www.mrc.gov.in/TradeLicense/login</a>	<ul style="list-style-type: none"> <li>Integration of feature such as help and FAQ section</li> <li>Integration of information security features such as https protocol, lock symbol, W3C compliance</li> <li>Integration of feature to log complaints/grievances and provide feedback</li> </ul>
2	Building License Issuance for - First floor and above - Ground floor and first floor	Land and Building Plan Approval System (LBPAS) <a href="http://164.164.10.22/LBPASPORTAL/Portal/DashBoard">http://164.164.10.22/LBPASPORTAL/Portal/DashBoard</a>	<ul style="list-style-type: none"> <li>Web site should be in Top 5 results of search engine</li> <li>Manual touch point of physical inspection by local urban body authorities/architects should be rationalised</li> <li>Integration of information security features such as https protocol, lock symbol, W3C compliance</li> <li>Provision for users to be verified with a two-factor authentication should be integrated</li> <li>Integration of feature to log complaints/grievances and provide feedback</li> <li>For road cutting service, provision for offline payment should be removed</li> </ul>
3	Occupancy certificate issuance		
4	Road cutting for electricity connection		
5	Permission for water supply and UGD connection for residential buildings - nondomestic purpose - commercial purpose	Karnataka Municipal Data Society Website <a href="http://www.mrc.gov.in/en/CitizenOnlineServices">http://www.mrc.gov.in/en/CitizenOnlineServices</a>	<ul style="list-style-type: none"> <li>Provision for users to make personal profiles</li> <li>Manual touch point of physical inspection by local urban body authorities should be rationalised</li> <li>Integration of information security features such as https protocol, lock symbol, W3C compliance</li> <li>Provision for users to be verified with a two-factor authentication should be integrated</li> <li>Integration of feature to log complaints/grievances and provide feedback</li> </ul>

SI. No.	DMA Service	Mode of Delivery	Improvement Areas for each of the services
6	Change of property ownership	Offline Service	<ul style="list-style-type: none"> <li>Service should be made online and should be compliant to suggestions made in recommendations section of this report</li> </ul>

Overall average score for all above DMA services is depicted in figure below, major areas of improvement for these services is identified as **Ease of use, End service delivery, Information security & privacy and Status request & tracking.**

**Figure 71 Integrated NeSDA score: DMA**

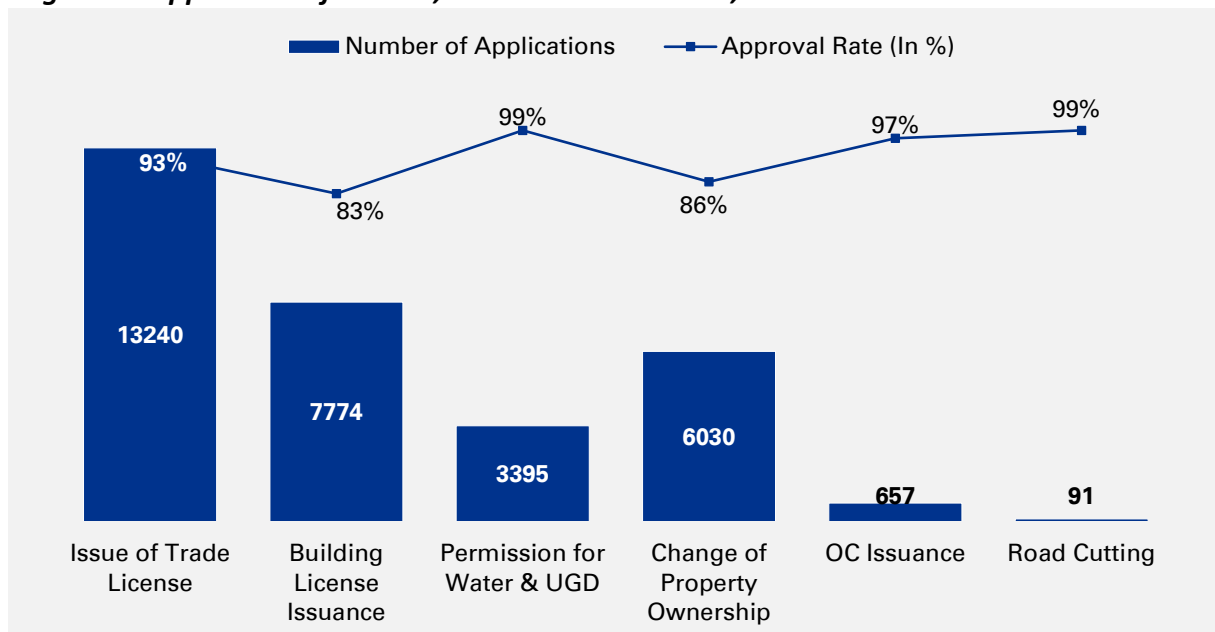


**Figure 72 Recommendations for improvement in DMA portal**

 Parameters	 Improvement Areas	 Recommendations & Significance
 <b>Ease of Use</b>	<ul style="list-style-type: none"> <li>Website search engine results should be available in Top 5 results</li> <li>Integration of features such as how to guides, search feature for website</li> </ul>	<ul style="list-style-type: none"> <li>Influences the ambit of e-service quality measurement and aids in <b>reducing digital divide by providing better accessibility</b> of the e-Government services</li> </ul>
 <b>End Service Delivery</b>	<ul style="list-style-type: none"> <li>Provisions for making offline payments could be removed to accept only online payment mode</li> <li>Manual effort to obtain the service should be removed</li> </ul>	<ul style="list-style-type: none"> <li>Integration and limitation to online payments leads to transparency and consistency in service delivery</li> <li>Manual processes should be eliminated in service delivery</li> </ul>
 <b>Information Security &amp; Privacy</b>	<ul style="list-style-type: none"> <li>Integration of online security measures such as hosting on https compliance, W3C compliance, lock symbol</li> <li>Intimating users for password update or unauthorized access to profile</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY ePramaan Framework</b> guidelines for eAuthentication for users</li> <li>Increases the trust of citizens in service delivery which in turn increases adoption and helps increase reach and coverage</li> </ul>
 <b>Status and request tracking</b>	<ul style="list-style-type: none"> <li>Integration of features to intimate users in status change/update of applications</li> <li>Provision for users to leave feedback</li> <li>Provide dedicated webpage for subjects related to payment for services</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY Digital service standard</b> to adopt practices for end to end status tracking Improves efficiency and increases transparency for service delivery. Empowers citizens by enhancing trust in Government</li> </ul>

Applicant data analysed for the evaluation period illustrates that most utilised service for the departments is trade license and approval rate for all service is above 80%. Primary reasons for rejections observed is tabulated below.

**Figure 73 Applications for DMA, Source SAKALA DPAR, GoK**

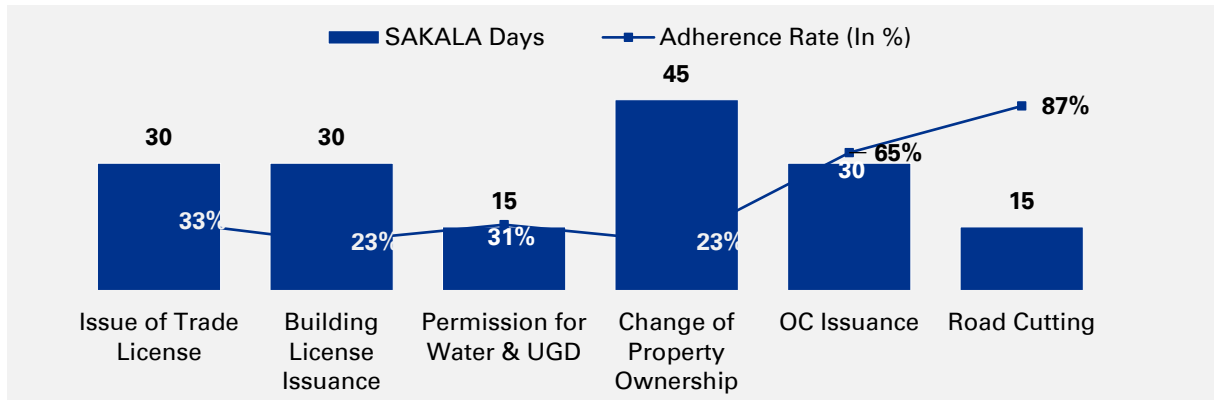


For Issue of Trade License	For Building License	For Permission of Water and UGG
<ul style="list-style-type: none"> <li>Submission with <b>mismatching information</b>, without fees payment</li> <li>Submission to <b>wrong jurisdiction</b></li> </ul>	<ul style="list-style-type: none"> <li>Non submission of <b>supporting document</b> such as affidavit, RDA copy, layout etc.</li> <li>Affidavits submitted <b>without signatures</b></li> <li><b>Noncompliance</b> to road margins</li> <li>Submission of incorrect document and <b>non-legible documents</b></li> <li>Submission to wrong jurisdiction</li> <li>Submission <b>without approval</b> from different sections such as AEE, RDA etc.</li> </ul>	<ul style="list-style-type: none"> <li>Non completion of <b>construction activity</b></li> <li>Nonpayment of property tax</li> <li><b>Duplicate requests</b> by applicants</li> <li><b>Noncompliance</b> to inspection observations</li> </ul>

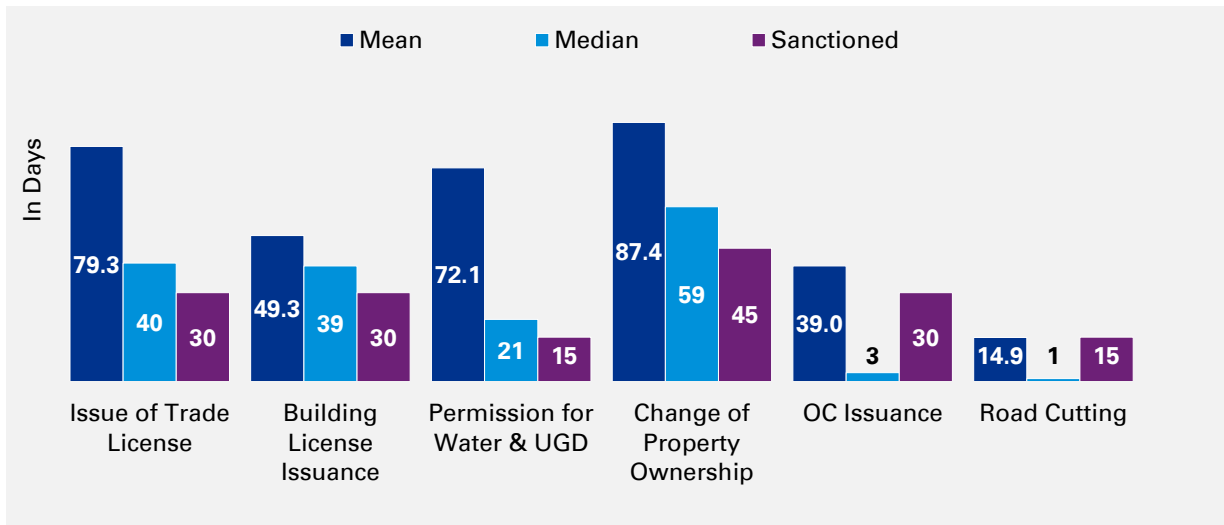
	<ul style="list-style-type: none"> <li>• Nonpayment of taxes</li> </ul>	
For Change of Property Ownership	For OC Issuance	For Road Cutting
<ul style="list-style-type: none"> <li>• <b>Non submission of supporting documents</b> such as EC number, Aadhar number, non-payment of challan</li> <li>• Non-payment of application fees</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Deviation from plan</b> such as double kitchen on floors</li> <li>• Submission to <b>wrong jurisdiction</b></li> <li>• Mismatch of measurement areas to documents/plan submitted</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Incorrect names of applicants</b></li> </ul>

Adherence rate for SAKALA timeline was found to be below 40% for four out of the six services for department and least was for building license issuance. Interactions with department officials revealed that lack of supporting documents, due diligence by applicants and multiple interactions with other departments were primary reasons for delays. Services delivered by departments still had instances of offline interactions i.e. supporting documents submission.

**Figure 74 SAKALA timeline analysis for DMA services**



Central tendency measurement for the applications processed indicates that for trade issuance department takes more than 2.5x, for building license issuance more than 1.5x, for water supply & UGD permission more than 4.5x, for change of property ownership nearly 2x of the sanctioned time.





*Summary of facts & figures across services of Directorate of Municipal Administration***Table 33 Summary of figures across all services of Directorate of Municipal Administration**

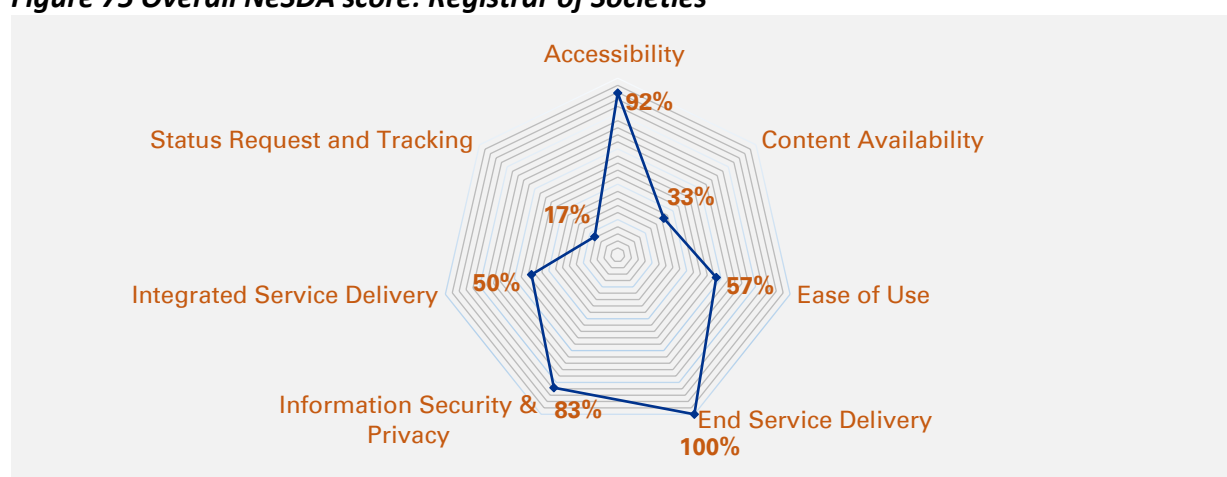
Service	Applicants	Approval Rate	SAKALA Adherence	NeSDA Score	Mean SAKALA timeline (in days)
Issue of Trade license	13240	93%	33%	69%	79.34
Building License Issuance	7774	83%	23%	76%	49.28
Permission for water supply and UGD	3395	99%	31%	71%	72.10
Occupancy certificate Issuance	6030	97%	65%	76%	87.45
Change of Property Ownership	657	86%	23%	0	39.03
Road Cutting (Right of way)	91	99%	87%	76%	14.91

### 3.16. Registrar of Co-operative Societies

There is one service under the study scope for the department namely **registration of societies under Karnataka societies act 1960**, key inferences from NeSDA assessment and applicant data analysis for the service is as below.

Figure below graphically depicts the NeSDA assessment scores for the service for Registrar of Societies (detailed score in Annexure). Major improvement areas for these services are listed as below.

**Figure 75 Overall NeSDA score: Registrar of Societies**







**Table 34 Registrar of Societies e-service delivery - Focus areas**

Sl. No.	Registrar of Societies Service	Mode of Delivery	Focus Areas for each of the services
1	The Registration of Societies under section 8 of The Karnataka societies Registration Act 1960	Department website <a href="https://societyreg.karnataka.gov.in/">https://societyreg.karnataka.gov.in/</a>	<ul style="list-style-type: none"> <li>• Web site to be in Top 5 results of search engine</li> <li>• Manual touch point in service delivery i.e. inspection and scrutiny by department officials should be rationalised</li> <li>• Integration of information security features such as W3C compliance</li> <li>• Payment gateway to be integrated in online service delivery module</li> <li>• Integration of feature to log complaints/grievances and provide feedback</li> </ul>

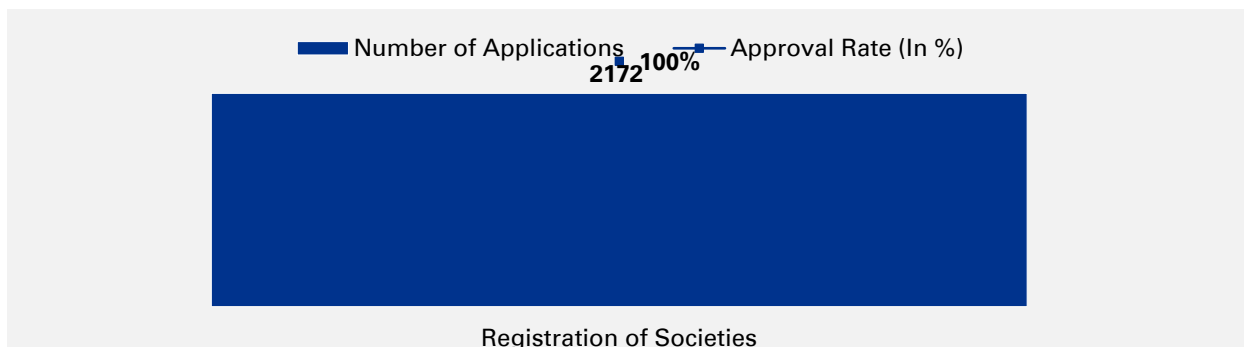
As seen from figure above, improvement areas are **Content availability, Ease of use, Integrated service delivery, and Status request and tracking**. Below improvement features in these areas would further enhance the transparency, better user experience and reduce service delivery discrepancies.

**Figure 76 Recommendations for Registrar of Societies portal**

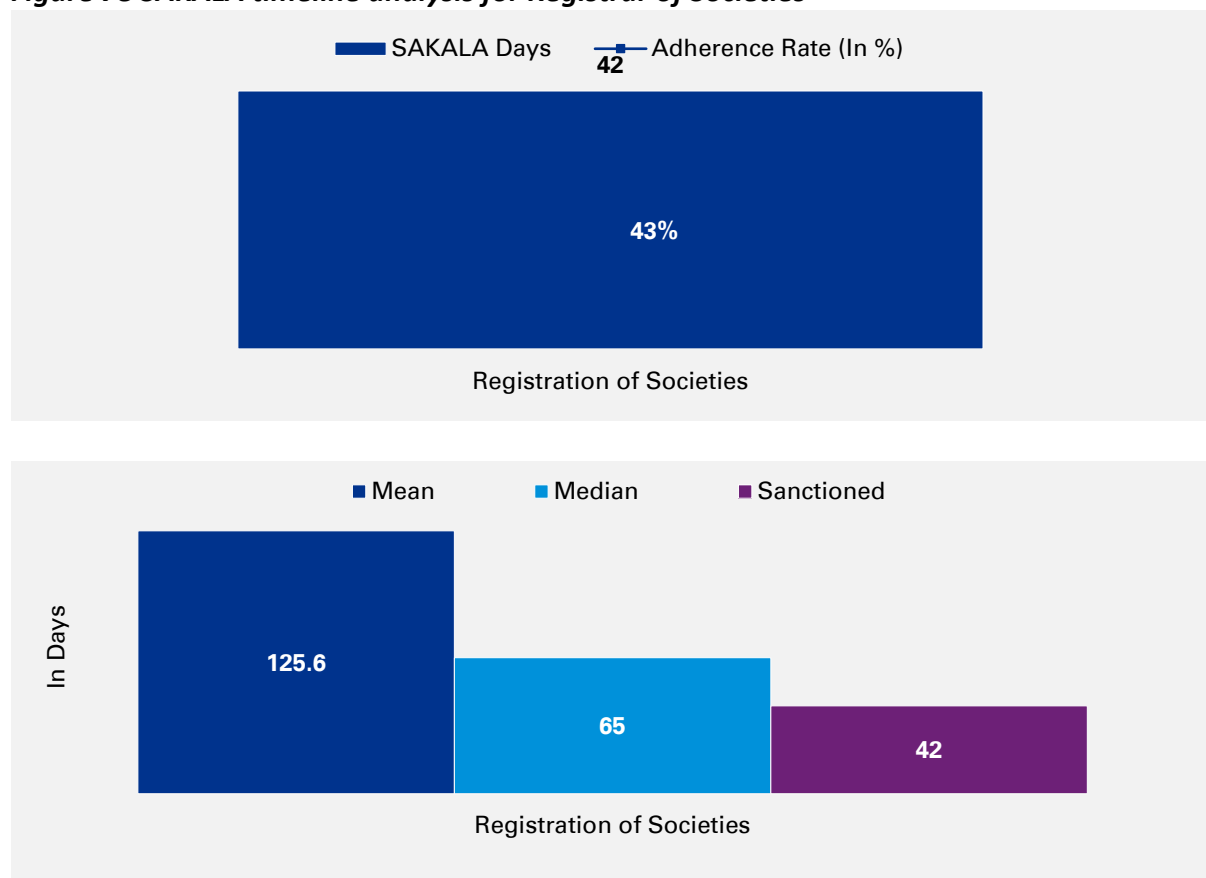
Parameters	Improvement Areas	Recommendations & Significance
 <b>Content Availability</b>	<ul style="list-style-type: none"> <li>Ensuring Help manuals and dedicated FAQ section at the portal</li> <li>Integration of site maps and feature to provide feedback and comments</li> <li>Providing know how on digital signature</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY Content Management Framework</b> with aim to improve presentation, usability and consistency of state portal</li> <li>Access to useful information enables better user experience and improves transparency</li> </ul>
 <b>Ease of Use</b>	<ul style="list-style-type: none"> <li>Website search engine results should be available in Top 5 results</li> <li>Integration of features such as how to guides, search feature for website</li> </ul>	<ul style="list-style-type: none"> <li>Influences the ambit of e-service quality measurement and aids in <b>reducing digital divide by providing better accessibility</b> of the e-Government services</li> </ul>
 <b>Integrated Service Delivery</b>	<ul style="list-style-type: none"> <li>Provisions for making offline payments could be removed to accept only online payment mode</li> <li>Manual effort to obtain the service should be removed</li> </ul>	<ul style="list-style-type: none"> <li>Integration and limitation to online payments leads to transparency and consistency in service delivery</li> <li>Manual processes should be eliminated in service delivery</li> </ul>
 <b>Status and request tracking</b>	<ul style="list-style-type: none"> <li>Integration of features to intimate users in status change/update of applications</li> <li>Provision for users to leave feedback</li> <li>Provide dedicated webpage for subjects related to payment for services</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY Digital service standard</b> to adopt practices for end to end status tracking Improves efficiency and increases transparency for service delivery. Empowers citizens by enhancing trust in Government</li> </ul>

Applicant data analysed for the evaluation period reveals a remarkably low approval rate of 53% with primary rejections tabulated below.

**Figure 77 Applications for Registrar of Societies, Source SAKALA DPAR, GoK**



**Figure 78 SAKALA timeline analysis for Registrar of Societies**



As seen from the above figure 78, adherence rate for SAKALA timeline was found to be 43%, interactions with department officials revealed that multiple interaction with associated line departments were primary reasons for delays. Interaction with applicants is mostly offline for the services. Central tendency measurement for the applications processed indicates **department takes on average takes nearly 3x of the stipulated time for application processing.**

*Summary of facts & figures across services of Registrar of Cooperative Societies*

**Table 35 Summary of figures across all services of Registrar of Societies**

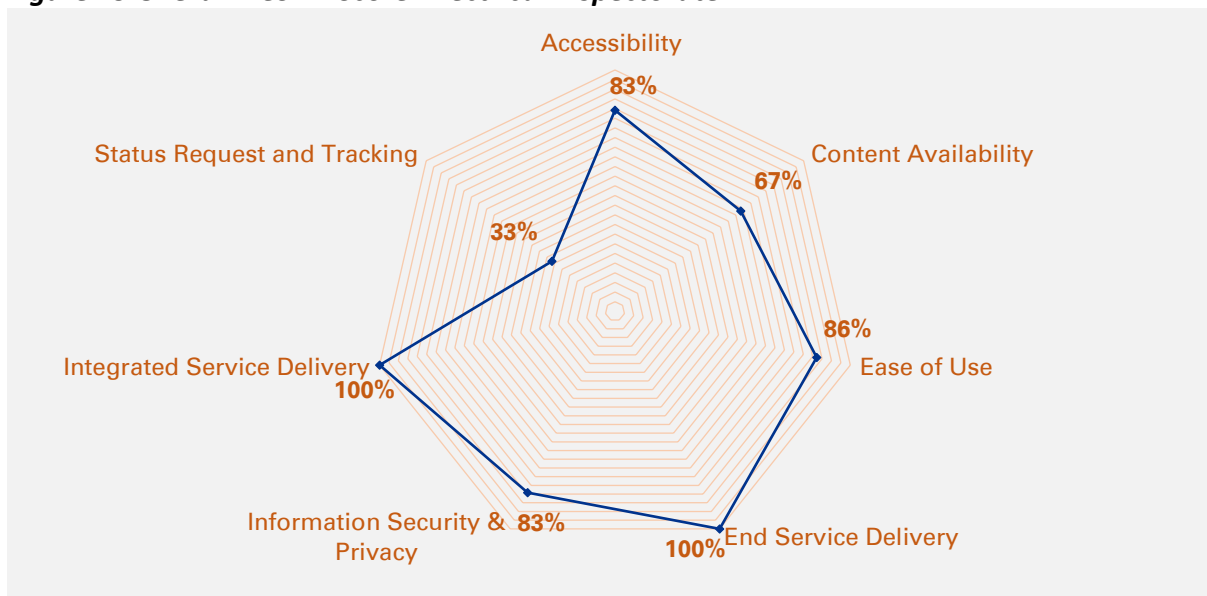
Service	Applicants	Approval Rate	SAKALA Adherence	NeSDA Score	Mean SAKALA timeline (in days)
Registration of Societies	2172	100%	43%	64%	125.60

### 3.17. Department of Electrical Inspectorate

There are two service under the study scope for the department namely **approval of drawings of the electrical installation and issue of commissioning approval (both only for industrial installations)**, key inferences from NeSDA assessment and applicant data analysis for the service is as below.

Figure below graphically depicts the NeSDA assessment scores for the service for Department of Electrical Inspectorate (detailed score in Annexure). Major improvement areas for these services are listed as below.

**Figure 79 Overall NeSDA Score: Electrical Inspectorate**



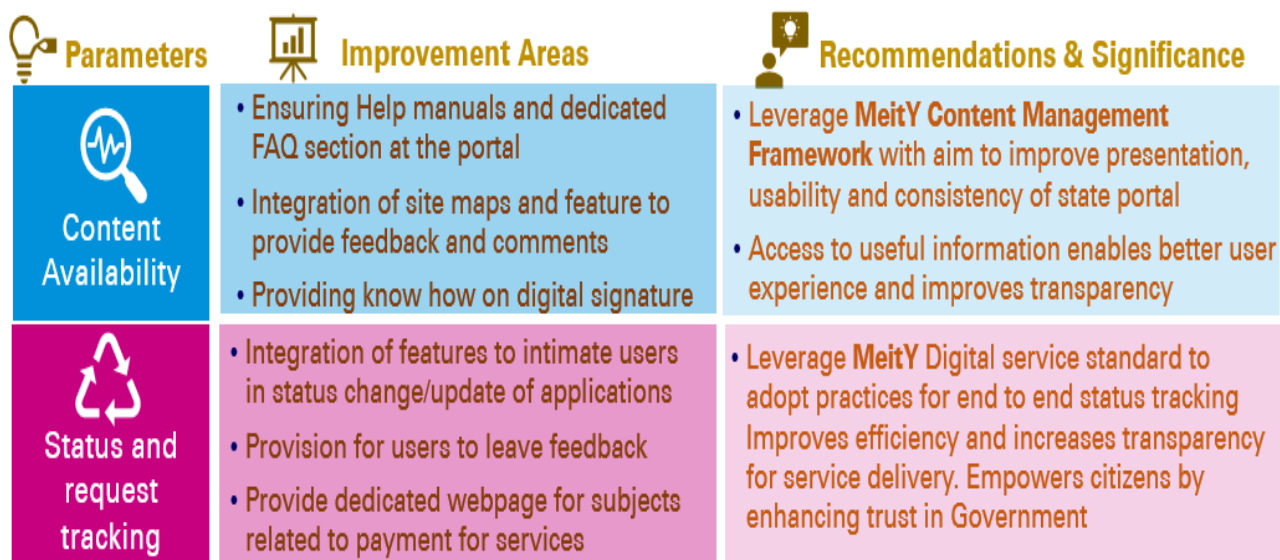
**Table 36 Electrical Inspectorate e-service delivery - Focus areas**

Sl. No.	Electrical Inspectorate Service	Mode of Delivery	Focus Areas for each of the services
1	Approval of drawings of the electrical installation (Industrial Installations only)	Department website <a href="https://ksei.gov.in/eisoft">https://ksei.gov.in/eisoft</a>	

Sl. No.	Electrical Inspectorate Service	Mode of Delivery	Focus Areas for each of the services
2	Issue of Commissioning Approval (Industrial Installations only)		<ul style="list-style-type: none"> <li>• Web site should be in Top 5 results of search engine</li> <li>• Integrate features to provide users of status change/update for their applications</li> <li>• Integration of feature to log complaints/grievances and provide feedback</li> <li>• Contact information for nodal officers to be explicitly provided on web page</li> </ul>

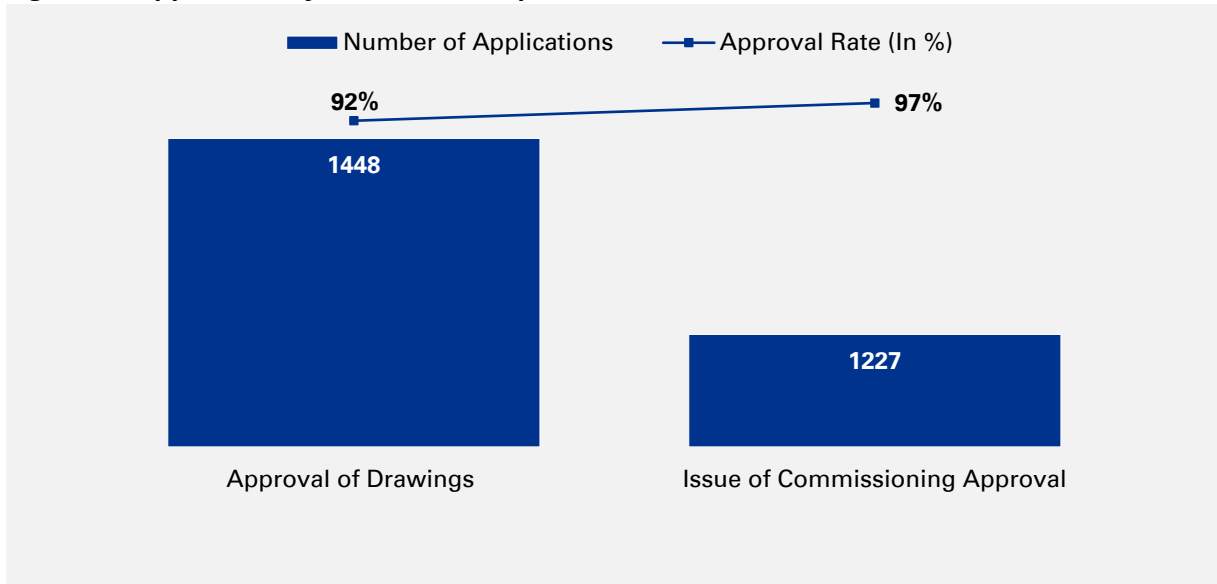
As seen from figure above, major improvement in areas such as **Content availability, and Status request and tracking**. Below improvement features in these areas would further enhance the transparency, better user experience and reduce service delivery discrepancies.

**Figure 80 Recommendations for Electrical Inspectorate portal**



Applicant data analysed for the evaluation period reveals an approval rate of above 90% for both the services. Primary reasons for rejections are tabulated as below.

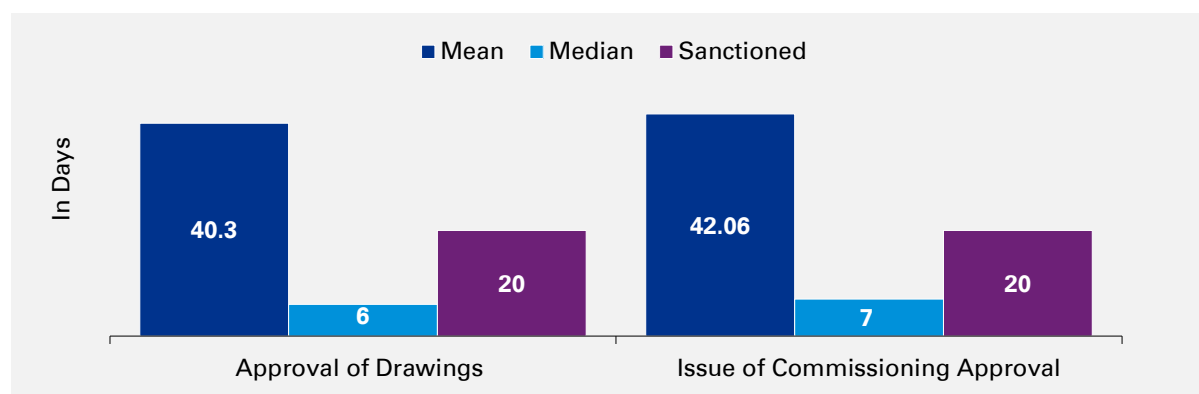
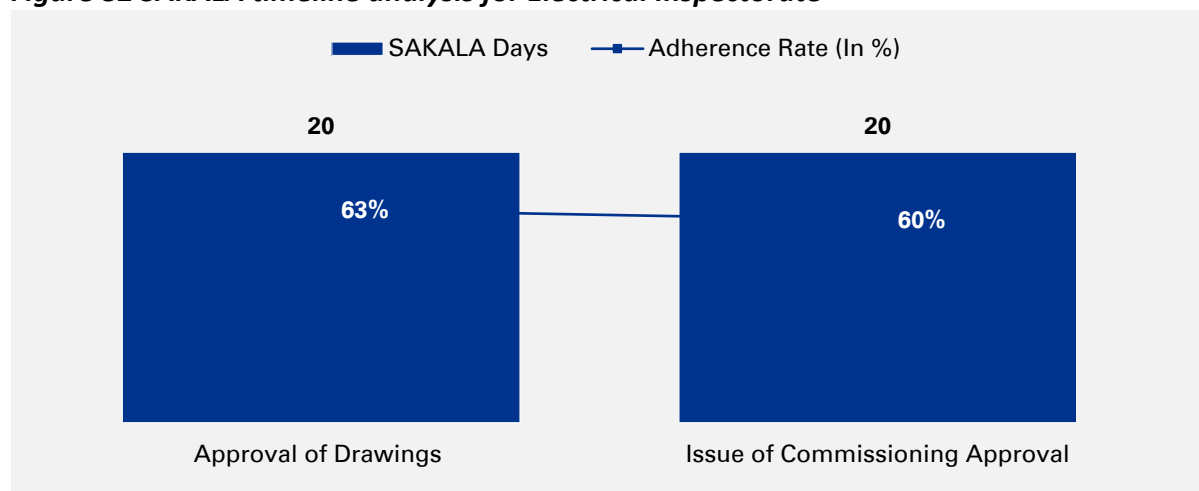
**Figure 81 Applications for Electrical Inspectorate, Source SAKALA DPAR, GoK**



For Approval of Drawings	For Issue of Commissioning Approval
<ul style="list-style-type: none"> <li>• <b>Non submission</b> of supporting documents</li> <li>• Submission in <b>wrong jurisdiction</b></li> <li>• <b>Noncompliance</b> to observations shared</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Noncompliance</b> to observations shared</li> <li>• <b>Non submission</b> of supporting documents</li> </ul>

Adherence rate for SAKALA timeline was found to be on average 62%, interactions with department officials revealed that lack of submitting supporting documents and inspection compliance were primary reasons for delays. Mode of interaction with applicants in many instances are offline primarily for supporting documents submission. Central tendency measurement for the applications processed indicates **department takes on average more than 2x of the stipulated time for processing of application.**

**Figure 82 SAKALA timeline analysis for Electrical Inspectorate**



Summary of facts & figures across services of Department of Electrical Inspectorate

**Table 37 Summary of figures across all services of Electrical Inspectorate**

Service	Applicants	Approval Rate	SAKALA Adherence	Mean SAKALA timeline (in days)
Approval of Drawings	1448	92%	63%	40.3
Issue of commissioning approval	1227	97%	60%	42.06



### 3.18. Regression analysis of data across all departments

A regression analysis was performed to understand the associations between process efficiency, IT enablement, and stakeholder connect (see annexure 1 for details). The services where data was available for all the three parameters, i.e., 45 services across 17 departments, were assessed for understanding the relationship between them.

The analysis of association between process efficiency (indicated by adherence to SAKALA timelines) and stakeholder connect (indicated by approval rate) indicate that there is a significant, positive correlation between these two parameters. The results are provided below.

#### Key results of the regression analysis:

1. Value of Pearson's Coefficient for correlation between 'approval rate' and 'adherence to SAKALA timelines' is 0.45
2. The P-value for this test is 0.00192, which less than ' $\alpha$ ' of 0.05 and indicating that there is a statistically significant, positive relationship between the two parameters
3. From the R Square values, it is indicative that roughly 20% variations in approval rate can be explained by SAKALA adherence
4. The Linear equation is: Approval Rate= 0.64 + 0.37 \* (SAKALA Adherence)

SUMMARY OUTPUT OF REGRESSION BETWEEN APPROVAL RATE & SAKALA ADHERENCE								
<i>Regression Statistics</i>								
Multiple R	0.450097046							
R Square	0.202587351							
Adjusted R Square	0.184042871							
Standard Error	0.172385459							
Observations	45							
<b>ANOVA</b>								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	1	0.324638	0.32464	10.9244	0.001920431			
Residual	43	1.27782	0.02972					
Total	44	1.602458						
<i>Standard</i>								
	<i>Coefficients</i>	<i>Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	0.644888308	0.071727	8.99092	2E-11	0.500237773	0.789538843	0.50023777	0.789538843
SAKALA Adherence	0.371920319	0.112526	3.30521	0.00192	0.144990956	0.598849683	0.14499096	0.598849683



## 4. Business Reforms in Karnataka




### 4.1. Background

In 2003, State of Karnataka enacted “The Karnataka Industries (Facilitation) Act 2002” to promote industrial development and facilitate new investments with a simplified regulatory framework. Few of the key highlights of the Karnataka Industries (Facilitation) Act 2002 are:

- To provide a single point guidance and assistance to investors
- To minimize procedural requirements
- To rationalize documentation requirements

This act provides for constitution of State High Level Clearance Committee, State Level Single Window Clearance Committee and District Level Single Window Clearance Committee for consideration of application from entrepreneurs intending to establish industries in the State. Snapshot of the working details of various committees is depicted in figure below.

**Figure 83 EoDB functioning in Karnataka**

	 <b>Authority</b>	 <b>Functions</b>	 <b>Power</b>
<b>State High Level Clearance Committee</b>	The apex committee constituted under the chairmanship of Chief Minister of Karnataka examines proposals with an investment of rupees five hundred crores and above	Examines proposals at state/district level and takes appropriate decision and communicate its decision to the concerned parties or authorities within such time as may be prescribed	Approvals given are binding on all the concerned departments or authorities and such departments or authorities is then required to issue the appropriate clearances within stipulated time subject to compliances by the entrepreneur
<b>State Level Single Window Clearance Committee</b>	The committee under the chairmanship of Minister for Industries examines proposals with an investment of rupees fifteen crores and above and up to rupees five hundred crores	Examines proposals at state/district level and takes appropriate decision and communicate its decision to the concerned parties or authorities within such time as may be prescribed	Approvals given are binding on all the concerned departments or authorities and such departments or authorities is then required to issue the appropriate clearances within stipulated time subject to compliances by the entrepreneur
<b>District level Single Window Clearance Committee</b>	The committee under the chairmanship of Deputy Commissioner examines proposals with an investment of up to rupees fifteen crores	Examines proposals at state/district level and takes appropriate decision and communicate its decision to the concerned parties or authorities within such time as may be prescribed	Approvals at district level are binding on concerned departments or authorities and such departments or authorities is then required to issue the appropriate clearances within stipulated time subject to compliances by the entrepreneur

*Source: <https://kum.karnataka.gov.in/newproposal.html>*

Karnataka Udyog Mitra (KUM) at state level and District Industries Centre (DIC) at district level are notified Nodal agencies rendering guidance and assistance to entrepreneurs for industrial activities in the state. Some of the highlights for processing steps of applied proposal with DIC & KUM are listed below<sup>6</sup>:

- KUM/DIC's will process / scrutinize the Combined Application Form (CAF) and place the same before the SLSWCC or SHLCC or DLSWCC, depending on the scale of investment of the project.
- During the scrutiny process, department may seek additional data or document based on project proposal through Notification and the same can be uploaded using the Login ID created at eBiz portal.
- Investors will be invited to attend the Land Audit Committee meeting /DLSWCC/SLSWCC meeting via SMS and Email Intimation, and are required to make a presentation on the salient features of the project.
- Once the project proposal is cleared by the DLSWCC/ SLSWCC / SHLCC, project proponent may log on to e-Udyami website and choose and submit online application along with required documents pertaining to KIADB,KSSIDC,KSPCB,I and C department, Energy department , Factories and Boilers etc. for obtaining various clearances/approvals.
- KUM/DIC's will follow up with the respective departments / agencies on behalf of the investors and Coordinate the required clearances / approvals.

KUM to facilitate and streamline investment proposals has taken various initiatives to reform the regulatory framework such as mobilisation of e-Udyami website with helpline, constituted monitoring and grievances redressal cell to facilitate successful

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<sup>6</sup> Analysis based on <https://ebiz.karnataka.gov.in/kum/index.aspx>  
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implementation of projects in the state. Framework for same with designated nodal officers is tabulated as below:

**Table 38 Investment Project Facilitation Framework in Karnataka**

Sl. No.	Project Activity	Chairman & Nodal Officers
<b>1. Projects up to Rs. 15 Crores - At District Level</b>		
1A. Help Line		Joint Director, District Industries Centre (For Respective Districts)
1B. Monitoring & Grievances Redressal Cell		Chairman- Deputy Commissioner (For Respective Districts) Nodal Officers- For every respective Districts: a) Joint Director, b) Development Officer, KIADB
<b>2. Projects above Rs. 15 Crores - Karnataka Udyog Mitra</b>		
2A. e-Udyami - Maintenance & Updating Website		Joint Director, Karnataka Udyog Mitra Executive Officer, Karnataka Udyog Mitra
2B. Help Line		Nodal Officers: Assistant Director, Karnataka Udyog Mitra Executive Officer, Karnataka Udyog Mitra
2C. Monitoring Cell - Reviews progress of approved projects		Chairman- Managing Director, Karnataka Udyog Mitra Nodal Officers- a) Deputy Director, Karnataka Udyog Mitra b) Executive Officer, Karnataka Udyog Mitra c) Members from associated Line Departments
2D. Grievances Cell - Addresses Investor Grievances for any approved projects		Chairman- Managing Director, Karnataka Udyog Mitra Nodal Officers- a) Deputy Director, Karnataka Udyog Mitra b) Executive Officer, Karnataka Udyog Mitra c) Members from associated Line Departments

## 4.2. Investment Trends in Karnataka

In this section key trends are analysed for the growth for industries/business/services for two specific periods, i.e., Pre-Sakala (between 2001 and 2011) and Post-Sakala (between 2012 and 2020) through secondary data research, sources utilised for the secondary research in the study are Economic survey reports of Karnataka<sup>7</sup> and MSME annual reports<sup>8</sup>.

Key findings from the **pre and post Sakala period (i.e. before 2011 and after)** in the State are:

1. FDI flow in the state **increased by 4x times** in the post-Sakala period as compared to pre-Sakala period;
2. While total investments approved through the state single window committees during post-Sakala period was just **54.3% of the investments approved in the state during the pre-Sakala period (between 2006 and 2011)**, the average investment size has witnessed an increase by ~42%
3. Average investment per project cleared by SHLCC has consistently grown from **INR 1603 Crores in 2006-11** to **INR 2270 Crores in 2016-19** whereas for SLSWCC it has grown from **INR 15.7 Crores in 2007-11** to **INR 87.1 Crores in 2016-20**;
4. As per the IEM filled, average investment size for a project in last four years has been **more than 2x the investment size** per project in previous four years. This likely indicates more investment in medium to large scale projects rather than small to micro size projects;
5. Similarly, while the number of registered MSME units grew by 0.4% in in the pre-Sakala, the growth rate was significantly better at 12.4% during the post-Sakala period.

Source: Analysis based on <https://ebiz.karnataka.gov.in/kum/index.aspx>

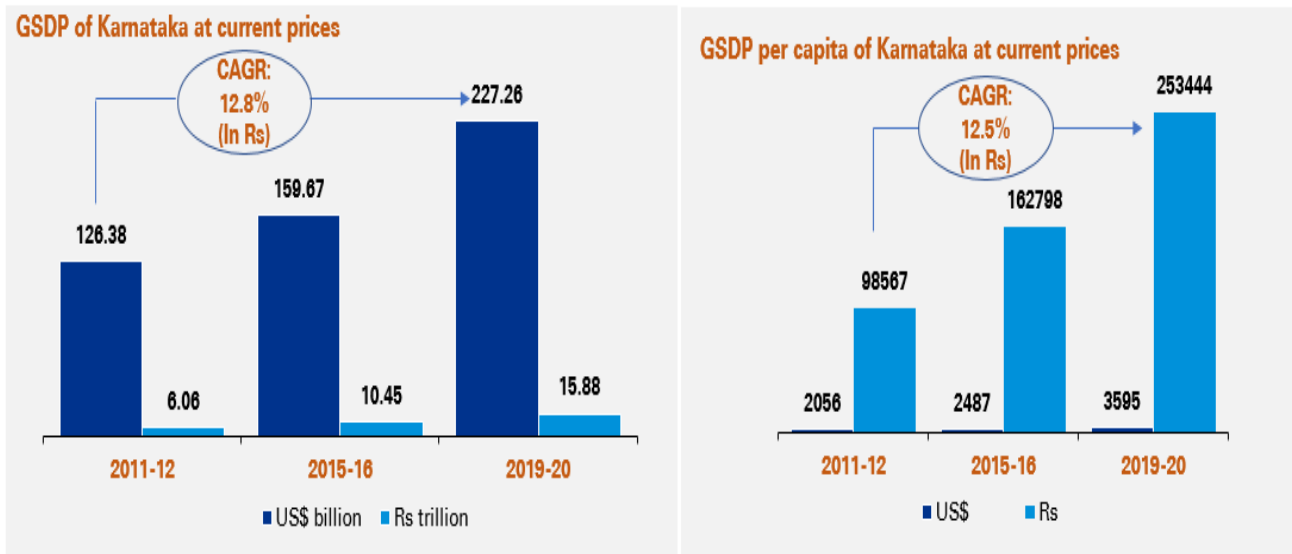
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<sup>7</sup> [http://karenvis.nic.in/Content/EconomicSurveyKarnataka\\_8184.aspx](http://karenvis.nic.in/Content/EconomicSurveyKarnataka_8184.aspx)

<sup>8</sup> <https://msme.gov.in/relatedlinks/annual-report-ministry-micro-small-and-medium-enterprises>

Post 2011, the GSDP composition trends analysed below highlights the growth observed by the tertiary sectors in the state at the expense of declining share by secondary and primary sector. At current prices, the gross domestic product of Karnataka stood at about Rs 15.88 trillion (US\$ 227.26) in 2019-20, exhibiting a growth rate of 12.8% for the period of 2012-2020. Similar trend of CAGR in per capita income for the state is observed in the time period, figure below illustrates the growth trend.

**Figure 84 GSDP Trends in Karnataka 2012-2020**



Source: Economic Survey 2019, Planning Department Government of Karnataka

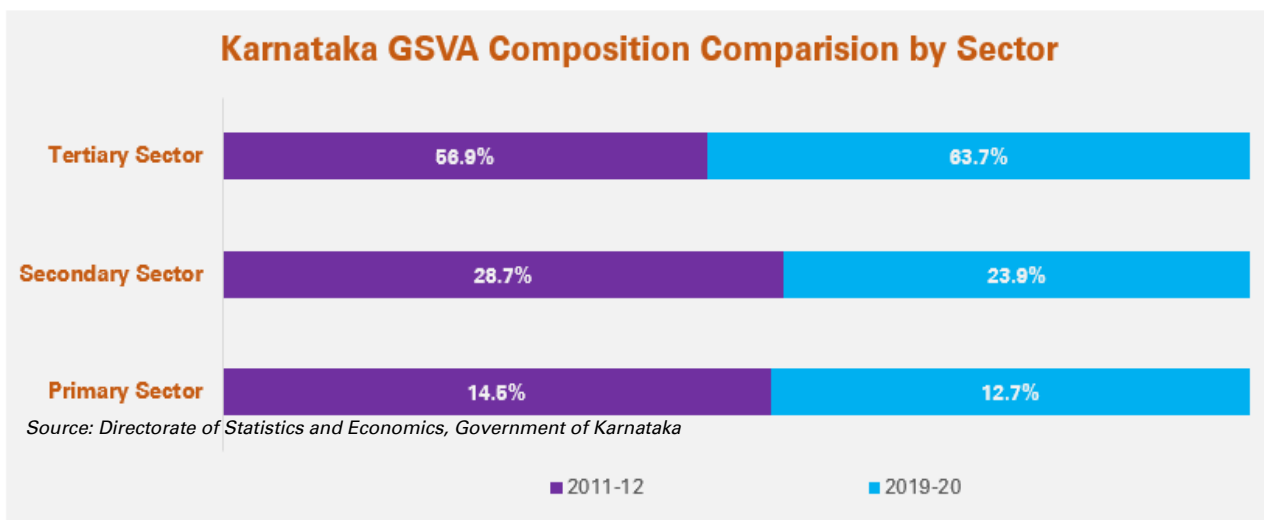
Further analysis of GSDP/GSVA composition<sup>9</sup> revealed below trends for the state:

- 1) At a CAGR of 14.10 per cent (in rupees term), tertiary sector was the fastest growing among the three sectors between 2011-12 and 2019-20. The growth was driven by trade, hotels, real estate, finance, insurance, transport, communications and others.
- 2) Secondary sector grew at a CAGR of 9.96 per cent (in rupees term) between 2011- 12 and 2019-20. This sector is proxy for manufacturing, construction and electricity, gas and water supply.

<sup>9</sup> Source: Economic Survey 2019-20, Government of Karnataka

3) Primary sector grew at a CAGR of 10.26 percent (in rupees term) between 2011-12 and 2019-20.

**Figure 85 GSVA Composition trends for Karnataka**

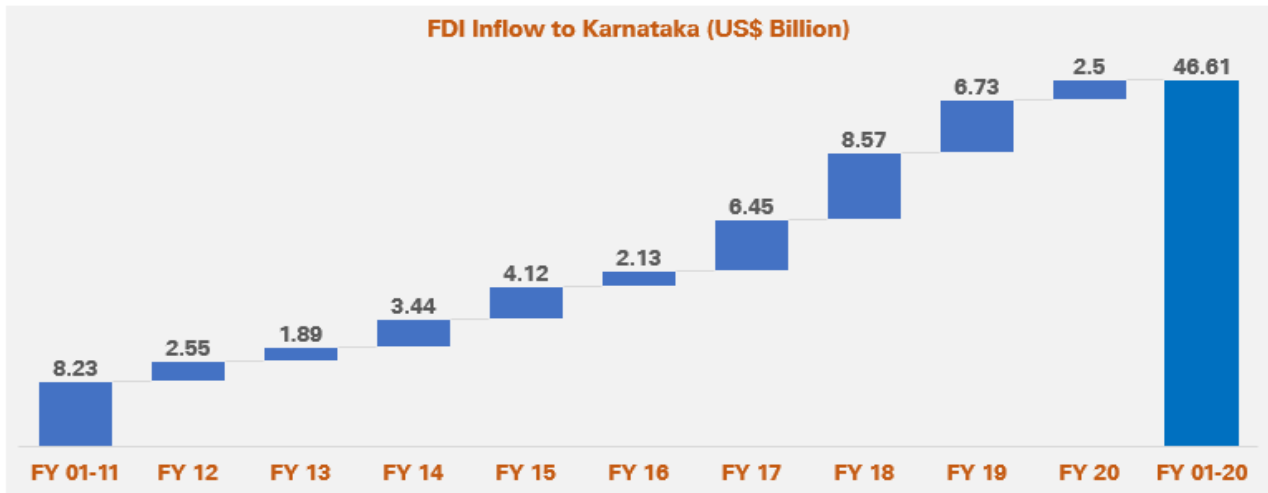


Below section details on the key findings observed above, to analyse the growth of industries, business/ services, investments etc. in pre and post Sakala period (i.e. before 2011 and post) in the State.

**Finding 1:** As per Department for Promotion of Industry and Internal Trade (DPIIT), cumulative FDI inflow stood at US\$ 46.61 billion between April 2000 and March 2020, the third highest in India after Maharashtra and Delhi, and accounted for a share of 18 per cent of India’s cumulative FDI inflow. Figure below depicts the year wise flow received by Karnataka, for the financial years 2012-20 (post-Sakala period) the investment received by state was nearly 4.6x times of the investment received in financial period of 2001-11 (pre-Sakala period).



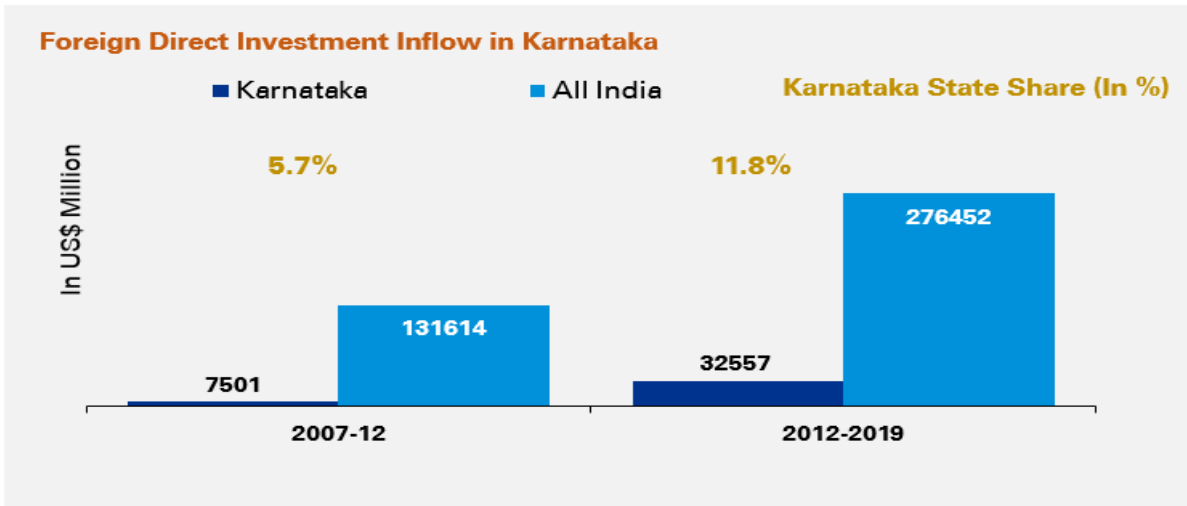
**Figure 86 FDI Inflow in Karnataka**



Source: Directorate of Statistics and Economics, Government of Karnataka

FDI inflows in state has increased at aggregate level in post-Sakala period i.e. 2012. At an aggregate level cumulative share of the state has nearly doubled from 5.7% to 11.8% as depicted in figure below.

**Figure 87 FDI Inflow in Karnataka (In Numbers)**

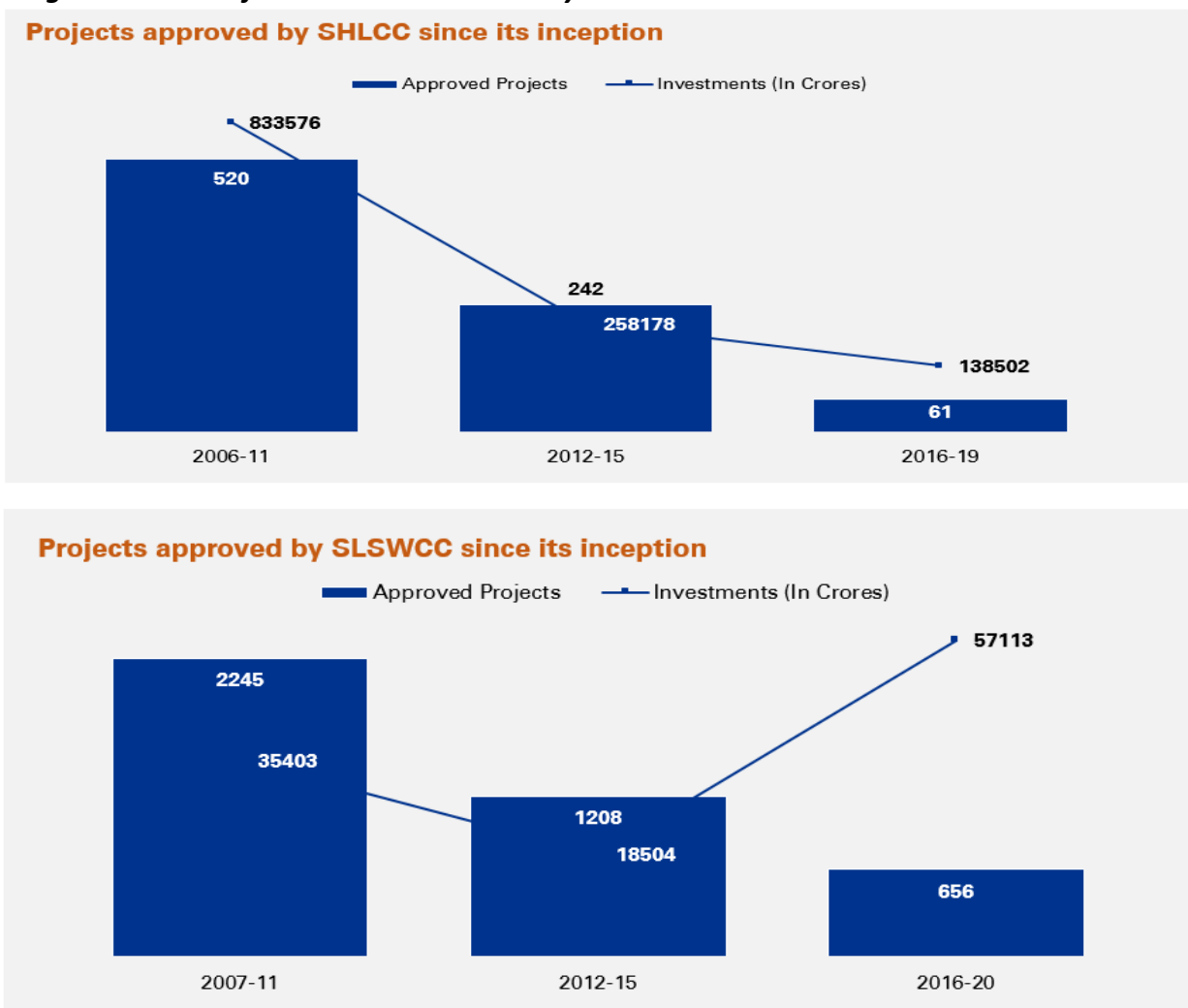


Source: Directorate of Economics and Statistics, Government of Karnataka

**Finding 2 and 3:** While total investments approved through the state single window committees have declined in post-Sakala period, the average investment size has increased. Projects cleared by SHLCC in the state, after 2012, in terms of investment value, is just 47% of the investments cleared by the committee during 2006-11. Also, the total

investments realised in the state during 2012-20 was just 54.3% of the investments realised in the state during 2006-11. However, the average investment per project cleared by SHLCC has consistently grown from INR 1603 Crores in 2006-11 to INR 2270 Crores in 2016-19 whereas for SLSWCC it has grown from INR 15.7 Crores in 2007-11 to INR 87.1 Crores in 2016-20.

**Figure 88 Trends for Investment realised by Karnataka**

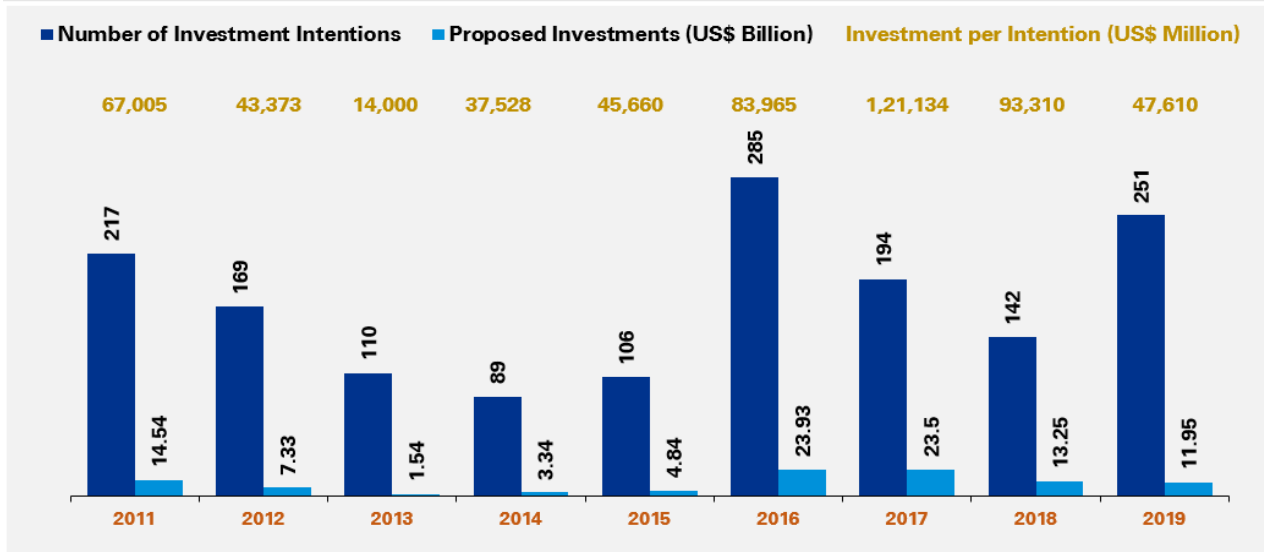


Source: Directorate of Statistics and Economics, Government of Karnataka

**Finding 4:** Investment intentions and proposed investments for the time period is depicted below which reveals a trend of increasing size of investment proposed per project. Average investment size for a project in last four years have been be more than 2x the investment size per project in previous four years, indicative of more investments in medium to large

scale projects rather than small to micro size projects. Below trend analysis is based on Industrial Entrepreneur Memoranda (IEMs) filed and Letters of Intent/ Direct Industrial Licences (LOIs/DILs) issued filed for delicensed sector. Data before 2011 was not available.

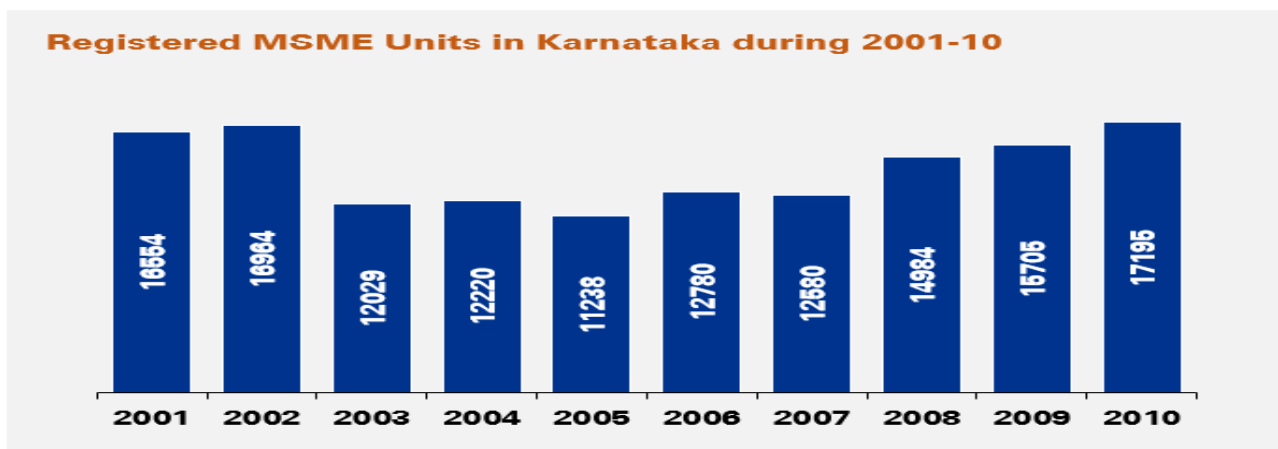
**Figure 89 Trends of Investment Flow in Karnataka**



Source: Directorate of Economics and Statistics, Government of Karnataka

**Finding 5:** For MSME units registered in the state for the period before SAKALA i.e. 2001-10, the growth rate for registered MSME units was 0.4%. However, this growth rate significantly increased to 12.4% in the post-Sakala period. Distribution of type of MSME units during the period 2001-10 was not available.

**Figure 90 MSME units in Karnataka before 2011**



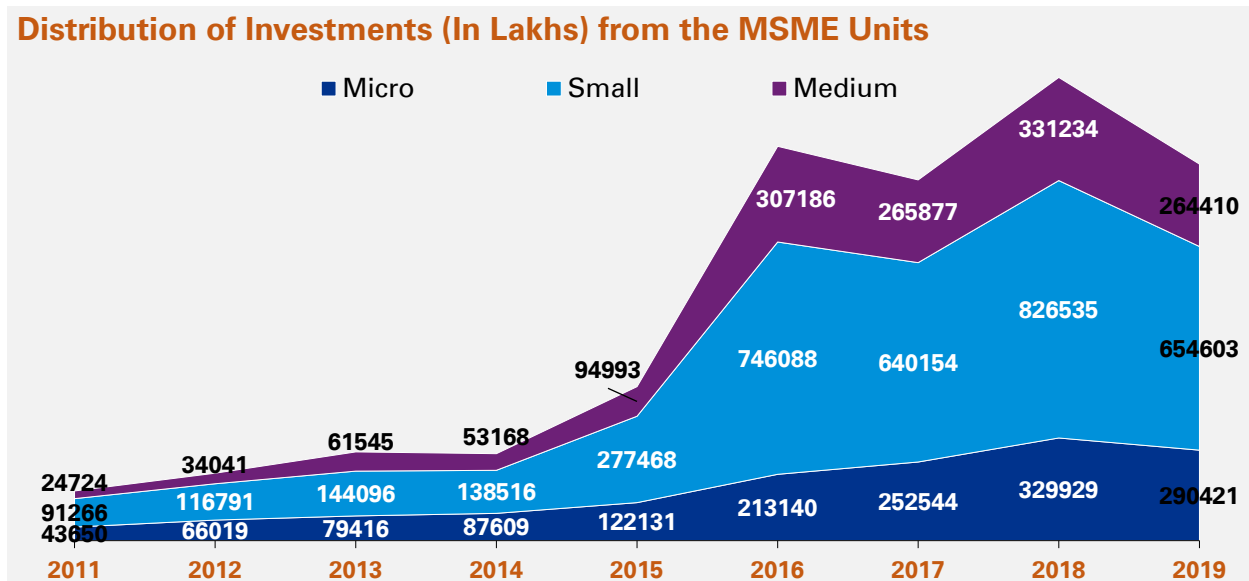
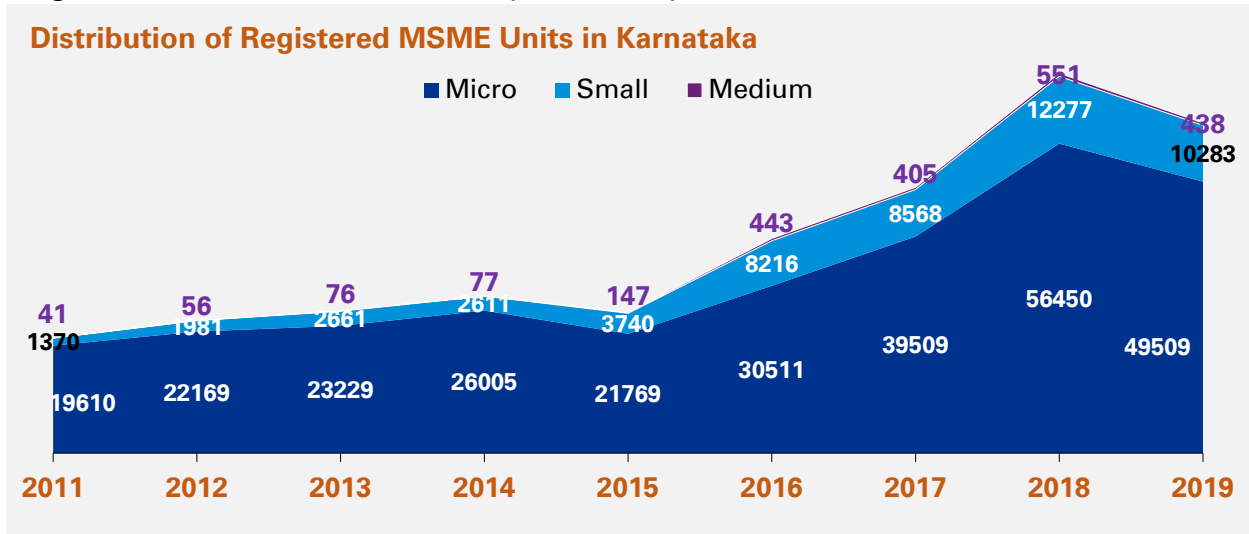
Source: Directorate of Economics and Statistics, Government of Karnataka

MSME units in the state form an important and growing segment of Karnataka's industrial sector, total number of registered MSME units have grown at an CAGR of 14% during the time period of 2011-19<sup>10</sup>. Distribution of such units yearly is depicted in figure below, an important take away is the significant rise in number of small units operating in the state. In 2011, number of small units comprised approximately 7% of the total number of registered units in state which has grown to 17% in year 2019. However, trends observed for the investments received in these MSME units primarily establishes the increased growth in medium category units when compared to other two, since:

- CAGR for investments received in Micro, Small and Medium category are approximately 27%, 28% and 34% respectively;
- Investments realised for medium category increased from 15% in 2011 to 22% in 2019.

<sup>10</sup> Source: Economic Survey 2019-20, Government of Karnataka  
Karnataka Evaluation Authority | Page 132

Figure 91 MSME Units in Karnataka (In Numbers)



## 4.3. Recent Developments

### 4.3.1. Karnataka Industrial Policy 2020-25

The new Karnataka Industrial Policy<sup>11</sup> envisions the state to emerge as a “global leader in advanced manufacturing, research and development, and innovation and to create an ecosystem for an inclusive, balanced and sustainable development of the State”. Karnataka Industrial Policy 2020-25 is aimed at the states holistic development and the promotion of Tier II and Tier III cities i.e. comparatively less industrialised cities/districts.

Government, through this policy, plans to introduce significant fiscal, labour, and land reforms and, thereby, attract INR 5 lakh crore investments and create about 2 million jobs.

Key highlights from the policy that would benefit the state’s business environment are as below:

- **Zoning of state districts:** The new industrial policy groups Karnataka’s districts into three zones to develop areas considered to be industrially backward. The industrially backward districts come under Zone-1 and Zone-2 while more industrially developed districts are classified under Zone-3 and Zone-4. Urban centers Bengaluru and Mysuru (formerly Mysore) come under Zone-4. Incentives will be rolled out to direct greater investment to the industrially backward districts.
- **Sector focus of the policy:** Key focus sectors have been identified under the policy – automobiles and auto components, pharmaceuticals, medical devices, engineering and machine tools, knowledge-based industries, logistics, renewable energy, aerospace, defense, and electric vehicles.
- **Special investment regions in Dharwad and Shivamogga:** The policy aims to enact the Special Investment Region (SIR) Act to create, operate, and regulate such investment regions in the state. Special investment regions would have an area of about 100 sq.km and be categorised as industrial townships. The first such region or SIR region will encompass the Dharwad, Gadag, Haveri, and Belagavi districts of Karnataka. Another SIR that is being planned includes Shivamogga, Davanagere, Chitradurga, and

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<sup>11</sup> <https://auto.economicstimes.indiatimes.com/news/policy/karnataka-cabinet-approves-new-industrial-policy-for-2020-2025/77139332>

Chickamagaluru districts as well as Kalaburagi, which is in the Kalyana Karnataka district.

- **Subsidies for MSMEs:** The policy offers production turnover-based subsidies for micro, small, and medium-sized enterprises (MSMEs) with a view to boost industrial innovation. The investment promotion subsidy will be based on 10 percent on turnover each year for a period of five years and limited to 20 to 30 percent of value of fixed assets (VFA). Other incentives include – exemption from stamp duty and concessional registration charges; reimbursement of land conversion fee; tax exemption on electricity tariff for MSMEs; and power subsidy for MSMEs.
- **Local jobs creation:** The policy will require new industrial projects to create as much direct employment as possible and hire locally – a minimum of 70 percent of the workforce should consist of locals and 100 percent in the case of Group D type of employees (housekeeping and sanitation staff, non-technical posts, drivers, etc.)
- **Labour reforms under the policy:** An amendment to the Factories Act, 1948 will ensure that women workers who work the night shift in factories, that is between 7pm to 6am, are registered. Sections 64 and 65 of the Factories Act have been amended to extend overtime hours to 125 hours per quarter. The Industrial Employment (Standing Order) Act, 1946 has been amended to permit fixed term employment or contract employment.
- **Wage revisions:** The minimum wage will be periodically revised based on factors like inflation and consumer price index (CPI).
- **Incentives Qualification:** The New Industrial Policy 2020-25 outlines investment promotion subsidies for enterprises according to their scale of production, turnover, and whether they are operated by persons belonging to special categories. Incentives categories are investment promotion subsidies, interest subsidy on loan, stamp duty concessions, tax exemptions on electricity tariffs etc.

### 4.3.2. Karnataka Industries (Facilitation)(Amendment) Act,2020

In October 2020, the Government of Karnataka issued a landmark amendment to the Karnataka Industries (Facilitation) Act, 2002. As per the amendment, small, medium and large-scale manufacturing companies in the State need not secure all required approvals/NOCs before commencing the construction or establishment of the company. These are deemed approved for a period of 3 years or until the commencement of commercial operations (whichever is earlier).

Manufacturing companies could commence construction and other activities soon after land allotment without seeking the following approvals beforehand:

- 1) Acquire land u/s 109 of Karnataka Land Reforms Act for non-agricultural purposes
- 2) Non-Agricultural Conversion
- 3) Building Plan Approval from KIADB, KSSIDC, BDA, BBMP & other ULBs/Local Planning Authorities & Panchayats
- 4) Factory plan approval
- 5) Provisional NOC from Karnataka State Fire and Emergency Services
- 6) Tree Felling & Transit Permission
- 7) Boilers erection permission
- 8) Registration Under Contract Labour (Regulation and Abolition) Act, 1970
- 9) Trade Licenses
- 10) Health NoC by Municipality/ Panchayat for Food Registration certificate
- 11) New License to Manufacturer of Weights and Measures State Jurisdiction

These companies need to only self-certify that they will abide by all applicable laws and regulations. If there are any deviations from these laws, at a later stage, the Act also equips the Government to hold the errant companies liable for any penalties or other penal actions.

The Act also provides for joint or coordinated inspections from multiple line departments such as Office of the Labour Commissioner; Chief Inspector of Factories and Boilers; representatives of the Employees State Insurance Corporation and the Employees Provident Fund Organisation; and Karnataka State Pollution Control Board. This measure will help avoid duplication of work between various departments, and at the same time, reduce the inconvenience of multiple inspections for manufacturing companies.



### 4.3.3. Karnataka EoDB Ranking 2020

Business Reform Action Plan (BRAP) 2019 released by Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry consisted of 80 recommendations for reforms on regulatory processes, policies, practices and procedures spread across 12 reform areas. For BRAP 2019, DPIIT decided to assess States/UTs based only on the feedback received from actual users of services. Thus, the 80-point BRAP 2019 had been devised such that feedback can be obtained on all reform points. Feedback was to be sought only on those reform points, which had been implemented.

The feedback was to be obtained either through a face-to-face or telephonic interview with the respondents. Selection of respondents was done through below methodology:

1. **General points:** Industrial estates was to be identified in the State/UT from the Industrial Information system. Feedback from industrial undertakings located in the industrial estate will be obtained and States/ UTs were assessed accordingly.
2. **User specific points:** List of users of the online systems was sent by the State to DPIIT. The period covered was from 1st December 2018 to 31st March 2019, that is users should have availed the service during the coverage period. Minimum number of users per reform point were to be 20.

Full marks were awarded if a minimum of 70% surveyed investors felt that the reform in question has been implemented and answered in affirmative to each of the questions in a specific reform area. Otherwise no marks were awarded. Therefore, the scores do not represent reforms implemented, but investor feedback on these reforms.

Given the new methodology, Karnataka witnessed a decrease in the ranking released based on above methodology by DPIIT in September 2020 (from its previous year ranking of 8<sup>th</sup> to 17<sup>th</sup> in India)<sup>12</sup>. The ranking attained by the State for the last 4 years is given below.

**Table 39 Karnataka EoDB rankings from 2015-19**

Year	2019		2017		2016		2015	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Karnataka	17	Not Released	8	96.42	13	88.39	9	48.5



<sup>12</sup> <https://eodb.dipp.gov.in/Home?year=2019>

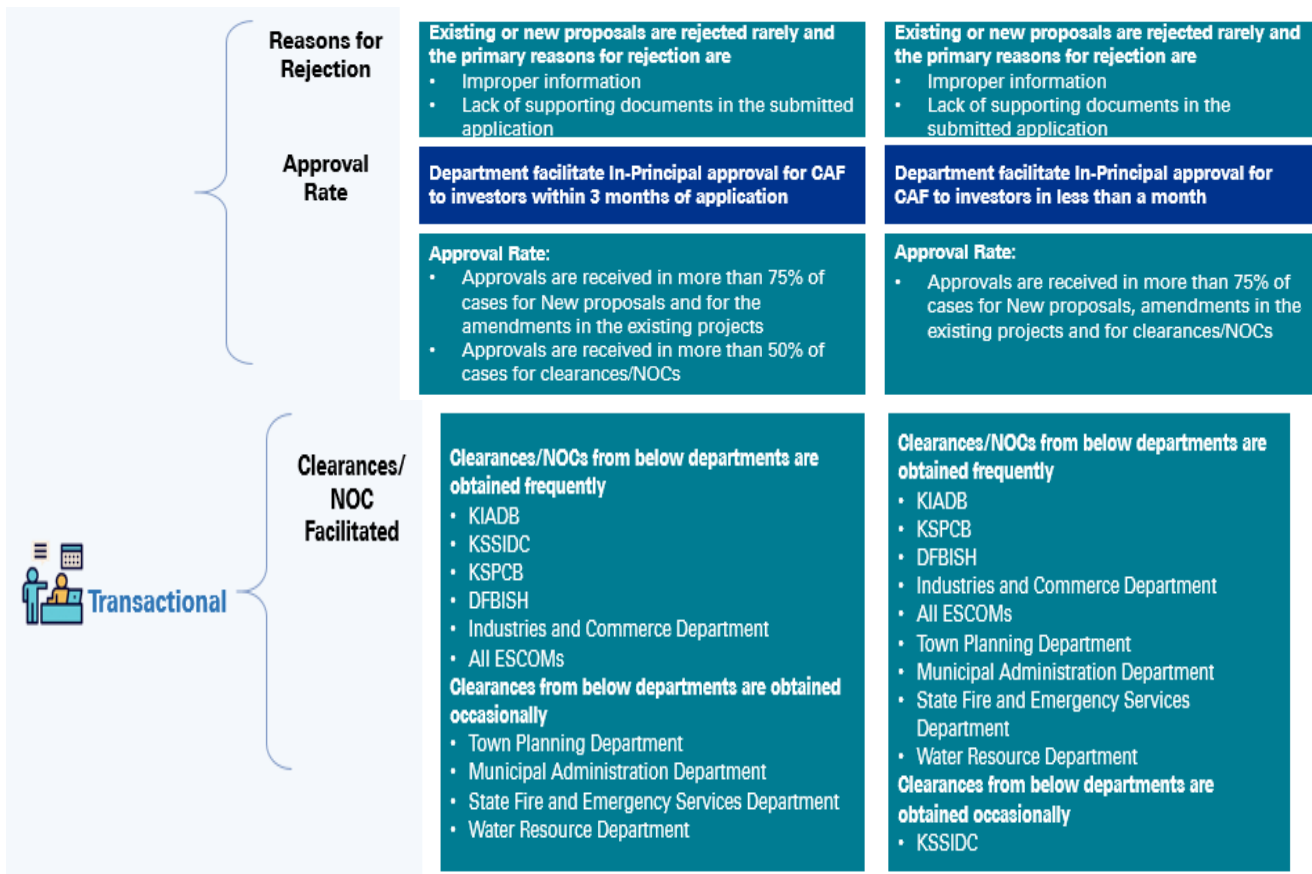
#### 4.4. Assessment of KUM/DICs

For the purpose of this study we designed a three-pronged approach to assess the functioning and status of EoDB described as below:

- 1) Online questionnaire for the users/investors who have applied for services through KUM/DIC or its eBiz portal. This exercise could not be completed because user data was not made available by concerned department.
- 2) Focused group discussion with investors from across the four divisions of the state. Observations of same from each of the FGD is detailed in annexure.
- 3) Structured interaction with KUM and DIC officials’ findings from the same is depicted below in figure 90.

**Figure 92 Snapshot of the KUM/DIC Responses**

		<b>Respondents from District Industries Center: Shivamogga, Bangalore Rural, Chikballapura, Mandya, Mysore and Bangalore Urban</b>	<b>Respondent from Karnataka Udyog Mitra</b>
 <b>Awareness</b>	<b>Means of Awareness</b>	<b>Department creates awareness via</b> <ul style="list-style-type: none"> <li>• Notice Boards, Officials/Helpdesks and Department website in every quarter of the year</li> <li>• Newspapers, Magazines/Posters/ TV ads once in every year</li> </ul>	<b>Department creates awareness via</b> <ul style="list-style-type: none"> <li>• Notice Boards, Officials/Helpdesks and Newspaper/Magazines/Posters/TV ads in every quarter of the year</li> </ul>
	<b>Investor Interaction</b>	<b>Investor interaction is undertaken frequently through</b> <ul style="list-style-type: none"> <li>• Investor Facilitation Cell</li> <li>• Help Line Numbers</li> <li>• Investor Outreach Programs</li> <li>• Through Online Query Handling &amp; Ticketing</li> </ul>	<b>Investor interaction is undertaken frequently through</b> <ul style="list-style-type: none"> <li>• Investor Facilitation Cell</li> <li>• Help Line Numbers</li> <li>• Investor Outreach Programs</li> <li>• Through Online Query Handling &amp; Ticketing</li> <li>• Department Websites</li> </ul>
 <b>Service Delivery</b>	<b>Services Offered</b>	<b>The services provided frequently by the department includes:</b> <ul style="list-style-type: none"> <li>• Grievance redressal for investors (<b>Offline</b>)</li> <li>• Handholding for filling Combined Application Form (<b>Offline</b>)</li> <li>• Assistance in obtaining Principal Approval from the appropriate Single Window Clearance Committee (<b>Offline</b>)</li> <li>• Assistance in Applying for Clearances/ approvals (<b>Offline</b>)</li> <li>• Application for Incentives &amp; Concession as per applicable policy (<b>Online</b>)</li> </ul>	<b>The services provided frequently by the department includes:</b> <ul style="list-style-type: none"> <li>• Grievance redressal for investors (<b>Online</b>)</li> <li>• Handholding for filling Combined Application Form (<b>Online</b>)</li> <li>• Assistance in obtaining Principal Approval from the appropriate Single Window Clearance Committee (<b>Online</b>)</li> <li>• Assistance in Applying for Clearances/ approvals (<b>Online</b>)</li> <li>• Application for Incentives &amp; Concession as per applicable policy (<b>Online</b>)</li> </ul>



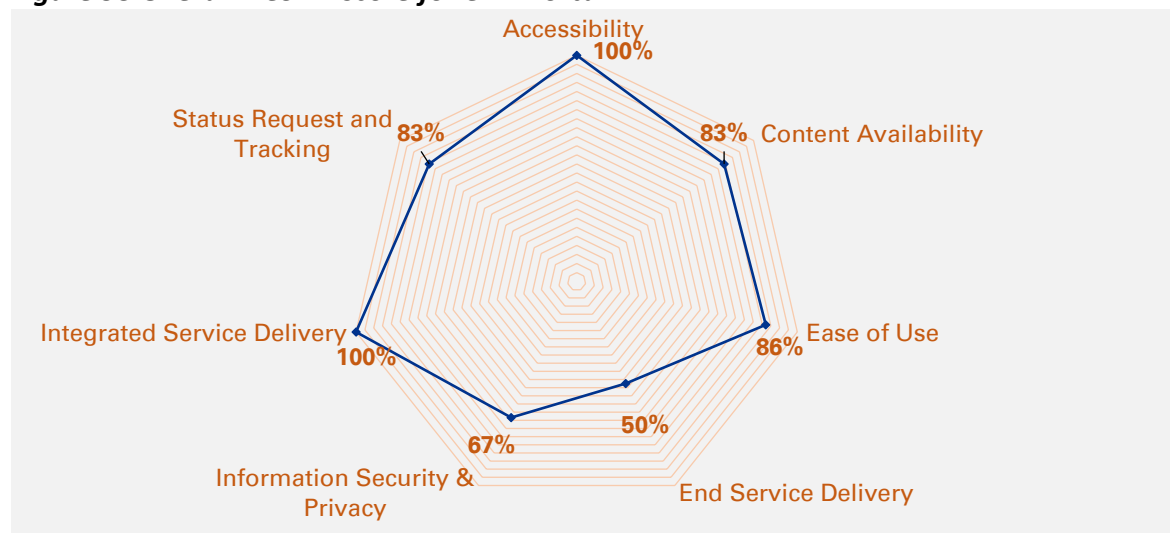
Key findings from interactions with KUM and DIC officials is that in most of the cases the following services are offered through **offline channels** (the first one is offered online by KUM). These are:

- 1) Assistance in obtaining Principal Approval from the appropriate Single Window Clearance Committee
- 2) Assistance in Applying for Clearances/ approvals with line departments
- 3) Handholding for filling Combined Application Form to investors/applicants
- 4) Grievance redressal for investors/applicants

All the above services should be available only through state single window system eBiz Portal without any manual or offline interventions. With this objective, the NeSDA

assessment framework was leveraged to evaluate the functioning of eBiz portal and the detailed scores are as below.

**Figure 93 Overall NeSDA score for eBiz Portal**








**Table 40 Improvement areas for eBiz Karnataka**

Sl. No.	Karnataka Single Window System	Website	Improvement Areas for each of the services
1	eBiz Karnataka	KUM website  <a href="https://ebiz.karnataka.gov.in/kum/index.aspx">https://ebiz.karnataka.gov.in/kum/index.aspx</a>	<ul style="list-style-type: none"> <li>Integration of feature to log complaints/grievances and provide feedback</li> <li>Manual intervention in form of offline interaction with officials for supporting document submission or follow up request must be removed</li> <li>Integration of enhanced security features i.e. adoption of W3C compliance</li> </ul>

As seen from figure 91 above, major improvement in areas such as **End service delivery, and Status request and tracking**. Below improvement features in these areas would further enhance the transparency, better user experience and reduce service delivery discrepancies.

**Figure 94 Improvement Areas for KUM and DIC**

 Parameters	 Improvement Areas	 Recommendations & Significance
 <b>End Service Delivery</b>	<ul style="list-style-type: none"> <li>Provisions for officials and users to interact offline for supporting documents submission or for follow up should be removed thus nullifying the manual effort to obtain the service</li> </ul>	<ul style="list-style-type: none"> <li>Integration and limitation to online interactions which are documented and time stamped leads to transparency and consistency in service delivery</li> </ul>
 <b>Status and request tracking</b>	<ul style="list-style-type: none"> <li>Integration of features to intimate users in status change/update of applications</li> <li>Provision for users to leave feedback</li> <li>Provide dedicated webpage for subjects related to payment for services</li> </ul>	<ul style="list-style-type: none"> <li>Leverage <b>MeitY</b> Digital service standard to adopt practices for end to end status tracking Improves efficiency and increases transparency for service delivery. Empowers citizens by enhancing trust in Government</li> </ul>

Investor/applicant data for KUM or DIC was not made available for quantitative assessment (i.e. approval rate, time taken for approval, rejection reasons etc.) for the KUM/DIC offered services.



## 5. Case Studies – EoDB Best Practices

### 5.1. Andhra Pradesh

Since 2016, Andhra Pradesh has topped EODB ranking and same was the case in recently released ranking for 'State Business Reform Action Plan 2019' (BRAP) which showed how Indian states have fared in enhancing Ease of Doing Business. DPIIT developed its first action plan for state reforms in 2015 to make it easier, simpler and quicker for businesses to operate throughout its lifecycle of operation.

This section describes the primary steps taken by Andhra Pradesh state administration to top the rankings for three consecutive years<sup>13</sup>. Primary steps taken include:

**1) Creating Awareness:** Final rankings released prior to 2019 were reflective of both Reform Evidence Score and Reform Feedback Score, thus awareness of the reforms among industrialists of Andhra Pradesh was necessary. Creating a meaningful and engaging channel between industrialists and industries department was top of the priority list. Following were the key steps taken by state administration:

- Designing creatives such as social media posts, booklet designing, hoardings designing with simple but effective language in both English and Telugu.
- State undertook more than 150+ new reforms across categories like environmental laws, labour laws, judiciary dispute laws etc. For effective communication of these, creatives were strategised according to the line of work of the industry and delivered them useful information.
- Facebook and Twitter were chosen as social media channels because both these platforms offered capabilities to target strategic **curated advertisements** at interest level, location bases, language and custom list level.

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<sup>13</sup> Analysis based on:

<https://www.apindustries.gov.in/APIIndus/UserInterface/SingleWindowServicesApplication/Public/EODB.aspx>

- Different graphics were designed in a way that it educated the budding entrepreneurs and industrialists about the environment and procedures to start/operate businesses or ease of doing business in Andhra Pradesh. To make sure the clear communication, the content in the graphics was made less technical, more concise and reader friendly. Facebook and Twitter ads with detailed targeting were used to reach out the industrialists according to their industry type.

**Figure 95 Andhra Pradesh AD Campaign for EoDB**



**2) Industry Reach out:** Following were some of the key steps taken by state administration to effectively communicate its undertaken reforms:

- Department of Industries organised interactive meets in every district and gave them detailed presentation and solve their doubts regarding the newly implemented reforms to the district industrialists. Booklet, with all the industry-friendly reforms, were made available to make sure that no industrialist would be left leveraging these reforms.
- To encourage budding and fellow entrepreneurs and industrialists to leverage the implemented resources, testimonial videos about the positive

**Figure 96 Booklets released by Andhra Pradesh**





impact on business after using the new system and educational videos, were made.

Output achieved by the state is illustrated below as state topped the ranking leveraging its intensive awareness campaign which reflected in being top performer in feedback score.

**Figure 97 Results Achieved by Andhra Pradesh**

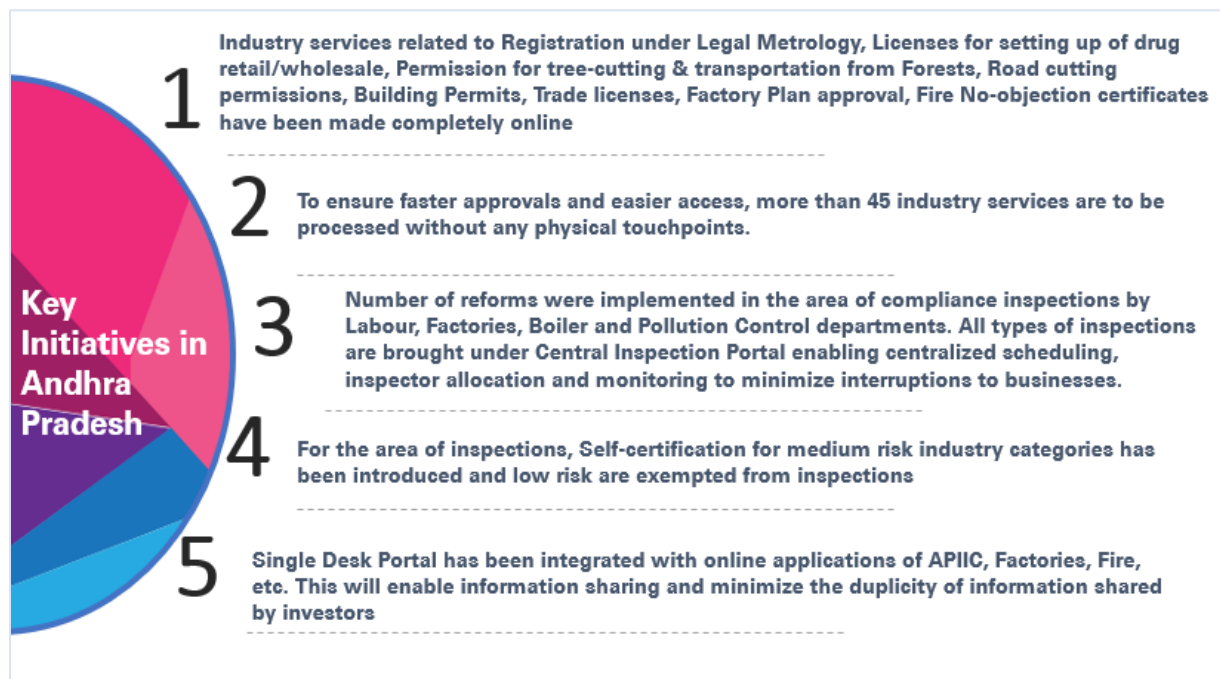


Andhra Pradesh as per 2017 DPIIT ranking in total **had implemented 405 reforms**, focusing on central inspection system, online land allotment system, online single window system for granting construction permits, registration under Inter State Migrant Workmen (RE&CS) Act, 1979, approval for boiler manufacturer and boiler erector etc.

**Table 41 Reforms undertaken by Andhra Pradesh since 2015**

Year	Number of Reforms	Andhra Pradesh Rank	Compliance
2017	405	1	98.30%
2016	340	1	98.78%
2015	285	2	70.12%

**Figure 98 Highlights of Reform Area undertaken in Andhra Pradesh**



**AP has special emphasis on feedback from the industry, Andhra Pradesh government is ensuring that the reforms are not only implemented but are utilized effectively by the concerned industry**

### DPMS System for Construction Permit, Factory Plan and Fire NoC:

Recognizing the critical role of construction in enabling business growth, Andhra Pradesh has implemented sweeping reforms, among the reforms is the implementation of online DPMS (Development Planning Management System), which has enabled a conducive ecosystem for approval of plans required for construction and setting up of industries. The application for construction permit, factory plan approval, Fire No objection Certificate etc. can be submitted online through the DPMS System and obtain Auto-DCR scrutinized and approved drawings/plans.

#### Reform in inspection

To bring transparency in the inspection process and reduce the turnaround time, the inspection reports are now made available online for download on CIS and the timeline for upload of inspection reports by the inspectors has been capped at 48 hours.

#### Reform in payment of taxes and charges

Andhra Pradesh introduced Building Rules 2017 enabling a comprehensive, development oriented and easily adoptable building stipulations to enable business friendly structure. The new building rules are anticipated to minimize the prevailing ambiguity in documentation required, various applicable codes and rates.



### Single Window System

AP government launched the Single Desk Portal (SDP) in June 2015. The one-stop-shop is helping industries to obtain more than 39 regulatory clearances required to set-up and operate business in 21 days. The SDP supports end-to-end transaction processing with online payment and application status tracking. Investors can obtain clearances belonging to 19 departments covering Pre-establishment approvals, pre-operation approvals and renewals. More than 23,100 industry applications were cleared through the Single Desk Portal.

## 5.2. Uttar Pradesh

In the recently released annual rankings for State business reform action plan (BRAP) 2019, Uttar Pradesh **jumped up from the 12th position in the BRAP 2017-'18 rankings to 2nd position**, leaving behind several leading states such as Gujarat, Telangana, Rajasthan, and Maharashtra

**Table 42 Reforms undertaken by Uttar Pradesh since 2015**

Year	Uttar Pradesh Rank	Compliance
2019	<b>2</b>	Yet to be released
2017	<b>12</b>	92.89%
2016	<b>14</b>	84.52%
2015	<b>10</b>	47.37%

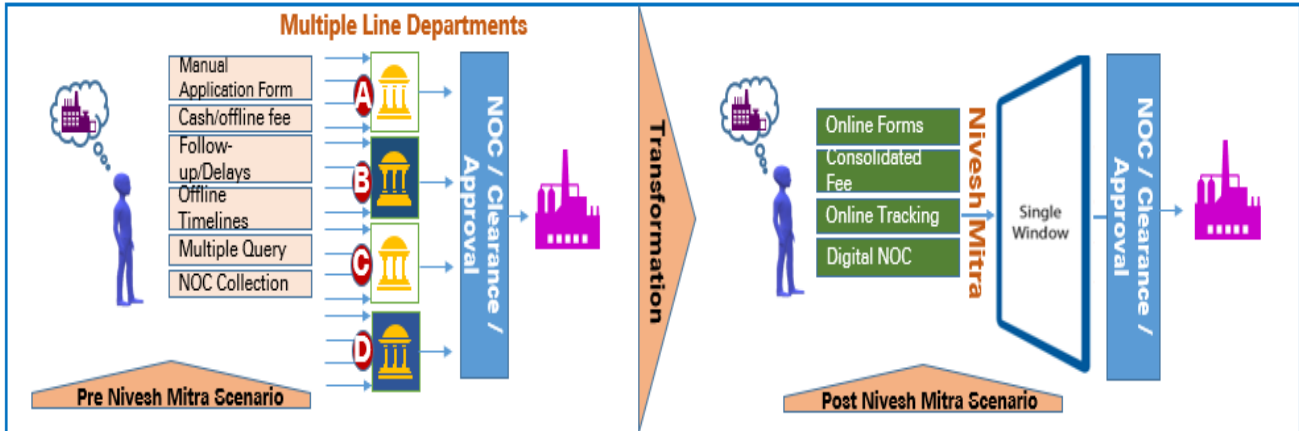
As per state report, UP had implemented **186 of the 187 reforms**<sup>14</sup> suggested by the Centre's Department for Promotion of Industry and Internal Trade (DPIIT). Reforms undertaken by the state were spread across several reform areas such as labour regulation, online single-window, access to information and transparency, land administration, construction permit, commercial disputes, inspection enablers etc.

Nivesh Mitra Portal<sup>15</sup> launched by the Government of Uttar Pradesh to simplify and catalyse the Ease of Doing Business in the state. It introduced a single dedicated portal on which businesses can register in online mode. All entrepreneurs in the state can login /register at [www.niveshmitra.up.nic.in](http://www.niveshmitra.up.nic.in).

<sup>14</sup> <https://indianexpress.com/article/india/ease-of-doing-business-rankings-up-credits-nivesh-mitra-platform-for-its-success-6584853/>

<sup>15</sup> Information for Nivesh Mitra sourced for <http://www.niveshmitra.up.nic.in/>

Figure 99 Nivesh Mitra Simplifying EoDB in UP



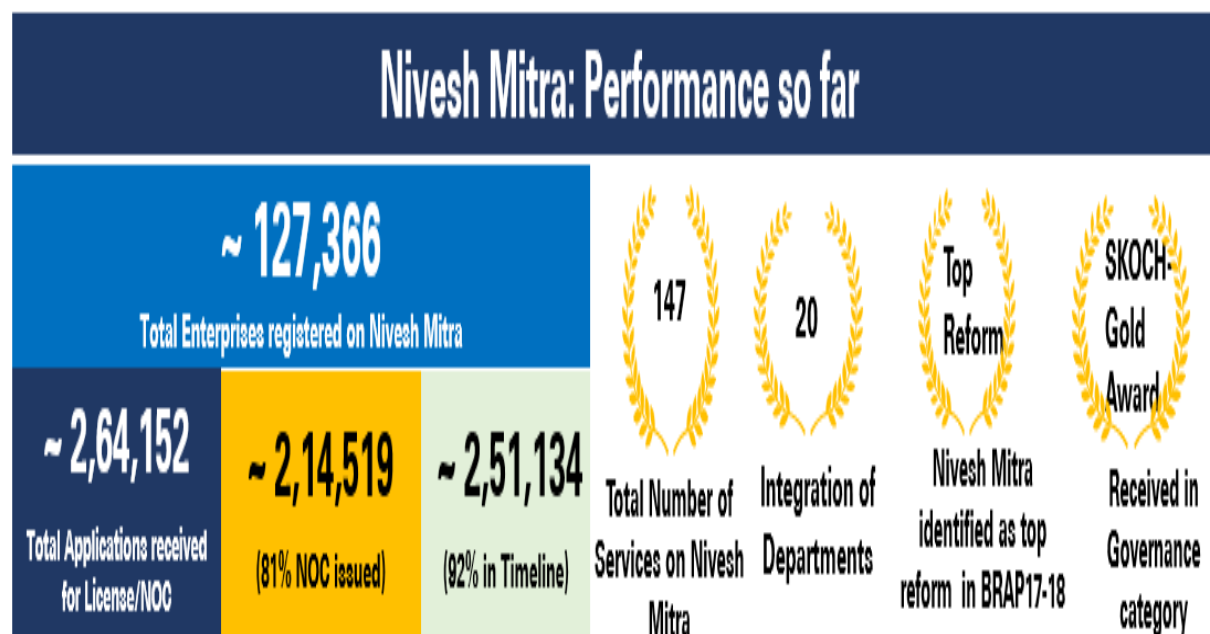
More than 147 services from around 20 departments have been added to the UP Nivesh Mitra Single Window Portal to ease business. It offers a one stop solution for online application, consolidated fee payment and monitoring the status. The services available on this portal include the list of required certificates, No Objection Certificate (NOC) and license. Along with this, online third-party verification of certificate / NOC / license can also be done through Nivesh Mitra. Following are the departments which are presently included under Nivesh Mitra:

Table 43 Nivesh Mitra integrated departments

Sl. No.	Department Name	Sl. No.	Department Name
1	Directorate of Industries	10	Food & Drug Admin.
2	Pollution Control Board	11	Forest
3	Commercial Tax	12	Stamps and Registration
4	Power	13	Revenue Department
5	Excise Department	14	Registrar Firms and Society
6	Factories/Boilers	15	Legal Metrology
7	Labour Department	16	Public Works Department
8	Fire	17	Electrical Inspectorate
9	Electrical Safety	18	Housing
		19	Industrial Development Authority (UPSIDC/NOIDA/Greater NOIDA/YEIDA)

Few of the salient features of the reforms undertaken are listed as below:

- Provision of Common Application Form (CAF) for applying to pre-establishment and pre-operation clearances/approvals.
- Details filled by entrepreneur in CAF being auto populated in clearance specific application form.
- Automatic SMS and e-mail response to entrepreneur generated at each stage.
- Online monitoring of applications can be done by entrepreneur, department concerned & DIC at District level, Divisional level and State level.
- Grievance redressal/Online feedback submission on draft government policies.
- Entrepreneurs can view the status online and clarify the objections raised.
- Tracking of application with colour coding to highlight those exceeding the time limit.
- Institutionalisation of 'Invest UP' in line to the vision of 'Invest India' Investment Promotion Agency of Govt. of India.
- The Implementation of stringent mandates such as 'One Time Query within 7 days of application received' and 'Application to be received by Nivesh Mitra Only' & 'Mandatorily digitally signed NOC issuance'.
- For Grievance Redressal, 'Nivesh Mitra' has received total 20,788 applications; out of which more than 20,156 i.e. 96.9% grievances were successfully resolved.
- 'Nivesh Mitra' inducted 'User Feedback' Module through which it received total 1,01,646 feedbacks; Out of which more than 74,713 applicants i.e. 75% have given their feedback as 'Satisfied'.
- Above feedback module not only collects feedback on overall experience in getting in NOCs in UP but also it also captures the data whether the applicant was asked to physically visit the departments & how was their experience with this online platform.
- No compliance related to Professional Tax in UP and fire license has been made free of cost.

**Figure 100 Nivesh Mitra Simplifying EoDB in UP**

For both these states, below table gives a one to one comparison of the timelines required for an entrepreneur to obtain approvals/clearances required in setting up a manufacturing or services activity in these respective states. These timelines are notified maximum time to be taken for delivery of the services to the applicants as per the right to public service delivery. For most of these services time required in Karnataka is substantially higher than both AP and UP varying in range from 2x to more than 10x.

**Table 44 Comparison of SAKALA timelines with that of AP notified timelines**

Clearances Approvals Required (Time taken in Days)	Andhra Pradesh <sup>16</sup>	Karnataka
Change in Land Use	10	30
Fire - No Objection Certificate	15	60
Consent for Establishment Red Category	21	70
Water Connection and Approval	21	42

<sup>16</sup> <https://www.apindustries.gov.in/APIndus/UserInterface/SingleWindowServicesApplication/Public/EODB.aspx>

Electrical inspectorate statutory approval for drawings	7	20
Factory Plan Approval	7	90
Building Completion Certificate	30	30
Consent for Operation Red Category	21	120
Occupancy Certificate from Fire Services Department	15	45
License for Building and Other Construction Works	Instant	15
Factory Registration/ License	7	90
Registration of establishments deploying inter-state migrant workmen	Instant	15
Registration of establishments deploying contractual workmen	Instant	15
Boiler Registration Certificate	15	90
Sanction of power supply	7	30

**Table 45 Comparison of SAKALA timelines with that of AP and UP notified timelines**

Clearances Approvals Required (Time taken in Days)	Andhra Pradesh <sup>17</sup>	Uttar Pradesh <sup>18</sup>	Karnataka
Fire - No Objection Certificate	15	15	60
Water Connection and Approval	21	15	42
Electrical inspectorate statutory approval for drawings	7	4	20
Factory Plan Approval	7	30	90
Building Completion Certificate	30	30	30
Occupancy Certificate from Fire Services Department	15	15	45
Factory Registration/ License	7	30	90
Boiler Registration Certificate	15	30	90
Sanction of power supply	7	30	30

<sup>17</sup> <https://www.apindustries.gov.in/APIndus/UserInterface/SingleWindowServicesApplication/Public/EODB.aspx>

<sup>18</sup> <https://niveshmitra.up.nic.in/eodb.aspx?ID=dipp19>



## 6. Recommendations and Action Plan

Recommendations detailed in this section are stemming from the observations made above in the detailed assessment. Recommendations are provided for a) Enhancing process and IT efficiency of the services, b) to improve the functioning of existing investor reforms and c) to improve the functioning of the state single window platform.

In section 6.1. below, recommendations are provided for each line department based on some of the key issues highlighted in the executive summary and some leading practices are highlighted for each of the NeSDA assessment parameter, to enhance the usability and utility of the department portals.

In subsequent section i.e. 6.2., recommendations for improvement in functioning of single window system, industrial land allotment and MSME support is suggested based on the feedback received from industry interactions. Lastly section 6.3. provides the immediate action points for the improvement of KUM ebiz Karnataka platform to provide seamless industry services.

### 6.1. For enhancing process and IT efficiency of services

State Line Department	Observations	Recommendations
<b>Inspector General of Registration and Stamps</b>	The department's SAKALA adherence and approval ratings are amongst the highest. Its Kaveri portal is quite well-designed contributing to high ease of use and end service delivery.	The following two measures will help enhance the NeSDA score: <ol style="list-style-type: none"> <li>1. Strengthening security measures through a two-factor authentication of users.</li> <li>2. Providing options for users to track their requests and obtain timely updates on any change in the status of their requests.</li> </ol>

State Line Department	Observations	Recommendations
<b>Department of Factories</b>	<p>While the department enjoys high approval rate and above average adherence with SAKALA timelines, two services are end-to-end offline. The ones that are online require some manual touchpoints (such as physical inspections and document verification), especially for service such as Approval of Building Plan.</p>	<p>The department could emulate the AP here where the service such as Factory Plan approval is end-to-end online with minimal manual touchpoints. The intelligent system employed is able to read AUTO-CAD drawings of building/factory layout and provide a compliance/deviations report as per prevalent codes and GOs without human intervention. The automated system has reduced the time taken for plan approval to 5-7 days from previously 25-30 days.</p>
<b>Bangalore Water Supply and Sewerage Board</b>	<p>Majority of the queries that the department gets is on application processes/procedures. While the department scores high on approval rate, delays in processing are largely attributed to inadequate documentation provided by applicants.</p>	<p>The highlighted issues could be effectively addressed by helping applicants get a better understanding of the application process through online how-to guides and physical helpdesks at its offices.</p> <p>For instance, the Ministry of Environment, Forest and Climate Change has a detailed how-to guide on their portal for applicants applying for the service – “Environment Impact Assessment Clearance”</p>
<b>Commercial Tax Department</b>	<p>While the department scores 100% in approval rate and SAKALA adherence, its portal where the service is hosted requires considerable improvement in areas such as information security, application request tracking and availability of information in Kannada.</p>	<p>On application status tracking, the portal could emulate features available in Haryana State Portal and information security features of Goa State Portal (see details in the subsequent part of the section)</p>

State Line Department	Observations	Recommendations
<b>Karnataka State Pollution Control Board</b>	<p>Department has low score for red category services on SAKALA timeline adherence which is primarily due to higher scrutiny required for such applications.</p> <p>However, for green category, the department officials attributed low SAKALA adherence to back and forth on inspection observations and submission of inadequate supporting documents by applicants.</p>	<p>Andhra Pradesh ensures delivery of consent services to industry more than 3x times faster than KSPCB (see section 5 for details). They are able to do so because:</p> <ol style="list-style-type: none"> <li>1. Consent services are end-to-end online with minimal manual intervention (consent orders are digitally signed and sent to the applicant)</li> <li>2. The online system and the enabling processes have ensured that the timelines for obtaining consent has been reduced from 45 to 21 days for red category industries, from 21 to 15 days for orange category industries and from 15 to 7 days for green category industries</li> <li>3. There is an auto-renewal and self-certification process system for obtaining consent for continuing operations for industries in the green category</li> <li>4. Inspections are done based on a computerized risk-based model</li> </ol>
<b>BESCOM</b>	<p>Department's comparatively low approval and adherence rate has been attributed to following reasons:</p> <ol style="list-style-type: none"> <li>1) Mis match of information submitted by applicants such as address, construction stage, bore size etc.</li> <li>2) Rejection due to nonpayment of applicant fees, non-submission of supporting such as building</li> </ol>	<p>Applicants could be helped by getting a better understanding of the application process through online how-to guides and physical helpdesks at the department's offices.</p> <p>For instance, the Ministry of Environment, Forest and Climate Change, Government of India, has a detailed how-to guide on their</p>

State Line Department	Observations	Recommendations
	<p>photo, NOCs from other department</p> <p>3) Submission of applications in wrong jurisdiction</p>	<p>portal for applicants applying for the service – “Environment Impact Assessment Clearance.”</p>
<b>Labour Department</b>	<p>Labour department’s NeSDA assessment score is consistently low primarily due to observations below:</p> <ol style="list-style-type: none"> <li>1) Users are unable to effectively track the status of their requests and obtain timely updates</li> <li>2) Non-availability of website content in Kannada language</li> <li>3) Non-availability of a feature to log complaints/grievances and provide feedback</li> <li>4) Inadequate information security</li> </ol>	<p>The portal could emulate features of application tracking from Haryana State Portal and information security from Goa State Portal (see details in the subsequent part of the section)</p>
<b>Drug Control Department</b>	<p>The department’s website scores low on information accessibility and ease of use, especially the portal for drug manufacturing license. Users are also unable to effectively track the status of their requests Information security measures need considerable improvement</p>	<p>The portal could emulate features from Meghalaya State Portal such as multiple navigation panes, an effective search function and sitemap for finding the right information without much difficulty.</p>
<b>Directorate of Municipal Administration</b>	<p>Processes and procedures requiring multiple interactions with associated line departments is often cited as a reason for delays resulting in low SAKALA adherence. Multiple interactions owing to inspections and compliance with inspection observations is also seen as contributing to the delay. It should be noted here that one service is end-to-end offline.</p>	<p>An intelligent system for approval of building plans could improve SAKALA adherence. Similar to the system AP has developed for approval of factory building plans. Self-certification and simplified inspections, helping applicants to get a better understanding of the application process through online how-to guides and physical helpdesks could go a long way in addressing these issues.</p> <p>For instance, the Ministry of Environment, Forest and Climate Change, Government of India, has</p>

State Line Department	Observations	Recommendations
		a detailed how-to guide on their portal for applicants applying for the service – “Environment Impact Assessment Clearance.”
<b>Registrar of Co-operative Societies</b>	The manual touchpoint in the process (physical verification of documents submitted and any back-and-forth on these documents) often contribute to the delay. The web portal also needs considerable improvement on information accessibility, ease of use and ability of users to track the status of their requests.	Enhancing web-portal to make it more user friendly and introducing a self-certification or notary-verification process for checking the veracity of documents submitted could help address the observed issues.
<b>Bangalore Development Authority (BDA)</b>	Department website needs considerable improvement in terms of information accessibility, ease of use, and information security.	The department’s portal requires a complete overhaul to enhance information accessibility and user friendliness. The portal could emulate features of accessibility from Gujarat State Portal, information availability from Kerala State Portal, application tracking from Haryana State Portal and information security from Goa State Portal
<b>Revenue Department</b>	Delay in processing applications attributed to multiple interactions involved with other concerned department officials.	Reduction of manual touchpoints could help. For instance, applicants have to submit a physical copy of notarized affidavit to DC/Taluk case worker. Integrating online service delivery with other concerned departments could help.  Integrating online service delivery with other concerned departments could help.

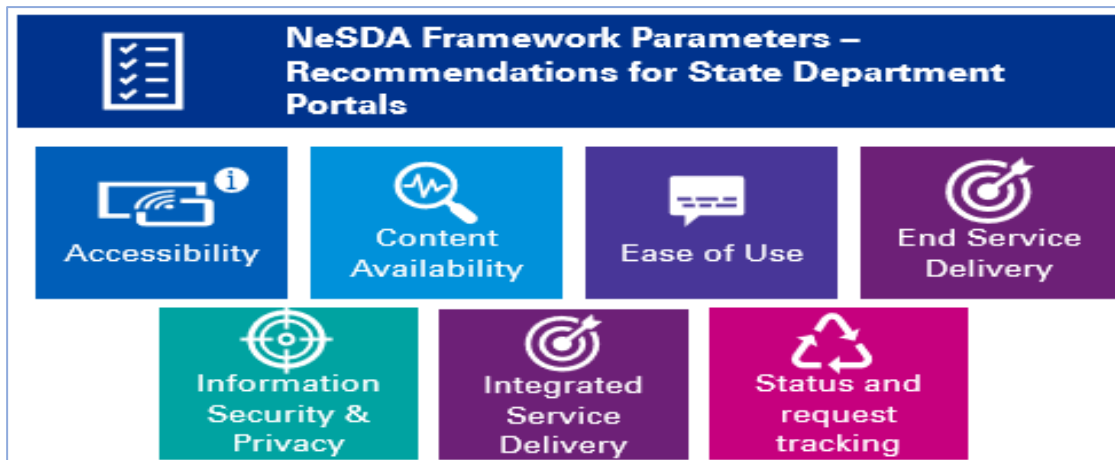
State Line Department	Observations	Recommendations
<b>Karnataka Fire &amp; Emergency</b>	Inspection noncompliance by applicants and multiple interaction with other line departments were primary reasons for these delays. Services delivered by departments still had manual interventions and offline interactions.	NOCs linked to an intelligent building plan approval system (such as AP's system for factory plan approval), self-certification and centralized, risk-based inspections could help.
<b>Department of Legal Metrology</b>	Interactions with department officials revealed that inadequate process knowledge, inadequate supporting documents and inspections were primary reasons for delays and rejections.	Department should ensure online availability of checklist, procedures and timelines. Integrate features to provide users timely updates on the status of their applications.
<b>Karnataka Industrial Area Development Board</b>	Inspections and ensuing back and forth on compliance of inspection observations are often cited as the reason for delays. Supporting documents are still being submitted through offline modes in many instances. Central tendency measurement for the applications processed indicates department on average requires more than 7x of the sanctioned time for land allotment and 16x of the sanctioned time for BP approval.	In Andhra Pradesh land allotment is streamlined owing to the intervention of the State's Single Window System, availability of up-to-date information on land bank, and online land allotment system. Karnataka could emulate these practices. In regards building plan, KIADB could emulate AP's system for factory plan approval (see recommendations for Factories and Boilers department)
<b>Bruhat Bengaluru Mahanagara Palike (BBMP)</b>	Primary reasons observed for delays were due to inadequate supporting documents submitted by applicants, non-compliance with building by laws, wrong jurisdiction, lack of submission of original documents. Interactions with officials also revealed that offline submission of documents is still prevalent. Also, update to users, on the status of their applications, are provided intermittently i.e., on case-to-case basis.	The department has multiple applications that do not talk to each other making applications for related services time consuming. The online services are also not easy to use and could emulate Meghalaya State Portal on ease of use.  Intelligent system for approving of building plans (like in AP; see recommendation for Factories and Boilers department), self-certification and risk-based

State Line Department	Observations	Recommendations
	<p>For occupancy certificate and commencement certificate only, partial data (for 4 out of 10 zones) was made available by the department. For occupancy certificate issuance department takes more than 27x, for commencement certificate issuance more than 9x of the sanctioned time. NeSDA score are not considered due to very low rate of adherence.</p>	<p>inspections could go a long in ensuring timely service delivery.</p>

As an immediate actionable there are services namely **Approval of Boilers, Certificate for recognition as Boiler / Boiler Component manufacturer, and Change of Property Ownership** these are currently end-to-end offline and should be made available online for the users.

For the rest of the services which has been assessed on the below depicted NeSDA assessment parameters, subsequent section provides overall action plan and recommendations across all these below parameters for these services to improve their efficiency and to offer better stakeholder connect.

**Figure 101 Parameters for NeSDA Recommendation**



1. **Accessibility:** This indicator is related to the availability of multiple navigation routes for services and information, availability of features for users to create personal login on the portal, availability of explicit information on compatible browsers and best screen resolution, listing of the State department portal and its services in National Government Services Portal (NGSP) and availability of features to enable access for people with physical disabilities among others.

To improve user perception and participation, the following recommendations are made:

- Web portals should be usable, accessible, well coded, and mobile-device-ready.
- To improve user accessibility & participation, mobile applications for providing information and availing services of portal should be available.
- Adherence to W3C, GIGW compliance displayed clearly on the portal homepage.
- Portals should be multi device compatible. Being designed using auto-format to adjust to various mobile devices such as tab, iPad, mobile phones etc.

**Case in Point:** Gujarat state portal has adopted multiple good practices, some of the key practices that could be replicated by Karnataka State Departments portals to improve accessibility are:

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#### **Gujarat State Portal**

(<https://gujaratindia.gov.in/>)

- State portal and services are also accessible through National Grievance Services Portal (NGSP) portal (<https://services.india.gov.in/>) to **facilitate multi-nodal accessibility**
- Users can create a **profile and login** to the portal, along with a **Single Sign on feature** to sign in through an integrated authentication initiative
- **Key call center nos.** are provided in the portal making reaching out for assistance or further information simpler
- **Installable mobile applications** are available that provide information and allow availing of portal services

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Source: NeSDA Report, 2019



2. **Content Availability:** Content availability covers aspects such as the availability of correct information, availability of Statistics about web site usage by users, services information, information about policies of privacy and open data, availability of Search Engine Optimization technique for better content rating, among others.

To enhance user satisfaction and participation, the following recommendations are made:

- Web site content should be made available in Kannada and English.
- Web sites should be easy to find in top search engines. Hence, it should be optimised by “keywords” so that its visibility increases, and people know about the services provided.
- To enhance user satisfaction, provision may be made for calling feedback regarding eServices & share results of user feedback.
- There should be site maps in every portal along with information manual and help desk number to access the services easily.

**Case in Point:** Kerala state portal has adopted multiple good practices, some of the key practices that could be replicated by Karnataka State Departments portals to improve content availability are:

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### **Kerala State Portal**

(<https://www.kerala.gov.in/>)

- Dedicated sections providing list of State Departments with contact details of Ministers & Senior officials along with list of Districts **officials with contact details**
  - Availability of information of last **updated timestamp** & last updated timestamp on each page of the portal as of current year
  - Portal follows the Open Data policy, publishing Government data for public use. Also uses **Search Engine Optimization** technique for better content rating
  - Information on availability of features to receive non-service SMS alerts and confirmations to users **about portal activities**
- 

*Source: NeSDA Report, 2019*

3. **Ease of Use:** Ease of use covers indicators related to the existence of a separate 'Contact us' section on the Portal, portal availability on different web-browsers, availability of multiple navigation routes in the portal for services and information, disclosure of service delivery timelines on the website, among others.

“Ease of Use” significantly **influences users’ satisfaction, their perception on benefits of the system and subsequently their intention to use the system, the following recommendations are made:**

- Service delivery portals should have facilities to log Grievances & Complaints on the portal itself.
- Availability of multiple navigation routes in the portal for services and information enhances accessibility and ease of use for citizens to leverage department online services.

**Case in Point:** Meghalaya state portal has adopted multiple good practices, some of the key practices that could be replicated by Karnataka State Departments portals to improve ease of use are:

## Meghalaya State Portal

(meghalaya.gov.in)

- Presence of **Sitemap** and multiple navigation routes for services & information
- Dedicated sections for 'Help', 'Contact Us' and '**What is New**' for ease of citizens
- Availability of '**Search**' feature on the portal and information about compatible browsers & optimum screen resolutions
- Portal available across **multiple front-end** tools (IE, Chrome, Firefox etc.)

*Source: NeSDA Report, 2019*

4. **End Service Delivery:** End Service Delivery measures the user's satisfaction with faster delivery of end services, elimination of manual processes, reduction of time/manual effort to obtain a service. It covers aspects such as whether end services are available online or available upon visit to respective department, whether service delivery timelines are published on the website and whether manual processes have been completely done away with.

Therefore, to improve the performance of respective portals, the following recommendations are made:

- Use of Digital tools like Digi-Locker to deliver services like certificates, personal identification id, etc.
- Use of Government cloud account by officers to verify the documents of citizens for all services.
- Wherever possible do away with submission of manual documents

**Case in Point:** Telangana state portal has adopted multiple good practices, some of the key practices that could be replicated by Karnataka State Departments portals to improve end service delivery are:

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**Telangana State Portal**

(<https://www.telangana.gov.in/>)

- End service delivery is available through **multiple modes** i.e., email, online and is downloadable
- Service delivery **timelines published** on the website
- Manual provision of services have mostly been done away by the State for few services
- **Reduction of time/manual effort** to obtain a particular service for citizens

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*Source: NeSDA Report, 2019*

5. **Information Security and Privacy:** The parameters evaluated hold significance in developing a robust and secure service delivery portal, a portal that users can trust, is simple to use and does not allow any threats to user data.

These provisions increase the trust of citizens in service delivery, which in turn **increases adoption and helps improve reach and coverage; the following recommendations are made:**

- Service delivery portals should be secured through incorporation of HTTPS protocol and/or third-party security alliances. This would increase users' trust in the service delivery portal.
- Disclaimer and Privacy policy must be clearly stated on all department portals to make users aware of the purpose of collection and usage of their data and to maintain integrity of data transactions.
- To improve user friendliness and to assure citizens of the safety of their data, password status alerts and password reset facility must be enabled for users.

**Case in Point:** Goa state portal has adopted multiple good practices, some of the key practices that could be replicated by Karnataka State Departments portals to improve Information security and privacy are:

- 
- Goa State Portal** (<https://www.goa.gov.in/>)
- Portal hosted on **HTTPS protocol** and assessed by TPA for online security
  - Clear indication of online security measures implemented on the portal through HTTPS, symbols for third party security alliances etc.
  - Password **recovery and reset** facility are available for the user
  - Clear Indication of **W3C adherence** of the Portal on the Homepage
  - Availability of **copyright Statements** on the Portal
- 

*Source: NeSDA Report, 2019*

6. **Integrated service delivery:** Integrated service delivery covers aspects such as whether the website allows multiple channel access for services at different levels, whether service specific content is integrated with data from dependent Departments/data sources and auto populated while submitting service application details online, among others.

This parameter **plays an important role in offering services to citizens through an integrated approach** which leads to better cooperation between Government agencies and engagement with users.

- Common integrated approach is required across concerned line departments and between all hierarchical levels to provide integrated services to citizens.
- Innovative processes and mechanisms for service delivery, and user engagement as well as empowerment are essential, to make services inclusive and accessible to all groups in the society.

**Case in Point:** Rajasthan state portal has adopted multiple good practices, some of the key practices that could be replicated by Karnataka State Departments portals to improve Integrated Service Delivery are:

- 
- Rajasthan Services Portal** (emitra.rajasthan.gov.in/)
- Services can be availed **without the need for a physical touch** point for document submission and verification
  - Mandated that all applications are **submitted online**
  - Single Sign on /Unique ID (**Aadhaar**) **sign in**
  - Availability of feature to submit service forms online (PDF or web based)
  - Single **integrated payment gateway** for all channels
- 

Source: NeSDA Report, 2019

7. **Status and Request Tracking:** Status tracking of service request raised by citizens includes the ability to obtain timely information on the status of the application, availability of obtaining such updates via SMS and facility to log complaints or provide feedback. Also covers aspects such as existence of a web page providing helpdesk, online support, and call centre for users, availability of information about help line for issues regarding online payments through webpage, SMS alerts for services updates, Information on availability of features to alert the users on each stage of Service Life cycle and Grievance and users getting feedback on their complaints through email or calls. This parameter plays **a pivotal role to increase satisfaction among the citizens about the Government's service delivery, there by fostering active citizen participation. To enable the same, the following recommendations are made:**
- An online provision which enables automatic tracking of service requests is recommended. The facility should be accessible from anywhere across the

web, easy to use, and reduce the issue/request resolution time which increases overall productivity.

- Premium SMS services could be offered as an optional value-added service for applicants to get SMS alert and automatic updates on their mobile for their application status at every stage.

**Case in Point:** Haryana state portal has adopted multiple good practices, some of the key practices that could be replicated by Karnataka State Departments portals to improve Status and Request Tracking are:

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<b>Haryana Services Portal</b>	<ul style="list-style-type: none"> <li>• Availability of <b>Ticket / Complaint Number</b> for status tracking and future follow-ups</li> </ul>
(https://www.haryana.gov.in/)	<ul style="list-style-type: none"> <li>• Availability of feature to <b>track Service Applications/</b> Requests online</li> <li>• Service <b>update alerts sent through SMS</b> also web page provide help desk, online support, and call center for users</li> <li>• Availability of Information about helpline for <b>issues regarding online payments</b> through web page</li> </ul>

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*Source: NeSDA Report, 2019*

Following action plan is suggested to be adopted for each of the above discussed parameter recommendations and across all the concerned line departments service delivery portals.

**Figure 102 Action Plan for State Line Department Portals**



### Accessibility Parameter – Action Plan for State Department Portals

- Service link provided should be listed in State Department portal or National government services portal.
- Service should be available both in English and Kannada.
- Contact Information of Government officials/ agency responsible for the provision of specific online services/queries should be listed on the portal.
- Separate 'Contact us' section should be available on the portal.
- Downloadable forms for provisioning of services which cannot be submitted online should be available on the portal.
- Multiple navigation routes for services and information (like A to Z services Index, Category wise service groups, etc.) to be provided on the portal.
- Feature for users to create personal login profiles or sign in through an integrated authentication initiative such as Aadhaar is to be provided on the portal.
- Facility for users to register/log in online is to be provided on the portal.
- For registered users, the provision for the user to check details of previously availed services, transaction history etc. is to be made available on the portal.
- Website should be designed using auto format to adjust to various mobile devices like tab, iPad, mobile phones etc.
- Information about compatible browsers and best screen resolutions is to be provided on the portal.
- The portal should support audio and video playing.
- The portal should be compliant with matrix of Guideline for Indian Government Websites (GIGW)
- The number of transactions should be displayed on the portal.





## Content Availability Parameter – Action Plan for State Department Portals

- Facility for user to provide feedback/comments regarding e-Services should be available on the portal.
- Information about results of user feedback about online services should be displayed on the portal.
- Separate section for Help and FAQ to be provided on the portal.
- The Site map is to be made available on the portal.
- Information of last updated time-stamp is to be displayed on each page of the website.
- The website should have relevant and updated contents.
- Statistics about website usage by users (no. of visitors/average time spent per visitor, etc.) should be displayed on the portal.
- Statistics about transaction count of services availed by users is to be displayed on the portal.
- Information about how to avail electronic/digital signature facility for availing the services should be provided on the portal.



## Ease of Use Parameter – Action Plan for State Department Portals

- Service application forms should be downloadable online.
- eServices should be available within two-clicks from homepage.
- A What's new section which details the changes in the website should be provided on the portal.
- Website should be easy to find in top search engines.
- Procedures describing how to fill and submit downloadable forms for provisioning of services (How-to Guides, Audio/Video Presentations etc.) should be available on the portal.
- Search feature should be provided on the portal.
- The website should be available on different web-browsers.
- The website should provide for complaints, resolutions etc. on various aspects of the e-service provided.
- The website should have built-in facility to populate content relevant to user's recent activity/interest.
- The Department/service portal should have a defined internal work-flow to process a service request.
- The user manual should be available to guide the users on the portal



### End Service Delivery Parameter – Action Plan for State Department Portals

- End service should be available through email, online (downloadable).
- End service should be available upon visit to respective department/concerned office etc.
- OTP facility should be available for user authentication during final service delivery.
- Service delivery timelines should be published on the website.
- Manual provision of services should be completely done away by the State.



### Information Security & Privacy Parameter – Action Plan for State Department Portals

- Mobile alerts for unauthorized access to user profile, password changes etc. are to be introduced on the portal.
- The web page should be assessed by Third Party Auditor (TPA) for the online security.
- Clear indication of online security measures implemented on the webpage through HTTPS, Lock Symbol on the browser, symbols for third party security alliances etc. is required on the portal.
- Clear Indication of W3C Compliance of the webpage is required on the Homepage.
- The personal data of the citizens should be safeguarded through the security policy of the Government
- The webpage should mandate two factor authentication for username & password.
- The user should be intimated by email on password expiry, reset, change in password, change in user profile etc.



### Integrated Service Delivery Parameter – Action Plan for State Department Portals

- Feature to submit service forms online (PDF or web based) should be provided on the portal.
- Facility to make Online payments should be available on the portal.
- Digital signature facility should be available on the portal.
- The website should allow multiple channel access for services at different levels (registration and application on website, payments on mobile etc.).
- Single payment gateway for all channels should be provided on the portal.
- The service should be availed without the need for a physical touch point for document submission and verification and mandate that all applications are submitted online.
- Single Sign on/Unique ID(Aadhaar) sign in should be provided on the portal.
- The available citizen services should be linked to Digital Locker.
- Facility to make online payment towards services availed on webpage using mobile device should be provided.
- The webpage should provide for various payment options like credit, debit, cash card, internet banking, mobile wallet, specific payment methods such as Rupay, BHIM etc. for availing a service.
- The webpage should be integrated with social media Apps like Twitter, Facebook etc.
- Service specific content should be integrated with data from dependent departments/data sources and auto-populated while submitting service application details online.
- Mobile application should be available for each of the services



### Status and request tracking Parameter – Action Plan for State Department Portals

- Feature to track service applications/requests online should be provided on the portal.
- Facility to log grievances/complaints should be provided on the portal.
- Ticket/Complaint Number for status tracking and future follow-ups should be provided on the portal.
- Service update alerts should be sent through SMS.
- Availability of features to alert the user on each stage of Service Life cycle and Grievance/Complaints (Service Request Receipt, Status Update, Service fulfilment etc.) through SMS or Calls should be introduced on the portal.
- The user should get feedback on their complaints like email, call back, etc.
- Information about helpline for issues regarding online payments through webpage should be provided on the portal.
- The webpage should provide for helpdesk, online support and call centre for users.

Government of India has developed standards and guidelines for various aspects of online service delivery (<http://egovstandards.gov.in/>). Adherence to these standards shall increase satisfaction among the citizens about the Government's service delivery, there by fostering active citizen participation, increasing the trust of citizens in any Government service delivery, which in turn will increase adoption and helps improve reach and coverage. **Some of the standards that may be adopted as quick wins are as below:**

- Adherence to W3C, GIGW compliance for all portals.
- Adherence to ePraman, as a mark of security assurance.
- Standardisation testing and quality certification (STQC) certified portals for security compliance.

## 6.2. For Functioning of Investor Business Reforms

Recommendations for functioning of investor related reforms is suggested based on the feedback received from industry interactions. Same had been categorised under categories namely functioning of single window system, industrial approvals & land allotment and support provided for MSME. Details are listed as below:

### 1. For Efficient Functioning of Single Window System:

- KUM and regional DICs need to function more cohesively. While investment ticket sizes of KUM and DICs vary significantly, KUM could help DICs in adopting leading practices, streamlining their processes and bringing their services online. The latter becomes especially important given that DICs are mostly offering their services through offline mode. Therefore, it could help to bring both KUM and DICs on a single, online platform to work in an integrated and a seamless manner. For instance, emulating AP's single window, Karnataka could adopt one portal, one email id and one number approach for catalyzing investments across the State.
- KUM should provide investors with a unified access to multiple regulatory authorities by liaising with all concerned line departments and taking responsibility for obtaining all necessary clearances in a time-bound manner (in other words ensuring strict adherence with SAKALA timelines). Further, by integrating eBiz portal with all concerned line department portals, KUM could provide all these clearances without any physical touchpoints. For instance, AP's Single Desk Portal helps investors to obtain more than 39 clearances/approvals from 19 line-departments without any physical touch points. Similarly, UP's Nivesh Mitra has implemented stringent mandates such as 'One Time Query within 7 days of application received' and 'Application to be received by Nivesh Mitra Only' & 'mandatorily digitally signed NOC issuance'.

- KUM's ebiz portal could deploy a chatbot or information wizard to ensure that investors get a quick view of all the clearances/NOCs that are relevant to their organization, industry and location. For instance, Kerala's Single Window has a chatbot to guide investors and AP's Single Desk Portal has an information wizard for this purpose.
- Business facilitation rules (such as SAKALA) could be strengthened to provide monitoring and facilitation agencies such as SAKALA mission more teeth in the form of powers to perform audit of line departments to assess adherence with SAKALA timelines and the challenges thereof; levy and collect penalties from line departments for non-adherence; and take appropriate action based on investor grievances pertaining to specific line departments.
- On the issue of investor grievances, KUM should provide a centralized mechanism to address all grievances, concerning all line departments, of investors that have gone through KUM/DIC. eBiz portal could be effectively utilized as a channel for investors to record their grievances without any physical touchpoints (detailed recommendations for eBiz portal is provided in the subsequent section). For instance, AP's Single Desk Portal offers a single form for grievance redressal across multiple line departments. Additionally, KUM could provide investors with a hotline, backed by a dedicated call center, to help address complex investor queries.
- KUM/DICs should also proactively reach out to investors from time-to-time to understand their issues/challenges. For instance, AP's Single Window has a Governance Cell that proactively reaches out to investors for feedback and works with line departments on process improvements to address their issues/concerns.
- Single window meetings, at the district level, must be conducted regularly by providing at least one week notice to all the concerned parties, including local industry associations, with identified agenda points.
- Sub-committee meetings of DICs must be held regularly in industrial consultation and should be utilised for agenda setting of single window meetings.

- Procedures and the minutes of all the district single window meetings must be available on DIC website and notice board within 2 days of conclusion of such meetings.
- Regular updates must be provided for an applicant digitally once every two weeks to keep them appraised of the progress.
- DIC premises could sport display notice boards/circulars to advertise its functions, investor services, SAKALA timelines of these services and information on nodal officers at respective line departments who will help facilitate timely service delivery.

## **2. For Efficient Industrial Approvals and Land Allotment:**

- In order to ensure that any delay in land allotment does not adversely impact the projects feasibility, state government could consider capping the escalation cost levied by KIADB/KSSIDC at the time of execution of lease cum sales agreement (LCSA) at a reasonable percentage of the indicative allotment rate.
- In order to strengthen the state industrial approvals process and ensure no delays in awarding of NOCs/approvals to investors. A system could be put in place where all the applied approvals are considered deemed approved after mandated SAKALA timelines.
- In cases of land conversion required in notified nonindustrial areas in the state, a process of automatic conversion of agricultural land for industrial purposes could be considered.
- Number of empanelled architects/engineers with state institutions for more than 2 acres of land are primarily in Bangalore, it is suggested that such empanelment must be increased to include local competent architects/engineers from every district.

- Land allotment screening committee meeting must be regularly held at district level and taluk level. Minutes of all such meetings must be made available by state institutions leading the meeting i.e. KIADB, KSSIDC etc.
- Inadequate bandwidth by KIADB development officers has been cited by investors as key reason for delays in inspections/approvals. Thus, appropriate increase in staffing of KIADB development officers is suggested to ensure availability of bandwidth.
- State administration should strengthen core and trunk infrastructure including connecting roads, approach roads, truck lots, water and underground drainage, effluent treatment plant, common treatment plant, parking bays etc. in industrial areas of the state.
- Once land allotment by state institutions like KIADB and KSSIDC is done, State single window system should facilitate Khata Transfer as well avoid ambiguity and delays in allotment.
- User interfaces for department website providing industrial approvals (e.g. KSPCB, KIADB, ESSCOMs etc.) must be made user friendly and content should be available in Kannada specifically for KSPCB XGN software.
- Land bank information provided by state institutions must be updated every month with a display of time stamp to ensure it captures and reflects the on-ground realities of allotted lands.
- Land allotment process by any of the state institutions must be undertaken only after development works (such as approach roads, plinth etc.) are duly completed.
- Consent fees levied from investors must be linked to category of business rather than just the value of investments.
- A recent NITI Aayog report observed that average time taken to get all the construction related approvals in Karnataka is 140 days and similar results have been found out from this evaluation detailed in above sections. To improve this scenario, state can look to further refine its SAKALA timeline and process efficiency by adopting the Hong Kong approach (detailed below) which allows just 9 to 10 Weeks whereas Karnataka allotted time line is more



than 24 weeks. Adoption of below process efficient approach could speed up the process of construction permits in the state by three times.

Construction Permits – Karnataka vs Andhra Pradesh vs Hong Kong				
Karnataka (SAKALA Timelines)	In Days	AP (In Days)	In Days	Honk Kong (Rank 1) <small>WB Doing Business</small>
Submit online Common Application Form along with requisite building permit fees and drawings to obtain building sanction plan	30	30	45	Obtain approval by submitting applications to the One Stop Center
Submit online notice for building plan approval and get Commencement Certificate	12	NA	1	Receive inspection by Building Dept. on foundation strata
Submit notice of completion, receive final inspection & obtain Fire NOC	60	15	1	Request and receive inspection on the superstructure construction
Obtain completion/occupancy permit	30	8	2	Receive audit inspection for Building Department and submit application project competition
Request water and sewer connection approval and inspection	42	7	18	Obtain relevant certificates through the One Stop center
			1	Receive joint & final inspection of licensing authorities; Obtain Water & Sewerage connection
<b>Time Taken</b>	<b>174 Days</b>	<b>60 Days</b>	<b>69 Days</b>	

### 3. For Enhanced MSME Support:

- In February 2020, the Ministry of Corporate Affairs (MCA) introduced SPICe+ – an integrated Web form offering 10 services by 3 Central Government Ministries & Departments (Ministry of Corporate Affairs, Ministry of Labour & Department of Revenue in the Ministry of Finance) to help ease the process of establishing a new business for entrepreneurs. The Government of Karnataka could consider integrating some of its own services on the portal to help entrepreneurs. For instance, Maharashtra has integrated the “professional tax registration” service offered by its Department of Goods and Services Tax.

- KUM/DICs could provide a dedicated single window system for MSME start-ups to act as a one-stop-shop for securing all necessary NOCs/clearances. All these clearances could be facilitated through eBiz portal without any physical touchpoints, thereby enhancing the ease of starting a business for entrepreneurs.
- Given the COVID-19 pandemic, increasingly MSMEs are facing a cash crunch due to delayed payments from buyers. In order to address this, the Government of Karnataka could consider one of the recommendations of *UK Sinha Expert Committee on MSMEs* on increasing the number of MSE Facilitation Council (MSEFC) and strengthening them with required manpower to monitor delayed payments to MSMEs. The State currently has four such facilitation centres in Bangalore, Belagavi, Kalburgi and Mysuru.
- The Government of Karnataka could also consider cash infusions/incentives and waivers to help the MSME sector tide over the pandemic. For instance, the Government of Andhra Pradesh has provided a waiver on fixed electricity costs for three months to MSME units in the State.
- In case of land allotment, the Government could encourage banks and financial institutions to consider LCSA executed with state institutions as a personal guarantee for availing loans by MSMEs. Currently, investors at our FGDs opined that banks and financial institutions also ask for personal guarantees to avail loans.
- District industries center should undertake exhaustive and inclusive industrial consultation (in form of workshops, conferences, seminars, knowledge exchange etc.) with MSME and SSI representative industry bodies at regular interval. This would develop know how of these units and ensure officials are appraised of on ground situation.

### 6.3. For Functioning of Karnataka Single Window (eBiz) Portal

In this section we detail the recommendations for further improving the functionalities of state's single window portal.

DPIIT has released four editions of its assessment results<sup>19</sup> under the State Reforms Action Plan. It has announced its latest assessment parameters for the next ease of doing business ranking in the country in September 2020 along with the latest rankings. In the latest assessment, i.e., the fifth edition of the exercise, DPIIT has proposed a 301-point State Reforms Action Plan.

The Action Plan is spread across 24 reform areas and seeks to promote sector-specific approach to create an enabling business environment across various sectors in the country. The various sector includes Trade License, Healthcare, Legal Metrology, Fire License/NOC, Cinema Halls, Hospitality, Telecom, Movie Shooting and Tourism.

Juxtaposing our recommendations in preceding sections with the latest action plan released by DPIIT, the table below highlights the immediate actions points to be undertaken under each reform area for state single window portal to plug the gaps and fully implement reforms proposed by DPIIT.

**Table 46 Recommendations for Karnataka Single Window system**

Sl. No.	Area	Immediate Action Points to improve the functioning of State EoDB through eBiz
1	<b>Investor Enablers</b>	<ul style="list-style-type: none"> <li>• Make provisions for publishing of draft business regulation online and invite public comments/feedback on the same prior enactment.</li> <li>• Ensure a GIS-based system provides details on connectivity infrastructure, utility</li> </ul>

<sup>19</sup> <https://eodb.dipp.gov.in/>

Sl. No.	Area	Immediate Action Points to improve the functioning of State EoDB through eBiz
		<p>infrastructure, truck infrastructure for all of the State's industrial estates</p> <ul style="list-style-type: none"> <li>• Introduce a chatbot on eBiz portal to address basic investor queries</li> <li>• Introduce an online grievance handling system for more complex investor queries across KUM and regional DICs on eBiz portal.</li> <li>• Ensure there is a single database of all investor queries received by KUM/DIC across the State and a public dashboard is available that indicates whether these queries were addressed within 15 days</li> </ul>
2	<p><b>Online Single Window System</b></p>	<ul style="list-style-type: none"> <li>• Provide services such as registration/renewals/approval/license for factories/boilers, labour, environment, fire and safety, electricity connection, water connection, and other industry services through eBiz/State single window portal. While the links for these services, including how-to guides for accessing these services are on the eBiz portal, online applications for these services are not through eBiz portal. Users are only directed to the respective department's portal for applying for a specific service. It would be better for investors if the portal could emulate Seva Sindhu model where users can apply for many G2C services</li> </ul>

Sl. No.	Area	Immediate Action Points to improve the functioning of State EoDB through eBiz
		<p>via a single portal. eBiz could be a similar hub for all industry services.</p> <ul style="list-style-type: none"> <li>• Provide an online dashboard that displays statistics across all the aforementioned industry services offered via eBiz portal such as applications received, approved and mean time taken for approval.</li> </ul>
3	<b>Land Information System</b>	<ul style="list-style-type: none"> <li>• Address the issue with the land Information System (LIS) in the eBiz portal. It does not seem to be working adequately.</li> <li>• Provide an integrated land/property related record of ownership and encumbrances through the LIS system <ol style="list-style-type: none"> <li>I. data of land transaction deeds for last 20 years at all sub-registrar offices</li> <li>II. Updated Record of Rights (ROR) at all revenue department offices (date of mutation)</li> <li>III. Data of property tax payment dues for all urban areas</li> <li>IV. Revenue court case data (case number, date of filling, status, parties involved)</li> <li>V. Civil court case data (case number, date of filling, status, parties involved)</li> <li>VI. Integration with Central Registry of Securitization Asset Reconstruction and Security Interest (CERSAI)</li> </ol> </li> </ul>
8	<b>Paying Taxes</b>	<ul style="list-style-type: none"> <li>• Publish a list of all state, municipal and panchayat levies including information pertaining to rates and tariff levied by the state and local bodies.</li> </ul>
9	<b>State Excise</b>	<ul style="list-style-type: none"> <li>• Provide a public, online dashboard for application submission and approval granted for brand registration, label registration, license for local sale, import and export</li> </ul>

Sl. No.	Area	Immediate Action Points to improve the functioning of State EoDB through eBiz
		<p>permit of spirit from state excise. Also provide time taken for approval (Mean and Median).</p>
11	<p><b>Central Inspection System</b></p>	<ul style="list-style-type: none"> <li>• Make available all inspection reports, within 48 hours of the inspection, via the Central Inspection System on eBiz portal. Users must be able to access such reports for at least the last three years. For instance, a similar system available on AP’s Single Desk Portal, provides digitally signed inspection reports across multiple line departments upon keying in a unique inspection ID</li> <li>• Address the issue with the Inspection Dashboard on the Central Inspection System hosted on eBiz portal. It does not seem to be working.</li> <li>• Ensure this Inspection Dashboard not only provides number of inspections carried out by department, but also lists the establishments inspected, name of the inspector/s and date on which the inspection was carried out.</li> </ul>

*All these discussed public online dashboards must be updated regularly (weekly/fortnightly).*

## 7. Annexures

- NeSDA results for each of the service is captured in appropriate excels and detail dummy login service flow has been shared separately online along with Interim Report submitted to KEA.
- Details of all the focused group discussion, in depth interview responses (Line Departments/DIC/KUM) has been shared separately online along with Interim Report submitted to KEA.
- Details of all the data on service applicants received and its detailed analysis files has been shared separately online along with Interim Report submitted to KEA.

## 7.1. Details of the regression analysis

The statistical significance of associations between process efficiency and IT enablement (indicated by NeSDA scores), and between stakeholder connect and IT efficiency were also explored. However, from the sample size, these two associations were not found to be statistically significant (see figures on the next page to obtain a snapshot of the regression analysis). This seems contrary to common knowledge that IT enablement leads to better quality of service and greater timeliness in delivery. In fact, there are many research papers in the secondary domain indicating this correlation. For instance, one paper indicates that IT enablement could improve governance of the public services<sup>20</sup>. Another one highlights that by digitizing the current processes, public administration could expand its opportunities of providing additional services to the citizens<sup>21</sup>. A third paper outlines the relationship between public service quality and e-governance.<sup>22</sup> Therefore, a larger sample size or more data points may be needed to explain the relationship between 'IT enablement' and 'process efficiency,' or for that matter, between 'IT enablement' and 'stakeholder connect.'

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<sup>20</sup> Paper titled: 'Public Service Delivery: Role of Information and Communication Technology in Improving Governance and Development Impact', published by Asian Development Bank, March 2014.

<sup>21</sup> Research Paper titled: "Improving the efficiency of public administrations through business process reengineering and simulation: A case study", Journal name: Business Process Management Journal, Publication date: April 2015.

<sup>22</sup> Paper titled: 'The Impact of E-Government System on Public Service Quality in Indonesia', published in European Scientific Journal December 2017 edition Vol.13, No.35



SUMMARY OUTPUT OF REGRESSION BETWEEN SAKALA ADHERENCE & NeSDA SCORES								
<i>Regression Statistics</i>								
Multiple R	0.03025376							
R Square	0.00091529							
Adjusted R Square	-0.02231924							
Standard Error	0.23351591							
Observations	45							
<b>ANOVA</b>								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	1	0.002148116	0.00215	0.03939	0.843606517			
Residual	43	2.344776328	0.05453					
Total	44	2.346924444						
	<i>Standard</i>							
	<i>Coefficients</i>	<i>Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	0.57493127	0.107467017	5.34984	3.2E-06	0.358203369	0.7916592	0.358203369	0.79165916
NeSDA Score	0.029265	0.147447078	0.19848	0.84361	-0.26809037	0.3266204	-0.268090368	0.32662038

SUMMARY OUTPUT OF REGRESSION BETWEEN APPROVAL RATE & NeSDA SCORES								
<i>Regression Statistics</i>								
Multiple R	0.14247							
R Square	0.0203							
Adjusted R Square	-0.0025							
Standard Error	0.19108							
Observations	45							
<b>ANOVA</b>								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	1	0.03252596	0.03253	0.89088	0.35051313			
Residual	43	1.569931818	0.03651					
Total	44	1.602457778						
	<i>Coefficient</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	0.7877	0.08793563	8.95767	2.2E-11	0.610358834	0.965037034	0.610358834	0.965037034
NeSDA Score	0.11388	0.120649591	0.94386	0.35051	-0.129436423	0.357189757	-0.129436423	0.357189757

## 7.2. Compliance with observations from the Technical Committee

Sl. No.	Observations	Compliance
1	Give the details of procedure followed in Single Window and hurdles there in	<p>Incorporated. Please refer to the following sections and pages:</p> <ul style="list-style-type: none"> <li>• “Executive summary” section and “Other observations” sub-section; pages 21 to 23</li> <li>• “Business reforms in Karnataka” section and “Background” sub-section; pages 105 to 107</li> <li>• “Assessment of KUM/DICs” section; pages 119 to 121</li> <li>• “Recommendations” section and “For functioning of investor business reforms” sub-section; pages 149 to 158</li> </ul>
2	Give the best practices across the Departments and Single Window System	<p>Incorporated. Please refer to the following sections and pages:</p> <ul style="list-style-type: none"> <li>• “Recommendations” section; pages 131 to 160</li> <li>• “Recommendations” section and “For functioning of investor business reforms” sub-section; pages 149 to 158</li> <li>• “Case studies – EoDB best practices” section from 122 to 130</li> </ul>

Sl. No.	Observations	Compliance
3	Give the details of reduction of manual touchpoints by porting the service end-to end.	<p>Incorporated. Please refer to the following sections and pages:</p> <ul style="list-style-type: none"> <li>• “Executive summary” section and “Key observations from the study” sub-section; pages 13 to 16</li> <li>• “Service delivery assessment for State departments” section; pages 35 to 104</li> <li>• “Recommendations” section and “For enhancing process and IT efficiency” sub-section; pages 131 to 148</li> </ul>
4	Clarification about compliance to 672 services	<p>It is understood here that the Technical Committee is referring to compliance with 301 areas identified under State Reforms Action Plan (SRAP). As per the scope of the study, we have only commented on Karnataka’s Business Reforms Action Plan (BRAP). However, we have provided recommendations in section 6.3 on page on page 175 keeping in mind the 301-point SRAP.</p>
5	Provide the analysis of gap, requirements and action	<p>Incorporated. Please refer to the following sections and pages:</p>

Sl. No.	Observations	Compliance
	points for major Industrial services for Best State and Karnataka	<ul style="list-style-type: none"> <li>• “Recommendations” section and “For enhancing process and IT efficiency” sub-section; pages 131 to 148</li> <li>• “Recommendations” section and “For functioning of investor business reforms” sub-section; pages 149 to 158</li> <li>• “Case studies – EoDB best practices” section from 122 to 130</li> </ul>
6	Revise the report as per comments provided by KUM	Incorporated. Compliance against comments provided by KUM included in the subsequent annexure.
7	<p>In the recommendations section include:</p> <ol style="list-style-type: none"> <li>i. AI to be used for land allotment</li> <li>ii. Implementation of call center and grievance redressal system under single window with 24/7 services</li> <li>iii. Online approval to be replicated in other departments similar to BBMP</li> </ol>	<p>Incorporated. Please refer to the following sections and pages:</p> <ul style="list-style-type: none"> <li>• “Recommendations” section and “For enhancing process and IT efficiency” sub-section; pages 131 to 148</li> <li>• “Recommendations” section and “For functioning of investor business reforms” sub-section; pages 149 to 158</li> <li>• “Recommendations” section and “For Functioning of Karnataka Single Window (eBiz)</li> </ul>

Sl. No.	Observations	Compliance
	iv. Intelligent chatbot to be added for prospective investors v. Revision of SAKALA norms	Portal” sub-section; pages 155 to 158

### 7.3. Compliance with observations from KUM

Sl. No.	Reference	Observations	Compliance
1	The sentence starting with “These findings...” on page no. 20	This report is a final outcome of the analysis of the survey data collected during 2016. The comment may or may not be relevant to present context (March 2019 to April2020)	The reference to 2016 Niti Ayog report has been removed in this section. Please refer to the “Other observations” section on page no. 21
2	The sentence starting with the “Services for KUM/DIC....” Page no. 22	In-principal approval is an end-to-end online system	The reference to in-principal approval being offline has been removed. Please refer to “Other observations” section on page 21

Sl. No.	Reference	Observations	Compliance
3	The sentence starting with "Majority of investors" Para 2; Point no: 3	It depicts that major state departments (78%) are accepting offline applications.	The sentence has been adequately modified to indicate that while majority of the services assessed as a part of the study were online, the awareness of this is quite low amongst investors
4	The sentence starting with "The latest ranking.." Para 2; Page 28	DPIIT has evaluated 187 business reforms (reverse mapped to previous year assessment) DPIIT has covered 12 reform areas (In report it is 45 areas)	In case of BRAP 2020, DPIIT has evaluated 180 business reform areas across 12 business regulatory areas. Accordingly, corrections have been made. Please refer to "relevant literature for the study" section; para 2 on page 29
5	Figure 6, page no. 32	Clarity is required on the sentence "No nomination was provided by KUM"	The sentence has been removed from Figure 6. Please refer to "field survey activities and

Sl. No.	Reference	Observations	Compliance
			limitations” section on page no. 33
6	Section 3.6, para 2	As per department portal, the service “Registration of building and other construction workers” is online and not offline	The service was found to be delivered via Seva Sindhu portal and not e-labour portal. Accordingly, the e-service was assessed and corrections made in the ratings and observations. Please refer to section 3.6 “Labour department,” page nos: 58 and 59
7	Section 4 “Business Reforms in Karnataka” and sub-section 4.3.2, “Karnataka EoDB rankings,” page no: 116	It was observed that KUM was considered as the only reason behind fall in the ranking. State has scored 100% in the implementation score but feedback methodology which comprise of many gaps, were not	The section on assessment of KUM/DIC is decoupled from “Karnataka EoDB Ranking” section. This way readers will not associate the decreased ranking with KUM. Further, it has been elaborated

Sl. No.	Reference	Observations	Compliance
		highlighted. Neither, the awareness gaps are flagged in the findings.	that methodology for BRAP 2020 was different and the scores do not represent reforms implemented, but investor feedback on these reforms. Please refer to section 4.3.3 “Karnataka EoDB Ranking 2020” on page no. 118
8	Section 6.3; “For functioning of Karnataka Single Window (eBiz) Portal;” Pages 152 to 159	Below mentioned reform areas are not related to Single Window System so it should not be part of this section where report is recommending eBIZ to incorporate the same <ul style="list-style-type: none"> <li>— Land administration and transfer of land and property</li> <li>— Change in Land Use</li> <li>— Environment Registration Enablers</li> <li>— Labour Regulation Enablers</li> </ul>	The table; table no: 26; has been changed to include recommendations in only those areas that are pertinent to eBiz portal. Please refer to section 6.3 “For functioning of Karnataka Single Window (eBiz) portal;” Table 26 on pages 155 to 158



Sl. No.	Reference	Observations	Compliance
		<ul style="list-style-type: none"> <li>— Obtaining Utility Permits</li> <li>— Paying Taxes</li> <li>— State Excise</li> <li>— Construction Enablers</li> <li>— Inspection Enablers</li> </ul>	
9	Table for leading practices adopted by other States (Construction permits, labour reforms, environmental reforms)	<p>Karnataka has also implemented the reform and online system is available for the same with timelines notified under SAKALA so it's not clear what to take from this leading practice</p> <p>Karnataka has also implemented the reform and same system is being used as Gujarat so what's the learning from this leading practice</p> <p>Karnataka has also implemented this reform as desired by DPIIT, but it was not highlighted. It is also missing that how</p>	The table on leading practices has been removed since Karnataka has also implemented many of the leading practices

Sl. No.	Reference	Observations	Compliance
		<p>Rajasthan, Maharashtra, and other states are different than Karnataka for this reform. It has been mentioned that 2) " Every commercial dispute greater than Rs. 7 crore fall under the jurisdiction of commercial court" However, this has been amended on March 03, 2018. Now "The Ordinance has brought down the specified value of a commercial dispute from INR 1 crore to INR 3 Lakh"</p>	
10	<p>Section 3.1 BBMP; section 3.2 BDA; 3.15 Directorate of Municipal Administration; 3.16 Registrar of Co-Operative Societies</p>	<p>NeSDA assessment for the parameter of <b>End Service Delivery:</b>  <b>Trade License (BBMP):</b> NeSDA score for this service is 100%, whereas final certificate is also not available online, investor is expected to visit respective Medical Health</p>	<p>All the identified corrections to the NeSDA assessment of services – such as Trade License (BBMP), Tree Cutting (BBMP), Registration of Societies , Possession Certificate (BDA), and Building License</p>

Sl. No.	Reference	Observations	Compliance
		<p>Officer to physically collect the final certificate:</p> <p><b>Tree Cutting (BBMP):</b> NeSDA score for the service is 100%, whereas mode of end service delivery is offline and online both which creates ambiguity or subjectivity. There's no OTP based authentication framework available.</p> <p><b>The Registration of Societies (Registrar of Societies):</b> In the user manual, it is mentioned that "Form of application for the registration of society shall be as per Schedule A of rule 3 of the Karnataka Societies Registration Rules 1961 to be submitted at the counter by one of the subscribers" which reflects the physical touch points in the process</p>	<p>Issuance (DMA) – has been made.</p> <p>Please refer to Section 3.1 BBMP; section 3.2 BDA; 3.15 Directorate of Municipal Administration; 3.16 Registrar of Co-Operative Societies</p>

Sl. No.	Reference	Observations	Compliance
		<p>NeSDA assessment for the parameter of <b>End Service Delivery:</b></p> <p><b>Trade License (BBMP):</b> NeSDA score for this service is 100%, under this category but there is no login id or Aadhaar linked login is provided, neither it requires any email/SMS based verification framework. It is highly unlikely to score 100% on this parameter.</p> <p>Additionally, final certificate is also not available online neither it is digitally signed, investor is expected to visit respective Medical Health Officer to physically collect the final certificate.</p> <p><b>Possession Certificate (BDA):</b> NeSDA score for component is 0%, but this</p>	

Sl. No.	Reference	Observations	Compliance
		<p>service is being provided through Seva Sindhu portal which is Aadhaar linked service delivery framework so it cannot score 0% under this category.</p> <p><b>Building License issuance (DMA):</b> NeSDA score for this service is 100%, but there is no integration with essential services (Such as Fire, AAI, ESCOMs, Water Connection and Labour services) to ensure the service deliver for Building License.</p>	

#### 7.4 Compliance with observations from independent evaluator

Sl. No.	Observations	Compliance
1	Median generally lies between Mean and Mode. However, it is not the case in	In the graphs/tables on SAKALA timelines, values for only mean are shown. Mode is not computed or

Sl. No.	Observations	Compliance
	the information presented on page 48 and page 52	shown in these tables or figures. However, all values for mean, across all the 17 departments, have been double-checked and corrected, as required. Please refer to section 3, "service delivery assessment for state departments' pages 38 to 121.
2	The study was expected to employ experimental method to generate data. Provide some explanation in this context	Incorporated. A regression analysis of three critical parameters on which departments/services are assessed – such as 'process efficiency,' 'IT enablement' and 'stakeholder connect' – is now included in Executive Summary section, under the heading 'Other observations (inter-departmental analysis and investor perception)', from pages 19 to 21
3	The study is also expected to employ various statistical tools like Correlation and Regression.	Incorporated. Figure 6 in section 2.3 'field survey activities and limitation' on page 36 has been revised to indicate that opinion survey was conducted on a restricted sample of 51 responses gathered from active members of industry associations, instead of KUM applicants, based on KEA's suggestions.
4	Sample size for the opinion survey was supposed to be 120. It is not clear what was the actual sample size was	Incorporated. Figure 6 in section 2.3 'field survey activities and limitation' on page 36 has been revised to indicate that opinion survey was conducted on a restricted sample of 51 responses gathered from active members of industry associations, instead of KUM applicants, based on KEA's suggestions.

Sl. No.	Observations	Compliance
5	The Third Chapter contains large number of diagrams and attempts to provide different aspects in a single diagram. This can be furnished in a tabular format	Incorporated. A table summarizing facts and figures for each department is included at the end of each sub-section of section 3, 'service delivery assessments for state departments,' from pages 38 to 121. Also, all graphs in section 3 have been checked to ensure that numbers are not overlapping each other.

## 7.5 Terms of Reference of the Study

**Terms of Reference for the study on Evaluation of Functioning and Effectiveness of industry related service modules of major Government Departments in promoting investor friendly business environment for industries in Karnataka State (2018-19)**

**1. Title of the Study:**

Evaluation of Functioning and Effectiveness of industry related service modules of major Government Departments in promoting investor friendly business environment for industries in Karnataka State (2018-19).

**2. Department Implementing the Scheme**

Department of Industries & Commerce & Karnataka Udyog Mitra

**3. Background & Context**

India is in a process of rapid transition towards an industrial economy. The new industrial strategy includes promotion of medium and small enterprises along with large industries. The country is on the threshold of major reforms and is poised to become the third-largest economy of the world by 2030. India offers the 3 'Ds' for business to thrive— democracy, demography and demand. Add to that a tech-savvy and educated population, skilled labour, robust legal and IPR regime, and a strong commitment to calibrated liberalization — India is a destination that foreign investors cannot overlook. India's manufacturing sector has evolved through several phases - from the initial industrialisation and the license raj to liberalisation and the current phase of global competitiveness. Today, Indian manufacturing companies in several sectors are targeting global markets and are becoming formidable global competitors. Many are already amongst the most competitive in their sectors.

Make in India is a major new national programme of the Government of India designed to facilitate investment, foster innovation, enhance skill development, protect intellectual property and build best in class manufacturing infrastructure in the country. The primary objective of this initiative is to attract investments from across the globe and strengthen India's manufacturing sector. It is being led by the



Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, Government of India. The Make in India programme is very important for the economic growth of India as it aims at utilising the existing Indian talent base, creating additional employment opportunities and empowering secondary and tertiary sector. The programme also aims at improving India's rank on the Ease of Doing Business index by eliminating the unnecessary laws and regulations, making bureaucratic processes easier, making the government more transparent, responsive and accountable.

#### **Why the ease of doing business matters?**

It essentially lies in the fact that there are important and well-researched linkages between the doing business climate (or the business regulatory environment), job creation, the firm-size distribution in the industry, and the level of economic activity. A poor business environment results in the country failing to realise its true growth potential. It may also result in specialisation that is contrary to the country's comparative advantage.

Doing Business advocates for both regulatory quality and efficiency. It is important to have effective rules in place that are easy to follow and understand. To realize economic gains, reduce corruption and encourage SMEs to flourish, unnecessary red tape should be eliminated. However, specific safeguards must be put in place to ensure high-quality business regulatory processes; efficiency alone is not enough for regulation to function well. Doing Business exposes cases with evident discrepancies between regulatory quality and efficiency, signalling to regulators what needs to be reformed.

Studies have pointed out that merely reducing the time taken to grant approvals for restaurants from nine months to three months, the states will accrue an additional revenue of Rs 38.76 crore, and the sugar millers/distillers will receive an additional revenue of Rs 51 lakh, which could potentially find its way towards payment of dues of sugarcane cultivators. These calculations indicate that by merely

reducing the amount of time for issuing licence, and the government incurs no expense in doing so, there is a significant economic gain. (Pable India Foundation, An Integrated Value Chain Approach to Ease of Doing Business: A Case Study of Sugar, Alco-Bev, and Tourism Business Standard Sept. 2018) Fewer procedures quick approvals and lower levels of minimum capital, for example, are positively and significantly associated with the process of starting a business. Where procedures are more complex or unclear, the likelihood of corruption and illegal practices is also likely to be higher. Further, there are benefits to companies of formal registration, such as greater access to new equipment and a larger scale of operations, which can lead to increased competitiveness and productivity.

Thus, there is high correlation between the business regulatory environment and income per person across time and space indicating the possibility that the improvement in business environment will increase the industrial activity and the per capita income. (EODB An enterprise survey of Indian States 2017 NITI & IDFC p-14).

The performance of the countries on Ease of Doing Business is measured by the World bank annually based on the parameters that affect the industrial environment. Doing Business 2019 measures the performance of the countries based on some standard indicators. A nation's ranking on the index is based on the average of the following indices:

1. **Starting a business** Procedures, time, cost and paid-in minimum capital to start a limited liability company
2. **Dealing with construction permits** Procedures, time and cost to complete all formalities to build a warehouse and the quality control and safety mechanisms in the construction permitting system
3. **Getting electricity** Procedures, time and cost to get connected to the electrical grid, and the reliability of the electricity supply and the transparency of tariffs

4. **Registering property** Procedures, time and cost to transfer a property and the quality of the land administration system
5. **Getting credit** Movable collateral laws and credit information systems
6. **Protecting minority investors** Minority shareholders' rights in related-party transactions and in corporate governance
7. **Paying taxes** Payments, time, total tax and contribution rate for a firm to comply with all tax regulations as well as post-filing processes
8. **Trading across borders** Time and cost to export the product of comparative advantage and import auto parts
9. **Enforcing contracts** Time and cost to resolve a commercial dispute and the quality of judicial processes
10. **Resolving insolvency** Time, cost, outcome and recovery rate for a commercial insolvency and the strength of the legal framework for insolvency

**(Labor market regulation-** Flexibility in employment regulation and aspects of job quality is included in the analysis but is not included in the Score).

India's rank has improved from 100 in 2017 to 77 in 2018 among 190 countries in the world with a score of 67.23 on a 0-100 scale.

#### **Business reforms in Karnataka**

The Karnataka Industries (Facilitation) Act 2002 provides for the promotion of industrial development and facilitation of new investments to simplify the regulatory frame work by reducing procedural requirements and rationalising documents and to provide for an investor friendly environment in the State of Karnataka. It provides for Constitution of State High Level Clearance Committee, State Level Single Window Clearance Committee and District Level Single Window Clearance Committee for consideration of application from entrepreneurs intending to establish industries in the State. Appointment of Karnataka Udyoga Mitra as a Nodal Agency at State Level and the District Industries Centre at Nodal Agency at the District level to undertake investment promotional activities and to render

necessary guidance and assistance to entrepreneurs to setup industrial undertaking in the State.

Karnataka Udyog Mitra (KUM) working under the aegis of Dept. of Industries and Commerce is the “single point of contact” for all investors who are looking forward for setting up businesses and also the nodal agency for implementing initiatives under Ease of Doing Business in the State.

KUM works on the model of a Single Window Clearance mechanism. Karnataka Udyog Mitra will liaise between the organization and the various government departments for assistance in land identification, land allocation, power, water, environmental clearance, etc. to ensure smooth and timely implementation of your projects. The investor has no longer need to go from department to department or wait in line or hop multiple websites for information and services.

Projects with investments between INR 15 to 500 crores, will be cleared by the State Level Single Window Clearance Committee (SLSWCC), chaired by the Minister for Large and Medium Scale Industries, Government of Karnataka. If the investment is above INR 500 crores it will be cleared by the State High Level Clearance Committee (SHLCC), chaired by the Chief Minister, Govt. of Karnataka.

However, to boost the investment process and attract the new investors in competitive markets, it is essential to have a robust automated system wherein businesses can be facilitated with end-to end service delivery by creating smooth transition from receiving an investment proposal to the implementation and operationalization of the project and its after care through adequate monitoring.

In this context, evaluation of the industry related service modules of major Line Departments is taken up here as requested by Karnataka Udyog Mitra. The objective is to understand the effectiveness of these modules in delivering the services to the investors and identify gaps if any to make necessary corrections and reengineering of these services to make them more investor friendly to boost the investment process in the State.

#### 4. Scope of the Study

The evaluation study is mainly a process evaluation. The 55 major services rendered by different Departments are listed for evaluation. The scope of the study is to examine the performance in delivery of these services as per the timeline, the process of delivery, online- offline, the clarity about the services, the problems faced, any additional issues etc. and the suggestions for any changes required. The data is to be collected and analysed for all applications from 1/4/2018 to 30/6/2019. The service delivery is to be assessed against the scheduled No. of days mandatory for the delivery of the service. It should cover the evaluation of both the aspects -service delivery and functional aspects of the service modules. It will also collect the opinion of the investors about the EoDB facilitated by these service modules. The study, based on the findings, will offer the suggestions for further improvement in the procedures.

#### Objectives of Evaluation

The basic objectives of Evaluation are:

1. To study the role of Karnataka Udyog Mitra (KUM) as single window portal and the services offered by it to facilitate the investment process in the State.
2. To examine the status of EoDB in Karnataka State vis a vis other States in India.
3. To analyse the service delivery mechanism, the approval process and the time taken by different departments for the approvals during the study period.
4. To examine the procedures, documents to be submitted to obtain a service – their requirement vis a vis redundancy, & to analyse the time pattern in delivery of services across the Departments/ categories of services, the investor groups, the Start-ups etc.
5. To analyse ease of accessibility, submission of application, access to information on the portal, ease of handling the process, and e- payments across the group of investors and regions.

6. To assess the effectiveness of service delivery, identification of gaps, pendency, online & offline procedures and issues across the Departments and suggest effective mechanism to overcome the gaps and improve the efficiency of service delivery.
7. To examine the impact of service delivery on growth of investment, enterprises and entrepreneurs in the State (Pre & Post Period analysis).
8. To study the models in other States & countries and their application in the State to improve the ranking of the State in EoDB.

#### 5. Evaluation Issues/ Questions

##### I. Assessment of service Delivery Procedure

1. Data collection from line Departments for all applications for each industry service module, and its approvals as per specified period.
  - a. Applications received, approved and rejected- reasons for the same.
  - b. Delivery of service, payment mode - online/ offline
  - c. Document submission- online/ offline/ partial.
  - d. Clarification- online/ offline/ NA
  - e. Status Tracking- online/ offline/ both
  - f. Approval certificate- online/ offline/ both
  - g. Approval Certificate signature (digital/ e-sign/scanned upload etc.)
2. Analysis of the following information for each Department & industry service wise
  - i. Name of the service,
  - ii. Timeline as per Sakala
  - iii. Name of the applicant, Application No. mobile no. e-mail id & address
  - iv. Office, division / circle/ Taluka applied to
  - v. Kalyan Karnataka region vis-a-vis Non-KK region
  - vi. Date of application
  - vii. Date of approval

- viii. Clarifications raised by Dept.- No. of days from the date of application,
- ix. No. of times clarifications raised.

#### **Website specific details**

3. Creation of Login IDs and making online applications for each service to check modules, functionality of website, ease of accessibility, form submission, workflow, ease of applying, document upload, tracking applications, downloading final certificate and other procedural requirements.
4. Analysis of ease of accessibility, submission of application, access to information on the portal, ease of handling the process, workflow, ease of applying, document upload, tracking applications, downloading final certificate and online payments across the group of investors and regions.
5. Analyse interdependence in service delivery across the services in different Departments. Identify correlation between two or more Departments.
6. Examine the extent of overlapping/ non overlapping in procedures /Laws/ rules/ among concerned Departments.
7. Validation and confirmation of the receipt for delivering the Sakala services to the concerned applicants/ entrepreneurs.
8. The number of days spent in getting approvals and compliances, Additional costs incurred for getting any approvals or completing processes beyond officially prescribed fees.

#### **II. Functional aspects of service modules**

- i. Workflow process- end to end application approval.
- ii. Document Storage capacity, document sharing and internal workflow process.
- iii. Help to understand a particular process.
- iv. Compliance to standard browsers (Google, Internet explorer, Mozilla Firefox, safari etc.)
- v. Bilingual support provision for the modules

- vi. Compliance with W3C Standards
- vii. Support to digital signature.
- viii. Security aspects w.r.t. authorisation.

**III. Output & Outcomes (Service delivery and impact on investors).**

- a) Analyse the percentage increase in growth of industries, business/ services in pre and post Sakala period in the State and percentage change/ decrease in time taken for final approvals.
- b) Analyse the service delivery trends across the services and Departments as against the scheduled time period. Identify the services that are provided within the time period and review to what extent the online mode has met the expectations of the investors.
- c) Whether separation of guidelines between Industrial Land approval agencies versus other residential and commercial zoning areas will speed up the land approval process?
- d) Analyse the pendency rate across the services, Departments regions, sectors and investor groups. Start-ups, small investors vis-a vis the big investors, investors within & outside the State & country.
- e) Carry out a regression analysis of services across departments and across services to identify which Departments and services are contributing to the delay period.
- f) The survey of enterprises by NITI Aayog on EoDB (2017) observed that at All India level, the average time taken to get all construction related approvals was around 75 days but in Karnataka it was 140 days, the highest in the country. Examine its validity and reasons for the same.
- g) The report also has noted that the awareness, information and utilisation of single window system is very low across the States. Examine it among the sample investors in Karnataka.
- h) How many business reforms are carried out by the state and what is the gap left. Examine to what extent the service coverage is adequate to ensure increased flow of investments in the State.



- i) Analyse the problems faced by MSME entrepreneurs with regard to procedures, access to and handling of investment procedures across the regions.
- j) Examine whether clear process guidelines are existing covering recent urban legal judgements and challenges to industrial approvals (including small firms-restaurants, clinics, shops, educational institutions etc.)
- k) Review the functioning of the grievance redressal mechanism to address the issues and concerns of the investors and time taken to settle the issues.
- l) The study has to undertake an opinion survey of investors to get feed back about the actual difficulties faced by them in seeking various approvals required for the investment proposal.
- m) What are the perceptions of the entrepreneurs about the business environment in the State?
- n) What are the models adopted in other States & countries and examine the feasibility of their application in the State to enhance the effectiveness of service delivery in the State and increase the flow of investments?

#### **6. Sampling & Evaluation Methodology**

The study is basically an audit/ assessment of processes involved in sanction of different approvals to start an industry/ business. It therefore largely depends on the secondary data collected from the portals/ websites of different departments and the data available in e- governance for these 55 industry related services in about 24 Departments. The study will also apply experimental method to generate the data. Various statistical techniques like correlation, regression to be applied for the analysis of the data.

For the opinion survey of applicants, a sample of minimum 30 applicants each from four divisions in the State to be picked up randomly based on the available information. The total is 120 applicants. A structured questionnaire with limited number of questions is to be used to collect the data from sample applicants.

In depth interviews with the officers of the Departments, Karnataka Udyog Mitra, Federation of Chamber of Commerce and industries and experts in the field to seek their views and suggestions.

**Qualitative data**

FGDs 10	4 @t division level 4 @ district level 2 @ State level	Stakeholders- leading industrial groups, members of chamber of Commerce & Industries, successful entrepreneurs, and other key persons.
IDIs 75	2 from each Dept. involved in the study & officers at Division level, district level and from Udyog Mitra.	Higher level and other key Implementing officers and others concerned.

**7. Deliverables time Schedule:**

The Karnataka Udyog Mitra, Sakala Mission and KEA will provide the necessary information pertaining to the study and also co-operate with the consultant organization in completing the assignment task within the stipulated time period.

It is expected to complete the present study in 3 months' timeline, excluding the time taken for approvals at KEA.

**Table 5: Timelines and deliverables**

a. Inception Report	15 days after signing the agreement
b. Field Data Collection	1 month after the date of work plan Approval*
c. Draft report submission	1 month after Field Data Collection
d. Final report	15 days after approval of the Draft report
Total duration	3 Months

**8. Qualities expected from the Report**

The evaluation report should generally confirm to the United Nations Evaluation Guidelines (UNEG) "Standards for Evaluation in the UN System" and "Ethical Standards of Evaluations".

The report should present a comprehensive review of the Scheme/ programme in terms of the content, implementation process, adequacy, information and access to beneficiaries and the effectiveness of service delivery.

The qualitative data collected through FGD and discussions with the officials should be used in unbiased manner to support or for further analysis of the reflections from the quantitative data. The analysis should provide adequate space for assessing the variations across the regions and social categories. Case studies to be presented to bring out the realities at the household level.

The report should come out with specific recommendations based on adequate field evidence for any modifications in the programme design, content, implementing procedures, and any other modifications to improve the access and impact of the Scheme/Programme.

#### **9. Structure of the report**

The following are the points- only inclusive and not exhaustive- which need to be mandatorily followed in the preparation of evaluation report. The report should be complete and logically organized in a clear but simple language. Besides confirming to the qualities covered in the Terms of Reference, report should be arranged in the following order:

##### **Preliminary Part**

- Title and Opening Page
- Index
- List of acronyms and abbreviations
- Executive Summary- A section that describes the program, purpose and scope of evaluation, research design and methodology, key findings, constraints and recommendations.

### Chapter-1 Introduction and Study design

- **Background-** A section that briefly covers the history or genesis of the sector under which the programme/scheme being evaluated covered. It should give recent fact sheets taken from reliable and published sources and review of the progress of the scheme at Taluka/District level.
- Log Frame theory/ Theory of change
- Objectives and performance of the program - This section includes the stated objectives of the program and the physical and financial achievements of the selected program in the period of evaluation. It should cover the description of the target group, aim of the program, the programme guidelines and method of selection of beneficiaries and the physical and financial achievements.

### Chapter –II Review of literature and Evaluation Methodology

- Review of past evaluation reports and their findings- Theoretical background.
- Evaluation Methodology - This should include research design, hypotheses for testing, evaluation matrix sample design and size, Methodology for data collection and analysis- questionnaire design and pilot test, data analysis.
- Limitations/constraints in the evaluation study.

### Chapter III - Findings and discussion

- Tables and figures are to be used to present results in summary and/or graph format to add clarity to the presentation. In addition to simply presenting the results in a straightforward manner, the author also must provide the readers with his/her interpretation of the results, implications of the findings, conclusions. Each result is discussed in terms of the original hypothesis to which it relates and in terms of its agreement or disagreement with results obtained by other researchers in similar/related studies.
- A detail analysis of Case Studies, and discussions

#### Chapter IV Summary and Conclusions

Chapter V- Recommendations – Recommendations to be evidence based- short term for mid-course corrections & long term for change in program design/ policy change.

#### Annexures

Sanctioned Terms of Reference of the study.

Survey tools and questionnaires

Place, date and number of persons covered.

Table showing details of major deviations, non-conformities, of the program.

#### 10. Study Team- requirements

Sl. No.	Team	Subject Experts Requirements	Experience
1.	Principal Investigator	Ph.D in Commerce/ Management/ Economics is preferable or first class post graduate degree in Commerce/Management /Economics	05 years of experience in field
2.	1 <sup>st</sup> Core team member	First class graduate/ Post graduate engineering degree in Computer Science/ Information technology/ Business analysis/ web designing.	Should also possess a minimum of three (3) years of experience in allied sector projects
3.	2 <sup>nd</sup> Core team member	Postgraduate in Statistics/ MCA with knowledge of Statistical analysis techniques	3 years' experience in data analysis

#### 11. Cost and Schedule of Budget release

The Output based budget release will be as follows-

1. The **first instalment** of Consultation fee amounting to 30% of the total fee shall be payable as advance to the Consultant after the approval of the inception report, but only on execution of a bank guarantee of a scheduled nationalized bank, valid for a period of at least 12 months from the date of issuance of advance.
2. The **second instalment** of Consultation fee amounting to 50% of the total fee shall be payable to the Consultant after the approval of the Draft report.

3. The **third and final instalment** of Consultation fee amounting to 20% of the total fee shall be payable to the Consultant after the receipt of the hard and soft copies of the final report in such format and number as prescribed in the agreement, along with all original documents containing primary and secondary data, processed data outputs, study report and soft copies of all literature used in the final report.

## 12. Selection of Consultant Agency for Evaluation

The selection of evaluation agency should be finalized as per provisions of KTPP Act and rules without compromising on the quality.

## 13. Contact persons:

Shri Pradeep kumar, Karnataka Udyog Mitra Bangalore

Dr. Chaya Degaonkar (ACEO.) KEA, Ph: 9342331301

**The Terms of Reference were approved by the Technical Committee of KEA  
in its 45<sup>th</sup> Meeting held on 10<sup>th</sup> October 2019.**



Prepared by:  
Dr. Chaya Degaonkar (ACEO, KEA)



Sudeephan GA  
Chief Evaluation Officer  
Karnataka Evaluation Authority



**EVALUATION OF FUNCTIONING AND EFFECTIVENESS OF INDUSTRY  
RELATED SERVICES MODULES OF MAJOR GOVERNMENT  
DEPARTMENTS IN PROMOTING INVESTOR FRIENDLY BUSINESS  
ENVIRONMENT FOR INDUSTRIES IN KARNATAKA STATE, 2019-20**

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