Chapter II

Performance Audit and Information Technology Audits relating to Government Companies

2.1 Tourism Corporation of Gujarat Limited

Promotion of tourism in Gujarat with emphasis on the functioning of Tourism Corporation of Gujarat Limited

Executive Summary

Introduction

The Industries and Mines Department (I&MD) of the Government of Gujarat (GoG) is the nodal department for the administration of the tourism sector in Gujarat. Tourism Corporation of Gujarat Limited (Company) was incorporated in June 1975 and was entrusted with the responsibility of development of tourism industry in the state. The performance audit focused on the efforts made by the Company for development of tourism in the state in accordance with the tourism policy of the state and covered the period 2009-14.

Tourist Inflow

The state adopted three-pronged strategy viz., strengthen existing attractions, develop low profile tourism places into attractions and create new attractions, which resulted into increase in tourist inflow from 1.70 crore in 2009-10 to 2.88 crore in 2013-14. Gujarat registered marginally higher growth than all-India average and when compared to its neighbouring state of Rajasthan, the growth rate was higher though in absolute terms (i.e., the total tourist inflow) Rajasthan still attracted higher footfalls. However, the growth of tourism in other two neighbouring states of Maharashtra and Madhya Pradesh was double than that of Gujarat.

Tourism Policy

GoG declared tourism policy 2003-10 aimed at providing services of international standards, creating excellent infrastructure, connectivity and facility to tourists. The Company implemented some of the policy measures like development of event-based tourism, hospitality industry, infrastructure and adventure sports. However, some measures like creation of Vishwagram and Development of entertainment theme park, Indus valley civilisation sites, wayside amenities, sites related to Buddhism, places related to Sardar Patel and eco-tourism were either not implemented or partially implemented.

Government Support

GoG had released grants of ₹1229.25 crore out of which Company spent ₹1025.45 crore and grant amounting to ₹295.07 crore remained unspent as on March 2014. The Company spent only ₹20.82 lakh against the grant of ₹128.50 crore received for promotion of coastal tourism.

Destination Development

The Company had successfully implemented projects at Dwarka, Saputara, Siddhpur, Becharaji, etc. However, the facilities created under Dandi Heritage Corridor and Dandi Destination at a cost of ₹20.43 crore could not be put to use.

Fairs and festivals

While the Company successfully organised various fairs and festivals like International kite festival, Navratri, Rann Utsav, Tarnetar fair, Monsoon Festival etc., the Company had not made any data collection on tourist inflow and impact analysis of economic benefits from the fairs and festivals. Further, it did not conduct any cost-benefit analysis before organising the Rann-Utsav on PPP mode from 2013-14 onwards.

Management of Hotels

The Company operates and maintains 25 hotels (19 self-managed and six leased), 7 wayside amenities and 5 cafeterias. Out of 14 working hotels, only 4 hotels earned cumulative profits, while the remaining 10 hotels suffered losses. The main reasons for losses were attributed to poor occupancy, high fixed cost, non-revision of tariff and no marketing of hotels, etc.

Monitoring and Control

The projects implemented by the Company were monitored by the GoG at regular intervals. But, the end use of the projects was not monitored at GoG level leading to expenditure on some projects becoming unfruitful.

Recommendations

The GoG may consider framing a new Tourism Policy since there has been no new Tourism Policy after 2010. The Company may coordinate its efforts so that assets created are put to use as the Dandi Heritage Corridor and Dandi Destination Development were not being utilised even after an expenditure of ₹20.43 crore. The Company may analyse reasons for continuous losses in certain hotels operated by it and initiate suitable corrective/ameliorative measures.

Introduction

2.1.1 Gujarat is a state in north-western India with an area of 1,96,077 square kilometers and a population of around six crore (2011 census). It is a state having diverse culture with its history extending over 4,500 years from the Harappan civilisation to the British period. The State has some of the great historical and archaeological monuments representing religions of Hinduism, Buddhism, Jainism, Islam, Zoroastrianism (Parsi) and Sikhism.

The State is well connected by road, rail and air and its capital city is Gandhinagar. The state was visited by 11.34 crore tourists including 8.48 lakh foreign tourists during the years 2009-10 to 2013-14, registering a marginally higher growth *vis-a-vis* the all-India average.

Administration of the tourism sector in Gujarat

2.1.2 The Industries and Mines department (I&MD) of the Government of Gujarat (GoG) is the nodal department for the administration of the tourism sector in Gujarat. The role of the I&MD is limited to that of a facilitator. The Tourism Corporation of Gujarat Limited (Company) incorporated in June 1975 was entrusted with the responsibility of development of tourism industry in the State in line with the tourism policy.

To develop and promote tourism as an engine of economic growth, I&MD declared the Tourism Policy for 2003-10 considering tourism as an important economic activity for overall sustainable economic growth, increasing employment generation and optimum utilisation of the tourism potential of the state.

Organisational set up

2.1.3 The Principal Secretary (Tourism) is the administrative head of the Department and is assisted by the Commissioner of Tourism (CoT) who heads the tourism branch of the I&MD. The CoT also acts as the Managing Director of the Company. The management of the Company is vested in the Board of Directors (BoD) consisting of eight members and is headed by the full time Chairman. The Managing Director is assisted in day-to-day functioning by a General Manager and two functional managers for Marketing and Public Relations and two executive engineers. As on 31 March 2014, the Company had 25 hotels, five cafeterias and seven wayside amenities and manned 277 employees.

Activities of the Department and the Company

2.1.4 The activity of the I&MD is focused on policy framing for developing tourism in the state, release of GoI and GoG grants and facilitating land acquisition for implementation of its projects.

The activity of the Company is focused on the overall development of tourism in the state by creating infrastructure, connectivity and providing tourists with facilities in important tourist destinations and religious places. In the development of various tourists destinations, the Company had successfully implemented the projects at Dwarka, Saputara, Siddhpur, Becharaji etc.

Further, the Company upgraded its hotels with modern facilities at Ahmedabad, Dwarka, Junagadh and Saputara for extending better hospitality to tourists. The Company gives a special thrust to 'Event (Festival) based Tourism' and promotes the major events like Kutch Rann Utsav, Kite festival, Navratri festival, Somnath festival, Dwarka festival, Tarnetar fare etc., both within and outside the country.

Scope of Audit

2.1.5 The performance audit covered the period from 2009-10 to 2013-14. The review focuses on the efforts made by the Company to realize the objectives of the Tourism Policy. We reviewed the Company's plan for development of various destinations, creation/ improvement of facilities for the tourists visiting the state, maintenance and management of hotels, cafeterias and wayside amenities and expenditure incurred on advertising and publicity. We scrutinised the records of the Principal Secretary (Tourism), CoT, the records of the project, marketing and finance branches of the Company and 14 working hotels located across the state.

Audit Objectives

2.1.6 We conducted the performance audit with objective to get reasonable assurance that:

- The GoG framed the tourism policy and detailed plans to promote tourism;
- The Company executed the development projects and put them to use;
- The Company effectively marketed 'Brand Gujarat' and its own hotels with efficient management; and
- Monitoring and evaluation was effective.

Audit Criteria

2.1.7 The performance of the Company was assessed against the following audit criteria:

- Tourism Policy of Gujarat 2003-2010 and the incentive schemes;
- GoG schemes guidelines, Gujarat Financial Rules, Government resolutions, and Company's plan for construction/renovation of hotels and cafeterias;
- Agenda and minutes of the BoD and its subsidiary committees; and
- The Advertising and publicity plan of the Company.

Audit Methodology

2.1.8 We explained the audit objectives and methodology to top Management of the Company and I&MD officials in an entry conference held on 7 April 2014. The audit queries were raised after scrutiny/examination of the records/interaction with the officials of the Company and the Department. The Draft Performance Audit Report (PA) was issued (September 2014) to the Company and Department. An exit conference was held on 6 January 2015.

We acknowledge the co-operation extended by the Department and the Company during the course of the Performance audit. The Company replied to the audit findings in December 2014; their replies have been considered while finalising the PA.

Audit Findings

Tourist inflow data and Tourism Policy

Tourist Inflow

2.1.9.1 The Gujarat Industrial and Technical Consultancy Organisation (GITCO) is the agency compiling the data of tourist inflow in the state for the Company.

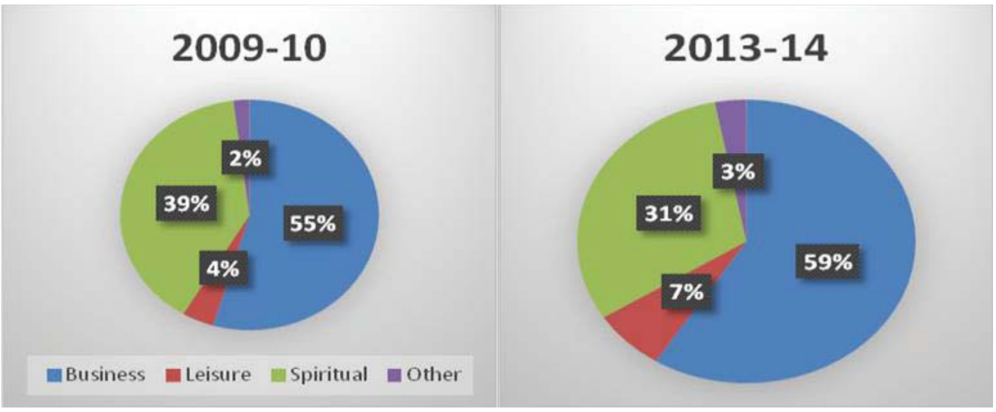
The tourist[1] inflow is one of the main yardsticks for assessing the effectiveness of the tourism policy of the state. As per the report for 2013-14, GITCO has built up a universe of 3,096 hotels/ guest houses/ dharmashalas at 199 locations in the state. A representative sample averaging 10 *per cent* of universe covering 41 locations is surveyed through a monthly structured questionnaire and then extrapolated to cover the entire universe. **Table 2.1.1** below shows the tourist inflow into the state during the period 2009-10 to 2013-14 as compiled by GITCO.

Table 2.1.1: Particulars of tourist inflow in Gujarat *(Numbers in lakh)*

Year	Tourists from within Gujarat	Tourists from other Indian States	Total Domestic Inflow	NRI and Foreigners	Grand Total
2009-10	130.78	36.24	167.02	3.09	170.11
2010-11	150.62	43.55	194.17	3.95	198.12
2011-12	171.76	47.28	219.04	4.60	223.64
2012-13	195.36	53.56	248.92	5.17	254.09
2013-14	221.61	60.61	282.22	5.66	287.88
Total	**870.13**	**241.24**	**1,111.37**	**22.47**	**1,133.84**

The classification of the tourists based on the purpose of visit during 2009-10 and 2013-14 is depicted in the chart below:

Chart 2.1.1 Segmentation of tourist as per purpose of visit



(**Source**: Tourist data compiled by GITCO)

It can be seen from the above chart that the percentage of the tourists who came for business purposes increased from 55 *per cent* in 2009-10 to 59 *per cent* in 2013-14, indicating a gradual shift towards business activity.

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[1] GITCO follows a Government of India definition of 'tourist'. As per the definition a 'foreign tourist' is a person visiting India on a foreign passport, staying at least twenty four hours in India and the purpose of whose journey can be classified as leisure (recreation, holiday, health, study, religion and sport) and business, family, mission and meeting. All Indians settled abroad but holding Indian passports will not be counted as foreign tourists even when they come to India for recreation, business and other purposes.
A 'domestic tourist' is a person who travels within the country to a place other than his usual place of residence and stays at hotels/ Dharamshalas etc., for a duration of not less than 24 hours or one night and for not more than 6 months at a time for any of the purposes viz., pleasure (holiday, leisure, sports etc.), pilgrimage, religious and social functions, business, conferences and meetings and Study and health. Thus, data on tourist does not include those who do not stay either overnight or for at least 24 hours at a destination.

The following **Table 2.1.2** shows the performance of Gujarat vis-à-vis All India average and its neighbouring states in terms of tourist inflow.

Table 2.1.2: Comparison of tourist inflow with other neighboring states

Particulars	Number of tourists (In crore)					Growth over 2009 (In percentage)	All India Ranking (December 2013)	
	2009	2010	2011	2012	2013		Domestic	Foreign
All India	68.32	75.81	88.40	105.71	116.52	70.55		
Gujarat	1.60	1.90	2.12	2.46	2.76	72.50	8	16
Maharashtra	3.31	5.35	6.01	7.15	8.69	162.54	5	1
Rajasthan	2.66	2.68	2.85	3.01	3.17	19.17	7	5
Madhya Pradesh	2.33	3.83	4.44	5.35	6.34	172.10	6	12

(**Source**: India tourism statistics published by Ministry of Tourism, GoI)

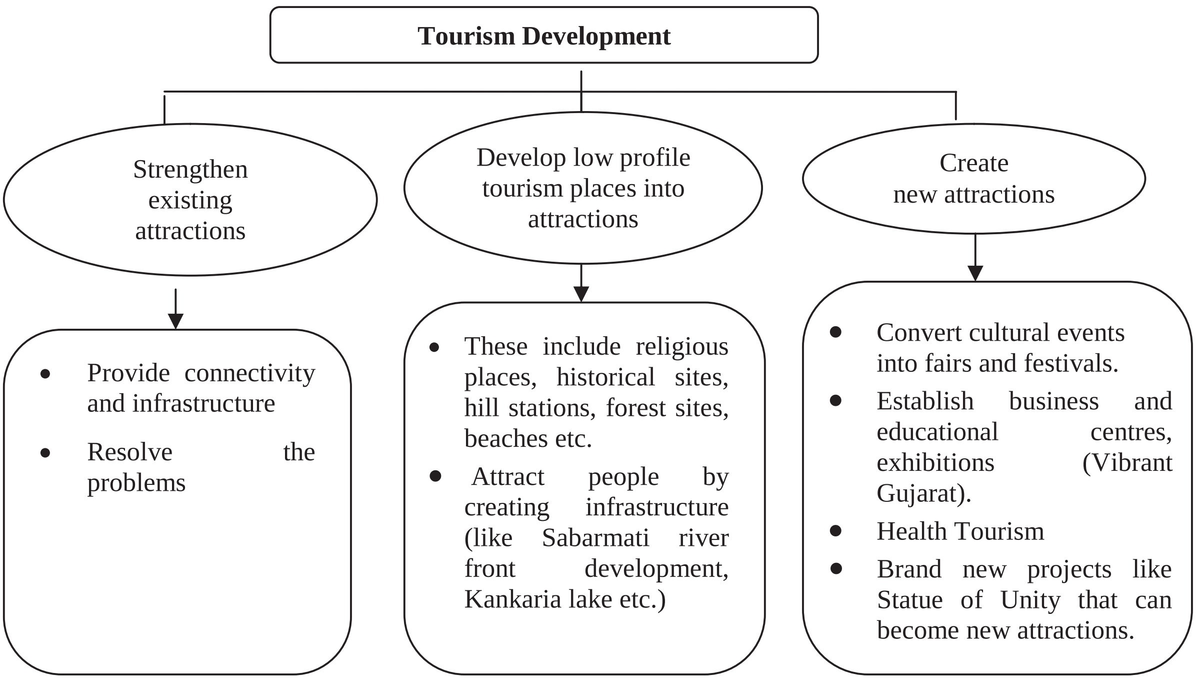
It can be seen that Gujarat registered a marginally higher growth in tourist inflow compared to all-India and much higher as compared to the neighbouring state of Rajasthan, though in absolute terms (i.e., the total tourist inflow) Rajasthan still attracted higher footfalls. However, the growth in the other two adjoining states viz., Maharashtra and Madhya Pradesh was more than twice that of Gujarat. Further, Gujarat was behind Maharashtra, Madhya Pradesh and Rajasthan in the all-India tourist inflow ranking.

Tourism development in Gujarat

2.1.9.2 Tourism is an employment friendly industry. It provides large scale employment opportunities to drivers, cooks, attendants, receptionists, guides, local artisans etc. However, for the tourists to visit a place there has to be a series of attractions in the form of tourist places, business centres and services (Health tourism). It also requires commensurate infrastructure.

The tourism industry generally develops in three stages (these could be overlapping) as shown below:

Chart 2.1.2: Stages of tourism development



Gujarat followed the above three pronged strategy to develop tourism with emphasis on massive advertisement campaign to place Gujarat prominently on the tourism map of India by appointing a celebrity as its brand ambassador; increasing the expenditure on advertising from ₹ 12.29 crore in 2009-10 to ₹ 71.74 crore in 2013-14; and road development works like Pragathipath improving connectivity, enabling people to move faster to reach tourist destinations spread across the state.

Tourism Policy

2.1.9.3 The GoG tourism policy 2003-10 considered tourism as an important economic activity for sustainable economic growth, employment generation and optimum utilisation of vast tourism potential in the state. It also aimed at providing services of international standards, creating excellent infrastructure, connectivity and facilities for tourists. The CoT cum MD of the Company is responsible for implementation of all policy proposals. The Gujarat Industrial Promotion Board (GIPB) was also to lay down the road map for the tourism promotion in the state and monitor the implementation of various projects. We observed that GIPB has not been formed as envisaged in the policy.

Table 2.1.3 below shows some of the policy measures implemented by the Company/Government:

Table 2.1.3: Policy measures implemented

Sl. No.	Policy	Achievement
1	Special thrust to Event (Festival) based tourism	Navratri festival, International kite festival, Rann Utsav, Tarnetar Fair, Beach Festival are organised every year by the Company. However, the information on the visitors to the venues of these festivals was not compiled.
2	Adventure sports like paragliding, rock-climbing and forest safaris etc.	This was being arranged wherever feasible during seasonal festivals and fairs by the Company.
3	Development of hospitality industry, pilgrim hotels and dormitories	The GoG introduced (October 2006) an incentive scheme (exemption from payment of electricity duty and luxury tax for five years and exemption from payment of stamp duty for purchase of land) for hotels started during two years of the policy period. However, the incentive was able to attract only five private hotels through this scheme.
4	Infrastructure development through rail and road connectivity to all important locations	All important tourist locations other than Dholavira (an Indus Valley Civilisation site), are well-connected.

(**Source**: Tourism Policy 2003-10 and information provided by the Company)

Table 2.1.4 below depicts the policy measures that were either not implemented or implemented partially:

Table 2.1.4: Non/Partial implementation of Policy measures

Sl. No.	Policy	Achievement
1	Creation of Vishwa Gram, by replicating structural modules and beauties of different countries with houses and accommodation models on the banks of Sabarmati	Not done as no specific grant was allocated for the purpose.
2	Development of entertainment theme parks and medical tourism	No action plan was framed by the GoG in this regard.
3	Development of beaches and water sports at nine locations	Out of ₹128.50 crore released during review period for coastal tourism only ₹ 21 lakh were spent in obtaining statutory clearances for taking up the project.
4	Development of Indus Valley Civilization cites at Lothal and Dholavira	Grant of ₹ 22 lakh received for Dholavira not utilised in seven years. No grant received for Lothal.
5	Twenty wayside amenities	The Company constructed five wayside amenities, of which only one was made operational.
6	Gandhi Circuit[2], Buddhist Circuit[3] and Sardar Circuit[4]	The Company undertook development of Gandhi Circuit. However, action plan was not prepared for Sardar Circuit and Buddhist Circuit.
7	Encouraging private sector participation in the tourism sector and privatisation of the Company's properties in a time bound manner.	A new Company Guj-Tour Development Company Limited was incorporated (April 2011) by GoG to create corpus fund for tourism project on PPP mode. The new Company is at a tendering process for identification of private participation.
8	Development of Eco-tourism	Infrastructure facilities were created mainly at Saputara at a cost of ₹ 7.75 crore during 2009-14.

(**Source**: Tourism Policy 2003-10 and information provided by the Company)

The policy document adopted by the GoG was for the period up to 2010 and has not been extended thereafter. However, some of the goals as indicated above are yet to be achieved, though they were intended to be achieved during 2003-10.

The Management stated (December 2014) that the GoG is currently planning to bring out a new tourism policy of the state.

We noticed several deficiencies in the implementation of tourism development measures as explained in the succeeding paragraphs.

Government Support

2.1.10 To develop the tourism in the state, GoG had released grants to develop existing and new tourist destinations across the state, showcase the fairs and festivals and undertake aggressive marketing campaign and creation of facilities for tourists. The grants given by GoG for various purposes during 2009-10 to 2013-14 are summarised below:

2 Destinations related to Gandhiji viz. Dandi heritage corridor, Dandi Village and Porbandar.
3 Cave temples and monasteries related to Buddhism at Junagadh and other places of the state.
4 Places related to Sardar Patel viz. Nadiad, Karamsad, Bardoli and Ahmedabad etc.

Table 2.1.5: Details of GoG Grants segment wise **(₹ in crore)**

Sl. No.	Grant For	Opening Balance	Received	Utilised	Closing Balance
1	Advertisement	12.84	279.54	258.23	34.15
2	Destination development	50.20	642.42	506.90	185.72[5]
3	Fairs and festivals	8.56	152.70	155.29	5.97
4	Tourism promotion	0.23	55.49	52.30	3.42
5	Tourist facilities	1.16	11.00	1.17	10.99
6	Other grants	18.28	88.10	51.56	54.82
	Total	**91.27**	**1229.25**	**1025.45**	**295.07**

(Source: Annual accounts of the Company**)**

It can be seen from the above table that the unutilised grants had grown from ₹ 91.27 crore in 2009-10 to ₹ 295.07 crore at the end of 2013-14. The Company did not surrender the huge unutilised balance lying with it at the end of each year nor did it take the approval of the GoG for retaining such balances. In respect of GoI grants (as per the annual accounts of the Company), the Company had opening balance of ₹ 37.03 crore and ₹ 31.69 crore were received of which ₹ 35.18 crore were utilised during 2009-14.

The above includes grant for promotion of coastal tourism for which GoG released ₹120 crore (of which ₹ 36 crore was one-time assistance from GoI) in 2012-13 and ₹ 8.50 crore in 2013-14 for creating infrastructure and facilities like roads, electricity, water supply, public toilets, cafeteria, on sea beaches, etc. However, the Company spent only ₹ 20.82 lakh during the year 2013-14 and an amount of ₹ 128.29 crore remained unutilised with the Company and the tourism potential of a long coastline was not exploited. Though some plans were prepared for developing beaches, no concrete action was taken.

The Management stated (December 2014) that it is under the process of making decision either to utilise or surrender grant to the GoG.

Advertisement and Publicity

2.1.11 Publicity plays an important role in spreading the knowledge and creating interest in various tourist attractions of a state. The Company prepared media plans and engaged media agencies for placing advertisements about various places of tourist interest in the state. The Company is promoting the Gujarat tourism through the "Khushboo Gujarat Ki" promotion campaign by engaging services of Shri Amitabh Bachchan as a brand ambassador. The expenditure on advertisements was met out of grants received from the Government. The grant received for advertisement and publicity and tourism promotion campaign and their expenditure in the last five years is shown in **Table 2.1.6** below.

[5] This includes ₹128.50 crore received from GoG to promote coastal tourism in Gujarat, which also includes ₹ 36 Crore from GoI as one time assistance for the said project.

Table 2.1.6: Details of Grants for advertisement and publicity (₹ in crore)

Year	Opening balance	Receipts	Expenditure	Closing Balance
2009-10	12.84	8.30	12.29	8.85
2010-11	8.85	51.05	37.74	22.16
2011-12	22.16	52.69	61.26	13.59
2012-13	13.59	80.00	75.20	18.39
2013-14	18.39	87.50	71.74	34.15
Total		**279.54**	**258.23**	

(**Source:** Annual Accounts of the Company)

The Company utilised the grants for placing the advertisement in various media such as on national and international television channels, FM Radio, magazines & journals, including in-flight magazines, on Delhi Metro Rail, hoardings at airports and in digital media. This campaign has provided visibility to Gujarat tourism.

The Company has its own website providing information on all the important tourist centres categorised hub-wise/ destination wise. Besides the means to reach the tourist centre, the website states the places of stay and the local importance of the location. We noticed shortcomings in the dissemination of information to tourists as stated below:

Dissemination of information to tourists

2.1.11.1 Ideally it is expected that entry points at each tourist locations, i.e., railway stations and bus stands provide information in a conspicuous manner regarding major tourist attractions in that particular location, the distance from bus stand or railway station to these places of interest, mode of transport available and the approximate cost, the suitable time for visit and information about the Company's hotels. The information could be provided by display boards, through Tourist Reception Centres at railway stations and bus stands and through Brochures or Display boards at the reception of Company's Hotels.

In the nine[6] out of the 14 hotels that we visited, none of the hotels except Dwarka had any information for tourists either at the railway station or bus stand. Even in Dwarka, the information was displayed only in the bus stand which also was not easily visible. As far as Tourists Reception Centres are concerned, only Porbandar had one at the bus stand which also was not fully operational and the information given was not legible. Out of the nine hotels visited, only Narayan Sarovar had a Reception Centre at the hotel giving all relevant information. In Saputara and Veraval only limited information was available at the Reception Centres. In the remaining five hotels (other than the two under renovation), no information was available at the Reception Centres.

On a review of the website of the Company, we noticed that no travel tips and guidance to tourists were being offered, the hotels operated by the Company and its tariff structure, were not shown, the information about the tourist information bureaus spread across the state was not displayed and no effective

[6] Dholavira, Dwarka, Junagadh, Narayan Sarovar, Palitana, Porbandar, Saputara, Somnath and Veraval.

guidance was available to those intending to visit fairs and festivals in the fairs and festivals link, etc. The Company updated its website after addressing these shortcomings.

The Management accepted the audit observation and further stated (December 2014) that they approached Gujarat State Road Transport Corporation and Railway authorities to see that the tourists arriving in Gujarat get maximum possible information.

Implementation of the projects by the Company

The project branch of the Company executes various works/projects. The work of design and preparation of estimates for various works is being done through the private consultants. Estimates are prepared based on Roads and Building Department's Schedule of Rates (SOR) of respective districts and works are being awarded on tender basis. Supervision and monitoring is done through the Project Management Consultants (PMCs) who are empanelled with the Company. Details of works undertaken by the Company for varied purposes during the period 2009-14 are summarised below:

Table 2.1.7: Particulars of works/projects

Sl. No.	Particulars	No. of works	Total awarded cost (₹ in crore)	No. of works as on March 2014	
				Completed	In progress
1	Destination Development	60	321.01	51	9
2	Renovation of Hotels and way-side amenities	26	47.81	19	7
3	Fairs and festivals	72	72.65	72	Nil
	Total	**158**	**441.47**	**142**	**16**

(**Source**: Data obtained from the Company and compiled by us)

Our observations on implementation of various projects are discussed below:

Destination Development

2.1.12 During the review period, 60 destination development works amounting to ₹ 321.01 crore were awarded of which 51 works such as Dwarka, Saputara, Siddhpur, Becharaji etc., were completed and 9 were in progress. We reviewed all the 60 destination development works and by and large the works undertaken were successfully completed. An example of successful completion of work was Saputara wherein the destination development work and renovation of hotel was done and occupancy of the hotel increased. However, certain instances of unfruitful expenditure/idle investment and inadequate facility creation were noticed as discussed below:

Dandi Heritage Corridor Project

2.1.12.1 In March 2008, the Ministry of Culture (MoC), GoI sanctioned Dandi Heritage Corridor Project covering 21 destinations from Ahmedabad to Dandi where Mahatma Gandhi stayed overnight during his Dandi March. The Company identified 15 of these locations for implementing the Dandi Heritage Corridor project to disseminate the message of Mahatma Gandhi and speeches made by him during the famous Dandi March and thereby spread the message of Gandhiji. The work was divided into six packages and the work orders were placed in February 2010 at a cost of ₹ 16.40 crore. The work included construction of Administrative office, Souvenir Shop, Guest Rooms, Restaurant, Library, Museum etc., in these locations. These works were completed during April 2011 to November 2011 at a total cost of ₹ 11.84 crore. The Company took possession of the constructed buildings with total 54 guest rooms at all the 15 locations and appointed GISF personnel for ensuring the safety of the assets created.

(Picture showing facilities created under DHC at Vanz Village)

During physical verification of these locations, we observed that even after over two years of completion, these buildings were not furnished and the water connections/ electricity supply were not provided, making them unfit for use. Some of the buildings were already showing signs of deterioration with broken glass windows and soiled paint. The reasons for not providing electricity and water connections and furnishings were not available on record. The Company belatedly floated tender in March 2014 for furnishing and artifacts, and contracts were awarded thereafter.

If the project was properly completed and opened to public, it could have been a major tourist attraction as it would have given a novel experience to the tourists to tread the historic path of Mahatma Gandhi. The expenditure of ₹ 11.84 crore also remained unfruitful.

Destination Development at Dandi

2.1.12.2 The Company initiated action to develop the basic infrastructure and tourist facilities including Gandhi Institute, Amenity Building, Guest House, etc., at Dandi as decided by GoI. This is the culmination point for the Dandi Heritage Corridor. The work order was placed (January 2009) on M/s. Krishna Constructions (Firm K) for development of the destination at a cost of ₹ 6.47 crore (revised to ₹ 7.32 crore due to excess and extra items). The schedule date of completion was 24 months from the award of work.

The value of the work done up to the last RA Bill released in April 2011 was ₹ 7.02 crore. The Project Management Consultant (PMC) certified (July 2011) that the work was completed as per the drawings. Based on the completion certificate, Firm K demanded (July 2011) refund of security deposit which was released in November 2011.

During actual inspection of the site we observed (May 2014) that the buildings viz., Gandhi Institute, Amenity Building and Guest House were in semi-finished condition contrary to the certificate furnished by the PMC. In addition, encroachment by the workers of a private contractor, executing the work in nearby areas, was also observed. It indicates that the Company made the payments relying on the completion certificate issued by the PMC without cross checking the actual status of the work.

(*Picture showing facilities created at Dandi)*

During the pendency of the above contract, another contract for infrastructure and stone work for the destination development at Dandi (Phase-II) was awarded in September 2010 to the same contractor at a cost of ₹ 3.80 crore. The scope included completing the balance work conceptualised by the architect in the previous work order *viz*., finishing items of amenity buildings, Gandhi Institute and 21 destinations display walls. The work was scheduled to be completed by September 2011. We observed during the inspection of site that only foundations were laid for all the 21 display walls and Gandhi institute and amenities building remained in semi-finished state.

The Company stated (July 2014) that the work was stopped (October 2010) at the instance of Ministry of Culture (MoC), GoI as some change in the design of the associated National Dandi Memorial project was under process with the MoC. The contractor was paid ₹ 1.57 crore for the work done under the work order.

The proposed facilities, if completed, would have helped in making this destination a major tourist attraction because of the historic role this act of breaking salt law played in the freedom movement. Thus, as a result of change in the design of the work midway, the Company was unable to take advantage of the natural potential of this historical place for development of tourism and at the same time incurred an unfruitful expenditure of ₹ 8.59 crore.

The Management stated (December 2014) that the operation of the activities/ facilities at night halt places under DHC was pending due to non-receipt of authenticated text, script, graphics and signage from the MoC, GoI and for the remaining works agencies are finalised for the execution. It further stated that MoC, GoI has constituted a committee for finalisation of management plan for night halt places and maintenance of National Dandi Memorial Complex. However, facts remain that the facilities created under DHC and Dandi Destination could not be put to use till date.

Change room and toilet facility at new Gomti Ghat of Dwarka

2.1.12.3 As it is the tradition to take bath before entering the temple, the Company developed at Dwarka new Gomti Ghat, Parikrama Path (consisting of dress changing place, toilet, platform, seating arrangement etc.) and repaired the old Gomti Ghat, at a total cost of ₹ 19.91 crore to facilitate the tourists in taking bath. There were no toilets and changing room places in the Old Gomti Ghat and the same were created for the first time in the new Gomti Ghat.

We observed that the new Gomti Ghat, adjacent to the existing old Ghat, had one toilet block (with partition for gents and ladies) and one place for changing dress with six partitions three each for gents and ladies. However, the number of toilets and places for changing dress are inadequate considering tourist flow of average 10,000 per day. This has largely reduced the utility of the facility created at a cost of ₹ 19.91 crore forcing the tourists to face some hardships for their basic requirements.

The Management stated (December 2014) that it is very difficult to cope up with 100 *per cent* requirement of tourist inflow and facilities would be augmented in future.

Renovation of hotels and way side amenities

2.1.13 The Company executed various works of renovation of hotels and wayside amenities out of GoG and GoI Grants. We reviewed the implementation of these projects to ascertain whether the renovation resulted into improved occupancy coupled with increased profitability and facilities to tourists. We reviewed all the 26 works awarded during review period out of which 19 works were completed and seven were in progress as on 31 March 2014. We observed that some of the works were not put to use and occupancy at hotels was reduced after renovation. Our observations are discussed below:

Construction of way side amenities and cafeteria

2.1.13.1 The Company operates way side amenities[7] and cafeterias, apart from full-fledged hotels. The Company had seven[8] way- side amenities as on 31st March 2014 of which two (Limbdi and Shamalaji) were closed. Of the other five which were constructed after the tourism policy, only one at Virpur was operational and four were yet to be inaugurated.

[7] A way-side amenity is facility with a restaurant and couple of rooms to cater to the tourists' requirements of food and rest. These are constructed on highways between important tourist destinations.

[8] Harshad Mata, Madhavpur, Patan, Limdi, Shamalaji, Balasinor, Virpur.

The Company operates cafeterias to provide refreshment to the tourists. Out of the five cafeterias[9] of the Company, Malavan and Gandhinagar were already closed, Modhera was under renovation and Siddhpur and Adalaj were not inaugurated during 2009-14. The details of these way side amenities and cafeterias, such as, the date of construction, cost of construction, date of commencement of operation/closure and reasons thereof were not provided by the Company. In absence of which, we could not analyse their performance.

(Wayside amenity at Madhavpur yet to be inaugurated)

The Company managed to keep functional only one out of seven way side amenities and it had not operated any of the five cafeterias. Despite this, the work for the construction of five more wayside amenities at new sites was awarded during the year 2013-14 at a total cost of ₹ 9.60 crore and the work was in progress (July 2014). While the Company had not drawn up any plan to make the already constructed way side amenities operational, further expenditure was being incurred on the construction of additional way side amenities, for which no justification was furnished to us. From the above, it is evident that expenditure on wayside amenities and cafeterias was incurred without any concrete plan.

The Management stated (December 2014) that the wayside amenities and cafeterias could not be put to use due to shortage of staff and pending policy decision to operate these units with the help of private parties under management contract.

Boating Activity at Saputara

2.1.13.2 Boating activity is carried out by the Company at Saputara Lake by operating five rowing boats and five pedal boats. As per the terms and conditions of licence granted by the District Magistrate (Collector) the tourists shall wear life jackets. We observed (May 2014) that no tourist wore the life jacket as per the stipulation made in the licence. Most of the life jackets kept at jetty/ wooden platform were torn, dirty and with broken straps and may not be of much help to tourists in the event of any untoward incident. No rescue kit and safety equipment was found in the boating area as stipulated in the licence. Thus, boating activity was being carried out without ensuring the prescribed safety norms.

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[9] Modhera, Sidhpur, Malavan, Gandhinagar Sector-28, Adalaj.

(Photos of Torn life jacket and safety ring tied with wooden platform at Saputara lake)

The Management stated (December 2014) that boating activity at Saputara had been stopped and the Company was in tendering process to operate it through the private party.

Fairs and Festivals

2.1.14 Tourism policy gives a special thrust to the event (Festival) based tourism. Special events and international fairs are being organised to promote tourism and showcase ‘Brand Gujarat’. The Company organises various festivals like International Kite Festival, Navratri Festival, Rann Utsav, Monsoon Festival etc., and fairs like Tarnetar fair, the Chitra Vichitra fair, the Holi fair at Chhota Udepur, the Vautha Cattle fair etc.

The Company organises these fairs and festivals at designated venues and expenditure towards the works and services such as execution and supervision of temporary structures, PMC consultancy, theme pavilion, sound and lighting system, cultural activity, security services etc., are borne by the Company and these contracts are awarded on tender basis. During the review period the Company incurred an expenditure of ₹ 72.65 crore comprising of 72 contracts in organising fairs and festivals. We observed that the Company had not made any data collection on tourist inflow and impact analysis of economic benefits from the fairs and festivals.

Award of Rann Utsav contract on PPP[10] mode

2.1.14.1 During the period 2009-10 to 2012-13, the Company organised Rann Utsav at Dhordo, Kutch every year (December to January) by dividing the activities required to be done into five different packages (tabulated below) and awarding the same to different contractors through tender process. Besides, the Company separately arranged food and pick up services through hotels and travel agents. The Company received rent from the tourists for their stay in the tents and for the facilities.

The Company invited tenders (June 2013) for the five packages for the Rann Utsav 2013-14, which was to be held between 15 December 2013 and 15 February 2014. As per the tenders received, the L1 parties for the different tenders were as tabulated below.

[10] Public Private Partnership.

Table 2.1.8: Particulars of packages under Rann Utsav 2013-14

Package	Package description	L1 Party	Amount
I	Providing, erecting and furnishing tents with supporting infrastructure & services	M/s Gandhi Corporation	₹ 6.28 crore
II	Conceptualisation, design, execution and supervision of temporary structures and related infrastructure	M/s Exposition and Conventions	₹ 1.69 crore
III	Event management	M/s Exposition and Conventions	₹ 0.25 crore
IV	Theme pavilion	M/s Lalooji and Sons	₹ 0.23 crore
V	Soak pit suction and disposal	M/s Navin Lakhani	₹ 0.34 crore

Later, the Company invited (August 2013) Expression of Interest (EOI) for Package I on PPP basis. Three bids were received and only one agency M/s Lalooji & Sons, who was L2 in the original tender (June 2013), qualified the pre-qualification criteria. He offered to pay ₹ 1.60 crore per annum for the next five years for managing the tent city with 325 tents. In return, the revenue earned from the tents would belong to the bidder.

The contract for package I was awarded (October 2013) on PPP basis for a period of five years. The remaining four packages were awarded to the L1 bidders on contractual basis as originally approved. We observed the following deficiencies in the award of contract on PPP basis:

- It was observed that the occupancy during 2012-13 was 90.94 *per cent.* Moreover, the tariff also was increased from ₹ 9,500 to ₹ 15,000 which indicates the popularity of the Rann Utsav. Further, the Company organised Rann Utsav for a period of maximum 45 days in previous years whereas in the PPP mode the operator was permitted to operate the tent city throughout the year i.e. beyond the period of Rann Utsav also. As this was a major shift in the mode of operation of Rann Utsav, the Company should have either done cost benefit analysis keeping in mind present and future revenue streams and popularity of the brand or obtained a feasibility report from experts before awarding the operation of Rann Utsav for a period of five years. However, this was not done. Further, the Company finalised the operator inspite of the fact that only one bidder was qualified in the technical evaluation.

- The contract had a provision for increase in tent rent with the approval of the Company. However, there was no provision for increase in revenue share of the Company as it remained constant at ₹ 1.60 crore per annum for a period of five years.

- The PPP agreement has not been signed between the Company and the PPP Contractor till date (December 2014).

- As per the PPP tender conditions, the Company was entitled to 15 *per cent* of the tent rent if booking was made through the Company's website. However, we found that the website had no provision for booking for the Rann Utsav, hence this income could not be realised.

Thus, the Company before going in for the PPP mode should have done a proper cost benefit analysis considering all the factors brought out above so that the Company is not put to a loss.

The Management stated (December 2014) that during Rann Utsav 2013-14 the duration and tariff both were increased and thus there may be a decline in the occupancy and demand under the PPP mode. The fact remains that the management has not provided any data to prove the reduction in occupancy under the PPP mode. Further, our contention is that before switching over to the PPP mode, analysis based on past data should have been done to determine the reasonableness of the revenue sharing quoted by the developer. However, there was no such analysis on record.

Operational performance of the Company

2.1.15 The working results of the Company during five years ending March 2014 is given in ***Annexure*-2.** The net profit of the Company increased from ₹ 2.32 crore in 2009-10 to ₹ 32.58 crore in 2013-14. To meet its administrative expenses, the Company is entitled to receive 15 *per cent* of total amount spent out of the grant received for the development of tourism industry. The Company parked the unutilised grants in investments and earned interest out of this investment. The interest on investment so earned and 15 *per cent* grant income are major sources of revenue of the Company and constituted 68 to 83 *per cent* of total revenue during 2009-10 to 2013-14. The Company's operational income consisted of income from providing accommodation and sale of food and beverages which was 9 to 19 *per cent* of the total revenue during 2009-10 to 2013-14. Poor occupancy levels of the Company hotels and non-functional way side amenities and cafeterias also contributed to the low operating income.

Management of Hotels

2.1.16 To meet the requirement of food and accommodation of tourists the Company operates and maintains Hotels and Cafeterias at various tourist locations of the state. The Company had 25 hotels (19 self-managed and six leased) and five cafeterias and seven wayside amenities as on 31 March 2014. Among the self-managed hotels, only 14 were functioning with room capacity of 284 rooms and five were closed throughout the review period. Only one way side amenity at Virpur is operational and all the cafeterias are closed for operation. The Company had leased out six[11] hotels of which five are under litigation and it received a lease income of ₹ 96.12 lakh from the only one hotel located at Sasan Gir.

Operational Performance of hotels

2.1.16.1 The operating profits or losses of the 14 working hotels managed by the Company during the review period are as shown below:

[11] Ahmedpur Mandvi, Ankleshwar, Dakor, Nagrol, Sasan Gir and Ubhrat.

Table 2.1.9: Operational performance of hotels during 2009-14 (₹ in lakh)

Hotel	2009-10	2010-11	2011-12	2012-13	2013-14	Total
Ahmedabad	(1.22)	0.33	(3.58)	5.05	(3.53)	(2.95)
Dholavira	(7.46)	(4.11)	(4.29)	(3.03)	(3.33)	(22.22)
Dwarka	5.69	5.99	6.19	2.17	6.62	26.66
Junagadh	(10.35)	(9.10)	(28.95)	(6.43)	(21.64)	(76.47)
Mount Abu	2.23	0.80	6.55	12.00	1.28	22.86
Nal Sarovar	(5.61)	(8.67)	0.00	0.00	0.00	(14.28)
Narayan Sarovar	(1.89)	(3.13)	(4.88)	(8.13)	(11.12)	(29.15)
Palitana	(4.69)	(4.23)	(13.17)	(8.68)	0.00	(30.77)
Pavagadh	19.77	19.99	23.64	22.43	4.80	90.63
Porbandar	6.64	4.28	(0.59)	(13.16)	0.00	(2.83)
Saputara	38.49	38.04	32.87	69.18	75.90	254.48
Vadnagar	(3.48)	(2.69)	(2.26)	(4.70)	(2.23)	(15.36)
Valthan	(2.03)	(2.07)	(0.69)	(1.75)	(2.77)	(9.31)
Veraval	(2.42)	(3.81)	(13.14)	(12.41)	(19.12)	(50.90)
Total	33.67	31.62	(2.30)	52.54	24.86	140.39
Profit making hotels	5	6	4	5	4	4
Profits	72.82	69.43	69.25	110.83	88.60	394.63
Loss making hotels	9	8	9	8	7	10
Losses	(39.15)	(37.81)	(71.55)	(58.29)	(63.74)	(254.24)
Under renovation	0	0	1	1	3	

Note: The figures in parenthesis indicate losses incurred by the hotels.
(**Source:** Hotel MIS Data and records kept at Hotels**)**

It can be seen from the above table that only four hotels earned cumulative profits, while the remaining 10 hotels suffered cumulative losses. Seven hotels reported losses in all the last five years from 2009-10 to 2013-14, while four hotels located at Dwarka, Mount Abu, Pavagadh and Saputara earned profits throughout the five year period. We observed that the Company has not analysed reasons for continuous losses in these hotels and no action plan has been drawn up to improve the profitability.

Though the tourist inflow in the state increased over *50 per cent* during review period, the overall profit of the Company's hotels came down from ₹ 33.67 lakh to ₹ 24.86 lakh. It can also be observed that Saputara hotel is the major contributor to the overall profitability of hotels of the Company. During the year 2011-12, the Saputara units were partially closed for renovation; hence the Company registered an overall loss of ₹ 2.30 lakh. We observed that lack of marketing, poor infrastructure, inadequate or poor quality services in comparison to the private sectors were the main reasons for poor occupancy. The high fixed cost against the low occupancy contributed to the losses. These aspects are discussed in the succeeding paragraphs.

Accommodation

2.1.16.2 The occupancy levels of hotels and the fixed cost of the hotels during the period 2009-2014 are as shown below:

Table 2.1.10: Occupancy details of hotels during 2009-14

Particulars		2009-10	2010-11	2011-12	2012-13	2013-14
Number of hotels operated		14	14	13	13	11
Number of room days available		87,450	86,356	78,805	62,473	66,537
Number of room days occupied		37,409	35,373	36,040	27,733	23,261
Occupancy in percentage		42.78	40.96	45.73	44.39	34.96
All-India Average Occupancy in percentage		59.90	62.10	60.90	58.30	
Number of hotels having occupancy in percentage	below 20	3	3	2	4	3
	20 to 40	4	4	4	5	5
	40 to 60	4	4	6	2	1
	above 60	3	3	1	2	2

(**Source:** Hotel MIS Data and records kept at Hotels**)**

It could be seen from the above that the performance was deteriorating as the occupancy of 42.78 *per cent* in 2009-10 declined to 34.96 *per cent* in 2013-14. Majority of the hotels were having lower occupancy as compared to the all-India average[12]. Further, though these hotels are situated at famous tourist places having a rich heritage, culture, wild life, hill station and religious importance etc., the average occupancy was always lower than the all India average. This indicates that even the hotels located at famous tourist places could not capture the inflow of tourists. A further analysis of hotel wise income, fixed expenses and occupancy for 2009-14 given below:

Table 2.1.11: F&BA Income vis-à-vis fixed expenses

Hotel	F&BA[13] Income (₹ in lakh)	Salary (₹in lakh)	*Per cent* of salary to F&BA	Occupancy in *per cent*
(a)	**(b)**	**(c)**	**(d=c/b)**	**(e)**
Ahmedabad	174.70	111.38	63.76	53.10
Dholavira	19.28	32.76	169.92	14.12
Dwarka	98.96	57.79	58.40	45.25
Junagadh	49.22	105.11	213.55	23.16
Mount Abu	179.08	67.52	37.71	30.77
Nal Sarovar	3.81	15.40	404.20	7.88
Narayan Sarovar	3.56	28.51	800.84	9.05
Palitana	30.26	49.87	164.82	33.00
Pavagadh	292.22	131.42	44.97	48.16
Porbandar	77.37	79.50	102.75	34.80
Saputara	793.24	254.33	32.06	49.57
Vadnagar	62.71	62.89	100.29	141.25[14]
Valthan	35.39	35.69	100.85	87.96
Veraval	49.82	80.64	161.85	37.91
Total	**1,869.62**	**1,112.81**	**59.52**	

(**Source:** Hotel MIS Data and records kept at Hotels**)**

As discussed in paragraph 2.1.16.1, ten out of the above 14 self-managed hotels suffered cumulative losses. It was also noticed that a very significant

[12] As per the survey reports of the Federation of Hotel and Restaurant Association of India.
[13] Food and Beverages and Accommodation (F&BA).
[14] The occupancy at Vadnagar was more than 100 *per cent* due to more than one check-in registered for the same room in a day.

portion of their F&BA income was spent on the salaries of the staff serving in these hotels, thus not recovering even the fixed cost from F&BA income.

Fixation of Tariff

2.1.16.3 The Company fixes and revises room tariff at the head office on the basis of inputs received from the units. We noticed that there was no rational basis for fixation of tariff based on various factors like actual occupancy, availability of infrastructure, tariff structure of other private hotels in close vicinity, etc. Further, there was no policy for periodical tariff revision and the Company revised tariff inconsistently.

In case of Vadnagar, the fixed expenditure towards salary expenses per available room was ₹ 863 which was higher than the tariff fixed for the hotel i.e., ₹ 400 and ₹ 800 for Non-AC and AC rooms. These rates were not revised since last three years ending 2013-14, despite very high occupancy of 141.25 *per cent* and the Company could have taken the advantage of increased tourist inflow to its hotel at Vadnagar. Thus, Vadnagar was not able to achieve the profit during 2009-10 to 2013-14, due to high salary cost and lower tariff in spite of more than 100 *per cent* occupancy.

Further, the tariff of the hotel at Valthan was last fixed in 2009. The tariff fixed in 2009 was ₹ 300 and it remained the same till 2013-14. We observed that despite company enjoying very high levels of occupancy ranging from 64 *per cent* to 112 *per cent* during the review period the Company incurred losses from its operations in respect of this hotel in all the years from 2009-10 to 2013-14[15].

There was no justification for the Company's decision to keep tariff at the same levels of 2009, despite the losses. The tariff in other hotels of the Company for the same type of rooms ranged from ₹ 300 to ₹ 500 in 2009-10 and increased over the years to ₹ 400 to ₹ 900 by 2013-14.

We further analysed effect of increase in tariff of hotels at Dwarka and Junagadh which were renovated during the review period. Prior to renovation, both the hotels at Dwarka and Junagadh had different categories of rooms, i.e., ordinary, deluxe and AC rooms. The tariff of rooms at Hotel Toran, Dwarka ranged from ₹ 400 to ₹ 1,200 and that of Hotel Girnar, Junagadh, from ₹ 300 to ₹ 1,000. The Company converted all the rooms in both the hotels into AC rooms and increased tariff manifold. Post-renovation, tariff of Hotel Toran at Dwarka ranged from ₹ 1,700 to ₹ 2,500 from November 2012 and that of Junagadh from ₹ 1,800 to ₹ 2,500 from March 2013.

We observed that occupancy[16] level which ranged between 53 to 56 *per cent* during 2009-10 to 2011-12 at Dwarka prior to renovation dropped to 25 *per cent* during 2013-14. At Junagadh too, occupancy dropped to 11 *per cent* during 2013-14 after renovation from the earlier levels of 26 to 30 *per cent*. The different categories of rooms with a wide range of tariff as prevalent

[15] Hotel was closed from October 2013 onwards for renovation.
[16] Occupancy excludes occupancy of dormitories.

earlier catered to various categories of tourists arriving at these two important places. However, steep increase in tariff resulted in lower occupancy and further limited the utility of the hotels to the upper segment of tourists.

The Company needs to have a tariff policy clearly laying down a consistent and rationale basis for tariff revision, as even in the hotels where tariff was increased, it was done at different times and at different time intervals lacking justification and consistency.

Food and Beverages

2.1.16.4 The Company is having two types of catering systems in their hotels. In seven hotels, the Company itself is managing the restaurants with its own staff and in the remaining seven hotels the Company has outsourced the catering services under Khansama System. However in none of the hotels room service and choice of food was available. These factors may have resulted in low occupancy and consequent losses as discussed below:

Catering system managed by the Company

2.1.16.5 The income and expenditure of the restaurants at seven hotels managed by the Company for the period from 2009 to 2014 are tabulated below:

Table 2.1.12: Details of F&B income and expenditure of hotels (₹ in lakh)

Hotel	F & B Income	F&B Salary	Other F&B Cost	Total F&B Cost	Profits/(losses)
Ahmedabad	55.20	68.46	36.09	104.55	(49.35)
Mount Abu	65.26	37.10	36.13	73.23	(7.97)
Nalsarovar	1.45	10.52	0.98	11.50	.(10.05)
Pavagadh	117.68	64.22	71.12	135.34	(17.66)
Porbandar	9.66	19.81	5.12	24.93	(15.27)
Saputara	299.29	101.54	154.84	256.38	42.91
Vadnagar	11.36	10.87	6.76	17.63	(6.27)
Total	**559.90**	**312.52**	**311.04**	**623.56**	**(63.66)**

(**Source:** Hotel MIS Data and records kept at Hotels**)**

It can be seen from the above that except Saputara hotel, all other hotels were not able to recover the food and beverages cost from their F&B Income.

Catering system under Khansama

2.1.16.6 The restaurants at Seven Hotels of the Company (Narayan Sarovar, Palitana, Dwarka, Veraval, Junagadh, Valthan and Dholavira) are managed under the Khansama System. Under this system a cook appointed by the Company manages the restaurant. The salary of the cook is borne by the Company. All the expenditure in preparation of food including the salary etc., of other supporting staff is borne by the cook. The cook is entitled to the income from sale of food. The cook is required to remit 10 *per cent* of the total sales made by him to the Company or a minimum guaranteed sale amount whichever is higher as per the Company's circular dated 20 May 2005. However, the company had not fixed minimum guaranteed amount in this regard.

A review of the income (10 *per cent* of sales) received from the Khansama cooks by the Company and the expenditure incurred (salaries of the cooks) during the period from 2009-10 to 2013-14 revealed that the income could cover 2 to 18 *per cent* of the expenditure on salary shown as under:

Table 2.1.13: Details of F&B Income and expenditure under Khansama System

Hotels	Income from khansama sales (in ₹)	Khansama Salary (in ₹)	Income to expenditure (in *per cent*)
(a)	(b)	(c)	(d)
Dholavira	1,43,767	17,27,651	8
Dwarka	1,07,638	6,12,399	18
Junagadh	30,157	17,70,471	2
Narayan Sarovar	19,365	9,57,365	2
Palitana	1,23,040	9,68,917	13
Valthan	1,33,265	7,63,591	17
Veraval	1,02,183	12,43,328	8
Total	**6,59,415**	**80,43,722**	**8**

(**Source:** Hotel MIS Data and records kept at Hotels**)**

The Company incurred expenditure on salary of Khansama cooks without insisting for any minimum guaranteed income. The income of the Company was 10 *per cent* of the sales as disclosed by the Khansama and there was no system of verifying the same. The Company needs to review its Khansama system.

Monitoring and Control

Monitoring by the GoG

2.1.17.1 The projects implemented by the Company were monitored by the GoG at regular intervals. Though the projects during execution were monitored by the GoG, the end use of the project was not monitored at the GoG level leading to expenditure on some projects being rendered unfruitful. Further, the GIPB meant to be a coordinating agency for various tourism projects as per the policy was not formed.

Monitoring by the Company

2.1.17.2 The works which constitute the major portion of the Company's expenditure were not measured independently by the Company through measurement books. The loose leaves measurement sheets made by the Contractor and certified by the PMC were relied upon. The Company did not have sufficient technical staff to monitor the work of PMC. Further, prior to 2014, there was no clause in the agreement with PMC for levy of penalty.

The Company appointed architects for designing and preparation of estimates and consultants for preparation of tender documents. The design and the estimates for the work prepared by the Consultants were not scrutinised and approved by the competent authority of the Company. The Company has only four engineers and due to shortage of technical staff, the check and scrutiny of tender terms, independent inspections and measurement of works could not be effectively carried out. Considering the extent of works undertaken by the Company, it should consider appointing more technically proficient staff for monitoring the work of PMCs.

Further, the Company did not take steps to increase the profitability of its hotels through constant monitoring of their performance.

The matter was reported to Government/Management (September 2014) and the Management replies were received (December 2014). An exit conference was held in January 2015 which was attended by the Commissioner of Tourism, GoG, and the views of the Government as presented in the conference have been duly considered. However, a formal reply from the Government is awaited (January 2015).

Conclusions and Recommendations

The performance audit on Promotion of Tourism in Gujarat with emphasis on the functioning of Tourism Corporation of Gujarat Limited indicates that tourism sector received an impetus in Gujarat as a result of development of infrastructure, advertising and increased economic activity. Consequently, the State recorded an increased tourist inflow with more footfalls during the period 2009-14. The Company successfully implemented new projects under destination development and promoted major events within and outside the country, with advertisement campaign to attract more tourists to the State. However, there were some areas of concern in relation to the performance of the Company like implementation of projects, management of hotels, and dissemination of information as highlighted below, along with some recommendations as a way forward:

- The GoG had not framed new tourism policy after 2010, though the existing policy had been only for the period 2003-10.

    - ***The GoG may consider framing a new tourism policy defining action plan, laying down the road map and incentive for various policy measures in view of the increased tourist inflow and in view of greater emphasis on tourism for overall sustainable economic growth, as a further philip to develop and promote tourism.***

- There is need of better dissemination of the requisite information for the benefit of tourists at different locations.

    - ***The Company may consider providing signage, pamphlets, route maps, contacts of local guides, travel tips and other relevant information to tourists at entry point and other important destination places.***

- The Company had created assets incurring ₹ 20.43 crore under Dandi Heritage Corridor Project and Dandi destination development, but did not put them to use due to certain infrastructural deficiencies.

  - ***The Company may coordinate effectively with the agencies and GoG/GoI so that the facilities created become operational at the earliest for Dandi to become a major tourist attraction.***

- Grants received for various projects were under/non-utilised by the Company to the extent of ₹ 295.07 crore.

  - ***The Company and the GoG may develop a mechanism to monitor that grants given for a definite purpose are used in reasonable time and if not utilised, the same may be surrendered to the Government.***

- The Company's hotels continued to suffer from poor occupancy and many of them continued to incur losses.

  - ***The reasons for continuous losses in seven hotels be analysed and appropriate remedial action be taken. The Company may also consider framing a Tariff Policy which may provide for periodical revision on rationale and consistent basis.***

GSPC Gas Company Limited

2.2 IT Audit on GSPC Gas Company Limited

Executive Summary

Introduction

GSPC Gas Company Limited (Company) was incorporated on 11 March 1999. The Company supplies compressed natural gas through 160 stations and piped natural gas to domestic households, commercial and non-commercial customers and industrial customers. The Company embarked into major computerisation in April 2010 by implementation of Enterprise Resource Planning (ERP) software SAP at a cost of ₹22.58 crore. The system was made operational with effect from 11 Febuary 2011.

Audit of operation and maintenance

Though the Company implemented ERP system for more than three years, it did not formulate business Continuity and Disaster Recovery Plan.

Material Management (MM) module

In the MM module meant for managing material planning, procurement and inventory management of the organisation, purchase orders were issued without purchase requisitions. Further, purchase orders were issued without delivery dates. Also, there were delays in posting of goods issued and receipt document and non-availability of guarantee/warranty feature.

Financial Accounting and Controlling (FICO) module

The FICO module meant for capturing all financial processing transactions and providing cost centre wise operational information was not monitoring defaulting consumers and bank guarantee renewals through the system. The regional trial balances were not generated. Further physical verification of assets was not updated in SAP.

Human Capital Management (HCM) module

The HCM module aimed to automate employee administration, time management, pay-roll management and legal reporting process. There was no means to determine the genuineness of conveyance allowance reimbursement and dependency status was not updated.

Process Integration (PI) module

The PI module was not utilised for integrating existing systems of the Company with SAP.

Recommendations

The Company should review the segregation of duties and authorisations to prevent chances of fraud and other irregularities and should utilise all functionalities of the modules and monitor important areas through the system by updating all the fields. All the systems should be integrated to have an online single point MIS for effective control and avoiding dependence on manual controls.

Introduction

2.2.1 GSPC Gas Company Limited (the Company) was incorporated on 11 March 1999. The Company supplies natural gas in the form of Compressed Natural Gas (CNG) through 160 CNG stations across the state that caters to more than 90,000 vehicles per day. The Company also supplies Piped Natural Gas (PNG) to 5,11,561 domestic households, 1,967 commercial and non-commercial customers and 1,942 industrial customers. Net Loss of the Company for the year 2013-14 was ₹ 134.68 crore, on a turnover of ₹ 4,617.75 crore. The management of the Company is vested in Board of Directors (BoD) consisting of five directors, including a Chairman. The Chief Executive Officer of the Company looks after the day-to-day functioning.

IT Programmes implemented by the Company

2.2.2 The Company embarked upon a major computerisation by undertaking the implementation of Enterprise Resource Planning (ERP) software SAP[17] in April 2010. SAP ERP is an integrated software solution that incorporates the key business functions of the organisation. The platforms for the modules used by the Company are UNIX and Windows and the Database Management Systems are Oracle and Max DB.

The Company selected SAP for licence and implementation of the ERP software and incurred an expenditure of ₹ 22.58 crore on its implementation. The SAP project started in June 2010 was scheduled for completion in the first quarter of 2011. The system was made operational (Go Live) with effect from 11 February 2011. Thus, the SAP implementation was done within the time schedule fixed. The Company implemented various SAP modules which included:

- Maintenance of financial data and Balance Sheet generation of all other reports as applicable from the accounting point of view **(FICO)**
- Automation of PNG meter for Bill Processing **(IS-U)**[18]
- Automation of customer registration and customer complaints **(CRM)**
- Maintaining customer wise Contract Accounting **(FICA)**
- Tracking of Material Management **(MM)**
- Automation of O&M and Project activities **(PM/CS)**
- Tracking of new Projects and Capitalisation **(PS)**
- Automation of CNG meter and Bill Processing
- Maintenance of Employee Master Data and Payroll generation **(HCM)**
- Generation of MIS Reports **(BW)**
- Integration of Third Party Application to SAP **(PI)**

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[17] SAP stands for Systems, Application and Products in Data Processing.
[18] Industry specific solution for utilities.

- Online access of Pay Slips and Leave for Employees **(EP)**
- Handling of all SAP modules **(BASIS)**
- Tracking of SAP changes -Solution Management **(SOLMAN)**
- Uploading of the scanned documents of customers or vendors-Document Management System **(DMS)**

Scope of Audit

2.2.3 The IT Audit was conducted during the period from 11 February 2014 to 17 June 2014. Out of the above 15 SAP modules implemented by the Company, six modules i.e., FICO, MM, PI, SOLMAN, HCM and EP were selected for detailed audit. We visited three Geographical Area (Location) units *viz.*, Rajkot, Valsad (set up at Vapi) and Nadiad to assess the efficiency and effectiveness of the ERP at the location level. Two store locations i.e., Vapi (Chikhali) and Gandhinagar were also covered.

Audit objectives

2.2.4 The objectives of IT audit were to get a reasonable assurance that:

- The system development was managed efficiently and effectively and the objectives of SAP were achieved;
- IT controls were in place in the Company; and
- The documentation standards, the input controls, processing controls, output controls and data file controls were maintained in respect of the six selected modules.

Audit criteria

2.2.5 The requirement, acquisition and performance of ERP software (SAP) of the Company were assessed by utilising the following audit criteria:

- Feasibility reports and project reports;
- Agreements with software companies;
- Company's perspective plans/ corporate plan/ annual plans;
- Agenda and minutes of the BoD and its subsidiary committees;
- Gujarat State Financial Rules, circulars issued by the Company, Government of Gujarat (GoG) resolutions, PNGRB guidelines, etc.; and
- Users' Manual of the application delivered by the Software Company.

Audit Methodology

2.2.6 The following methodology was used for the above audit.

- Reviewed SAP modules i.e. FICO, MM, PI, SOLMAN and HR (HCM & EP) implementation plans;
- Reviewed data on existing Tally Software and HR systems including data collected and data suitability to SAP modules i.e., FICO, MM, PI, SOLMAN and HR tables;
- Reviewed Business Blueprints Build process and System Architecture[19]; and
- Assessed the efficiency and effectiveness in the operations and activities of the Company after the implementation and adoption of IT systems in various departments.

We acknowledge the co-operation extended by the Company during the course of audit. An entry conference was held on 27 May 2014 at the level of CEO in which the audit objectives and methodology were explained to the management of the Company. The exit conference was held on 14 October 2014. Responses received during the course of Audit are suitably incorporated at relevant paragraphs.

Audit Findings

Audit of operation and maintenance

2.2.7 Audit of operation and maintenance was done to ensure there existed necessary internal controls, organisation controls and authorisation controls to prevent frauds and errors.

Password policy

2.2.7.1 The National Informatics Centre (NIC) prescribed password policy that contains various specifications for passwords like having Upper & Lower case, not containing dictionary words, etc. Further, previous three passwords should not be used and that the password had to be regularly changed.

We observed that the Company was not having a password policy since inception. After our enquiry, a password policy was framed and circulated to all concerned with the approval of General Manager. The requirements prescribed in the NIC password policy were not insisted in the circulated policy.

The Company did not even insist for the strict compliance of the password policy framed by it and rather generic (easily guessable) words like GSPC, GAS, SAP, GUJARAT and even the names of the individuals were used as a password. This could lead to a) risk of unauthorised access b) vulnerability of the entire database.

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[19] GSPC Gas has 3 tier client/server Architecture for SAP System. All data is stored in a database, and the data is processed in the application layer on the application servers. The SAP GUI frontend (presentation layer) is the interface to the user. All three layers are connected to each other with networks.

The Management (May 2014/September 2014) assured that for the sake of strengthening the password policy, it would refer NIC password policy.

Generic user names with overlapping authorisation

2.2.7.2 Provision was available in SAP to assign roles and authorisation to different users and to maintain log and audit trail. Seventy eight generic user names (group user names) were provided. However, a review/ monitoring of changing the password for employees leaving the Company was not being carried out. On a detailed analysis of three generic user names (group user names) of C & M wing, we observed that at least half a dozen officials were using the same user name and password. Hence, responsibility and accountability was diluted and it increased the risk of unauthorised access to data in case of any transaction taking place under the 78 generic user names (group user names).

During review of MM module, it was found that users enjoyed various combinations of critical transactions, the details of which are as follows:

- 275 users were authorised to create Purchase Requisition (PR) and out of that 10 users were authorised to approve the PR;
- 96 users were authorised to create Purchase Orders (PO) and out of that six users were authorised to approve the PO; and
- 15 users were assigned roles to receive goods (Enter Goods Receipt) and out of them 13 users were authorised to process vendor invoices.

We have also noticed some peculiar authorisations as listed below, which can result in misuse of authorisation powers; with the risk of fraud and other irregularities.

Sr. Manager is authorised to:
- create PR,
- release PR,
- create PO,
- release PO,
- enter goods issue,
- enter goods receipt, and
- purchase analysis.

He is also authorised to:
- create Request For Quotation (RFQ),
- create model service specification,
- create service entry sheet and
- release service entry sheet.

AGM is also authorised to:
- create PR,
- create PO,

- release PO,
- enter goods issue,
- enter goods receipt,
- purchase analysis, and
- create RFQ.

The usage of generic name combined with authorisation for various combinations of transactions as stated above carries risk of misuse and fraud. We observed that a fraud occurred at Halol office because of the fact that the power to reverse a bill and generate and regenerate bills was retained with the same person. The said employee took advantage of these multiple powers and reversed bills already paid by the customer, pocketed the proceeds of the bill already paid by the customer and regenerated the bill in the system to show that the bill was outstanding. This regenerated bill was not issued to the customer, hence the customer never complained.

The Management accepted (March 2014) the fact that it has not prescribed roles and responsibilities for its employees and stated that efforts towards segregation of duties have already been initiated. The Management also stated (May 2014/September 2014) that generic names were created to save license cost and recurring AMC cost and also stated that users enjoying various combinations of critical transactions were being reviewed for required rectification.

Business continuity and disaster recovery

2.2.7.3 Though the Company implemented ERP system for more than three years, it did not formulate business Continuity and Disaster Recovery Plan. On this being pointed out, the Company came out with a Business Continuity and Disaster Recovery Policy cum strategy in May 2014 without informing the Board of Directors. Having a policy (after more than three years of implementation of ERP) without informing the BoD is in violation of prudent practices which requires all policy decision to be taken with the knowledge of the BoD.

The BoD approved the Business Continuity and Disaster Recovery Policy cum strategy on 18 October 2014, which needs to be implemented.

Application Controls

2.2.8 The six selected modules were reviewed for documentation standards, input controls, output controls and data entry controls.

Material Management Module

2.2.9 SAP Materials Management (MM) helps in managing material requirement planning (MRP), the procurement activity and inventory management (IM) of an organisation. MM is also integrated with other business modules. The MM module has enabled the configuration of the entire procurement right from purchase order release to inventory management *via* multiple storage locations.

Purchase Orders issued without Purchase Requisition

2.2.9.1 After implementation of SAP, there is a procedure that purchase order (PO) is issued through the system after getting a Purchase Requisition (PR) from the user department. However, we observed that many POs were issued without PRs being entered in the system as tabulated below:

Table 2.2.1: POs without PRs

Sl. No.	Year	Total No. of Pos	No. of POs without PR	Value of POs without PR (₹ in Crore)
1	2013-14	1,172	1,003	328.90
2	2012-13	1,042	890	271.40
3	2011-12	1,414	1,314	717.58
Total			**3,207**	**1,317.88**

It can be inferred from the above table that during three years (2011-2014) the Company issued 3207 POs worth ₹ 1317.88 crore without having any formal PR in the system. A PR in the system is the starting point in the procurement cycle and will enable analysis of pending PRs at any given time and time taken for issue of POs after receipt of PRs. It will also help in the online assessment of requirement from different departments and in clubbing POs of similar nature. Further, it will also help in checking duplicate/excess requirements.

The Management accepted (March 2014/September 2014) the fact that these POs were issued without PRs in the system and also stated that as per the Company's requirement, hard copy of the approved note/PR is a must for processing the PO.

Fact remains that having PRs in hard copy is nothing but continued reliance on the manual system even after implementation of the SAP. Though having a PR in hard copy will satisfy the procedural requirements, the control requirements inbuilt in the system, the availability of data for future analysis will be satisfied only if the PR is routed through the system before any PO is issued. It would also be helpful in proper and definite assessment of requirement before issue of any PO.

POs without delivery dates

2.2.9.2 On a review of the POs, we observed that 1,420 POs worth ₹ 216.62 crore were issued without the delivery dates. These POs were issued from January 2011 to April 2014. In the absence of delivery dates, there can be no monitoring of performance against scheduled delivery dates and SAP features based on delivery dates will not get activated.

The Management stated (May 2014) that it would re-visit the process for ensuring system entry for validity period to the possible extent by meeting business requirement.

Posting of goods issue and receipts

2.2.9.3 Goods receipts and Goods issue documents should be posted immediately in the system as they are the basis on which total issues to a department or total goods received during a given period of time are worked out. Undue delays in their postings can lead to understatement of figures of issues and receipts generated by the system. We have noticed considerable delays in posting of issue and receipts as tabulated below during the period 2011-12 to 2013-14.

Table 2.2.2: Delay in posting of Goods receipt/issue documents

Sl. No.	Particulars	Numbers	Value (₹ in Crore)	Delay in days
1.	Goods issue documents	401	-	> 30 days
2.	Goods issue documents	8,300	-	1 – 30 days
3.	Goods receipt documents	199	48.69	> 30 days
4.	Goods receipt documents	3,361	204.42	1 – 30 days

The Management stated (May 2014/September 2014) that every year the delay in posting of documents is decreasing, which establishes that it has taken necessary measures. It added that further emphasis would be given to minimise processing delays.

Availability of guarantee/warranty features

2.2.9.4 The provision to capture information relating to warranty/guarantee terms of the materials procured was not available in the system. Absence of this provision posed the risk of failure to use/test the usability of the equipment within the warranty/guarantee periods and to invoke the same wherever the situation warranted.

The Management assured (May 2014/September 2014) that it would explore the possibility.

Utilisation of reminder feature

2.2.9.5 Standard SAP-ERP system has an inbuilt reminder features for keeping track of the POs issued. This feature, however, was not being used and the reminders were being issued manually. There were 2,845 numbers of materials in various POs which remained undelivered or partly delivered beyond their delivery dates as on 31 March 2014, for which reminders were not generated through the system despite availability of such a feature in SAP.

The Management accepted (May 2014/September 2014) the observation by stating that after taking inputs from the business process owners, it would initiate separate configuration.

Discrepancy Report functionality not used

2.2.9.6 SAP system provides a functionality of Discrepancy Report (DR), which incorporates all the issues of poor quality material, short receipt, wrong supply, transit damages, non-delivery or damage/breakage of material, rejection, etc. However, we observed that the Company was not using this functionality of SAP. The Company should generate the DR so as to have a proper control on materials.

The Management stated (May 2014/September 2014) that it would review the process of development of such reports.

Financial Accounting and Controlling Module

2.2.10 SAP Financial Accounting (FI) is the core module where all the financial processing transactions are captured. This is the module that is used to create statutory Financial Statements for external reporting purposes i.e., Balance Sheet and Profit and Loss Statement. Functions in SAP FI can primarily be divided into General Ledger Accounting, Accounts Receivable and Accounts Payable processing, and Fixed Asset Accounting.

SAP **Co**ntrolling (CO) provides details of cost center-wise operational information to the management of a Company to support business analysis and decision-making. Controlling also represents the internal accounting viewpoint of an organisation. It provides information to managers to help manage costs and operations of the organisation.

SAP Financial Accounting and Controlling (FICO) Module integrates with various other SAP Modules. All accounting-relevant transactions which are made are posted real-time to FICO by automatic account determination. The FICO module has enabled the generation of all required financial information and release of transaction based invoice documents through the system.

Monitoring of defaulting customers

2.2.10.1 The Company provides grace period to its customers for bill payment as 21 days, 10 days and seven days for domestic, commercial/non-commercial and industrial categories respectively. If the customer does not adhere to the grace period, then delayed payment charges are levied on the customer, which are included in the next billing cycle.

However, we noticed that in case when the outstanding amount of any customer exceeds the security deposit or bank guarantee amount given by him, there is no provision in SAP wherein any flagging is done. In the absence of such provisions in SAP, monitoring of customers outstanding is done through review committee meetings as and when held. Resultantly, as on 31 March 2014, debtors worth ₹ 2.20 crore were over six months old.

The Management assured (May 2014/ September 2014) that it would ensure regular follow up of defaulting customer by generating system based reminders through SAP. However, the fact remains that charging delayed payment charges and increasing the arrear amount will not prevent arrears from mounting unless the functionality as stated above is added.

Renewal of Bank Guarantee

2.2.10.2 The Company takes bank guarantee (Guarantee) from its commercial and industrial customers at the time of signing of Gas Selling Agreement to protect its financial interest in case of non-payment of bills by the customers. We observed that SAP system did not provide updated information about outstanding guarantees. During the period December 2013 to February 2014, 119 guarantees had expired but there was no information available in SAP to know whether these expired guarantees had been renewed or not. As per details provided by the Company, out of these 119 guarantees, 105 had already been renewed but details of renewal had not been updated in SAP. Even out of 105 guarantees renewed, 22 guarantees were renewed with a delay of one to 41 days. The remaining 14 guarantees were renewed (14 to 21 February 2014) only after the expiry was pointed out (13 February 2014) by Audit.

The Management accepted (March 2014 and May 2014) the observation and stated that monitoring of guarantees would be done through SAP system to prevent the non-renewal and delay that occurred in the cases mentioned above.

During a test check of 634 customers pertaining to Morbi location, we observed that in case of 110 customers, the guarantee periods were not entered. As the calculation of guarantee amount is dependent on the period, the correctness of the guarantee amount entered in SAP could not be verified.

The Management accepted (September 2014) the above observation and assured compliance.

Region-wise trial balance

2.2.10.3 The system was not envisaged to generate region-wise trial balances (TB) although separate regional cost centers were maintained. The Company is having nine regions viz., Nadiad, Navsari, Rajkot, Surendranagar, Jamnagar, Khambhat, Valsad, Palej and Gandhinagar. Though the system was capable of generating region-wise trial balances, the same was not utilised which deprived the Company the benefit of utilisation of SAP to the full extent for various analyses in financial matters.

The Management stated (February 2014/September 2014) that the system is capable of generating region wise TB and it may explore the possibility of using this feature.

Generation of TDS from the system

2.2.10.4 SAP provides the functionality to generate quarterly returns and TDS certificates from the system. We observed that the Company did not use this functionality of the system and continued to get the TDS return prepared through the tax consultant while appointing them for tax audit and assessment proceedings for the years 2011-12, 2012-13 and 2013-14.

The Management stated (May 2014/September 2014) that it would explore using the SAP functionality for filing TDS return.

Physical Verification of Assets not updated in SAP

2.2.10.5 The physical verification (PV) of assets is conducted regularly. However, the records of physical verification of assets are not being updated in the SAP.

The Management stated (February 2014/September 2014) that SAP was capable of updating Asset Master records with PV and it would be done.

Human Capital Management Module

2.2.11 SAP HCM (Human Capital Management) is an ERP Software aimed to automate mainly employee administration, time management, payroll management and legal reporting process etc. EP (Employee Portal) is basically an employee related database with viewing rights to each employee. SAP HCM ERP is the managing system which encompasses essentially Organisation Management (OM), Personnel Administration (PA), Time Management (TM), Payroll Management (PY), and Employee Self-Services Portal (ESS).

OM segment manages a gamut of organisational information for Organisation Units (O), Positions (S), Jobs (C) and Tasks (T). PA segment consolidates all workforce related and core process and data on to single platform. TM segment covers by and large all time management and leave related affairs. PY segment provides seamless and effective solutions to a series of payroll services. ESS segment allows employees to view payment details, view and update personal information and submit vacation requests from their Web browsers.

The HCM Module has enabled configuration of employee master data, structure management and payroll run for all employees, besides facilitating various employee portal facilities.

Reimbursement of conveyance allowance

2.2.11.1 The Company has a system of granting conveyance allowance to contractual employees and petrol allowance to regular employees. The contractual employees submit petrol bills for claiming income tax exemption towards conveyance allowance over and above the allowable limits under the Income Tax Act and regular employees submit bills for claiming income tax exemption for the petrol allowance.

We observed that though conveyance and petrol allowances were routed through SAP, the vehicles numbers against which the reimbursements were claimed, though required to be entered as a field under SAP, were not entered as the same was not mandatory. Therefore, there was no means to determine the genuineness of the claims for petrol and conveyance allowance.

Dependency status

2.2.11.2 The marital/employment status of daughters for deciding the dependency was not monitored through the system due to non-updation of such status in the system. Further, in some of the cases, parents of the employees were also treated as dependents without verifying their actual status. It is suggested that checks should be created in the system to verify the data regarding dependency status or status as manually verified should be updated in the system.

Process Integration (PI) Module

2.2.12 SAP Net Weaver Process Integration (SAP PI) is SAP enterprise application integration software, a component of the Net Weaver product group used to facilitate the exchange of information among Company's internal software and systems and those of external parties. SAP PI is necessary to integrate the SAP system with the pre-existing Non-SAP system. It is also single point integration for all systems of SAP.

The PI has enabled real time and secured integration of spot billing mobile based application with SAP for on-the-spot meter reading and bill generation at the same time.

Mapping of other application/software with SAP

2.2.12.1 The system was not designed to provide for mapping of the business needs of other application/software used by the Company which resulted in deviations with accepted practices. These systems are private applications purchased by Company before opting to go for SAP. A few illustrative deficiencies noted are indicated below:

- **Geographical information system (GIS) Application:** This application is used for tracking pipeline network across Gujarat. This application can be used to verify the genuineness of the invoices raised by the contractors. It can also be helpful to know the alternate route which can be cost effective also. If viewing rights are given to all end users, it can be used as a ready reckoner apart from its use in emergent situations.
- **Automatic Meter Reading (AMR) Application:** This application is installed in the meters of a few of the industrial customers wherein meter reading is automatically transmitted to a receiver at a zonal office. These readings are saved in AMR and then manually uploaded in SAP. However, as on date no mapping with SAP is being done which resulted in reliance on manual procedures.
- **Vehicle Tracking System (VTS):** This application is used for tracking LCV vehicles hired from the private operators. There are various types of penalty which can be levied based on the violation of the norms fixed for the operation of the vehicle. However, as on date no mapping with SAP is being done with the result that the Company had to rely on manual procedures.

- **Biometric System (BS) Application:** 'Biometric System" (BS) (17 units) was procured and installed in the Company (August 2011 to April 2013) for 'attendance monitoring system' at cost of ₹ 3.53 lakh. The annual maintenance cost was 15 *per cent* of the basic cost. The authorisation as well as taking reports from the BS is kept with HR Department and IT Department is giving technical support only. However, the biometric system has not been integrated with SAP despite three years of SAP existence.

The Management accepted (March 2014/September 2014) the fact that they had not integrated various applications like GIS, AMR, VTS, and BS with ERP. The Company assured that it would explore the possibility of integrating other applications with ERP.

Solution Manager Module

2.2.13 SAP Solution Manager (SOLMAN) is a centralised help desk provided to SAP's customers as part of their license agreement. As any SAP system landscape may include a large number of installed SAP and non-SAP systems, SOLMAN is intended to reduce and centralise the management of these systems and end-to-end business processes. SOLMAN early watch system has been configured for system performance management and fine tuning.

We observed that SAP solution has a centralised helpdesk in place to redress the problems faced by users in SAP environment. Each such communication made to the centralised helpdesk is called a ticket[20]. Range of time taken for resolution of tickets raised during February 2011 to February 2014 is tabulated below:

Table 2.2.3: Time taken for handling of tickets

Sl. No.	Types of action	Total Numbers	Range (days)
1	Confirmed tickets (Tickets in which solution has been given and confirmed by the Company)	2,420	0-351
2	Customer Action pending (Tickets which have not been confirmed as solved by the Company)	79	0-209
3	In process at different stages (Ticket pending solution)	249	0-345
Grand Total		**2,748**	

It can be seen from the table above that even the 2420 tickets which were confirmed with a delay of 0-351 days, there were 45 very high and high priority tickets wherein the delays were more than 100 days. The Company should lay down the time limits for confirmation atleast for very high and high priority tickets. In respect of 79 tickets which were pending settlement for

20 Tickets are the errors or bugs forwarded by the end users, prioritised as per severity into high, medium and low, to the support team for resolving in a time bound manner along with suggestions wherever feasible.

want of confirmation from the Company, the same should have been given and the cases closed. In respect of 249 tickets which were in process, 155 tickets had high and very high priority ratings and in nine out of them 100-345 days had already been lapsed. The company needs to monitor this area and ensure timely solution of user tickets.

The Management accepted (February 2014) the fact that there was delay in resolving the problems of users but has also stated that the delay for more than 30 days was very less. The Management also stated (September 2014) that as on date, all pending tickets have been closed in SOLMAN and the actual status of tickets are updated.

The matter was reported to Government (August 2014); they have endorsed (October 2014) the replies of the Management.

Conclusions and Recommendations

The Company embarked upon major computerisation in the year 2010-11 by the implementation of ERP software SAP. The system was made operational with effect from 11 February 2011 without any delay in the scheduled time line. The Company implemented various SAP modules encompassing the key business operations of the organisation. However, certain deficiencies were noticed in the operation and maintenance of the system and implementation of individual modules reviewed as discussed below:

- The operation and maintenance of the system did not have an approved password policy and authorisation with required checks and balances.
    - ***The Company should review the segregation of duties and authorisation to minimise the possibility of the risk of misuse or fraud. The Disaster Recovery Plan needs to be implemented.***
- The Material Management module was deficient in terms of validation checks and input controls as purchase orders were issued without requisitions and there were delays in posting.
    - ***The Company should utilise all the functionalities of the modules and monitor important areas through the system by updating all the fields.***
- The Financial Accounting and Controlling Module did not generate a region-wise trial balance. The physical verification of assets was not updated in the module and neither the defaulting customers nor the bank guarantee renewals were monitored through the module.
    - ***Input controls and validation checks needs to be exercised to ensure generation of correct and required output from all the modules. The Company should minimise dependency on manual controls.***

- The Process Integration Module was not fully utilised to integrate existing systems of the Company with SAP, and the SOLMAN module meant to be a centralised help desk was not effective in providing immediate solution to problems.

    - ***The Company should integrate all the systems to have an on-line single point MIS.***

2.3 Gujarat Medical Services Corporation Limited

IT Audit of Drug Logistic Information and Management System (DLIMS)

Executive summary

A web-based system named Drug Logistics Information and Management System (DLIMS) was developed by National Informatics Centre (NIC) for Gujarat Medical Services Corporation Limited (Company) to cover activities starting from the collection of indents to the distribution of indented items of drugs and surgical items.

Issues related to system efficiency

No documentation existed of the authority which could create master data, nor were procedures for its amendment or verification prescribed; as a result unauthorised creation and tampering of master data could not be ruled out.

Quality Control

There was no pre-dispatch testing at four out of five depots. Further as the module for quality assurance monitoring had not been developed, the same was being done manually.

Inventory Management

The principle of First Expired First Out (FEFO) was not facilitated in the system hence issue of drugs was not made on the basis of FEFO. DLIMS was also not having any automotive alert for Near to Expiry Drugs.

Issue of Stores

A review of stock receipt module and stock issue module of drugs revealed that in 16 out of 3,16,347 cases, date of issue was prior to manufacturing dates. In 253 cases, date of dispatch to depots was prior to date of issue from depots and in 92 cases stores were issued but not dispatched. This indicates that the control needs to be strengthened.

Integrity and Reliability of data

Six cheques involving 23 bills were issued prior to the passing of bills and 25 out of hundred cheques issued were not found in the system database. Further, bill numbers were not system generated.

Documentation

There was no agreement or understanding between the Company and NIC and the Company was not having system development related documents.

Monitoring and Internal control

The Hospitals and other health institutions did not submit e-receipt for acknowledging receipt of stores from depots. Audit trail was not facilitated in the system to recover the history of transactions.

Conclusion and Recommendation

IT audit of DLIMS revealed that due to improper planning without taking into account inter-related activities of the Company and lack of support from the developer etc., the Company was left with a system which had issues relating to integrity and reliability of information. It is recommended that an integrated software package be developed which would take care of the entire business operations of the Company with forward and backward integration.

Introduction

2.3.1 The Central Medical Stores Organisation (CMSO) was established with the objective to procure and supply drugs, medicines, surgical items and medical equipments to cater to the needs of all the Government medical institutions[21] (hereinafter referred to as hospitals and other health institutions) of Gujarat State. Funds for purchase of drugs are placed at the disposal of four Additional Directors (ADs[22]), Gandhinagar working under Commissioner of Health, Medical Services, Medical Education and Research. The drugs are received at five depots[23] and are supplied as per the indents of the medical institutions. With a view to match the changing demands and pace of development in the health sector, CMSO was transformed into Gujarat Medical Services Corporation Limited (Company) with effect from July 2012.

About DLIMS

2.3.2 A web-based application named Drug Logistics Information and Management System (DLIMS) was developed (2007) by National Informatics Centre (NIC), free of cost, to cover interrelated activities starting from the collection of indents from hospitals and other health institutions to the distribution of the indented items. DLIMS only covers the procurement of drugs and surgical items. The system was developed using SQL server 2005 as back end and dot-net 2005 as front end. The system is hosted in the central server of NIC to get the benefit of the technical support.

Through DLIMS, online annual indents for drugs are received from approximate 500[24] hospitals and other health institutions. The indents are automatically consolidated for centralised purchase. A separate e-tender system is utilised for determining the lowest bidder and to fix rate contract (RC) for each item. After finalisation of RCs, purchase orders (POs) for supply of drugs are issued to vendors. The drugs, received from the suppliers are stored at five depots. Distribution of drugs is made to the hospitals and other health institutions from these depots against their indents. Stock available with the hospitals and other health institutions can also be monitored through DLIMS.

Objectives of DLIMS

2.3.3 DLIMS was developed with the following objectives:

- to improve efficiency and effectiveness of drug logistics system;
- to integrate all inter-related activities through common database to avoid redundancy, increase accuracy and enhance transparency;
- to improve various functions to serve in a better and effective manner; and

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21 All medical colleges-hospitals, district hospitals, sub-district hospitals, Community Health Centres (CHCs) and Primary Health Centres (PHCs).
22 In charge of Health, Medical Education, Medical Services and Family Welfare.
23 Amreli, Gandhinagar, Jamnagar, Patan and Surat.
24 Numbers of hospitals and other health institutions 470 (2009-10), 493 (2010-11), 499 (2011-12), 498 (2012-13), 502 (2013-14).

- to facilitate online monitoring of all activities.

Modules

2.3.4 Following modules are available in DLIMS:

Table 2.3.1: Modules under DLIMS

Sl. No.	Modules	Functioning
01.	e-IS	e-Indenting System
02.	PPS	Purchase Order Processing System
03.	BPS	Bill Payment System
04.	SIM	Store Issuable Monitoring System
05.	SRM	Store Receipts Monitoring System
06.	SMS	Stock Monitoring System
07.	MIS	Management Information System

Organisation structure of the Company

2.3.5 The Managing Director is the head of the Company. He carries out the activities through its Drugs branch which processes and finalises rate contracts for supply of drugs on receipts of e-indents from hospitals and other health institutions, its Depots, which distribute the stores to hospitals and other health institutions and its Quality Assurance branch which supervises the quality of the drugs. Each Depot is headed by a Manager.

Audit Objectives

2.3.6 IT Audit of the DLIMS was conducted to evaluate:

- whether there was effective planning for implementation of the system and the business rules were mapped adequately;
- adequacy and robustness of the system in achieving the stated objectives;
- completeness, correctness and reliability of data; and
- adequacy and implementation of various controls in the system.

Audit Criteria

2.3.7 The DLIMS was evaluated considering the business rule governing the functioning of the Company. Planning of computerisation, methodology of development and data management was examined keeping in view the best practice of IT governance.

Scope and Methodology

2.3.8 Records/data related to DLIMS for the period 2009-14 were reviewed at the Company, Gandhinagar. Two[25] out of five depots were selected for assessing supply of drugs against indents, quality assurance of drugs supplied by vendors etc. Entry and Exit conferences were held in April 2014 and

[25] Amreli and Gandhinagar.

November 2014 with the Managing Director and other officers of the Company.

IDEA (Interactive Data Extraction and Analysis) a data analysis tool, was used for analysis of data (2009-14) captured in DLIMS. Besides examining the data, adequacy of general and application IT controls was also assessed.

Audit Findings

Planning Management

Dependency on manual system for supplementary indents

2.3.9.1 DLIMS facilitates submission of online annual indent from all the hospitals and other health institutions. After due date, the procedure for online submission of annual indent is closed. Against their requirement, drugs are procured and supplied to the hospitals and other health institutions. However, during the year, if particular hospitals and other health institutions require additional quantity of items or new items, which had earlier not been included in the online indent, they are required to intimate the Company in writing to be included as supplementary indents.

Thus, due to non-facilitation of online indents for supplementary requirements, dependency on manual system continued. Audit noticed that there had been no effort towards enhancing the features of DLIMS to include additional demands. The Company had also not approached the developer on the issue.

The Management replied (November 2014) that due to less business of supplementary indents, matter of online submission of supplementary indents was not considered and same was done manually. The Management further stated that software development documents have not been provided by NIC and that a new software E-Aushadhi was under development through C-DAC[26], a unit of Government of India. It further assured that the audit suggestion would be attended to in the new software.

Manual dependency for risk purchase

2.3.9.2 As per clause 50 of the tender documents of the Company, risk purchase of the items ordered at the cost and the risk of the party will be carried out when the party fails to supply the items during the validity period. The risk purchase will be done at any time after the delivery period and it will be done from main/parallel/substitute RC holders for undelivered quantity of the stores. The vendor will be penalised to the extent of 10 *per cent* of the cost of undelivered items or difference of the purchase amount, whichever is higher. Audit observed that a manual register was maintained to work out the penalty for risk purchase and to monitor their recovery. The system had not facilitated the generation of risk purchase recovery order; the same was

[26] Centre for Development of Advanced Computing.

manually calculated and issued for affecting the recovery. The Management assured that the same would be incorporated in the new software.

Non-inclusion of various in-house modules to DLIMS

2.3.9.3 The Company requested (September 2008) NIC to develop four modules viz., (i) Quality Assurance/Control (QC) Module; (ii) Earnest Money Deposit/Security Deposit Monitoring; (iii) Grant Monitoring System; and (iv) Instrument Purchase Monitoring System. Three modules excluding QC module were developed in-house by the Company. NIC was requested to add these in-house developed modules to DLIMS but the same had not been done.

The Management replied (November 2014) that NIC had not developed the required modules for DLIMS by citing staff-scarcity and being overloaded by various tasks of the State Government.

This has kept these modules out of DLIMS with the result that the possibility remained of duplication of work for the same information at various places, redundancy of data and human interference during transferring data from one system to another.

Integration with HMIS developed for hospital management

2.3.9.4 Hospital Management Information System (HMIS) was developed (2007-08) by M/s Tata Consultancy Services Ltd. (TCS) to provide clinical and diagnostic tool, hospital management tool and to integrate various in-house functions. It covered six teaching (major) hospitals and 24 non-teaching (minor) hospitals across the State. HMIS is having module 'STORE' to capture drugs, medicines etc., received from the Company. It also receives online indents from various IPD/OPD wards, emergency counter, etc., and issues the stores to them.

Audit observed that even after six years of roll-out of DLIMS, no interface had been developed for integration with HMIS. Stocks received from the Company were manually entered by the hospitals into HMIS and manually updated on account of consumption at both the systems. This resulted in continuity of manual entry of medicines received from the Company into HMIS. The integration would also facilitate monitoring of consumption of medicines in the hospitals through DLIMS.

The Management replied (November 2014) that a meeting was held (May 2011) between NIC and TCS for integration between both the systems. However, there was no progress in this regard. They assured that same would be done in the new software.

Alert facility for monitoring of minimum stock at Depots

2.3.9.5 A Reorder Level (ROL[27]) of each item of drug was required to be defined for each depot based on the consumption pattern, so that the Company

[27] A quantity of an item which a company holds in stock, such that, when stock falls to this quantity, the item should be reordered.

can maintain minimum stock for a defined period and minimum stock in pipeline to reduce the chances of stock-out at the depot. The system was to be designed to give alert once the stock reached the minimum level.

Audit observed that such facility was not available in the system and thus no alert is popped up when the stock of an item goes down the minimum cut-off level. While a minimum cut-off level was defined for 218 items of drugs of Amreli Depot and 228 items for Gandhinagar, these levels were not maintained. During the period of five years (2009-14), the re-ordering levels were not maintained in 46,895 and 46,942 instances in the above two depots respectively.

The Management replied (November 2014) that at the time of development, NIC was requested (September 2008) to provide ROL facility in the system. However, the same would be facilitated in the new software.

Issues relating to System Efficiency

Input control

2.3.10.1 A system should be designed to control the risk of input of incorrect data in the system. The system should ensure that the data entered are accurate and without duplication. Weak input control may increase the risk of entry of un-authorised/irrelevant /incomplete /duplicate/redundant data with the possibility of error or fraud in the computerised system.

- **Reliability of Master Data -** Information stored in the master data files is usually critical for processing and reporting of financial and operational data. Master data affects many related transactions and must therefore be adequately protected from unauthorised and uncontrolled changes. There were approximately 500 hospitals and other health institutions from whom online indents were received during 2009-14. However, as per database[28], the hospitals and other health institutions were 1868 including 34 units, which were not actual hospitals or other health institutions in nature thus, creating doubts about the reliability and integrity of master data files. Further, procedures for changing of master data, verification of integrity of master data with proper manual records, etc., had also not been prescribed.
- **Duplicate code for drugs -** Drugs have been classified into various categories *viz.*, tablet and capsule, injection, surgical items, etc. Each drug has been coded with a unique identification number. Audit noticed that there were 13 items out of 1,107 for which more than one code have been allotted.
- **Updation of declared formulary items -** A list of essential drugs/items is prepared annually by Formulary Committee after inviting opinions from all the stake-holders like district/civil hospitals, medical colleges, etc. There were 466 items of

[28] dbo_CMSO_DDO.

drugs/medicines/surgical/dressing etc., which have been included in the list of formulary for the year 2013-14. In the database, there were 1,107 drugs that were classified as formulary or non-formulary. Logically, those classified as non-formulary should be those not appearing in the list and vice-versa. However, Audit observed 569 drugs out of them have been classified as formulary which did not match with the declared 466 items of formulary drugs for the year 2013-14. It indicates that formulary list was not being updated in the DLIMS.

- **Data in rate contract -** Each rate contract (RC) has its validity period. Date of entering into an RC is invariably prior to the validity period of RC. However, in five cases, the validity of RCs was prior to the dates of the RCs.
- **Price preferences to non-SSI units as per database -** In order to encourage small scale industries (SSIs) and cottage industries to enable them to compete with large scale units, such units are eligible for price preference as per State Government policy (September 1997). Price preference for more than 15 *per cent* will not be admissible. Audit observed that 29 out of 39 units to whom price preferences were given were not SSI units as per the database. Thus, system was not designed in such a way to restrict price preference only to those vendors who were listed as SSI units in the database which would have been in consonance with the Government policy.

The system should be designed in such a way that there should be minimal possibility of input of incorrect data from the users' side. However, Audit observed that there were several cases, as discussed above, where mistakes occurred in capturing the data from the users due to inadequate input controls.

The Management replied (November 2014) that price preference had never been given to non-SSI units. Such errors might have occurred due to mistake and non-validation in data entry for the SSI status. They assured that adequate input control would be provided in the new software for avoiding such type of incorrect data entry.

Process control

2.3.10.2 A system should ensure that data is accurately and completely processed for generation of correct, complete and reliable output data. This objective is achieved by providing various controls. Weak process controls may lead to wrong outputs/results, unauthorised changes in the existing data etc.

- **Closing balance of stock -** Monthly stock (item-wise) of hospitals and other health institutions was captured in the table 'dbo_dlims_stock'. Audit observed that in 283 cases out of 75,05,641 cases, pertaining to eight hospitals and other health institutions, closing balances were not correctly calculated. This indicated that system-processed closing balances were not reliable.

- **Auto-change of quantity of items -** Quantities of the items which have been issued/supplied by the depots to the hospitals and other health institutions, automatically increased to twice or sometime more than four times the original quantity, which required re-check by the depot staff to ensure the supply of correct quantity to the hospitals and other health institutions. The possible implication could be erroneous stock position and incorrect bill generation, if the manual verification is not carried out.

The Management replied (November 2014) that NIC was requested (August 2014) to rectify it but the NIC has not taken action to upgrade the system. The entity assured that the same would be considered in new software.

Penalties for late supply

2.3.10.3 Audit observed that:

- **Manual calculation of penalty:** Despite having facility for auto-calculation of penalty for delay in delivery, it was manually calculated in a separate excel sheet and the same was put into DLIMS for further process. This indicated that either system process calculation was not reliable or altered value of penalty was effected in the system, which required dependency on manual system.
- **Incorrect/less penalty:** In 25 cases, though the drugs were supplied within the stipulated delivery period, even then penalty was deducted while in 1,311 cases, the penalty was not recovered as per the scheduled rates. There were differences between the system calculated penalty and penalty worked out by audit. The difference worked out to ₹ 41.50 lakh.

The Management agreed (November 2014) that lacunae in DLIMS resulted in incorrect calculation of penalty. Hence, late supply penalty was manually calculated. The Company also stated that in some cases, the amount of risk purchase was incorrectly shown as late supply penalty and in some cases the delivery period was extended upto eight to 12 weeks, whereas, in DLIMS, provision is made for a period upto six weeks only.

Quality control

2.3.11.1 Pre-dispatch testing (PDT) system at four depots

At the time of commencement of DLIMS, the samples were randomly taken and sent for testing to Food and Drug Laboratory (FDL), Vadodara, a Government laboratory.

On need-felt basis, a system of pre-dispatch testing (PDT) was started (July 2010). The PDT system was to be achieved up to 100 *per cent* by next three years. As per PDT procedure, the samples were required to be drawn by Senior Drug Inspector and sent to FDL for quality assurance. Drugs were required to be kept in quarantine and not to be distributed to hospitals and other health institutions till test report was received.

Audit observed that out of five depots PDT system was adopted only at Gandhinagar depot and drugs were distributed from other four depots without adopting PDT system, which could pose risk of consumption of drugs without pre-dispatch testing. Instead of following PDT system, post testing process was followed at four depots which was ineffective and served no purpose due to significant delay in getting the test results from FDL.

Module for Quality Assurance of medicines

2.3.11.2 The Quality Assurance Module has not been developed and thus the entire functioning of the Quality Assurance was being done manually.

The Management replied (November 2014) that NIC was repeatedly requested to develop module for Quality Assurance, however, the NIC expressed (August 2013) its inability for any modification/upgradation in DLIMS. The Company also stated that same would be developed in the new software.

Supply of drugs to hospitals and other health institutions against indents

2.3.12 On analysis of table containing data of indents of hospitals and other health institutions and supply of medicines there against, Audit observed that:

- **Negative value of demand –** In one case, the indent/demand of a IO named Central Jail, Vadodara for an item code 1,065 was found in a negative value (-10). This showed that there was no validation check to prohibit the user to enter irrelevant data in the demand field.
- **Supply against no demand -** In 9,681 cases, there were instances of supply against no demand from the hospitals and other health institutions. The quantity of supply made to these units ranged from one to 40,000 numbers when there was no demand for drugs from them.
- **Excess supply than demand -** In 32,585 cases, the supply of drugs was in excess of demand and the quantity of excess supply ranged from one to 57,000 numbers.

This indicated that the system lacked various validation checks. The Management agreed (November 2014) with the audit observations and stated that adequate controls would be facilitated in the new software for monitoring of supply of drugs against the demand.

Inventory Management

Adherence to principles of FEFO for issuing of drugs

2.3.13 An efficient drug logistics system should ensure that the principle of First Expired First Out (FEFO)[29]is followed while issuing drugs, so that expiry of drugs is avoided. Audit observed that the Company took up (September 2008) matter with NIC for requirement of issue of drugs on the basis of FEFO. However, the same was not facilitated in the system and as such inventory was not maintained on FEFO basis. DLIMS was also not having any automatic alert for 'Near to Expiry Drugs', so that the expiry of drugs can be avoided by issuing these to the hospitals and other health institutions or by depot transfer.

The Management replied (November 2014) that requests were made to NIC for using of FEFO principles. However, NIC expressed (August 2013) its inability to extend any module in DLIMS. They assured that the same would be done in the new software.

Issue of stores

Issuance of stores from Depots to hospitals and other health institutions

2.3.14.1 On receipt of drugs from the suppliers, stock is updated in Stock Receipt Module (SRM) and then these are dispatched by own/hired vehicles to the hospitals and other health institutions through Stock Issue Module (SIM) after showing issue from the store. Audit observed that:

- **Store issue dates prior to manufacturing dates -** In 16 out of 3,16,347 cases, the drugs were found issued from four depots (Amreli, Jamnagar, Patan and Surat) even before manufacturing dates.
- **Dispatch dates of stores prior to stores issue dates -** In 253 cases, date of dispatch of stores by own/hired vehicles to the hospitals and other health institutions were found prior to the date of issue of stores from depots.
- **Stores issued but not dispatched -** In 92 cases, the stores were shown issued from the SIM module but these were not found dispatched from depots in the module.
- **Store issue rate in negative value -** In 145 cases, the rate of drugs issued to the hospitals and other health institutions was found 'null' (i.e with no data input), while in 14 cases the rate of drugs issued was in negative value.

The above shows that the controls need to be strengthened.

The Management replied (November 2014) that mistakes were occurred at the time of manual data entry due to disconnection of internet/DLIMS and their

[29] A method of drug inventory management in which drugs with the earliest expiry date are the first products issued, regardless of the order in which they are received.

post entry in DLIMS. For stock issue rate in negative, the reason was attributed to deficiency in DLIMS.

Availability of transportation codes for four depots

2.3.14.2 The names of the vendors with whom rate contracts were entered into by the depots except Gandhinagar Depot, were not available in the database. Resultantly, other depots were forced to use the codes meant for transporters contracted for Gandhinagar depot, which was not proper. Thus, due to non-availability of transportation codes for four depots, incorrect codes were used by them.

The Management stated (November 2014) that these transportation codes for other four depots were not provided by NIC resulting in forced use of transportation codes of Gandhinagar depot by them. The same would be considered in the new software.

Stock Monitoring System

Reliability of Stock data

2.3.15 As per Stock Monitoring System (SMS), stock of a depot is processed monthly. Audit observed that:

- **Expiry dates prior to manufacturing dates:** In 81 cases, expiry dates of the drugs were prior to the manufacturing date of the drugs.
- **Invoice date prior to purchase order date:** In 36 cases, the invoice dates submitted by the vendors at the depot were prior to the dates of purchase order issued by the Company.
- **Closing balance of stock in 'minus':** Monthly stock of each depot is maintained in the database. In 26 cases, the closing stocks were in minus. Thus, the system was not properly designed to control issue of drugs in excess of availability of stock, which was not practically possible.

The Management stated (November 2014) that due to deficiency and limitation of DLIMS, the data entry errors were occurred. The same would be resolved in the new software.

Integrity and Reliability of data

Bill Processing System

2.3.16 Prior to commencement of the Company, the accounts branch of CMSO sanctioned the bills and sent them to the treasury for prescribed checks before issue of cheques. After set-up of the Company, its accounts branch sanctioned the bills and issued cheques to the suppliers. Audit observed that:

- **Issuance of cheques prior to preparation of bills:** Dates of six cheques (involving 23 bills) for making payment of ₹ 39.58 lakh to the suppliers were prior to the dates of passing of bills.

The Management replied (November 2014) that manual register was maintained for monitoring the issue of cheques to the vendors, but incorrect dates were mistakenly entered in the DLIMS, which would be rectified.

- **Cheques issued but not found in DLIMS:** Audit randomly selected 100 cheques for their verifications in DLIMS database. Out of them, 25 cheques were not found in the database. Further, discrepancies were found in three cheques wherein the names of vendors on cheques did not match with the names of vendors in the database.

The Management replied (May 2014) that the manual system of issue of purchase order and preparation/passing of bills was adopted and hence their corresponding entries were not made in DLIMS. However, the discrepancy was not clarified by the Company.

- **Receipt of stores prior to purchase orders:** In 14 cases, the dates of receipt of drugs at depots were prior to the dates of purchase orders issued by the Company. It included two records wherein the receipt dates of drugs were even one year prior to purchase order dates.
- **Gap in Bill Numbers:** Bill numbers were not system generated but manually allotted numbers, following the preceding number. Further, bill numbers were having huge gaps between the bill numbers 1 and 092942. This indicated that either bill numbers were not chronologically followed or these numbers were deleted after allotting the bill numbers, for which no reasons were offered by the entity.

The Management stated (November 2014) that while preparing the bills in DLIMS, next bill number is given manually after considering the numbers of bills prepared outside the DLIMS. However, the fact remained that completeness of the data in DLIMS was not ensured as evident from the gaps.

Documentation

System Development Documentation

2.3.17 To ensure the effective utilisation and future maintenance of a system, all the system development related documents should be prepared and suitably updated for any changes. Lack of updated documentation hampers the continuity of development activity.

Audit observed that there was no agreement or Memorandum of Understanding between the Company and NIC. Normal software development methodologies like preparation of URS, SRS, SDD[30], Users Manual etc., were not adopted by NIC. Maintenance and changes in the application were not

[30] URS-User Requirement Specification, SRS-System Requirement Specification, SDD-System Design Document.

recorded. No policy was adopted to document the authorisation of changes/modification/up-gradation required in DLIMS. Resultantly, the Company was not having system development related documents. Absence of documentation policies increases the risk of unauthorised working practices being adopted and may render the system difficult for future maintenance.

The Management replied (November 2014) that software development documents have not been provided by NIC. They further stated that a new software E-Aushadhi was under development through C-DAC, a unit of Government of India and assured that the audit suggestion would be attended in the new software.

Monitoring and Internal control

2.3.18 The existence of an adequate system of internal control minimises the risk of errors and irregularities. However, the Company has not defined any such policy to reduce risks associated on account of lack of internal control.

Submission of e-receipt by hospitals and other health institutions for acknowledging the receipt of stores from depots

2.3.18.1 Hospitals and other health institutions were required to issue e-receipts as acknowledgment for receipt of the drugs from their respective depots. Audit noticed that:

- In 14,851 out of 23,619 cases, e-receipts had not been issued by hospitals and other health institutions. In other cases, time taken in delivery of the stores to these units after dispatch from the depot ranged up to 1,579 days from the dates of dispatch.

The Management replied (November 2014) that the quoted cases might pertain to the legacy data. Reply was not correct as these pertained to the period 2009-14.

- In 176 cases, the dates of receipt of stores by hospitals and other health institutions were even prior to the date of dispatch of vehicles from depots, which were unreliable. Audit observed that the e-receipts to be issued by these units had not been monitored by the Company for ensuring actual delivery of stores to them.

The Management accepted (November 2014) the audit observations and stated that incorrect data entry might have been the reason for such discrepancies. It was further stated that care would be taken to avoid such deficiency in the new software.

Audit Trail

2.3.18.2 There was no internal control mechanism to detect any attempts of deletion which may enhance the risk of manipulation by unauthorised users. ‘Audit trail’ was not facilitated in the system to recover the history of transactions *viz*., updated by, updated on, updated from, deleted by, etc. In absence of the activity logs for audit trail, changes/modifications done by NIC were not available on record. Consequently, the activities of all the users including managerial/monitoring staff could not be tracked for fixing responsibility in case of any unauthorised manipulation.

Thus, the Company had not considered the designing and incorporating audit trails to track the transactions and to monitor the changes made to the data.

Business Continuity Plan and Disaster Recovery Plan

2.3.18.3 Business continuity and Disaster recovery plan is to enable a business organisation to continue its operations in the event of a disruption and to survive disastrous interruption to their information systems. Further, backup media is required to be kept at a location other than the server room, so as to avoid fatal loss of the vital data in case of any unforeseen accident. Further, backup media is required to be tested for assuring recovery in the case of database servers getting damaged.

Audit observed that no such policy has been framed for continuing their operations in case of any disaster, security policy for the periodical back-up of data and its testing for retrieval of data. This would lead to disruption of activities in case of any unforeseen eventuality.

The Management replied (July 2014) that audit suggestion would be considered for the new software.

The matter was reported to Government/Management (September 2014); while the Management replies were received (November 2014) which have been duly incorporated, a formal reply from the Government is awaited (December 2014).

Conclusions and Recommendations

DLIMS was a web-based system developed by NIC free of cost for the Company to cover inter-related activities starting from the collection of indents to the distribution of indented items to improve efficiency and effectiveness of the drug logistics system. The following deficiencies were noticed in the implementation of this system:

- On account of planning without taking into account the inter-related activities of the entity, lack of support from the developer for timely updation etc., the Company was left with a system which had issues relating to the integrity and reliability of information stored and processed therein.

    - ***The Company should formulate IT strategy defining inter-alia the goals and objectives of the intended computerisation and benefits which would accrue from it.***

- Non-integration of various in-house modules and modules of HMIS has defeated very purpose of computerisation of drug logistics system.

  - ***It is essential that an integrated software package be developed which would take care of the entire business operations of the Company with forward and backward linkages from demand generation to procurement as well as issue to hospitals and other health institutions and other users of the healthcare system in Gujarat.***

- Important functions such as Quality Control and real time pre-dispatch testing system were yet to be fully comprehended. Data captured in the system was not fit for immediate benefit to the organisation. Hence, the manual system was still in use for various purposes.

  - ***The Company should ensure documentation of all stages of system development and the changes carried out to the system at later date to ensure its smooth and error free functioning***.

- Running the system in the present form based on the information generated by it may affect the decision making process. The software is yet to stabilise its system controls.

  - ***Adequate validation checks for data entry, use of barcode system to avoid human error and auto capturing the vital information of drugs and efficiency of process control should be embedded in the systems to avoid erroneous data entries and incorrect generation of reports.***