Deloitte.

# Strategic Review of the Medical Stores Department of Tanzania

## The Journey to Efficiency

## FINAL REPORT

December, 2015

The Global Fund

msd
medical stores department

# Glossary of terms

| Abbreviation | Long Form | Abbreviation | Long Form |
|---|---|---|---|
| APS | Advanced Planning Scheduling | DPTWM | Demand Planning Technical Working Manual |
| APP | Annual Procurement Plan | DPU | Demand Planning Unit |
| AWB | Airway Bill | DPs | Development Partners |
| AFS | Audited Financial Statements | E9 | Epicor 9 |
| Analysis Period | Period starting 1 July 2012 to 30 June 2015 | E10 | Epicor 10 |
| AG | Attorney General | eLMIS | Electronic Logistics Management Information System |
| ATS | Annual Technical Support | EMT | Executive Management Team |
| BoT | Bank of Tanzania | ERP | Enterprise Resource Planning |
| BRN | Big Results Now | EPI | Expanded Program on Immunization |
| Bn | Billion | EPM | Enterprise Performance Management |
| CMS | Central Medical Store | FY | Financial Year |
| CVR | Classification & Verification Report | GDP | Gross Domestic Product |
| CAPEX | Capital Expenditure | GoT | Government of Tanzania |
| CMA | Chief Management Accountant | GRN | Goods Received Note |
| CAGR | Compounded Annual Growth Rate | GNI | Gross National Income |
| CRM | Customer Relationship Management | HIV | Human Immunodeficiency Virus |
| CHF | Community Health Funds | HFs | Health Facilities |
| DCSZO | Director of Customer Services and Zonal Operations | HCM | Human Capital Management |
| DG | Director General | IDF | Import Declaration Form |
| DHRA | Director of Human Resources and Administration | IDs | Identification Cards |
| DFP | Director of Finance and Planning | ILS | Integrated Logistics System |
| DL | Director of Legal | ICD | Inward Container Depot |
| DOS | Dormant, Obsolete and Slow moving | ICT | Information Communication Technology |
| DoSO | Days of Stock Out | JSI | John Snow Inc |
| DPM | Demand Planning Manager | KEMSA | Kenya Medical Supplies Authority |
| DP | Director of Procurement | K | Thousands |
| DMO | District Medical Officer | KPI | Key Performance Indicators |

# Glossary of terms

| Abbreviation | Long Form | Abbreviation | Long Form |
|---|---|---|---|
| LoB | Lines of Business | PS | Permanent Secretary |
| LPO | Local Purchase Order | PMO RALG | Prime Ministers Office – Regional Administration and Local Government |
| LGA | Local Government Authority | PPM | Pooled Procurement Mechanism |
| LC | Letter of Credit | QA | Quality Assurance |
| LMU | Logistics Management Unit | SBU | Strategic Business Units |
| MoU | Memorandum of Understanding | SKU | Stock Keeping Unit |
| MSD | Medical Stores Department | SLAs | Service Level Agreements |
| m | Millions | SOP | Standard Operating Procedures |
| MDGs | Millennium Development Goals | STG | Standard treatment Guidelines |
| MTSP | Medium Term Strategic Plan | SC | Supply Chain |
| MoF | Ministry of Finance | SLA | Service Level Agreement |
| MoHSW | Ministry of Health and Social Welfare | TFDA | Tanzania Food and Drug Authority |
| MSL | Medical Stores Limited | TISCAN | Tanzania Inspection Service Company |
| MSO | Medical Stores Office | TPA | Tanzania Ports Authority |
| NEMLT | National Essential Medicines List for Tanzania | TRA | Tanzania Revenue Authority |
| NHIF | National Health Insurance Fund | TZS | Tanzania Shilling |
| NMS | National Medical Stores | TB | Tuberculosis |
| O&SP | Operations & Sales Planning | UC | Underpinning Contracts |
| OLAS | Operating Level Agreements | VAT | Value Added Tax |
| PCVR | Provisional Classification & Verification Report | VP | Vertical Programme |
| PHC | Primary Health Care | WC | Working Capital |
| PHF | Primary Health Facilities | WGP | Warehouse Goods Practice |
| PMU | Procurement Management Unit | WIB | Warehouse in a Box |
| PO | Purchase Order | YoY | Year on Year |
| PPA | Public Procurement Act | ZM | Zonal managers |
| PPRA | Public Procurement Regulatory Authority | ZTA | Zonal Transfer Advice |
| PM | Performance Management | ZTO | Zonal Transfer Out |

# Acknowledgement

Deloitte would like to express sincere thanks to all who made this study possible. Special thanks go to The Global Fund for entrusting us with this important assignment, and for their support throughout. We also wish to extend our sincere gratitude to all stakeholders who in one way or another have contributed to the successful completion of this assignment including: MSD Management and Board of Trustee; Ministry of Health and Social Welfare; Ministry of Finance; Development Partners Group; President's Delivery Bureau; E-Government Agency; The Project Steering Committee Team; MSD Clients and MSD Suppliers. Lastly, to the many Deloitte staff who worked tirelessly to deliver this report.

# Contents

With Health being one of the top priority sectors for the Government, the increasing coverage of interventions has led to increased demand for health care services thereby creating pressure on MSD to adequately deliver accessible, timely, affordable and quality health care commodities. However, the declining trend in Government funding for health care commodities, growing receivables, and operational inefficiencies have resulted into severe working capital erosion at MSD, further jeopardizing its ability to deliver. This has contributed to instances of stock outs at MSD, translating into unmet health care demand for the Tanzanian community; calling for immediate structural and operational reforms at MSD and Government level to reinstate MSD's operational efficiency and optimize service delivery. This reform will be inline with the current Government's initiatives of improving operational efficiency and avoiding waste.

Such reforms have happened in similar institutions in several countries and helped transform the health care delivery in those countries. A good example is the recent reform of the Kenya Medical Supplies Authority (KEMSA). KEMSA's operations have changed from previous status, where the organization depended on funds from the government to procure, to the current model where the Authority uses its own capital to buy medical commodities.

# Deloitte was requested to conduct a strategic review of MSD with a focus on the organizations existing governance framework, supply chain operations, financial performance and the causes for its working capital erosion. We set out below the scope of work for the review:

| | | | | |
|---|---|---|---|---|
| Governance | Board Composition | 1. Understand governance structures at MSD and explore opportunities for improvement including having stronger financial management capabilities at MSD board. | See Slide 10 | Details on 47 - 53 |
| | Legal Structure | 2. Provide options for the governance structure required to ensure maintenance of the new fee structure taking into account the possibility to maintain the current structure or to change into an Agency. | See Slide 10 | Details on 46 - 49 |
| Supply Chain | Operational Efficiency | 3. Propose efficient business models for the CMS building on the existing work, looking operations of the CMS and from areas of efficiency improvement observed from the understanding of the root causes of the challenges currently experienced | See Slide 12 | Details on 61 – 69 & 135 |
| | KPIs | 4. Develop KPIs (dashboard) that can provide a comprehensive but succinct picture of financial flows in MSD's supply chain to MOHSW, Finance Ministry, MSD's Board of Trustees and development partners | See Slide 18 | Details on 137 |
| Finance | Payment Arrears | 5. Establish the levels and sources of payment arrears at MSD. More specifically determine the age, institution, type of payment, and reason for arrear/receivable. | See Slide 15 | Details on 94 - 98 |
| | Options to Clear Receivable | 6. Propose different options for clearing the current stock of receivables at MSD. In consultation with different stakeholders assess the feasibility of each of the options. | See Slide 16 | Details on 98 |
| | Working Capital Erosion | 7. Based on above analysis identify the root causes for accumulation of debt and working capital erosion at MSD. | See Slide 15 | Details on 93 – 94 & 102 |
| | Short Term Recommendations | 8. Develop specific short term recommendations for preventing the recurrence or further escalation of this problem. | See Slide 19 | Details on 99 - 100 |
| | Fee Structure | 9. Build upon the costing study carried out by USAID to recommend an optimal/sustainable fee structure for MSD based on an efficient system of operations. | See Slide 14 | Details on 85 - 91 |
| | Budget Formulation Process | 10. Understand MSD budget formulation process and assess opportunities for improvement. Also study cash management practices at MSD and explore opportunities for improvement. | See Slide 17 | Details on 73- 77 |

# Our findings revealed that an inadequate governance framework, operational inefficiencies, inadequate funding weak performance management and technological challenges have contributed towards the significant working capital erosion at MSD

## 1: Inadequate Governance framework

MSD's **autonomy** is limited because of its limited powers in making its own strategic decision to operate commercially impacting its financial independence. Lack of the right **skill set** within the current Board also impacts MSD's ability to improve strategic performance on its core business. For example, the current Board of Trustees does not have members with experience in Logistics and supply chain, Pharmaceuticals, and Accounting/Finance which are key to MSD's core business.

## 2: Operational inefficiency

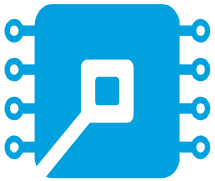
Despite an average stock out rate of 24% for essential items, the value of **expired goods** has grown by 37% over the past 1year. In addition the **Dormant, Obsolete and Slow Moving** (**DOS)** items grew by 136% over the same period. As at June 2015, the MSD had over 11.7Bn worth of expired and DOS stock stored in its warehouse.

## 3: Inadequate funding

While **demand for medicine has been growing** at an average of 46.7% for the past 4 years, **funding for medicine and medicine supplies has been declining** at an average of 74.5% over the past 4 years.

## 4: Weak performance management

There is no link between MSD's **KPIs** and MoHSW's expectations of the Department. This has led to conflicting views of the Department's performance, hindering effective cooperation between the two entities. In addition, whilst the current MSD's **performance management** framework (DRIVE), is good; the framework has not been operationalized fully and effectively.



## 5: Technological challenges

The current technology environment at MSD does not adequately support efficient operations mainly because of issues arising from **over customization** of the system and inadequate **reporting** capabilities. For example the current system (Epicor 9) lack audit trail functionality and inability to generate the required stock and financial management reports

## 6: Working capital erosion

**Inadequate funding** and **growing government receivables** have forced MSD to finance its operations through capital, which has contributed significantly to working capital erosion. Over 85% of the receivable amount results from charges attributable to **clearing, storage and distribution of Vertical Program goods**. Operational inefficiencies have also played a role in MSD's working capital erosion.

# These issues have also been highlighted by the BRN initiative as part of ongoing efforts to provide 100% stock availability of essential medicines for health facilities by June 2018

**1. Inadequate Governance Framework**
(BRN issue # 7)

**2. Operational Inefficiency**
(BRN issues # 1, 2, 6, 8, 9, 12)

**3. Inadequate Funding**
(BRN issue # 4, 11)

**4. Working capital Erosion**
(BRN issue # 3)

**5. Technological Challenges**
(BRN issue # 5)

**6. Poor Performance Management**
(BRN issue # 7, 10)

## BRN Health Commodity Issues

| | | |
|---|---|---|
| 1. | Procurement Lead Times | Procurement processes for tracer medicines takes too long |
| 2. | Demand Forecasting | Inaccurate quantity procurement due to inadequate quantification and forecasting capabilities |
| 3. | Working Capital Erosion | Erosion of MSD working capital |
| 4. | Transportation Costs | Resources to transport health facilities from central to zones and health facilities are insufficient by 40% and expensive |
| 5. | Technology | Weak tracking systems for health commodities from central to health facilities |
| 6. | Storage Capacity | Currently MSD storage capacity at central and zonal level can only cater for % of the Health Community |
| 7. | Governance | Weak governance, accountability, ownership on the management of health commodities at the district & health facility levels resulting in frequent occurrences of stock outs |
| 8. | Inventory Management | Weak inventory management and storage management has negatively affected the availability and quality of commodities |
| 9. | Procurement Process | Irrational prescription of drugs in the facility has resulted in frequent stock out of medical commodities |
| 10. | Performance Management | Weak management systems at district level leading to frequent stock out of health commodities |
| 11. | Inadequate Funding | Inadequate mobilization of funds from local sources by some facilities has resulted in frequent occurrences of stock outs |
| 12. | Distribution Process | Inefficient system of distribution for receiving medical commodities from zonal MSD to health facilities |

# Restructuring the board composition and conducting regular board evaluations will improve MSD's ability to diagnose and resolve operational issues. Changing to a corporate body will also enable MSD to become more financially independent

More Details Page 46- 53

Scope #1,2

## Key Findings and Implications

- **Limited legal mandate** - While similar institutions in other countries are run as fully autonomous Corporate Bodies either incorporated as a Parastatal / State Corporation; or Limited Liability Company, MSD is run as a department with limited autonomy. Therefore, MSD's governance framework relies on the Minister (MoHSW) for final approvals/directives resulting in limited decision making authority
- **Lack of financial independence -** As a department, MSD does not have the mandate to make sound financial decisions, making it overly dependent on decisions made by the MoHSW. Also, under its current status, MSD does not have authority to invest, borrow funds from financial institutions or sale to private hospitals unless under special permission from the MoHSW, making it overly reliant on Government disbursements which makes it financially vulnerable
- **Board mandate -** Where as in other similar entities, key decisions are discussed and resolved by the Board of Directors, at MSD there are limited powers vested on Board of Trustees. Key decisions require approval of Minister/Government since the Trustees are responsible to the Minister
- **Board composition –** Board of Trustees composition, qualifications and skills are not defined in MSD Act. As a result, the required skills within the current Board do not exist to adequately guide the strategic direction of MSD on its core business lines and processes. For example the current Board lacks key experts in pharmaceuticals, supply chain, accounting and finance which are key to MSD (note that the current board term ends in April 2016)
- **Board Performance Evaluation currently not undertaken** - Periodic evaluation of Board performance is not done for MSD Board of Trustee, making it difficult to assess the effectiveness and efficiency of the Board

## Key Recommendations

1 **MSD should have a legal mandate to make strategic decisions and operate commercially to enable it to become financially independent**

*Linked to BRN initiative #12 (Support funding for medicines)*

- Transform MSD from a Department to an Authority with powers vested in a Board of Directors instead of a Board of Trustees
- Board of Directors should have term limits in terms of how many times a Director can be re-appointed to the Board. These terms should also be staggered to ensure that all Directors do not retire and leave the Board at the same time

2 **Improve the skills-mix of the Board**

- Board members should be selected through a competitive recruitment process to allow for the diverse skill-set and experience that match the core business of MSD Some of the skill-sets to be considered and currently missing on the Board include: accounting & finance, pharmacist, supply chain, legal and medical doctors
- The MoHSW should have representation in the Board, but the representative(s) must have the skill set required within the Board

3 **Strengthen the Board Charter**

- There should be a Board Charter that sets out the role, responsibilities, structure and processes of each Board Committee in overseeing the management's implementation of MSD's strategic initiatives
- There should be an annual performance review of the Board and its committees to assess performance and identify and address potential gaps in the boardroom

# Increasing DOS by 132% (Figure 1) due to poor commodity flow is resulting in a surplus of goods by 24% (Figure 2) and eventually increasing the value of expired goods for disposal by 37% (Figure 3) over the last year. As of June 2015, MSD had over TZS 11.7Bn worth of expired and DOS stock stored in its warehouse

More Details Page 61 - 69

Scope #1, 3

## DOS

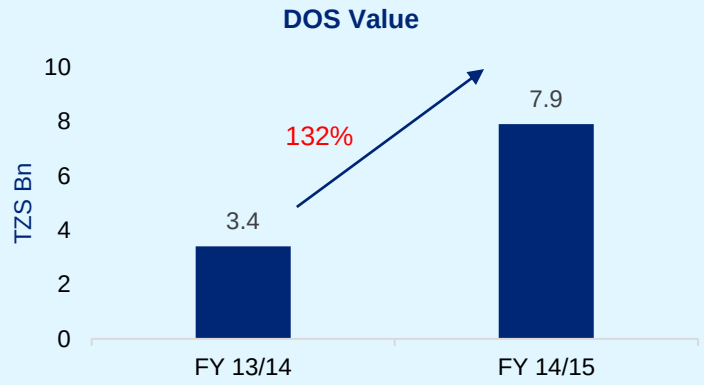



**Figure 1:** DOS value has increased by 132% over the past 1 year.

- **Poor commodity flow –** Due to inadequate funds for distribution resulting in an increase in DOS items. This is in addition to poor coordination between procurement and warehouse unit resulting into purchase of additional DOS stock

## Overstock Items

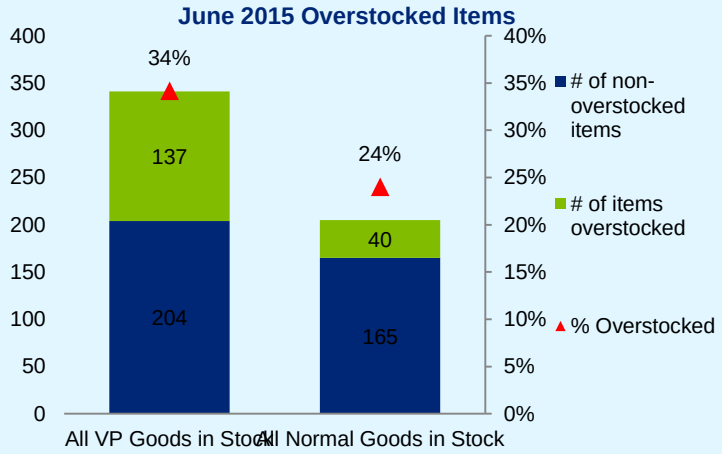



**Figure** 2: On average, 29% on goods were overstocked by June 2015

- **Stock Visibility** - Poor stock visibility for goods within the warehouses and inadequate coordination between Procurement and Logistics unit at MSD significantly affects inventory management processes
- **Coordination of VP Goods** – Insufficient coordination of VP goods add on the inventory management challenges to MSD

## Expired Goods

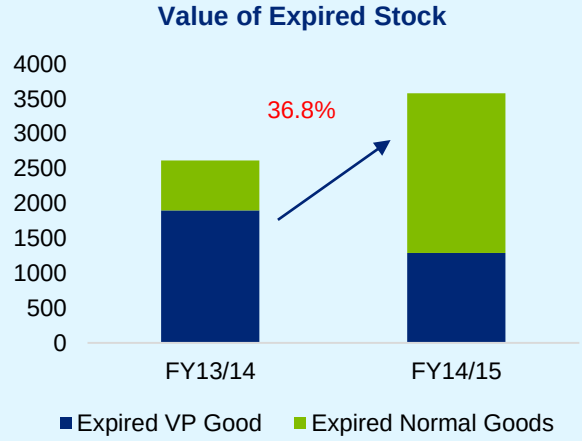



**Figure 3:** Expired stock grew by 36.8% over the past 1 year.

- **Poor procurement coordination –** For both VP and normal goods, resulting in overstock and DOS goods, which are a major contributor of the expired stock value
- **Slow distribution of stock –** Due to inadequate funding and slow disbursement of funds also contribute to increased expired stock

# Strengthening existing coordination mechanisms, reviewing LMU performance metrics, scaling up framework agreements and enforcing timely payments will quickly alleviate bottlenecks in the procurement process and optimize the end-to-end supply chain

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Scope #3

## Key Findings and Implications

- **Poor commodity flow –** Due to inadequate funds for distribution results into increased DOS items. This is in addition to poor coordination between Procurement and Logistics unit resulting in purchase of additional DOS stock
- **Stock Visibility –** Poor stock visibility for goods within the warehouses, and inadequate coordination between Procurement and Logistics unit at MSD significantly affects inventory management processes
- **Coordination of VP Goods –** Insufficient coordination of VP goods add on the inventory management challenges to MSD
- **Poor procurement coordination –** For both VP and normal goods, resulting in overstock and DOS goods, which are a major contributor of the expired stock value
- **Slow distribution of stock –** Due to inadequate funding and slow disbursement of funds also contribute to an increase in expired stock

## Key Recommendations

4 **Improve coordination between Procurement and Logistics directorates so as to boost stock and order visibility**

- Conduct inter-departmental coordination meetings within MSD
- Fast tracking of bar coding systems to enable real-time visibility of stock data
- Increase frequency of cycle counts and ensure follow up on variance items

5 **The Logistics Management Unit (LMU), and MSD should work closely to improve communication around management of VPs**

- MSD's commitment and participation in the technical working groups to be reinforced
- Define performance targets for LMU for efficient management of the flow of VP goods

6 **Undertake a holistic supply chain system review**

*Linked to BRN initiative #13 (Improvement procurement & delivery)*

- Review key performance metrics for the entire supply chain processes from planning to final delivery to address the current process inefficiencies. This should include review and recommendations on metrics for processes around minimum procurement timeframes, inventory levels, ordering process, delivery process, delivery frequency, quantification process, warehouse layout, and distribution mechanism

7 **Minimize stock out occurrences**

- Adequate allocation and timely disbursements of funds inline with demand estimations
- Timely payments to suppliers to avoid delivery delays

8 **Improve stakeholder management by developing a stakeholder engagement strategy**

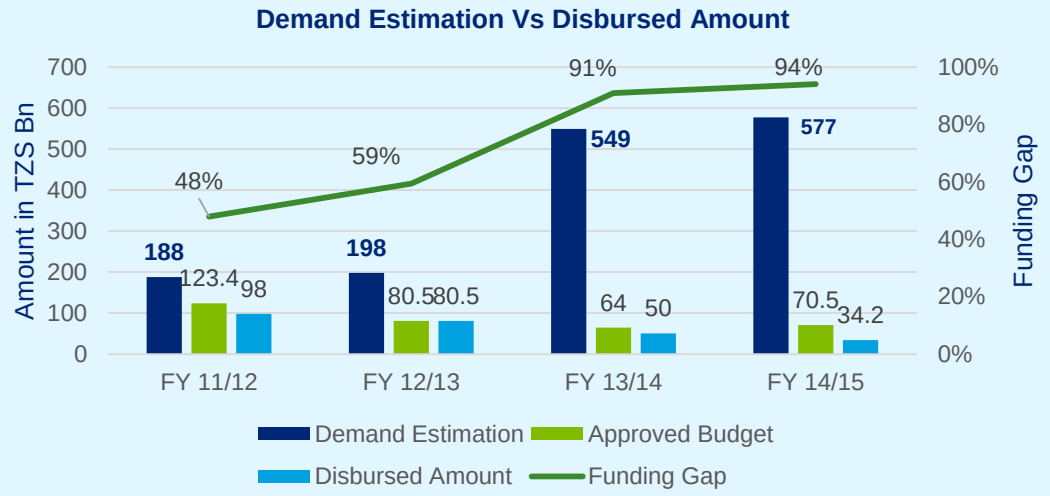
*Linked to BRN initiative #16 (Sustain with tools & best practices)*

# The funding gap between the demand for medicines from citizens compared to the available supply has doubled over the last four years indicating that there is a need for MSD to search for alternate sources to bridge this gap and minimize occurrences of stock outs

More Details
Page 56 - 58

Scope
#9

## Key Findings and Implications




While the demand for medicine has been growing at an average of 46.7% for over the past 4 years, **funding has been declining at an average of 74.5%** over the same period.

The situation has been worsening over time, with recent data showing that **less than 10% of the demand for medicine is being funded through direct government** disbursement.

**Health facilities have complemented their budget through alternative sources** of funds such as NHIF, CHF and basket funding

## Additional Details

- Rapid population growth coupled with growing quality of life has increased the demand for more heath care, however, **the funding gap has doubled in the past 4 years**, growing from 48% to 94%. Of recent, the budget for medicine and medicine supplies has been declining, resulting in unmet demand for health care commodities. This issue was also highlighted in the BRN report as a **major contributor to the stock out** of medicine within the country
- The approved budget ceiling has also not been adhered to, resulting in increasing discrepancies between amount approved and amount disbursed. For example, the **disparities between the annual allocated budget and actual amounts disbursed** has grown from 4% in the FY12/13 to 51% in FY14/15
- **Overreliance on Government disbursements** significantly affects MSDs ability to meet the demands for medicine and medicine supplies. Inadequate funding also affects the flow of commodities from MSD warehouses to Health Facilities because of lack of funds to meet the distribution cost of the available medicine. As a result, the value of expired good, DOS goods and overstocked items continues to increase over the years. This means that even the available medicine is not distributed effectively
- Furthermore, **unpredictability of the disbursement schedule** is contributing to poor commodity flow at MSD. Not only are funds inadequate, but availability of funds are not disbursed timely and at regular intervals, affecting MSD's ability to plan stock supply
- Given the current level of inefficiencies and waste, the current **fee structure** of 20.4% for normal business and an average of 11.6% for VPs is not adequate to cover MSD's operational costs. From our analysis of MSD's current actual cost of doing business, it would require an average mark up of 24% to cover its operational costs

# Searching for alternate sources of funds including LGAs, universal health care, revising the fee structure and developing inter-agency agreements will hedge MSD from fluctuations in government funding

More Details Page 56 – 68, and 99 - 100

Scope #9

## Key Recommendations

### 9 Institute a mechanism for MSD to generate additional sources of funds to reduce overdependence on Government funding

*Linked to BRN initiative #13 (Improve procurement & delivery)*

- Coordination between MoHSW, the MSD and PMO-RALG for the MSD to tap into funds from LGAs such as NHIF, CHF and basket funds, to increase MSD cash sales
- Sale of medicines to private health facilities under clear guidelines from the MoHSW to protect the interests of the public healthcare system

### 10 Actively initiate preparations for universal health-care

- Undertake a detailed feasibility study on Universal Health care in Tanzania, including establishing a clear implementation roadmap to achieve it

## Key Recommendations (continued)

### 11 Revision of the current fee structure to cover operational expenses, hence enabling MSD to sustain its operations

- Under an efficient operation, on average MSD should charge an average of approximately 20.9% to meet its operational costs. This fee have a huge potential to go down further after implementing the activity based costing to estimate MSD's actual cost of doing business. Therefore, at the moment, we recommend that MSD should work towards improving operational inefficiencies and maintain the current fee structure for normal business (20.4%). However, the fee structure for **VPs should be elevated** to a similar fee structure of **20.4%.** This will enable MSD to estimate the actual cost for each process, and identify areas of inefficiency in order to optimize its operations

### 12 Develop inter-agency agreements to fast-track clearance of MSD goods

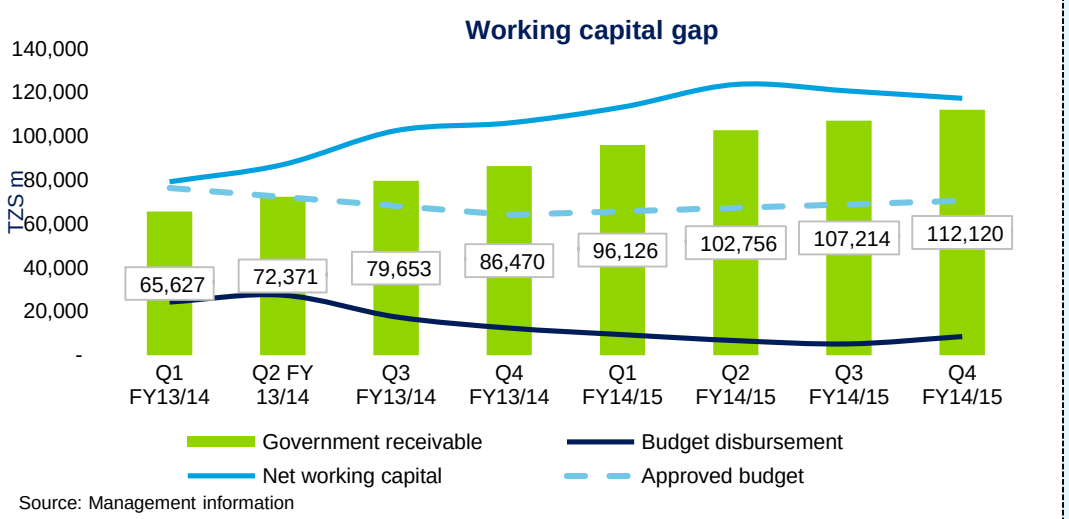
- The agreement should involve the relevant agencies in the clearance process such as TFDA, TRA and TPA, which will enable other clearance procedures such as inspection and quality assurance to be undertaken in the bonded warehouse. This will significantly reduce charges on demurrage and ICD. However, as a prerequisite to this, there should be a formal agreement prohibiting MSD from release of stock until all clearance procedures (e.g. quality inspection) have been completed
- There should be an agreement with the Government for all medicine supplies and equipment to be exempted from VAT so that such funds can be directed towards procurement of medicine. However, as a prerequisite, there should be clear internal control to avoid abuse of this exemption

# MSD's net working capital position has been worsening mainly because of growing government receivables, inadequate funding and operational inefficiencies

More Details Page 93– 94 & 102

Scope
#5, 7

## Key Findings and Implications




Source: Management information

MSD's net working capital position has been worsening mainly because of:

- **Growing Government receivables -** This form 99% of the total MSD's receivables, coupled with slow debt settlement rate do not match with the receivables growth rate
- **Inadequate funding –** This causes delay in settlement of trade payables and poor inventory flow from the warehouses to health facilities
- **Operational inefficiencies –** This results in waste such as expired stock, demurrage charges and increased DOS

## Additional Findings

- Over 120% of the Government receivables are over 120 days. As of 30 June 2015, **85% of the total receivables resulted from clearance, storage and distribution of VP goods and donations**. The main reason for this receivable is inadequate budget allocated by the government for handling of VP costs (clearance, storage and distribution charges). On average, the Government sets aside only between 10% to 15% of the total amount required annually.
- **Lack of a reconciliation mechanism** between the MoHSW and MSD caused by inadequate documentation at MoHSW and lack of breakdown of the billed amount by MSD contributes significantly to continuous accumulation of government receivables.
- Other receivables (about 15% of total Government receivables) are contributed by Directives from MoHSW to MSD to distribute goods to dispensaries and Hospitals before payment.
- In May 2015, the Government through MoF verified TZS 64bn of the Government receivable. Further more, Deloitte verified an additional TZS 40bn for cumulated amount from 1 July 2014 to 30 June 2015, hence making 91% of the total verified debt as at 30th June 2015.

# Preventing recurrence of increasing government receivables by ring-fencing adequate budget for MSD and providing up-front disbursements while settling the current debt and avoiding waste will reinstate MSD's working capital position

More Details Page 93 – 94 & 102

Scope #6,8

## Key Recommendations

**13** **Clearance of the current Government receivables so as to arrest working capital erosion**

*Linked to BRN initiative #12 (Support funding for medicines)*

- Direct budget allocation to the tune of the current debt amount
- Netting off of the amount payable to government institutions such as TFDA
- Soft loan from multilateral financial institutions such as the World Bank

**14** **Upfront disbursement of the approved funds in a maximum of two tranches**

*Linked to BRN initiative #12 (Support funding for medicines)*

- One of the start of the financial year and second in the middle of the financial year

## Key Recommendations (continued)

**15** **Take measures to prevent future accumulation of Government receivables**

*Linked to BRN initiative #12 (Support funding for medicines)*

- Inclusion and ring–fencing of adequate budget for VP clearing, storage and distribution costs
- Instituting a delivery-duty-paid policy for all VP goods to reduce and/or avoid incurring demurrage and ICD charges
- Enforcing the cash-and-carry policy at MSD
- Maintaining adequate documentation at MoHSW and performing monthly reconciliations of the Government receivable between MoHSW and MSD
- Enforce implementation of the donation guideline

# A detailed post implementation review of E9 is required to zero in on the identified functional challenges and gaps caused by over customization. In addition, fast – tracking the barcoding rollout to all warehouses will address data integrity issues and reduce process delays due to manual interventions

More Details Page 106 - 113

## Key Findings and Implications

- **Extensive customization** – Attributed to resistance to Business Process Transformation and/or inadequate rigor in Project Management during implementation. In addition, the MSD currently does not have a customization support contract in place
- **Lack of Service Level Agreements (SLAs)** – Between the Business and ICT to provide Service based targets for ICT and manage expectations with the Business. In addition, MSD experiences network connectivity issues caused predominantly by power outages and reliability issues with available WAN infrastructure
- **Limited Audit trail capabilities** –This creates a high risk of fraud as the system is unable to keep track of users who may delete or change transactions fraudulently.
- **Inadequate Financial Statements and reporting functionality** - Manually creating financial statements adds to the risk of data integrity issues within financial reporting. Discrepancies have also been identified across reports.
- **Inadequate stock visibility** – The system (Epicor 9) does not have parameters required to provide reports on DOS, which contributes to the increase of expired goods and overstocking
- **Budgeting process** - The current system's (Epicor 9) configuration did not include the budgeting module. As such budget preparation and monitoring is done using the excel spreadsheet, which is time consuming and could easily be subjected to human error.

## Key Recommendations

16 **Conduct detailed Post Implementation Review of E9**

- Focus on gaps and inefficiencies against functional requirements and Business Processes
- Assess feasibility to upgrade to E10 comparing specific gaps. The assessment should include cost benefit analysis of conducting an upgrade vs. upgrading to a new system
- Ensure key gaps are included as requirements for future implementations including; financial statements and stock report, Audit trails, and Enterprise Performance Module .
- Engage vendor to remediate critical system bugs and put controls to address data integrity issues identified in post implementation review

17 **Implement Service Level Agreements between ICT, the business and vendors**

- Negotiate and agree SLAs with the Business
- Urgently establish annual contract for customization support with vendor
- Monitor performance against SLAs on a monthly basis, ensure consistent reporting, hold regular review sessions with the Business and implement reactive and proactive improvement measures.
- Ensure that IT Service Management processes, Operating Level Agreements (OLAs) and Underpinning Contracts (UCs) support end-to-end service targets

18 **Complete roll-out of Barcode Smart Readers to all warehouses**

- Enforce system usage to reduce manual entry to mitigate data integrity issues

19 **For efficiency in budgeting formulation and tracking, the ERP should be configured to support budgeting system.**

# Institutionalization of performance management process with pay-for-performance reward systems will hold staff accountable for achieving the strategic objectives for MSD and ensure alignment with MOHSW

More Details Page 116-133

Scope #4 (slide 135)

## Key Findings and Implications

### Performance Management

- MSD's Performance Management (PM) framework – DRIVE, is just over one year old, and the Executive Management Team (EMT) is committed and motivated to fully implement it.
- There is inconsistency in how performance is reviewed as evidenced in the staff files. This may pose a challenge in terms of providing accurate feedback and putting in place an appropriate learning and development strategy for EMT.
- Although PM is an important aspect of people management, managers are not formally held accountable for the process.

### Target Setting Alignment Against Strategy

- Some targets appear exactly the same between multiple departments, which could make it a challenge to hold two directors accountable for performance
- In addition, there is a notable mis-alignment between individual Directors' scorecards and the departments. This means Directors' efforts may be spent in areas that are not contributing to the achievement of the overall strategy

### Pay-For-Performance

- Lack of explicit link between performance and rewards, which is an essential component in creating a motivational value for a significant portion of employees

### MSD and MOHSW Alignment

- Lack of alignment between MSDs KPI dashboard and MOHSW expectations hindering cooperation between two entities
- LMU is not appropriately measured based on effective MSD / MOHSW coordination despite being the primary role of this unit

## Key Recommendations

**20 Strengthen the performance management frameworks at MSD to improve staff performance in implementing the organizational strategy**

*Linked to BRN initiative #11 (Stop the pilferages)*

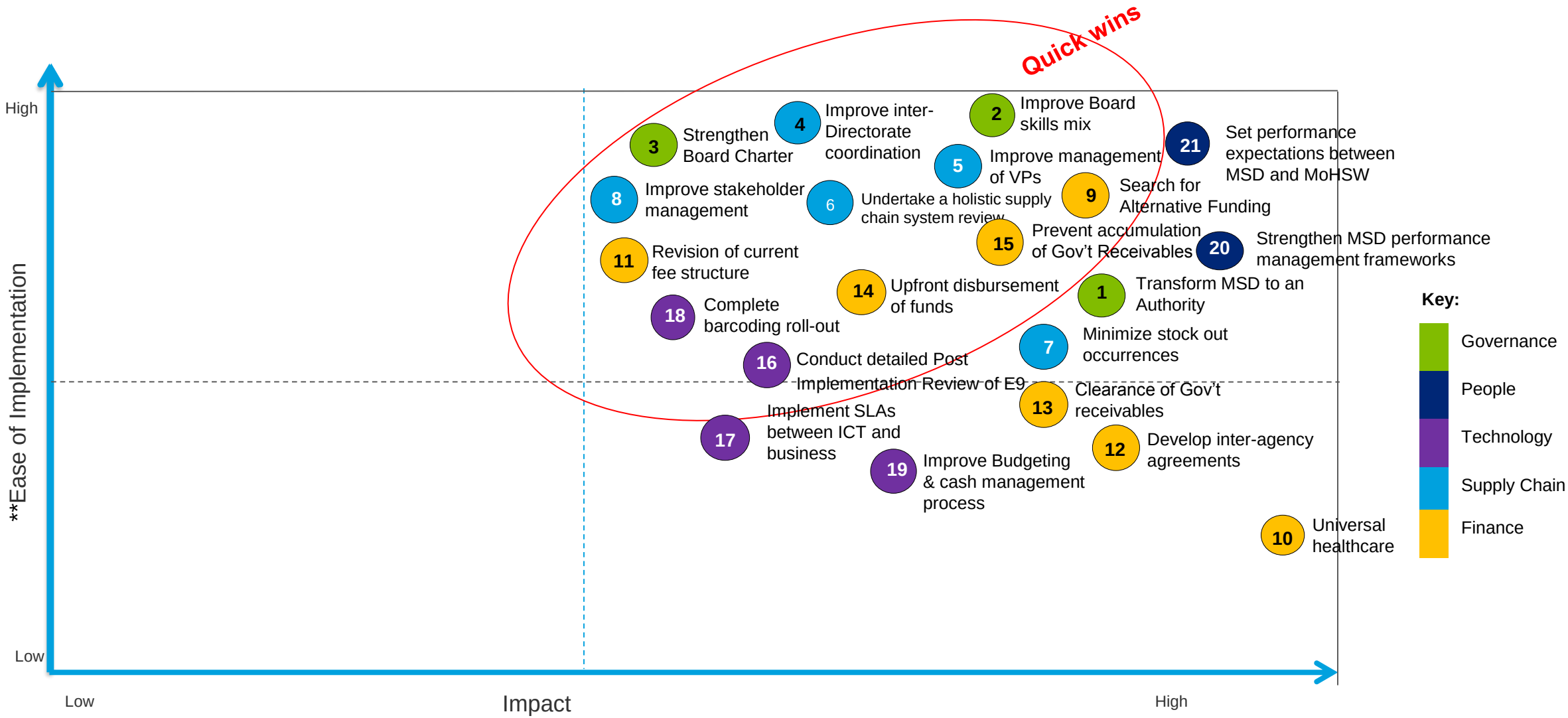
- Alignment of MSD's organizational strategic goals with staff performance goals
- Institute a consistent approach to cascade and measure staff performance goals at all levels within MSD
- Develop and institute a reward and recognition system which is aligned with the performance management framework at MSD
- Enhance accountability in performance management process

**21 Set clear performance expectations between MoHSW and MSD**

- Define clear performance targets for MSD linked to the MoHSW's expectations of the Department
- Improve accountability of the LMU Unit by developing and instituting clear KPIs for the LMU in coordinating work between MSD and the MoHSW

Scope #8

# Implementing the set of 12 prioritized "quick wins" recommendations will transform MSD's operations significantly, with a manageable level of effort within a relatively short period of time



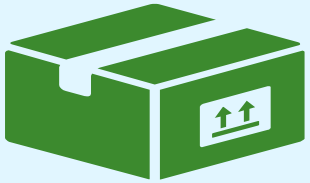

**High Easy of implementation means that the particular recommendation requires basic (minimal) resources, minimal time and minimal process changes, while Low Easy of implementation means that the intervention will requires reasonably high resources allocation, longer time, and significant process changes.

# By quickly correcting issues relating to operational inefficiencies (recommendation #4 - #7), we believe that MSD will save approximately TZS 11.1Bn in the next year while continuing to address longer term initiatives

More Details Page 60 - 68

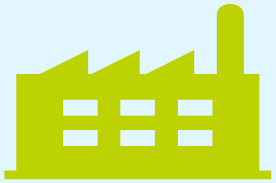
Scope #8

| | Inventory Holding Costs | Warehousing and Admin | Wastage |
|---|---|---|---|
| FY14/FY15 Total Spend (TZS) | 1Bn | 20.1Bn | 7.8Bn |
| Possible Annual Cost Savings | 1Bn | 3.1Bn | 7Bn |



**The value of normal DOS goods - purchased using MSD working capital

- Over 6Bn worth of Normal goods are Dormant, obsolete of slow-moving.
- This means MSD funds are tied up in their warehouses instead of earning interest at the market rate.



Costs incurred storing Overstocked, DOS and Expired stocks

- With over 11.7Bn in Expired and DOS stocks being stored in warehouses, MSD is incurring extra storage costs.
- Costs are incurred in terms of admin and costs of warehousing that includes rent, utilities, equipment and materials.

- Demurrage costs (ICD + Storage)
- Theft
- Cost of destroying expired goods
- Stock provisions

- MSD is funding over 3Bn annually demurrage fees due to inefficient clearing processes
- Better controls need to be implemented to curb over 1.4Bn in stock theft
- There are also costs incurred in disposing expired stock
- Overall MSD can realistically aim to save 90% of these costs

**Since the exact value of overstocked items could not be calculated because of data limitations, this number represents the minimum savings in this area without accounting for overstocked normal goods currently in MSD inventory.

# The Results Management Office (RMO) is an ideal implementation mechanism to ensure rapid implementation of the recommendations with an immediate focus on the quick wins towards achieving operational efficiency

- For MSD, the **RMO** will be relevant to coordinate efforts and ensure efficient implementation of recommendations. The RMO will sit within MSD, reporting directly to the DG, with a key role of coordinating implementation of internal recommendations and changes management, as well as following up closely on recommendations which require support of the MoHSW. The RMO encompasses four key elements namely Strategic alignment, Change management, Technical expertise, and Program management. The effective operationalization of the RMO would require a fully dedicated team with adequate technical expertise to drive implementation and review progress.
- At the Government level, it is expected that the BRN will continue to monitor the recommendations addressed for health commodities

## Strategic alignment

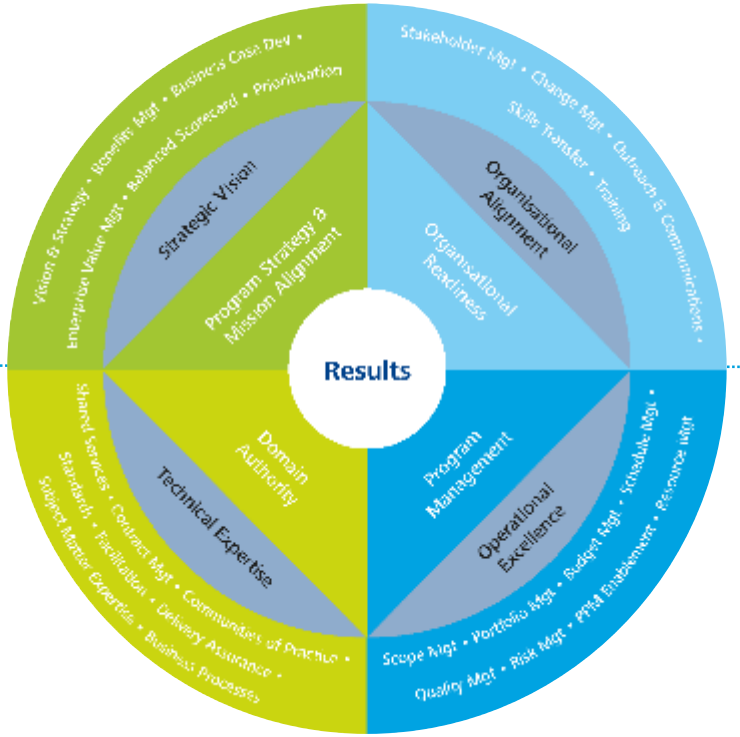
Continuously ensuring implementation of the recommendations and key initiatives is aligned to MSD strategy through:

- Setting and cascading clear performance targets in measurable terms
- Integration of all directorates and units' implementation plans to MSD's strategic objectives, and
- Tracking costs and benefits of initiatives being delivered

## Technical expertise

Availability of the required technical expertise in delivering key initiatives such as process improvement, skills audit & improvement of MSD's governance environment .This will ensure:

- Improved decision making
- Provision of critical expertise to implement specialised recommendations, and
- Consistent technical approach to problem solving and project implementation




## Change management

- Ensure all stakeholders such as MoF, MoHSW and DPG, are aligned to MSD's transformation objective and there is buy-in to the strategy
- Ensure MSD is ready to embed change by coordinating the overall change communications plans that establish how, when and what change interventions are required by the projects throughout its lifecycle
- Ensure that MSD has the competence to sustain change – i.e. build required capabilities

## Program management

- Managing interdependencies between directorate and units in implementing the recommendations
- Implement standard reporting on performance of project portfolio – produce reports and dashboards

# Detailed Report

# Contents

# Our work aimed at building upon existing studies to understand the undelaying causes of MSD financial challenges and how can they be resolved for sustainable operations. Specifically, our scope entailed;

1. Establish the levels and sources of payment arrears at MSD. More specifically determine the age, institution, type of payment, and reason for arrear/receivable.
2. Propose different options for clearing the current stock of receivables at MSD. In consultation with different stakeholders assess the feasibility of each of the options.
3. Based on above analysis identify the root causes for accumulation of debt and working capital erosion at MSD.
4. Develop specific short term recommendations for preventing the recurrence or further escalation of this problem.
5. Build upon the costing study carried out by USAID to recommend an optimal/sustainable fee structure for MSD based on an efficient system of operations. The fee structure should take into account fixed asset contributions, volume and product mix changes, and other variables relevant for MSD's long term sustainability and self-sufficiency. MSD needs to implement an Activity Based Costing system and then use that to determine an optimal fees structure that is pegged to the actual costs. Costing should not be an ad-hoc one time exercise but instead an ongoing activity facilitated through a good IT and accounting system.
6. Understand MSD budget formulation process and assess opportunities for improvement. Also study cash management practices at MSD and explore opportunities for improvement.
7. Propose efficient business models for the CMS building on the existing work, looking operations of the CMS and from areas of efficiency improvement observed from the understanding of the root causes of the challenges currently experienced
8. Understand governance structures at MSD and explore opportunities for improvement including having stronger financial management capabilities at MSD board.
9. Develop KPIs (dashboard) that can provide a comprehensive but succinct picture of financial flows in MSD's supply chain to MOHSW, Finance Ministry, MSD's Board of Trustees and development partners.
10. Provide options for the governance structure required to ensure maintenance of the new fee structure taking into account the possibility to maintain the current structure or to change into an Agency.

# Contents

# Our overarching approach involved strong stakeholders involvement and drew on our ability to bring on board a team of trained and experienced professionals and subject matter experts. Our approach and methodology was underpinned by the following elements;

## Documentation and Data Review

Key to our approach was to build upon the existing reports from various studies done previously. Our team reviewed various internal and external reports through out the assignment, to ensure a full rounded understanding of the challenges which MSD faces. This include, BRN Reports, MSD Act, JSI costing study, and MSD management reports. This also involved online research and review of publicly available information. A full list of documents reviewed is provided in the appendix section.


## Stakeholders Interviews

Throughout the assignment , we ensured close engagement and participation through interviews and discussion with critical internal (staff) and external stakeholders. This include MSD Executive Management team, MSD Board of Trustee, Ministry of Health and Social Welfare, Project Steering Committee, select managers and staff, customers, suppliers, Developing Partners community and other relevant stakeholders. A full list of interviewee is provided in the appendix section of this report. In addition, we held a stakeholders workshop on 10th November 2015, which was attended by over 70 participants.

## Benchmarking

In order to provide a fair view, analysis and understanding of MSD issues, it was critical for our team to benchmark MSD's performance measures against similar institutions across the region. Our selection was based on institutions with similar mandate and how such organizations address or have addressed similar challenges faced by the MSD, therefore providing a learning platform to MSD. Together with the steering committee, we selected the following organizations for benchmarking;

- Kenya Medical Supplies Authority (KEMSA) – Kenya,
- National Medical Stores (NMS) – Uganda,
- Medical Stores Limited (MSL) – Zambia, and
- Medical Stores Office (MSO) – India

**Note:** The financial information of these benchmark organizations were not publicly available which limited our comparison.

# To achieve this, we divided the work into different work streams which carried out a detailed diagnostic review of MSD and its external environment to gather the most relevant information regarding MSD's Governance, operational , and financial aspects and identify improvement opportunities.

## Operating Model

### Supply Chain Process Review

Our team carried out a high level review of the supply chain process from demand estimation to distribution. Specifically, the team reviewed;

- Forecasting and Planning Process
- Procurement process
- Warehousing/Storage
- Distribution and fleet management

### People

People capabilities is a key function of any self sustained and performing organization. In order to provide practical recommendations for MSD sustainability, our team reviewed the following;

- Financial management capabilities at Board and leadership level
- Staff Performance Management system

### Technology

Our team reviewed the Technology environment at MSD and how it impacts or supports organizational performance. Specifically, our team reviewed;

- System (EPICOR) reporting and operational capabilities, and
- Ongoing technological innovations e.g. eLMIS

### Governance and Legal

In order to understand the current Governance and Legal framework, and how it impacts MSD, our team reviewed the following;

- Governance Structure (internal and external)
- MSD's legal mandate (challenges and legal limitations)

## Financial Model

### Debt Analysis

MSD's level of receivables and payables have been growing over recent years. Our Analysis focused on;

- Understanding the current levels, ageing and make up of the debts; and
- Payables ageing

### Fee Structure

Due to growing concerns on the appropriateness of MSD's fee structure, our team undertook the following;

- Review the appropriateness of current fee structure; and
- Review the various proposed options for MSD fee structures

### Working capital erosion

Despite various efforts to recapitalise MSD, its capital level has been eroding over time. To enable a better understanding of the problem, our team performed the following;

- Review of MSD's capital erosion trend; and
- Review the root causes of the working capital erosion at MSD.

### Budgeting and Cash management Practices

Budgeting and cash management practices have a huge implication in determining the long term financial sustainability of MSD. Out team reviewed the current practices to identify improvement opportunities.

# Given the depth of the analysis required, which encompassed the internal and external environment, we selected several of the best-in-class tools and methodologies from Deloitte's global library of resources to conduct the strategic review. A summary of the tools and methodologies is outlined in the table below.

| | Tool/Methodology | Description | |
|---|---|---|---|
| All workstreams | **Document Reviews (Desk Top Research)** | Review of documents provided by MSD and different stakeholders including previous consultancy reports, financial reports, HR reports, and Legal documents |  |
| | **Staff interviews** | Questionnaires were developed by the Deloitte team to collect information relevant for the scope of work. Interviews were conducted by the Deloitte team. |  |
| | **Customer Interviews** | Interview and surveys conducted by the Deloitte team, in Dar Es Salaam, Mwanza and Mtwara | |
| | **PESTEL Analysis** | Macro analysis review of the **P**olitical, **E**nvironmental, **S**ocial, **Te**chnological, and **L**egal aspects of the current landscape |  |
| | **Culture Print Survey** | Culture Print provides a "hard" and tangible way to understand the "soft" and complex issue of culture at MSD. |  |

# Contents

# Tanzania's macroeconomic landscape is overall positive owing to its steady economic growth, growing population, and the expected development in several service sectors

- Real GDP growth: 7.0% (2014)
- Population: 47.4 M (2013)
- GNI per capita: 1730 (2013 PPP US Dollar)
- Urban population: Approx. 13 M (29.6% of total population) (2012)

## Country Overview

- Tanzania hosts a **steady and ever growing economy** with most of its sectors expected to grow in line with the economy.
- With the **support of several development partners**, Tanzania has been able to make important economic and structural reforms to sustain its growth rates. However poverty is still widespread in the rural areas.

## Indicators

### Economic growth

There has been steady economic growth, **with GDP expected to rise by 6.9% in 2015**, the economy is expected to witness a rise in disposable income which will in turn increase the demand for various services including healthcare.

### Technology

Several **technological advancements like the increased use of social media and telemedicine** have provided the healthcare sector with opportunities for alternative business models and increased access and reach to its customers

### Socioeconomics: Population growth

Population **growth averaged at 2.7% between 2002 and 2012 coupled with an increase in urbanization with 29.6% of** the population living in urban areas. This will increase the demand for healthcare services and require substantial investment to address.

### Legislative: Regulatory framework

The Ministry of Health and Social Welfare is mandated to formulate health and social welfare policies and to monitor and evaluate their implementation

*Source: Economist Intelligence Unit, Tanzania Country Report 2015; African Economic Outlook*

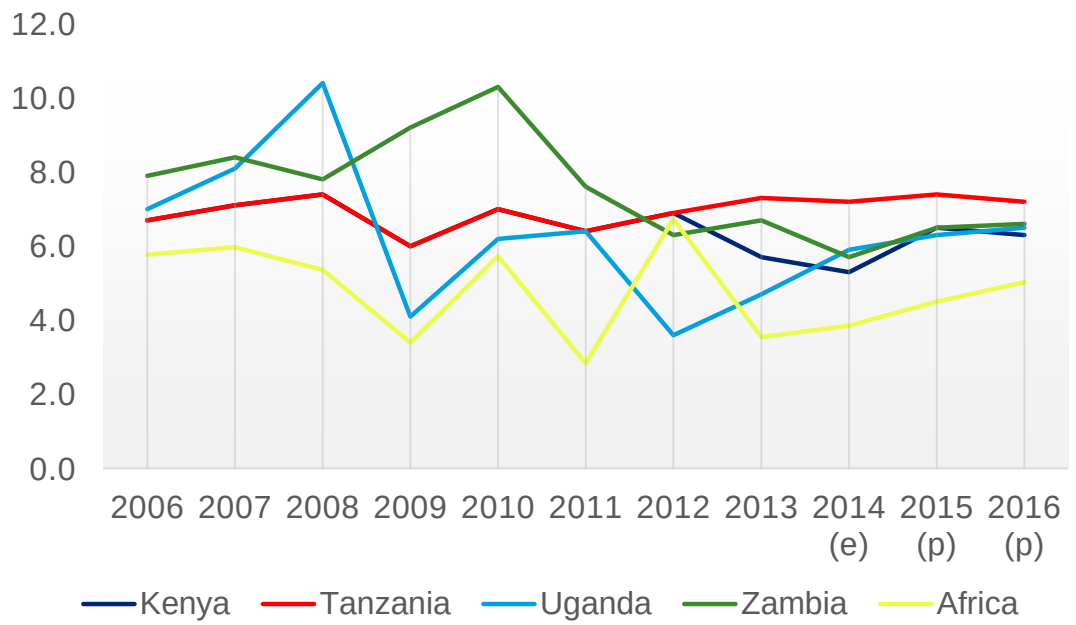
# Tanzania's economy has been growing steadily over the past 4 years, and is projected to continue growing in the coming years suggesting stable environment for MSD operations

## Economic Outlook

- The GDP in Tanzania was worth 49.18 billion US dollars in 2014
- Real GDP grew by 7.0% in 2014; main contributors to growth being the construction, trade, agriculture and transport sectors
- Real GDP is forecast to rise by 6.9% in 2015, underpinned by a loose fiscal stance ahead of the elections and rising investment in the natural gas sector
- Per capita GDP is also expected to continue to grow, signifying that economic growth will be much more broad based going forward
- The services sector is forecast to grow quickly, driven by telecommunications, transport and financial services. Manufacturing is also expected to grow at a healthy pace as further progress is made in boosting local processing of commodities

*Source: Economist Intelligence Unit, Tanzania Country Report 2015; African Economic Outlook*

## Real GDP growth rates 2006 - 2016



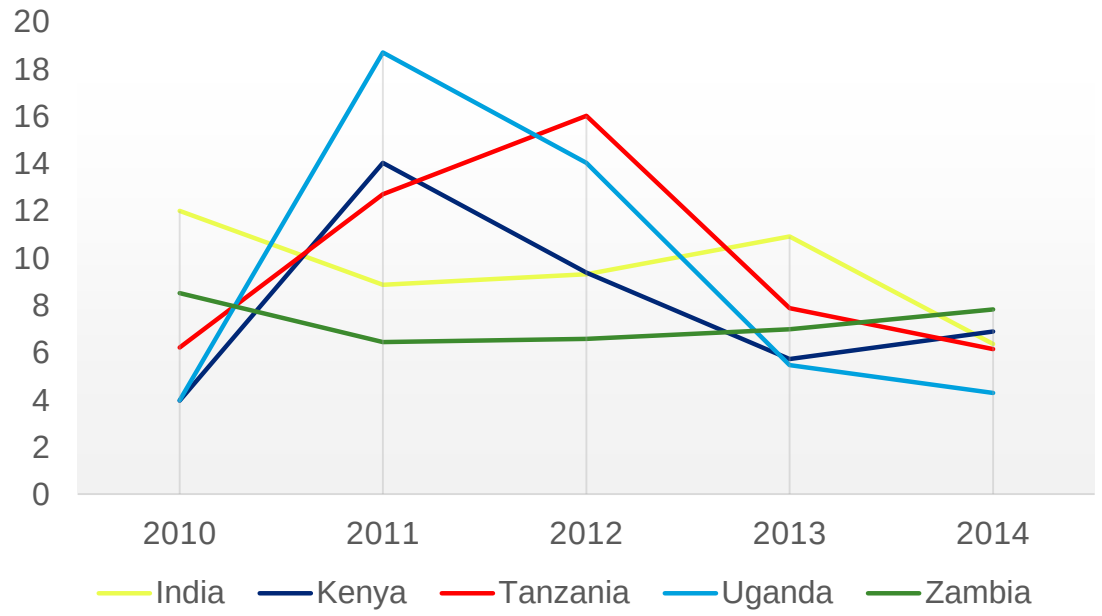

***Implication for MSD:*** *Sustained economic growth may result in higher disposable incomes,* ***thus increasing the purchasing power of the people****; this could increase the demand for various options for medicine and medical supplies. Additionally, growth could benefit other sectors including transportation, leading to increased access to supplies and medicines.*

# Curbing inflation has been the Government's key focus for the last few years with a view to maintaining macroeconomic stability; suggesting stable pricing structures for MSD

## Overview

- Although inflation remains below BoT's medium-term target of 5%, headline inflation rose to 4.5% year on year in April, up from 4.3% of the previous month, reflecting a pick up in prices of some key local staple food items (maize, rice, potatoes and cassava)
- Due to decline in global commodity prices, average inflation will moderate to 5.7% in 2015, down from 6.1% in 2014
- Inflation will then increase to an average of 7.6% in 2016-2019, mainly coming from imported inflation, reflecting a renewed rise in global food and oil prices, combined with continued **currency depreciation**
- There is a risk that a renewed drought over the next five years could cause a spike in domestic food prices, leading to a worse inflation outcome

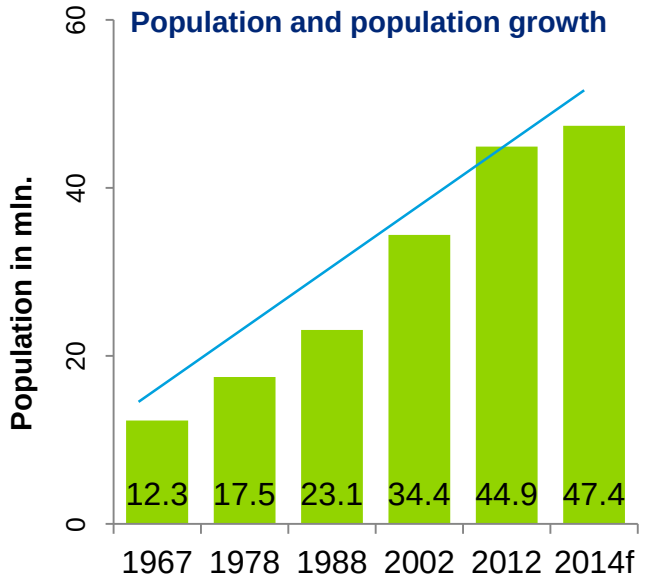
## Inflation, consumer prices (annual %)

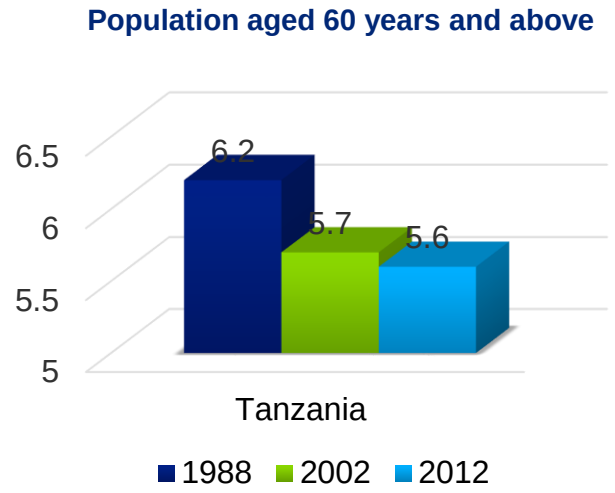


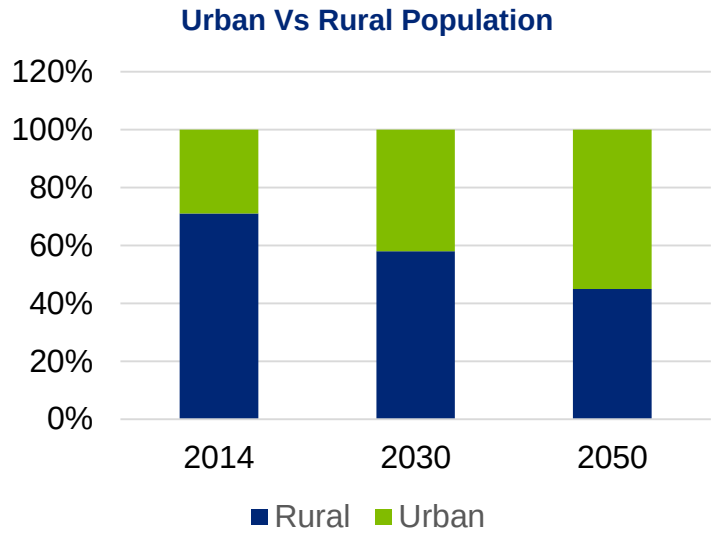

*Source: Economist Intelligence Unit: Tanzania Country Report 2015; National Bureau of Statistics; AfDB Statistics Department*

***Implication for MSD:*** *MSD is susceptible to inflationary pressures,* ***particularly when sourcing imported supplies.*** *An increase in inflation rates will subjecting consumers to face higher prices. Thus MSD needs to observe fluctuations in inflation rates and manage it well through alternative business models and the procurement of affordable supplies to reduce burden to the final consumer*

# The rising population coupled with increasing urbanization will further put pressure on the health sector to the expected increase in demand that will result from these phenomena. The changing demographics may also impact MSD's choice and distribution of medicine and medicine supplies




- Tanzania's population has grown at a rate of 2.7% per annum between 2002 and 2012
- The UN has projected that Tanzania will be the world's fifth populous country in the world by 2100

- 5.6% of the Tanzanian population is aged 60 and above; which has remained constant over the years
- 47.3% of total female population are of reproductive age (15-49 years)

- 29.6% of total population reside in urban areas
- The UN estimates that by 2050, 53.9% of Tanzanians will reside in urban areas

Source: Population and Housing Censuses 1967, 1978, 1988, 2002 and 2012
Tanzania National Bureau of Statistics
Population Division of United Nations' Department of Economic and Social Affairs

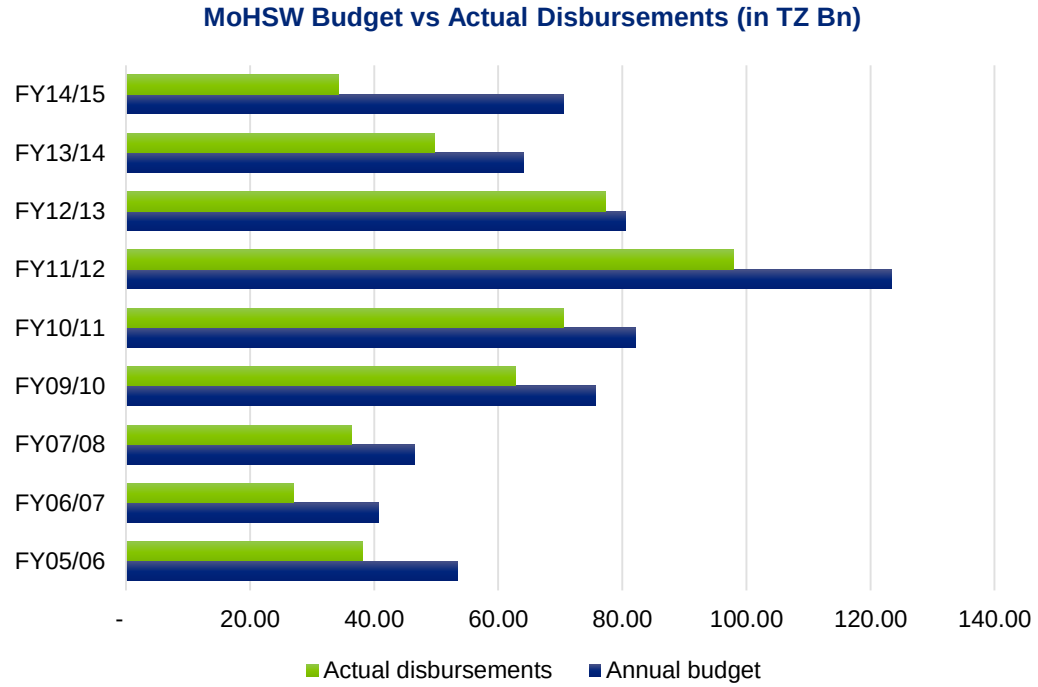
***Implication for MSD:*** *The growing population and increased urbanisation implies increased demand for medicine and medicine supplies especially in urban areas.* ***The transformation of MSD will need to start now to prepare with the upcoming increase in demand***

# Despite the health sector being a top priority in Tanzania, major problems in terms of technical and resource capability limit its impact to the people. Lack of accessibility and affordability of medical supplies constitute the bulk of the issue

## Overview

- More than 30% of Tanzanians live below the poverty line, most of these live in rural areas and have irregular incomes making it difficult to meet out of pocket health expenditures
- Many poor people, particularly women and children fail to access quality health care
- Tanzania currently has about 7 beds per 10,000 people compared to 14 beds per 10,000 people in Kenya
- Government contribution to the national medicines and health commodity requirements has not increased significantly given population growth, inflation and other factors in the last six years
- Twaweza study in 2013 found that 41% of patients were not able to get the medicine they need directly from a public health facility

## Health sector funding




***Source: Implications of Health Sector Reforms in Tanzania: Policies, Indicators and Accessibility to Health Services***

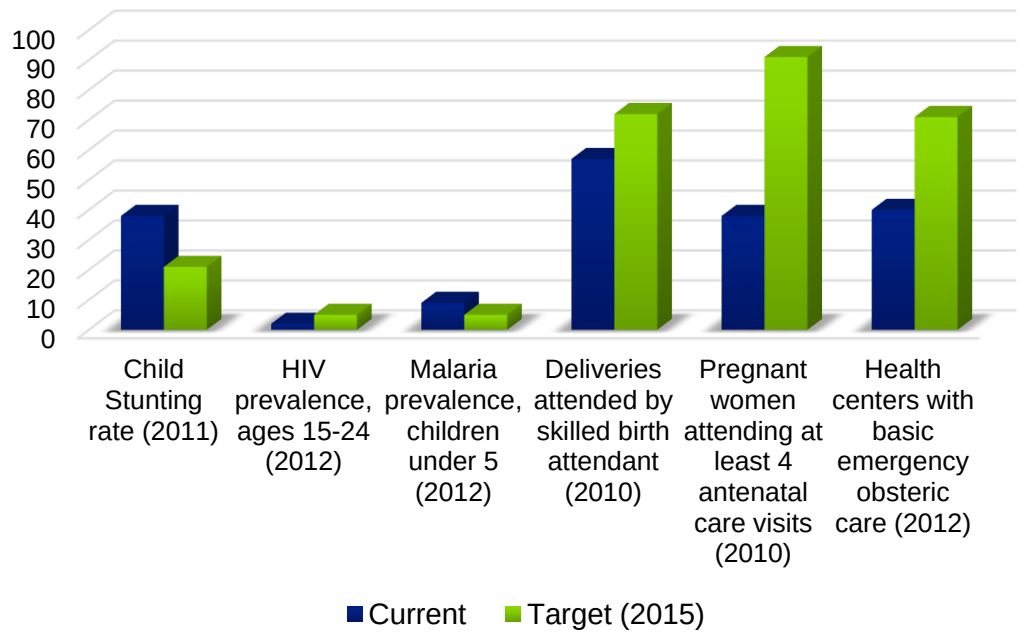
***Implication for MSD:*** *The demand for medical supplies is not being met due to budget constraints; MSD will need to become creative in sourcing ways to better cater to the needs of the people while increasing the accessibility and affordability of medicine and medicine supplies*

# The Tanzania Health Sector has been prioritized in helping the country in its move to become an economic powerhouse; the Big Results Now initiative particularly has singled it out as an area of top priority and several health reforms are underway to realise the goals set

## Overview

- Currently, Tanzania has an extensive network of over 7,000 healthcare facilities (both public and private HFs)
- The health sector intends to implement four priorities that are: equal distribution of skilled health workers from the lower level of primary health care, quality delivery of services, availability of important drugs and health equipment, strengthening reproductive health of mother and child by reducing at least 60 percent mortality rate by 2018
- **About 10-15%** of the population is currently covered by health insurance

## Health status indicators




***Source: Implications of Health Sector Reforms in Tanzania: Policies, Indicators and Accessibility to Health Services; Snapshot: Tanzania's Health System (2015)***

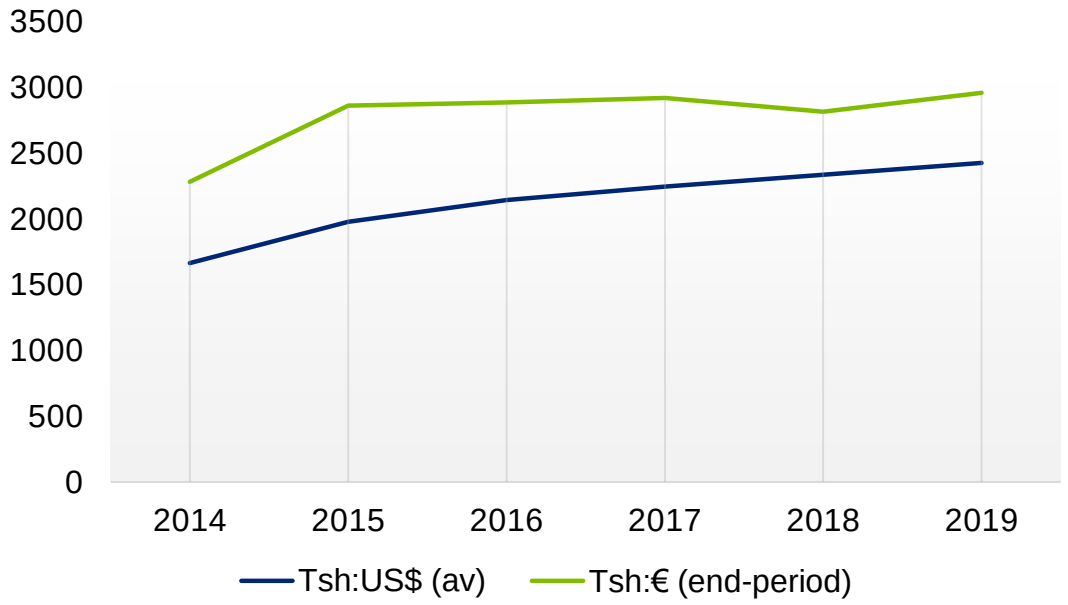
***Implication for MSD:*** *The importance of the health sector has been clearly stated; MSD needs to play its part in ensuring that the goals set are met in an efficient and optimal manner. This may require an assessment of the current capabilities and their ability to meet the BRN goals and an implementation plan to address any gaps or challenges.*

# Although Tanzania pursues a managed-floating exchange rate regime, the TZS continues to moderately depreciate against the US dollar and this trend is expected to remain over the short term

## Overview

- The Tanzanian shilling averaged 1399.07 from 2003 until 2015,reaching an all time high of 2260.80 in June of 2015 and a record low of 1014.30 in December of 2004.
- On the back of a large trade deficit, reduced inflows of aid and a strong US dollar, the Tanzania shilling fell by 9% against the US currency during the course of 2014, and has depreciated a further 12% in the first four months of 2015
- Although the Shilling is expected to stage a slight recovery once the elections are over, it will depreciate further over the period from an average of Tsh 1,976: US $1 in 2015 to Tsh 2,425: US $1 in 2019 impacted by the continued large current account deficit

## TZS per Unit of Foreign Currency




*Source: Economist Intelligence Unit*

***Implication for MSD:*** *Ffluctuations in rates which may not have been predicted definitely affects* ***MSD's purchasing power*** *as the budget for supplies is set at the beginning of the financial year and in the local currency. MSD might need to set in place a contingency strategy to alleviate exchange rate losses so that supply of medicines is not affected.*

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# While Health care accounts for 10% of global GDP, only 7.1% of the Tanzania GDP is spent on Health, suggesting a need for transformation. Cost pressures, changing demographics, Digital innovations, and regulatory environment continue to shape the sector

**Cost: Most of the world's regions are facing a formidable challenge to manage the rapidly increasing cost of health care e.g** In Japan government has begun a number of initiatives of control spending like use of cheaper generic drugs etc.

**Changing Dynamics: Dynamic market forces requiring providers and health plans to rethink traditional business models to better address shifting health care challenges and opportunities** E.g. South African Health strategic plan includes re-engineering of country's system of primary health care. New areas for healthcare will require a strong behavioural component to address issues like tobacco use, harmful use of alcohol, physical inactivity and poor diet

**Transformation and Digital Innovations: Adoption of new digital advances such as electronic health records, mHealth applications, and predictive analytics is transforming the way physicians, payers, patients and other stakeholders interact** E.g. In India major hospitals have adopted telemedicine services to address the fact that 80% of physicians reside in urban population leaving only 20% for rural population.

**Regulatory environment: Rapid clinical and technology changes; increased scrutiny by governments, the media, and consumers; more sophisticated risk-monitoring techniques; and coordination across agencies and regions add pressure on authorities to protect patients Health, Safety and Privacy** e.g India has proposed establishing a National Health and Medical Facilities Accreditation Authority (NHMFA) to define health care facility standards in the country.

# Several countries are moving from curative to preventive care in addition to increasing accessibility of health services while striving for sustainable health funding schemes

**Move from curative to preventative**

- Increasing focus on wellness campaigns.
- **For example in Ethiopia** – Government has launched a mobilisation campaign targeted at young women who are often closest to the main beneficiaries of primary care in the hope that more will train as health extension workers

**Revamping healthcare delivery**

- Proactive models of healthcare where "healthcare comes to the people, and not the people must come to healthcare"
- Relying more on technology to provide alternative options of healthcare
- **For example in South Africa** – mobile health initiative that sends 1m-2m messages a day to citizens providing information or asking them to call the national Aids health line

**Finding sustainable financing**

- Financing in Africa is a combination of meagre public spending, heavy reliance on foreign donors and large dependence on out of pocket contributions and user fees
- Micro-insurance plans can be a potential solution for covering poor and middle class populations who do not have access to employment related and other private schemes
- Rwanda – 91% of the population belongs to one of three health insurance schemes
- **For example in Ghana** – National Health Insurance Scheme has made it mandatory for all residents to be members of a district mutual health scheme, private commercial insurance scheme or private mutual health scheme

**Source:** ***Economist Intelligence Unit: The future of healthcare in Africa (2012)***

# Contents

# In the recent past, MSD has made some progress towards attaining its vision. Below are key highlights on selected MSD successes

| Key Theme | Overview |
|---|---|
| Strategic Performance | • Despite limited and declining funding level from the Government, the MSD has been able to deliver on its mandate by increasing revenue collection from other sources (normal sales) from TZS 16bn in FY14 to TZS 31bn in FY15 to address a strategy for survival.<br>• Establishment of the Strategic Business Units (SBUs) has improved revenue collections as well as improving operational efficiency. |
| Logistical Upgrades | • Implementation of Direct Deliveries to all health facilities in the nation. Initially medical supplies were first transported to the District Management Officer (DMO) for disbursement to health facilities. Direct Delivery System has reduced delays in delivering medicine to the users, and minimized stock theft.<br>• Construction of donor funded warehouses (Warehouse-in-a-box) built in 6 locations Mwanza, Dar es Salam, Mbeya, Dodoma, Tabora and Tanga increasing storage space and reducing rent costs.<br>• Implementation of the route and network optimization approach has brought notable success to the MSD. The organization has minimized inefficiencies in its distribution process (last mile) by avoiding duplication of efforts and improving turn around time enabling MSD to cut down its distribution cost by approximately 17% of its previous total distribution cost. |
| People | • Despite operating in a highly competitive labor market, MSD has kept its staff attrition rate exceptionally low at 0.3%. This can be attribute to good working environment, staff development programs, and lucrative staff remuneration and benefits. This needs to be leveraged upon for the transformation. |
| Advancements in Procurement procedures | • Since 2013, prime local vendors were contracted to bridge supply of medical products whenever stock outs occurred. Service level agreements require prime vendors to supply medical supplies within 2 to 3 days.<br>• Also starting FY13, the MSD has been entering into framework contracts with suppliers for all its normal business so as to reduce lead times for supply against orders. This form of contracting is an industry best practice. |

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# Criteria definition

We categorize each of the improvement opportunities based on their level of “Impact” and “Ease of Implementation”.

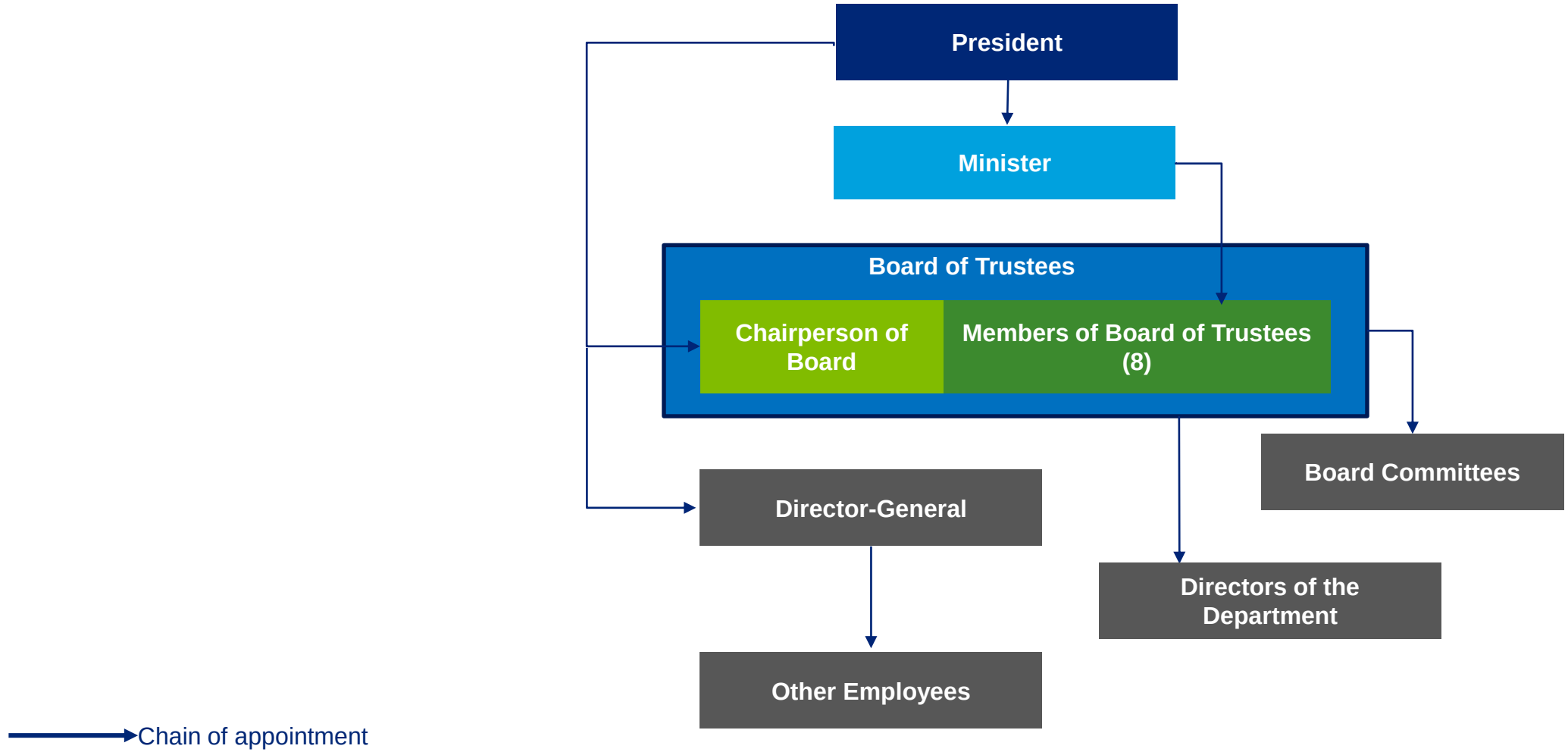
| Impact | | Criterion |
|---|---|---|
| High | | • Significant impact on supporting operational and financial transformation |
| Medium | | • Medium impact on operational and financial transformation |
| Low | | • Limited operational/ financial/ risk implications |

| Ease of Implementation | | Criterion |
|---|---|---|
| Low | | • Would require large changes in the processes<br>• May require large budget allocation<br>• May require longer time |
| Medium | | • The implementation requires change in process currently adopted by the stakeholders and would require monitoring and follow-up towards implementing the change<br>• Requires a small budget allocation in terms of people and technology time |
| High | | • The implementation requires basic change in action items<br>• Requires no or very minimal budgetary allocation |

# Contents

# MSD Act (1993) stipulates clear chain of appointment and levels of authorities, with the Board being accountable to the Minister of Health and Social Welfare

## Current Governance Structure



# Most institutions with similar mandate like MSD, operate as Body Corporates governed by the Board of Directors which has legal mandate in making strategic decision

| Theme | MSD - Tanzania | KEMSA - Kenya | NMS - Uganda | MSL - Zambia | MSO - India |
|---|---|---|---|---|---|
| Business Model | Autonomous department under the Ministry of Health and Social Welfare | Corporate body with perpetual succession, a common seal and may be sued or sue in its corporate name | Corporate body with perpetual succession, a common seal and may be sued or sue in its corporate name | Autonomous state owned company wholly owned by the Government | Subordinate office of the Ministry of Health and Family Welfare administered |
| Governing Board | Board of Trustees<br>Final approval of decisions regarding operations is made by the Minister | Board of Directors<br>Final approval of decisions regarding operations is made by the Board | Board of Directors | Board of Directors | Board of Directors |
| Board appointment procedures | The Chairperson to the board is appointed by the President.<br>The Director General (a secretary to the board) is also appointed by the President.<br>The other eight members are appointed by the Minister | Non-executive Chairperson competitively recruited and appointed by the President.<br>The four other persons competitively recruited and appointed by the Cabinet Secretary | All the directors appointed by the Minister. | | Members are government civil servants auto allocated based on their role |
| Governance (Board committees) | Finance and Administration<br>Technical<br>Audit and Risk | Technical evaluation<br>Procurement oversight<br>Tender<br>Human resource<br>Audit | Evaluation<br>Procurement<br>Contract | | Procurement<br>Tender opening<br>Tender evaluation<br>Integrated purchase advisory |

# Our analysis supports MSD's current proposal submitted to the MoHSW for its transformation to become an Authority

| Key Features of a Department (normal Agency) and implication to MSD |
|---|
| • As a department, MSD's autonomy is limited because it relies on directives and approvals from the MoHSW. This affects MSD's ability to operate independently and effectively under commercial principles.<br>• As a department, MSD is governed by the Board of Trustees. This implies that, the Board does not have mandate to make final decisions on the strategic issues. Final decisions depend on approval from the MoHSW<br>• MSD is not financially independent. It does not have power to make final decisions on its cash flow, including ability to enforce its cash policy, ability to borrow from financial institutions, ability to enter into contracts, ability to sure and be sued and ability to invest. This affects MSD's financial independence.<br>• With regard to any contracts that MSD enters into, it means any dispute or legal case has to be referred to the Attorney General's office |

| Key Features of an Executive Agency and implication to MSD |
|---|
| • The Permanent Secretary (PS) of the MoHSW shall be responsible for the strategic management of the Agency, and for that purpose may give directions to the Chief – Executive of the Agency. This will still limit the MSD's ability to operate as a fully autonomous entity as it will be reliant of the directives from the PS.<br>• The Permanent Secretary of the MoHSW shall be responsible for the discipline and control of the Chief Executive. This will to a greater extent jeopardize the powers and autonomy of the Chief Executive to operate independently.<br>• The Executive Agency shall have a Ministerial Advisory Board which with members appointed by the Minister. This means the Board powers will be limited to only act as advisors as opposed to directors which may limit the Board's powers in making strategic decisions. The Board will therefore still be reliant on the MoHSW to make key strategic decisions.<br>• The Permanent Secretary will act as the Chairman of the Advisory Board. This could limit the Board's ability to operate independently. |

| Key Features of an Authority and implication to MSD |
|---|
| • The autonomy will be extended, giving powers to MSD to operate independently financially and operationally with minimal interference from the MoHSW.<br>• As an Authority, MSD will have the Board of Directors for strategic guidance as opposed to the Board of Trustee. The Board of Directors will have final mandate to make strategic decisions which will cement its operational independence<br>• With MSD being a strategic unit of the MoHSW, the MoHSW will still be involved in providing key directives periodically without jeopardizing the entity's day to day autonomy. For example key decision such as changing the of the fee structure for medicine and medicine supplies will still require the MoHSW's approval. In addition, the MoHSW will have representation to the Board, to represent the interest of the ministry, although the representative must have the skill set required to the Board.<br>• As the Authority, MSD will be fully liable to manage its cash flows, thereby being responsible to enforce its cash policies and make any other key financial decision relevant to enable it operate independently under commercial principles.<br>• An authority is capable of suing and being sued in it's own corporate name. |

# Becoming an Authority will allow MSD to enjoy a number of benefits which are necessary to resolve some of the critical challenge facing MSD in its current state as a Department

## Prerequisite

- There must be a robust public financial management system at MSD. Existence of a strong financial management system is a necessary condition for MSD's effective transformation to an authority.
- There should be clear guideline on how MSD will operate as an Authority without undermining the role of MoHSW in making critical decisions that affect the health care system, such as pricing of medicine and medicine supplies.
- There should be clear demarcations on the role of MoHSW versus the role of MSD as an Authority to avoid conflict of interest.
- The MoHSW should issue clear guidelines on how MSD as an Authority will partner with private institutions.
- The MoHSW should issue a guideline on how MSD as an Authority will sell medicine and medicine supplies to private institutions

## Advantage

**As an Authority, MSD will benefit from;**

- Ability to operate independently as a fully autonomous entity with minimal intervention from the MoHSW
- Freedom to sell to private institutions to increase revenue sales
- Freedom to sell out of catalogue (branded medicine) which will increase revenue sales
- Ability to invest funds directly or though PPP arrangements which will grow MSD's working capital
- Ability to enforce financial policies such as cash and carry policy and have fully control on its cash flow which will protect its working capital
- Ability to enter into agreements directly with VPs which will harmonise procurement processes and mitigate challenges resulting from poor coordination of VP logistics between MSD and VPs
- Changes on the Governance body from Board of Trustee to Board of Directors, thereby vesting all decision making powered within the Board of Directors which will improve accountability of the Board, and powers of the Board in guiding MSD
- Being a body corporate with perpetual succession and a common seal with ability to sue and be sued, inter into contracts or perform transactions in its own name

## Disadvantage

- If the autonomous of operating commercially is not well defined, it could result in more focus on commercial ideology as opposed to being service driven

# Transforming MSD to an Authority will be necessary step towards establishing its sustainability, which will allow MSD to operate independently with decision making authority vested within the Board of Directors

| Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendations | Impact | Ease of implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|
| ▪ Autonomy is limited since the MSD operates under the Ministry of Health pursuant to the Medical Stores Department Act, 1993.<br>**To note:** MSD has submitted to the Ministry an amendment to the MSD Act to transform it to a corporate body "The Tanzania Medical Stores Authority Act". | ▪ The governance framework relies on the Minister for final approvals/ directives. | ▪ Corporate Body that is autonomous either incorporated as a Parastatal / State Corporation; or Limited Liability Company;<br>▪ For instance, KEMSA is an Authority that is a Body Corporate (Kenya); National Medical Stores is a Corporation that is a Body Corporate (Uganda); Medical Stores Limited (Zambia) is an autonomous government agency established under the Companies Act of Zambia. In India, (KMSCL) Kerala Medical Services Corporation Limited is registered as a limited company under the Companies Act of India and fully owned by the Government of India. | ▪ Transform MSD from a Department to a Body Corporate (Authority) with powers vested on the Board of Directors. This will enable the entity to achieve its purposes efficiently, be able to partner with other institutions, be able to invest, be able to borrow e.g. from banks, and institute a Board of Directors empowered to make key strategic decisions. |  | Low | 1 – 4 yrs | PS – MoHSW and DG - MSD |
| ▪ There are limited powers vested on Board of Trustees. Key decisions require approval of Minister/Government since the Trustees are responsible to the Minister. | ▪ The Government has power to sanction key decisions not deliberated by the Board of Trustees. | ▪ Key decisions are discussed and resolved by the Board of Directors.<br>▪ The governing body in KEMSA, NMS and KMSCL is the Board of Directors.<br>▪ Government appoints its representatives as Directors in the Board to represent government interests. | | | | | |

# Irrespective of an Authority or Department, skill set within the Board should be improved to include the necessary skills required for each board committee to effectively execute its mandate

| Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendations | Impact | Ease of implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|
| ▪ Tenure of Board members is defined in the MSD Act but the term is not limited. | ▪ Limiting of terms for Directors will allow for Succession Planning and injection of new skill sets, ideas and experience into the Board. | ▪ A fixed term tenure that is eligible for renewal for only one more term, for instance the KEMSA Act provides for a term of 3 years for the Chairperson and the four competitively recruited Directors who are eligible for re-appointment for one further term of three years. | • Limiting the term with respect to the number of times a Director / Trustee can be re-appointed to the Board.<br>• Staggering the terms of the Directors to ensure that all Directors do not retire and leave the Board at the same time. |  | High | 0 – 6 Months | PS - MoHSW |
| ▪ Directors' composition, qualifications and skills not defined in MSD Act<br>○ Presently MSD has communicated to the Ministry on the required skill-sets for the Board members.<br>▪ The Board is comprised of: medical doctors, public health practitioners, and members of parliament. Although some might have education background in finance, they do not practice. | ▪ Directors appointed may not have specific competencies to adequately perform their role. For instance, at least Directors nominated to the Audit and Risk Committee should have competency in accounting/finance.<br>▪ The absence of varied skill compromises the quality of discussions including time spent, types of issues discussed and use of alternative routes to verify financial reports. | ▪ The composition of Directors should allow for the diverse skill-set and experience required to undertake the mandate of the Board<br>▪ Qualifications for Directors are specified with respect to subject expertise e.g. pharmacy, medicine, corporate law etc.<br>▪ Example is the KEMSA Act (Kenya) and National Medical Stores Act, 1993 (Uganda)<br>▪ KEMSA has 4 Directors recruited competitively and are placed based on their expertise in the relevant field. | ▪ MSD Act should be amended to include specification on the composition of the Board to allow for the diverse skill-set and experience that match the core business of MSD, such as: supply chain management, pharmaceuticals, accounting/financial management, logistics. For instance, Directors nominated to the Audit and Risk Committee should have competency in accounting/finance. This can be achieved through;<br>○ The Minister issuing Regulations that define the composition and competencies of the Board.<br>○ The Regulations issued should have a component of competitive recruitment of members of the Board. |  | High | 1– 2 years | PS-MoHSW |

# Establishing and enforcing Board Charters for each Board Committee, in addition to annual Board evaluation will improve commitment of the Board

| Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendations | Impact | Ease of implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|
| ▪ Role of Board Secretary combined with Director-General. | ▪ Legal duties should be undertaken by the Board Secretary (Corporate Secretary) and the role includes advise to the Board.<br>▪ Board Secretary position normally held by an individual with legal qualifications but the position of Director-General is sometimes not held by an individual with legal qualifications. | ▪ Secretary to the Board is not combined with a Director role and the Secretary has requisite qualifications.<br>▪ For instance in Uganda, the Secretary is not a Director and is appointed by the Minister. | • To separate the role of the Secretary of the Board to be held by an individual who is not the Director-General. This can be done through regulations issued by the Minister or an amendment of the MSD Act. |  | Low | 0 – 6 Months | PS - MoHSW |
| ▪ Board Performance Evaluation currently not undertaken.<br>○ A presentation on Board Evaluation has been undertaken and presented to the Board of Trustees by Deloitte<br>○ The Treasury Registrar is currently working on regulations with respect to Board Evaluation. | ▪ Board Evaluation identifies strategic priorities and gaps between strategy and delivery. Without it, review of practices / procedures to improve governance and be more efficient will be lacking.<br>▪ Board Evaluation also informs the re-appointment of Chairperson / Trustees /Directors | ▪ Pursuant to Corporate Governance Best Practice, Board Performance Evaluation is undertaken on an annual basis. | ▪ To implement the recommendations on Board Evaluation that will come from the Treasury Registrar. |  | Low | 0 – 6 Months | DG - MSD |
| ▪ There exists a Board Charter and Terms of Reference for Board Committees | ▪ The Board Charter and Terms of Reference for Board Committees provide guidance on responsibilities and duties of the Board and Committees | ▪ Existence of Board Charter and Terms of Reference for Board Committees is good corporate governance practice. | ▪ To review and refresh the Board Charter and Terms of Reference for Board Committees to align to best practice. |  | Low | 0 – 6 Months | Board Secretary |

# Improving decision making process at the Board level will increase scrutiny of the root causes to various financial challenges of MSD and provide appropriate recommendations for resolution

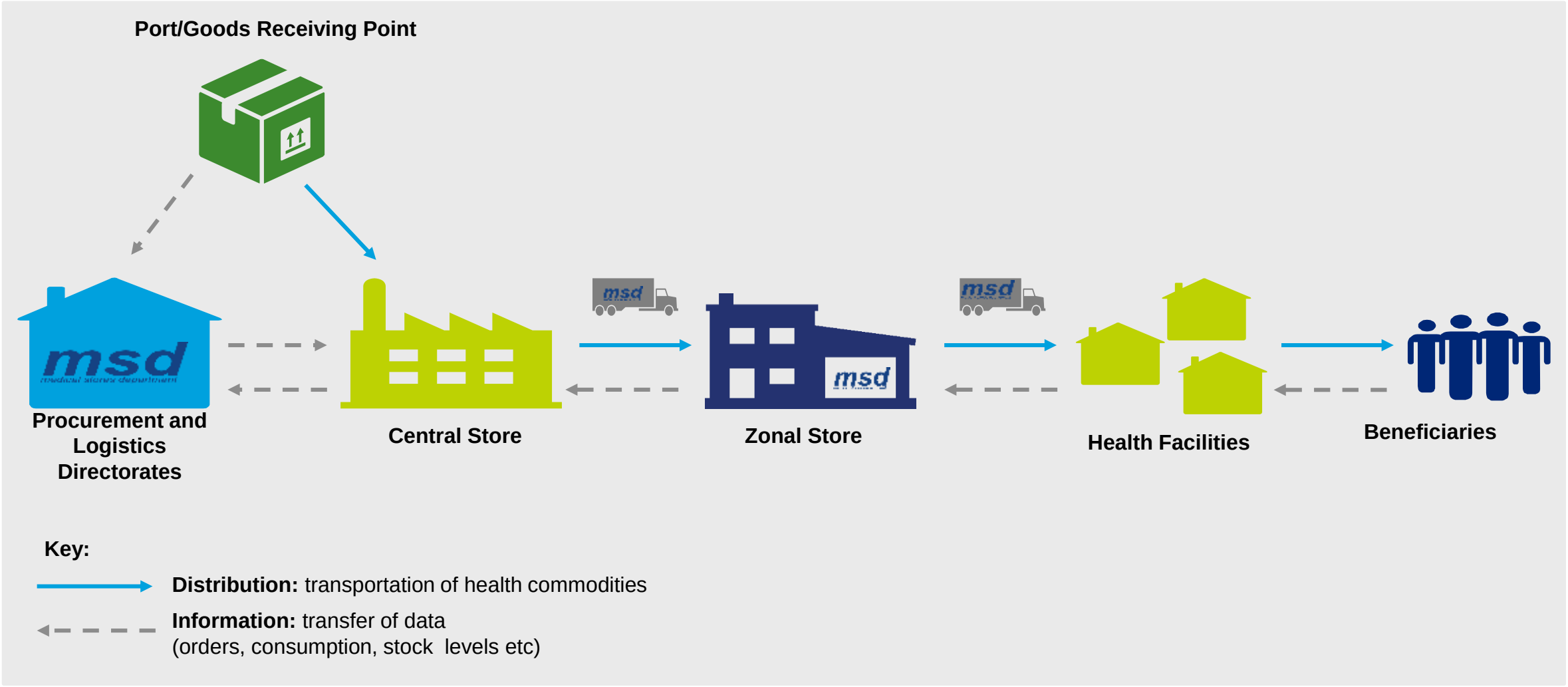
| Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendations | Impact | Ease of implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|
| ▪ There are no programs for Board induction and continuous trainings | ▪ The Board may not be updated on changes or requirements for corporate governance necessary to deliver their roles effectively | ▪ At least annual Board trainings and refresher courses to improve efficiency strengthen knowledge on best practices for corporate governance | • There should a program to ensure continuous training for Board members to enable them to better perform their duties and to keep informed about developments in areas such as the Pharmaceutical and Medical industries, corporate governance and Director responsibilities. This could include trainings on financial oversight, board governance, ethics etc. |  | High | 0 – 6 Months | Board Secretary |
| ▪ There is no evidence that the Board makes sufficient number of resolutions to address financial matters. For instance, in the 130th Meeting held on 29th August 2014, the Members discussion on Quarter 4 performance contained the following: concern for lack of priority accorded to MSD; proposal for BRN work to come up with permanent solution for MSD woes; comment on the uneven budgeting of MoHSW on facilities. However, there was no decision made on how the Board may go about addressing these challenges. The same is evident in the 135th Meeting held on 05 June 2015, whereby there was a discussion about disbursement from the Basket Fund and inadequate budget for medicines. | ▪ Lost opportunity to make resolutions that have a positive and lasting impact on MSDs overall position i.e. financial, corporate image and effectiveness | ▪ Issues above management's control are vigorously discussed by the Board; and<br>▪ Board makes decisions on how they shall address issue and provide management with way forward | ▪ Board to identify its main stakeholders; and<br>○ Develop a comprehensive stakeholders strategy in line with the MSTP II; and<br>○ Operationalize the strategy annually in line with the business plans;<br>▪ Discuss and agree with MoHSW on an escalation process for critical issues so that they may be resolved in a timely manner |  | Low | 0 – 6 Months | DG -MSD |

# Having strong accounting and financial management skills within the Board will ensuring a comprehensive review of financial papers on MSD performance during Board meetings

| Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendations | Impact | Ease of implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|
| ▪ The is no evidence that Members adequately address financial papers and MSD performance reports submitted by the management.<br><br>For instance, in the 70th Board Meeting held on 29th April 2015, the board paper had 4 items submitted for approval: Annual Business Plan and Budget; Price Catalogue, Proposed new Vertical Program Charging Mechanism, and Renewal of Director's contract.<br><br>Only one paper was presented i.e. the Annual Business Plan and Budget. However there were no comments, queries or resolution on any of the 4 papers.<br><br>The same is evident from the 62 Meeting held on 25th August 2014, whereby there was no discussion on the financial implications of 'working capital re-financing'. Or in the 66th Meeting held on 18th December 2014 on the letter of credit before either was approved | ▪ High dependence by the Board on management to interpret financial information; which might impair the level of required independency between the two levels<br><br>▪ Approvals and decisions being made without having taken into consideration the financial implications for the organization at the macro level | ▪ Board to effectively challenge management's assumptions and deliberate in details the financial implications before approving budgets and financial performance reports<br><br>▪ A broad range of performance indicators to monitor management's performance vs solely based on financial statements provided by management. | ▪ Have a broad range of skills that mirror MSD core business. The skills holders should be actively practicing in their field in either public and/or private sector<br><br>▪ Develop performance indicators and means of assessing management's performance as needed. These should focus on both the 'what' and the 'how' |  | High | 0 – 6 Months | PS- MoHSW |

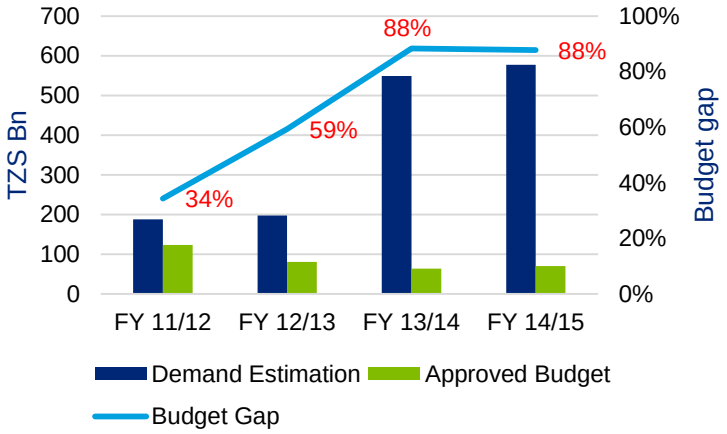
# Contents

# Below is a high level overview of MSD's information and commodity flow in fulfilling its legal mandate of procuring, storing and distributing health commodities to all public health facilities in Tanzania

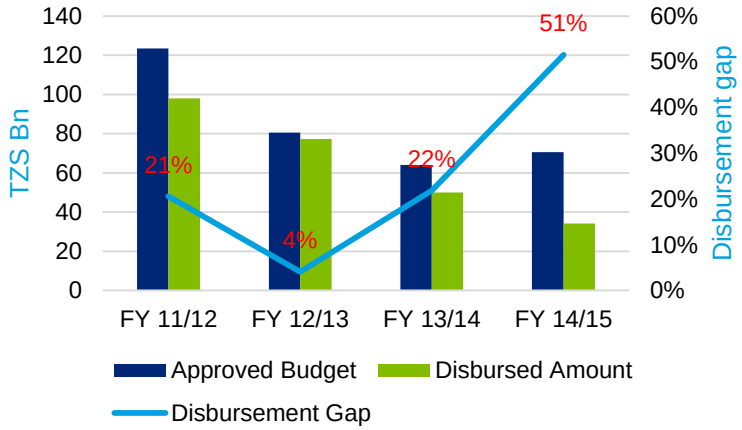


# The growing disparity between budget needs and amount disbursed adversely affect MSD's ability to meet the needs of health facilities and Tanzanian citizens

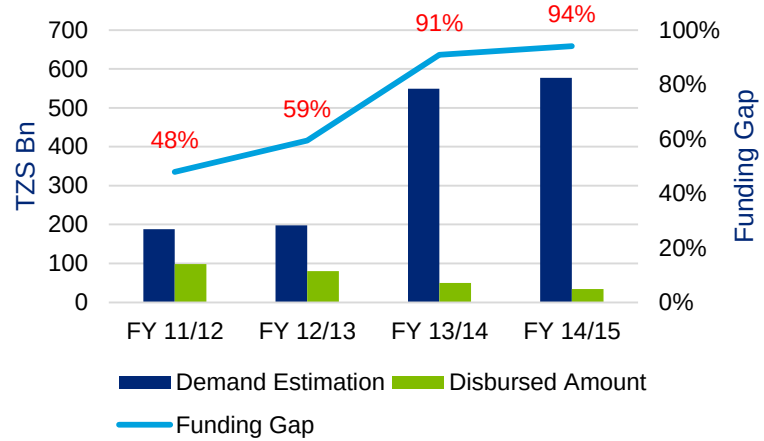
### Demand Estimation Vs Approved Budget




### Approved Budget Vs Disursed Amount




### Demand Estimation Vs Disbursed Funds




**Findings and Implications**

- **Overreliance on Government disbursements** significantly affects MSD's ability to meet the needs for medicine and medicine supplies
- Although population has been increasing suggesting the need for more heath care budget, **the budget gap has more than double in the past 4 years**, growing from 34% to 88%. Therefore, MSD's ability to meet the growing demand for medicine and medicine supplies is affected significantly
- Health facilities have been supplementing their budget needs through own sources of funds such as NHIF, CHF and basket funds.

**Findings and Implications**

- D**isparities between annual allocated budget and actual amounts disbursed** has grown from 4% in the FY12/13 to 51% in FY14/15.
- **Disbursement is done in multiple ad hoc installments** which significantly affects MSD's supply chain planning.
- Failure to disburse approved funds timely makes MSD fail to distribute available stock timely. This affects the MSD's warehouse and inventory management due to poor commodity flow from MSD warehouse to Health facilities which could result into expired and DOS stock.

**Findings and Implications**

- **Lack of reliable and sustainable sources of funds** are a major setback in addressing the country's health care needs.
- Although Government disbursements are a major sources of funds for MSD, of recent, less than 10% of the total needs for medicine and medicine supplies is being funded through government disbursement.
- **Basket funds** to the LGAs and other indirect sources of funds such as NHIF and CHF have played a notable role in financing the health care system.

# The amount approved should be disbursed timely and in one or two installments to enable better planning of stock procurement and distribution at MSD

Based on the findings and implication explained on the previous slide, below are the key industry benchmarks for similar metrics and key recommendations

| S/n | Industry Benchmark | Recommendation | Impact | Ease of Implementation | Implementation Timeline | Responsible |
|---|---|---|---|---|---|---|
| 1 | • **Demand planning** drives the budget and commitment from the MoHSW, and is based on the consumption data from health facilities (pull mechanism)<br>• **Health facility budgets** are credited to health facility in either in one tranche at start of the year or twice one at start and second at the middle of the FY<br>• **Disbursement of funds** to health facilities are carried out in a timely manner and in the full amounts<br>• **Quarterly monitoring** of budget utilization is then conducted against the disbursed funds | • Variance between the approved budget and the disbursed amount should be minimized to below 5%.<br>• Disbursements of funds to MSD should base on upfront credits to health facility accounts in one or maximum two tranches a year.<br>**This will ensure:**<br>○ An efficient flow of inventory to avoid DOS and expired stock resulting from delays in stock distribution to health facilities due to lack of funds.<br>○ Safeguarding of MSD's working capital<br>○ Timely payment to suppliers |  | Medium | On going | Chief Pharmacist at MoHSW |

# The quantification process will be improved is the LMU takes an active role in coordinating the quantification for normal goods leaving MSD to focus more on its core roles

| S/n | Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendation | Impact | Ease of Implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|---|
| 2 | • In recent years, quantification of normal goods of the national demand for medicines and medical supplies has been conducted by MSD predominantly using supply data. This information is then used by the LMU to develop the consolidated annual budget for medicines and medical supplies<br>• From FY15/16, MSD has started using demand-driven forecasting – whereby HFs commit to purchasing their forecast of the amount of medicines/medical supplies that they will need for the coming year. This is then aggregated by the MSD and shared with the LMU for the quantification exercise<br>• This demand-driven forecast is updated on a quarterly basis by the LMU officers located in all MSD zones who coordinate with HFs<br>• The quantification process is not within MSD's legal mandate and should have been entirely owned by MoHSW through its LMU. However, due to resource constraints – the LMU is not the key driver of the whole process | • Due to the predominant use of supply data in quantification (up to FY14/15), it has been hard to accurately determine the exact demand for medicines and medical supplies in the country<br>• MoHSW's inability to take lead on quantification of normal goods may affect the quantification process since MSD may not have enough expertise and resources to perform this role accurately. | • Medical stores work in close collaboration with relevant Ministry bodies in the quantification process | • LMU should be capacitated to become the key driver of the quantification process with MSD playing a key supporting role.<br>• The Demand-driven-forecasting initiative by MSD should be further strengthened through instituting signed agreements between all HFs and MSD at zonal level for their annual forecasted demand. This will serve as a legal commitment and provide a basis for MSD to make bulk purchases of health commodities. |  | Medium | Ongoing | Chief Pharmacist at MoHSW and Director of Finance and Planning at MSD |

# Improving efficiency and accuracy of the data collection process at the Health facilities will enhance the quantification process

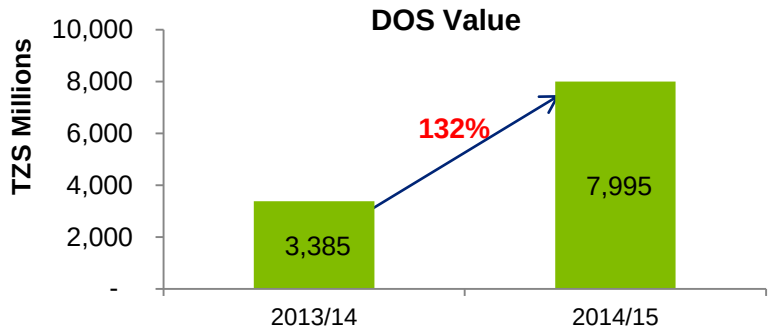
| S/n | Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendations | Impact | Ease of implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|---|
| 3 | Need for process/systems upgradation at health facility level:<br>• Poor quality of manually submitted data (data collected during deliveries to lower level health facilities) due to staff non-compliance to record-keeping procedures; and<br>• eLMIS has not been deployed to primary health facilities, data still has to be collected and recorded at district level manually which is a slow process. | • Inaccurate demand data being forwarded to MSD for demand forecast;<br>• Wrong demand forecasting;<br>• Delayed souring of data from health facilities; and<br>• Delayed MSD procurement processes. | • Formalization and enforcement of standardized operating procedures for health facilities record keeping; Health facilities proactively take responsibility for action steps and execute them in a timely manner;<br>• Introduction and integration of eLMIS to all primary health facilities nation wide; and<br>• Integration of eLMIS into the ERP – Epicor 9 system. | • Deploy/ integration of eLMIS system to PHFs to ensure effective sharing of data across health care entities;<br>• Establish standardized/cohesive data collection procedures for PHFs; and<br>• Establishment of guidelines and training of resources for adherence to data capture, stock taking and related processes at Health Facilities. |  | Low | Ongoing | Chief Pharmacist at MoHSW |

# Strengthening the compliance unit at MSD will improve the management of supplier's performance, thereby increasing efficiency in the procurement process and ensure timely delivery of goods

| S/n | Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendations | Impact | Ease of implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|---|
| 4 | • Supplier contractual compliance is an issue due to suppliers not always honoring contractual commitments to deliver goods to MSD on time upon receiving payments;<br>• Supplier face shortages in their inventory of items that have been requested by MSD. As a result supplier struggle to fulfil 100% of MSD request at a go; and<br>• The quality standard of goods delivered to MSD by suppliers is sometimes poor/below standards. | • Delayed:<br>○ Receipt of goods;<br>○ Low Order fill rate;<br>○ High Turn around times; and<br>○ Lead-times.<br>• Rejection during quality check; and<br>• No defined mechanism for supplier appraisal, rating and performance linked renewals. | • Performance measurement of suppliers based on monitoring of parameters such as SLAs for lead-times, quality of commodities, etc.; and<br>• Demand Plans are reconciled informally to each other and to the financial plan. Plans to be reviewed on a weekly basis with frozen horizon of one week or less. | • Definition of SLAs in supplier contracts-agreement of joint goals with suppliers; and<br>• Pre-contract supplier appraisals before post-contract supplier appraisals.<br>• Further support and strengthen the contract compliance unit by ensuring adequate resourcing. |  | Medium | 1 -2 years | Director of Procurement at MSD |

# Improving inter-departmental coordination between logistics and procurement divisions will help avoid wastage and improve safeguarding of MSD's working capital

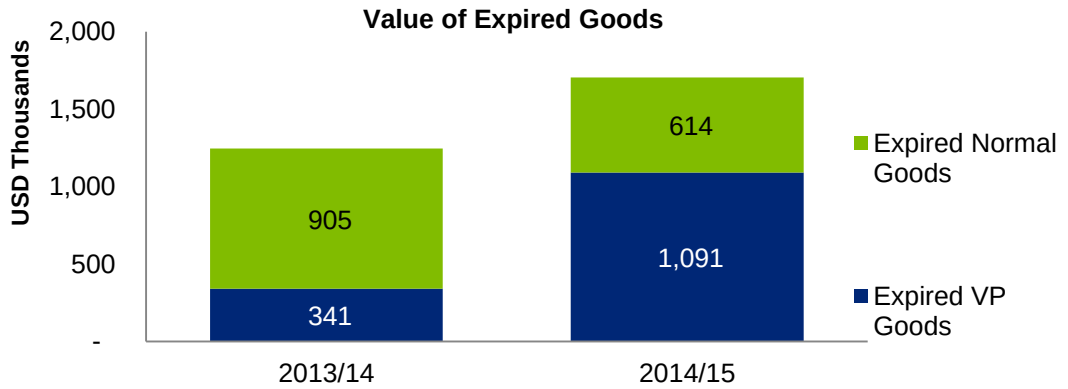
| S/n | Findings/Current Reality | Implication to MSD | Industry Benchmarks | Recommendation | Impact | Ease of Implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|---|
| 5.1 | • Stock data visibility and analysis in ordering process is low, as noted in purchasing of additional quantities of dormant, obsolete and/or slow-moving (DOS) goods already within MSD warehouses.<br>• The MSD Stock-taking exercise is currently conducted once a year, due to the fact that all warehousing operations need to be halted as it happens.<br>• Between the years 2013/14 and 2014/15, over 2.2 Bn worth of DOS goods were purchased. This significantly contributed to a 130% growth of DOS goods between these years from 3.4 Bn to 7.9 Bn-worth. As of June 2015, DOS goods account for 3.7% of total goods (vertical + essential goods) as shown in the figure below. | • Ultimately, the financial situation of the MSD continues to weaken due to lost potential sales of expired goods. | • Obsolete inventory is reviewed frequently at the SKU level; all dormant/obsolete/ inventory is disposed of; and<br>• Integrated supply chain design bringing all supply chain functions to plan for commodities.<br>• Set clear policy on minimum month of shelf life for all goods to be received | • Fast tracking of complete implementation of bar coding systems and integration with ERP system so as to enable real-time visibility of stock data to reduce levels of DOS and expired goods<br>• Should there be delays in the bar-coding implementation, either<br>○ The frequency of stock taking exercise needs to be increased to at-least twice a year- for more accurate visibility of stock level.<br>○ OR the accuracy of cycle counting at MSD warehouses needs to be boosted. |  | Medium | 0 – 6 months | MSD Director of ICT at MSD, and Director of Logistics |



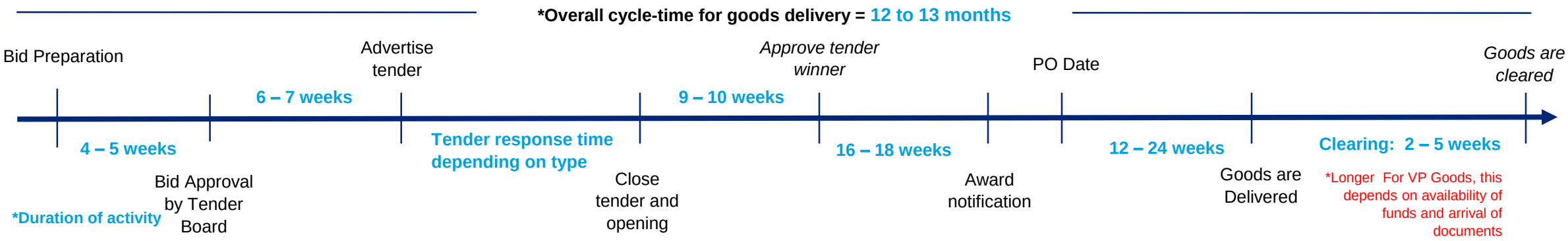

**Source:** MSD data

# Improving commitment and emphasis on the monthly technical working group meetings will help to streamline planning and improve the management of VP goods

| S/n | Findings/Current Reality | Implication to MSD | Industry Benchmarks | Recommendation | Impact | Ease of Implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|---|
| 5.2 | • The procurement process is not well coordinated and/or aligned between VP programs and MSD – this leads to poor order visibility on MSD side. There is significant improvements in the TB, Malaria and ARV programs but challenges still remain with reproductive health medicines and vaccinations.<br>• Some VP shipments have been arriving without MSD's knowledge eg: As of Sept '15, over 12% of VP consignments arrived before MSD received shipment documentation.<br>• Unplanned donations have also been a key contributor to clearing delays (Some donations come from non-DPG members eg: China and Korea)<br>• Monthly technical meetings between VP programs and MSD have started taking place in FY15/16 to address this issue. | • Increased demurrage charges for MSD<br>• Overlap in drugs available with MSD and donated by VPs<br>• An increase in expired stocks at MSD warehouses. For example, in FY 13/14 to FY14/15 expired stock increased by over USD 450k from USD 1.26m to 1.7m as shown in the figure below<br>• MSD is not able to efficiently plan for distribution. | • Commodity security coordination meetings are held on a quarterly basis between the Medical Stores Organization and all Donor-funded programs so as to improve coordination and planning. | • MSD should be committed to ensure availability at monthly technical working groups meeting to gain insights on VP stock pipeline, thereby increase MSD's visibility in the VP management process<br>• LMU should have clear performance measures on facilitating and coordinating communication between VP managers and MSD<br>• Ensure that shipment documentation is sent to both MSD and MoHSW before arrival of the consignment to allow for timely clearing of goods. |  | High | 0 – 1 year | Chief Pharmacist at MoHWS, and Director of Procurement and MSD |



# High procurement lead-times of 12 – 13 month are severely affecting MSD's operational efficiency and timeliness in meeting customer needs




| S/n | Finding | Implication to MSD |
|---|---|---|
| 6 | • MSD already has **framework agreements** in place for some health commodities with a view of expanding them to cover the majority of it's health commodities<br>• The waiting time between **tender preparation and advertising** takes over 9 weeks on average for all medical goods – due to multiple Tender Board and QA unit sittings to clarify and sign of on specifications.<br>• The waiting time between the **selection of a bid winning entity to when the entity is notified** is over 6 months long on average for medical goods.<br>• High waiting time between notification and contracting as all purchases over 50 Million Tshs have to be sent to the AG's office for vetting (as per PPRA guidelines) – a process that takes 1 to 2 weeks. | • Lengthy lead times<br>• **Stock-outs**<br>• High cost of goods imposed by **suppliers** to cover for the delays. |

**Source:** MSD data

# If applied correctly, framework agreements stand to improve the procurement of health commodities and can potentially reduce cycle times from 12 months to 6 months

**Single supplier framework**

- A single contract is awarded to one supplier through a competitive process during the first stage of procurement, and then multiple call-off orders are placed directly against the contract throughout the duration of the agreement.

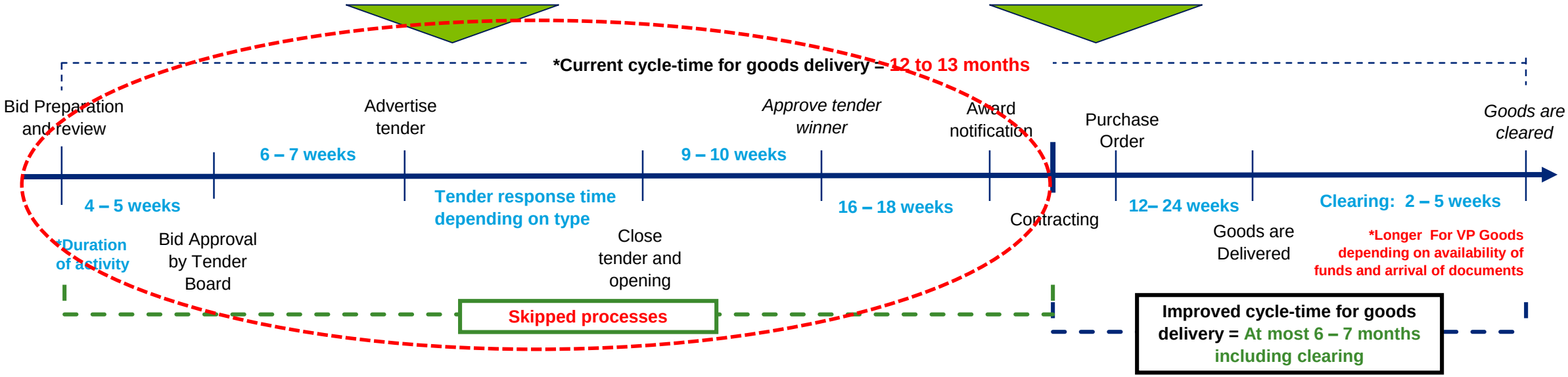
**Pre-requisites for effective framework agreements**

- Conducive legal and regulatory environment
- Adequate technical capacity in terms of contract management as well as ability to continually prepare, negotiate, manage, evaluate, and conduct performance reviews.
- Participation of local manufacturers
- Payment discipline (timeliness of payments)
- Exclude prices from the ToC – so as to deal with price volatility (applies to multi-supplier frameworks

**Multi-supplier framework**

- A contract for the same good or service is signed with multiple suppliers in the first stage of procurement.
- **Multi-supplier frameworks can be carried out in different ways:** a secondary bidding process may take place for each call-off order, suppliers may have been ranked according to preference or capacity, orders may be rotated among the different suppliers, or fixed order amounts may be assigned to each supplier in the initial contract.

Framework agreements can save significant procurement time and resources by avoiding the repetition of all steps for each purchase (see figure below). Entities can secure the benefits of centralized purchasing, through demand aggregation, while retaining flexibility in purchase quantities and delivery schedules.




**Source:** Research article on Strategic Contracting practices by Prof. Yadav et al

# Elevating the role of the Quality Assurance Unit while increasing internal efficiency of the tender board and the procurement management unit will increase efficiency in the procurement process

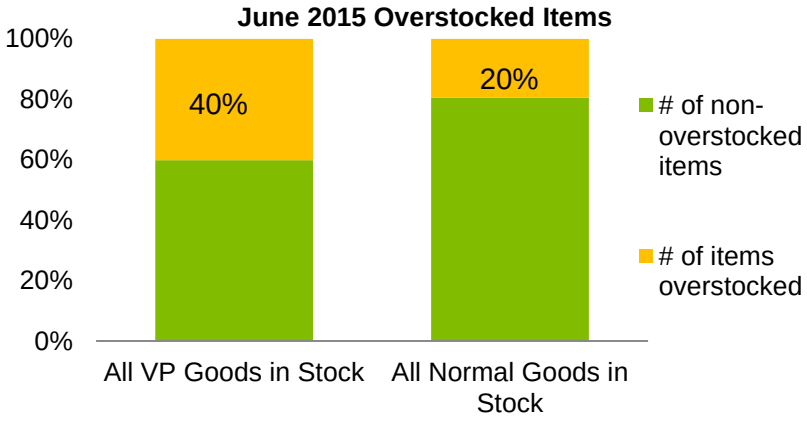
| Industry Practice/ Benchmarks | Recommendation | Impact | Ease of Implementation | Timeline | Responsible |
|---|---|---|---|---|---|
| • Use of rate contracts (framework agreements)<br>• Delegation of Authority matrix are pre defined and are revised on an annual basis in line with changing needs and value of contracts. With the objective of making 80% of procurement straight through and having deviation approvals for 20% exceptions. | • Inefficiencies within the procurement process should be cut out so as to lower lead-times to at most 6 months. This can be done by:<br>  ○ Setting clear performance metrics for the procurement unit to ensure the minimum possible timeframes for procurement<br>  ○ In order to preserve flexibility, achieve good value-for-money and offer supply security, there needs to be strategic formulation of agreements (with suppliers), adequate contract management and continuous assessment of framework agreements.<br>  ○ Counter verification mechanisms should be used with framework agreements. This is due to the frequency and small size of call-off orders, which complicate monitoring for any legal violations during award of these orders. These mechanisms will safeguard transparency and competition while using these agreements.<br>• Institute controls to ensure effective use of framework agreements<br>• In-order to smoothly carry-out all PPRA stipulated approvals - the performance and efficiency of the tender board should be tracked so as to reduce unnecessary delays resulting from unavailability and/or lack of attendance from members<br>• The QA unit should take the lead in the preparation and review of specifications before tender advertisements so as to avoid multiple tender board sittings to addressed changes in incorrect specifications |  | High | 0 – 6 months | Director of Procurement, and Head of Quality Assurance at MSD |

**Source:** MSD data

**Source:** Research article on Strategic Contracting practices by Prof. Yadav et al

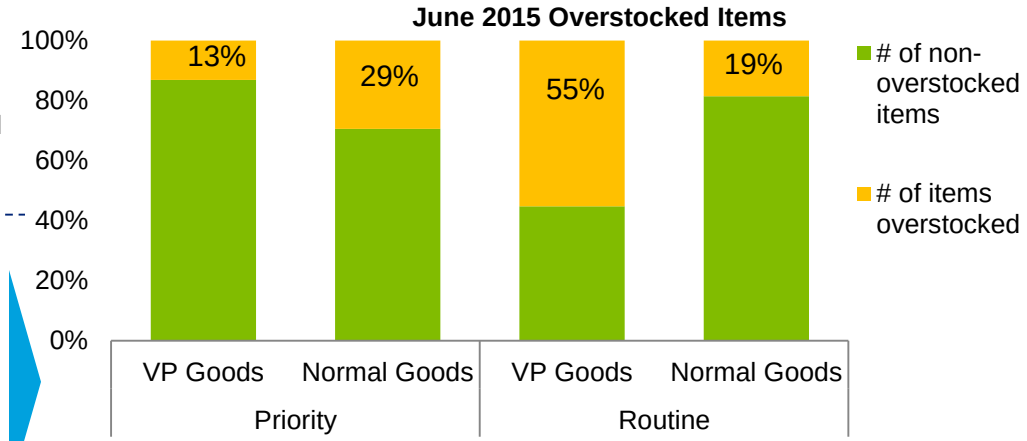
# Inadequate order visibility for VP goods at MSD contributes significantly to overstocking of VP goods

| S/n | Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendation | Impact | Ease of Implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|---|
| 7.1 | • Excess stock as exhibited through analysis of the June 2015 VP Goods in stock, showed that 55% of goods had 12 months or more of stock in terms of the average monthly consumption<br>• MSD does not have order visibility of VP goods, hence MSD distribution plan is not synced with incoming goods, resulting in goods being stored for longer durations before delivery<br>• Another contributing factor is the process of VP goods quality inspection – which requires goods to be placed in storage hold for lab testing before distribution. | • Overflowing VP stock leads to Increased difficulty in warehouse mobility and efficient operations<br>• Furthermore, around 40% of VP Goods are overstocked in MSD warehouses (over 12 months + delivery lead time). Routine VP goods account for most of the overstocked items<br>• Contributes to stock expiration | • Safety stock requirement are determined item wise, based on a scientific analysis of demand and procurement lead times. Typically average between 1-3 months;<br>• Frequent, periodic rearrangements of the warehouse (SKU static slotting) when movement patterns of stock changed significantly;<br>• Maximize on the warehouse vertical space; and<br>• Warehouse Goods Practice (WGP) – no items in the isles but on the shelves. | • Close integration of procurement and warehouse processes<br>• Detailed study of projected stock levels, volume requirements and available storage space, vertical management practices etc. is required to assess the warehousing requirements of MSD<br>• There should be routine analysis of stock levels and share findings with VP managers |  | Medium | 1 -2 years | Director of Procurement and Director of Logistics at MSD |




40% VP Good items in stock are overstocked (have 13 months or more of inventory in stock); while 20% of all normal goods are also overstocked (i.e have 7 or more months stocks)

Both the VP and Normal stocks can be categorized into priority and routine items. 55% Routine VP items are overstocked – which places a significant strain on storage space




**Source:** MSD data

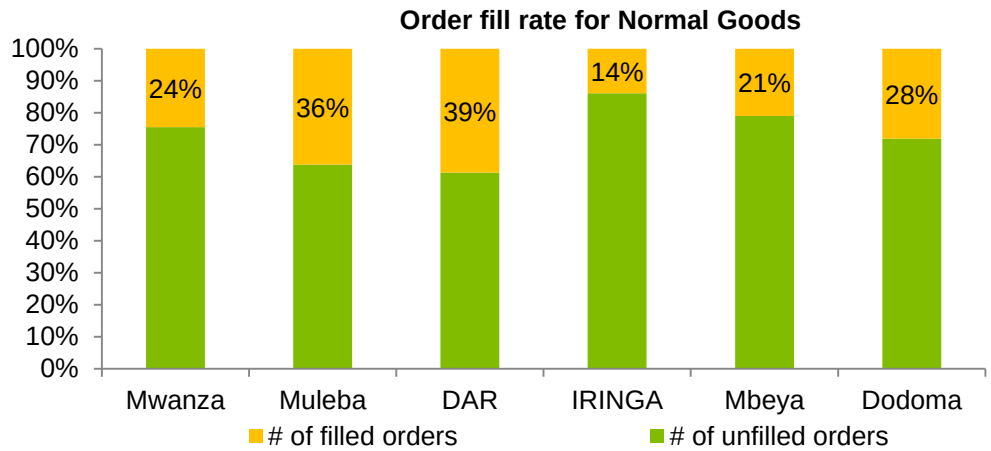
# Improving utilization of vertical warehouse space and timely disposing of the expired stock will increase warehousing capacity at MSD

| S/n | Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendation | Impact | Ease of Implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|---|
| 7.2 | Storage space management is poor because of;<br>○ Poor warehouse layout (not utilizing vertical space effectively)<br>○ Storage of expired goods for up to 2 years,<br>○ Inefficient management of the inventory levels, and<br>○ Poor commodity flow | • MSD incurs administrative and warehousing costs for storage of expired goods.<br>• MSD currently stores 3.7Bn of expired goods, which is approximately 2% of total value of stock | • Disposal tracking systems are in place and are linked with third parties and/or used for reporting improvement opportunities<br>• Regulatory bodies are automatically notified using the system.<br>• Products are moved to correct facility in a timely fashion for disposal<br>• Disposal procedures exist and are regularly reviewed<br>• Vertical warehouse space is utilized well to increase warehousing capacity | ▪ Ensure timely disposal of expired goods by:<br>○ Configuring ERP to track expired and/or damaged stock levels.<br>○ Coordinating with regulatory bodies and relevant authorities for the periodic application of disposal permits so as to control inventory holding costs<br>○ Explore possibilities of renting warehouses from Government agencies/parastatals to reduce warehousing costs<br>• Efficient management of the inventory levels by improving commodity flow<br>• Improve warehouse layout by efficient utilization of vertical space |  | High | 1 – 2 years | Director of Logistics and MSD |

**Source:** MSD data

# Frequent stock-outs and sub-optimal order fill rates for essential medicines are a result of MSD's deteriorating financial situation

| S/n | Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendation | Impact | Ease of Implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|---|
| 8 | • The essential goods warehouses frequently experience stock-outs due to lack of sufficient funding to replenish stocks. Health facilities are forced to purchase essential drugs on credit due to late government disbursements, which significantly restricts MSD's purchasing power; and<br>• As of June 2015, On average, 24% of priority essential items such as ERYTHROMYCIN (of which stock-outs should not occur) are out of stock. While over 50% of routine essential items such as VITAMIN B COMPLEX SYRUP are out of stock | • Stock availability targets of 95% are never met, year on year which means customers almost never have their medicinal needs met by MSD. This adversely affects the quality of health care as a whole.<br>• In the first quarter of FY15/16, the average % of filled orders is only 73% - meaning over 1 in four orders is not fully met.<br>• Of the unfilled orders, an average of 14% of line items were not filled<br>• Inadequate mechanism to ensure appropriate prioritization on procurement | • Funding for procurement is ensured through adequate planning and budgeting; and<br>• Creation of master facility list of essential commodities with a trigger mechanisms.. | • Strengthen the use of Technical Working Groups in discussion stock levels, LMU accountability, and MSD internal coordination<br>• Clearance of overdue payables to suppliers need to be prioritized |  | High | 0 – 3 years | Chief Pharmacist at the MoHSW, and the Director of Procurement at MSD |




An average the order fill rate from Zonal Stores to Health Facilities (On Time and In Full) is around 73%. This needs to be improved to meet the BRN target of 100% stock availability by 2017.

**Source:** MSD data

# The management of DOS goods can be improved by updating and enforcing MSD's current DOS policy

| S/n | Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendation | Impact | Ease of Implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|---|
| 9 | • MSD has an outdated DOS policy in place – that has no standard criteria used to determine when a good is dormant, obsolete or slow-moving ; as well as the regularity of conducting this analysis.<br>• Currently, the DOS goods are tracked in the annual stock taking exercise | • Limits the ability of MSD to proactively manage the ageing of their inventory. As a result, new items get procured during the course of the year, even though they are dormant/slow-moving and/or obsolete. This leads to financial losses on products that eventually have to be disposed.<br>• The ERP system cannot provide visibility on DOS goods because there is no standard criteria for determining if a good is DOS. Without the criteria, parameters cannot be set in the system to enable visibility.<br>• New items (that are dormant/obsolete/slow-moving) are purchased in the middle of the year when real-time DOS data is not available. During the FY13/14, this amounted to over USD 1 Million. | • Obsolete inventory is reviewed frequently at the SKU level using a standard S.O.P;. All obsolete inventory is disposed. | • Definition of the DOS policy and its integration with stock management process as well as IT system to generated lead alerts and flags – system trigger mechanisms |  | Low | 0- 6 months | MSD Director of Logistics |

**Source:** MSD data

# Upgrade of key resources and systems is critical to ensure efficient operation of MSD's distribution services

## Distribution Planning

| S/n | Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendations | Impact | Ease of implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|---|
| 10 | No system module for route planning: Manual recording of route planning - complicates and elongates the process. | • Use of less optimal routes; and<br>• Incurring unnecessary running cost unscheduled (fleet maintained, longer delivery routes etc). | • Introduced application system for route logistic planning; and<br>• Strategic network optimization tools for route scheduling. | • Explore advanced planning & scheduling (APS) solutions.<br>• Consider Pick-up & Delivery" (PUD) planning solution -optimizes routes. |  | High | 1 year | MSD Director of Zonal Operations |

## Dispatch

| S/n | Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendations | Impact | Ease of Implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|---|
| 11 | • Ageing fleet - MSD Fleet is at an average of 5 years, which is old due to the heavy-duty and high frequency nature of its work. Some vehicles have been used for over 15years.<br>• MSD has floated tenders for 3PL services and has recently entered into an agreement with two 3PL providers to support with distribution from the Central Store to zonal stores (starting early 2016) | • Fleet expansion is a capex intensive exercise, asset lite options such as 3rd party logistic providers need to be evaluated<br>• Aged fleets result in increased/high fleet maintenance costs for MSD. (grown by 7% in the last 3 years) | • Logistics is typically an outsourced function, to optimize capex requirement as well as better service delivery.<br>• Logistics is outsourced down to last-mile delivery. (eg: KEMSA)<br>• Centralized transportation planning is done at corporate level and within each region. Planning of activities merge-in-transit, back hauling, routing etc. | • Detailed assessment of the option for outsourcing fleet and distribution services to 3PL players.<br>• MSD needs to adopt and strengthen the hybrid model of 3PL services it will receive starting early 2016 and consider expanding it to some zonal stores depending on the viability and efficiency of the distribution model. Ultimately this model stands to reduce MSD's capital expenditure in its fleet.<br>• Use internal fleet for emergency responses alone. |  | Medium | 1 -2 years | MSD Director of Zonal Operations |

# Although the distribution charges are based on the need to ensure equity, they do not reflect the true cost of distribution

| S/n | Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendations | Impact | Ease of Implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|---|
| 12 | • A flat-rate fee of TZS 130,000 is charged for all deliveries to PHFs. TZS 610,000 flat rate is charged for regional/district hospitals regardless of distance the fee are to low to offset the actual running costs of fleet distributions (approx. TZS 7 mil for inter- zonal deliveries).<br>• For every 1000 tshs of revenue, MSD's distribution cost has increased from 18 Tshs in FY13 to 29 Tshs in FY15. | • There is USD 7,000 difference between estimated quarterly distribution costs to actual quarterly costs.<br>• The MSD incur additional high running costs due to poor management of transportation costs/ inefficient cost discovery<br>• There are instances of overcharging of distribution costs and likely undercharging due to the flat rate model | • Conduct assessment of the cost of freight, the reliability of each lane for each service level, and the true cost of carrying inventory.<br>• Strategic network optimization<br>• Delivery costs are derived as a function of volume carried, commodity characteristics and distance travelled. | • Detailed activity costing study to be undertaken to assess the suitability of MSD fixed fee model for distribution. The study will establish the actual distribution costs to show the Government the cost absorbed by near by facilities on behalf of some hard to reach facilities. |  | Medium | 1 -2 years | MSD, Director of Zonal Operations |

**Source:** MSD data

# Contents

# Key sources of funding for MSD's budget are the annual GoT disbursements and cash sales from normal business line

## Overview of the budget process

- Below is a highlight of MSD's budget formulation process.

### Budgeting process

| Activity | Responsibility |
|---|---|
| Issue of business plan and budget preparation guidelines | Chief Management Accountant |
| Directorates and department dissemination of budget and business plan guidelines | Directors and managers |
| Review and preparation of Directors objectives and targets | All budget holders |
| Review and preparation of departmental, operational and individual objectives, targets and activities | Responsible managers |
| Finalisation of directorate's business plan and budget | Directors and managers |
| Business plan and budget consolidation | Directors and managers |
| Present the business plan and budget to the Engagement Management Team (EMT) | Directors and managers |
| Inclusion of EMT recommendations to business plan and budget and preparation of MSD master budget | Chief Management Accountant |
| Submission of budget to w orkers council | Director General |
| Submission to Board of Trustees | Executive Management Team |
| Submission to MoHSW | Chief Management Accountant |
| Publish business plan and budgets | Chief Management Accountant |
| Submit copy of business plan and budget to MoHSW and MoF | Executive Management Team |

Source: M anagement information

- **MSD's budgeting process is based on the current Medium Term Strategic Plan (2014-2020) (MTSP)** from which the annual business plan is prepared and then quantified in the budget. The objectives of the MTSP are factored as activities in the annual budget. At the start of the budgeting process, the Chief Management Accountant (CMA) issues Budget Preparation Guidelines (BPG) and sets annual targets taking into account the previous years' performance. The Budget Preparation Guidelines issued by the CMA are approved by the Executive Management Team (EMT) and are formulated to assist each department in budget preparation.
- **Sources of funding for MSD's budget are the annual Government disbursements and cash sales.** The Government disbursements are made up of funds from the Ministry of Finance (MoF) and the Basket Fund. The Basket Fund is comprised of contributions by multiple bilateral and multilateral Development Partners (DPs) who support Tanzania's health sector.

- The MoHSW forecasts Tanzania's health sector demand which is the basis of the health sector budget. An allocation of the health sector's budget is channelled through the MSD to enable it carry out its mandate i.e. distribution of medicines and medical equipment. For it internal planning, the MSD also forecasts medical needs through coordination with zonal managers and stakeholders (at zonal level). Zonal forecasts are moderated based on the MoHSW's estimated budget allocation to the MSD. Prior to the Government budget reading, the MoHSW communicates an estimated budget allocation for the purchase of drugs. Please note that CAPEX is not included in the allocation.
- **The budget preparation process at MSD is a "bottom-up" participative process**. Every manager, head of Strategic Business Units (SBUs) and supervisor involve their departments in preparation of their respective budgets. The budgets are then consolidated by departmental directors and managers.
- Consolidated budgets are presented to the SBU Advisory Committee for moderation. This committee comprises of representatives from all departments. Departmental Heads justify their budgets at this stage.
- Following approval by the SBU advisory committee, the Executive Management Team (EMT) approves the budget and sends it to the MoHSW for review. Please note that the MoHSW's role in the MSD's budget process is limited to review and not approval.
- The annual budget is reviewed and revised in December for actual Government disbursements. A monthly budget variance analysis is undertaken at zonal level and reviewed at the Head Office. Variances exceeding 10% are investigated by the Management Accountant. This is good practice as timely decisions can be taken to mitigate adverse budget variances. We analysed MSD's budget and actual results for the period 1 July 2013 to 30 June 2015 i.e. FY12/13 to FY14/15 as presented in Appendix of this report. Notably most revenue and cost variances were attributed to the inadequate budget disbursements.

# MSD's annual budget is prepared under the assumption that 100% of its budget allocation shall be received from the MoHSW despite that not being the case in practice

## Overview of the budget process continued

- Below is a highlight of MSD's budget review process.

### Budget review process

| Steps | Activities | Responsibility |
|---|---|---|
| Reporting | Monthly and quarterly budget variances are prepared at Zones by the tenth day of every month and submitted to the head office for review. | Zonal managers |
| Review | Budget variances are analysed at head office and variances above 10% investigated.<br>The SBU's explain variances above 10%. | Zonal managers<br>Chief Management Accountant |
| Board review | The Board of Trustees review the budget quarterly alongside quarterly management accounts. | Board of trustees |

Source: Management information

- Notably, the **main variances between budgeted and actual results during the period 1 July 2013 to 30 June 2015 were due to delayed and inadequate Government disbursements and reduced donations from DPs**. Consequently, the MSD postponed the planned staff recruitment in FY13/14 and FY14/15 and CAPEX.

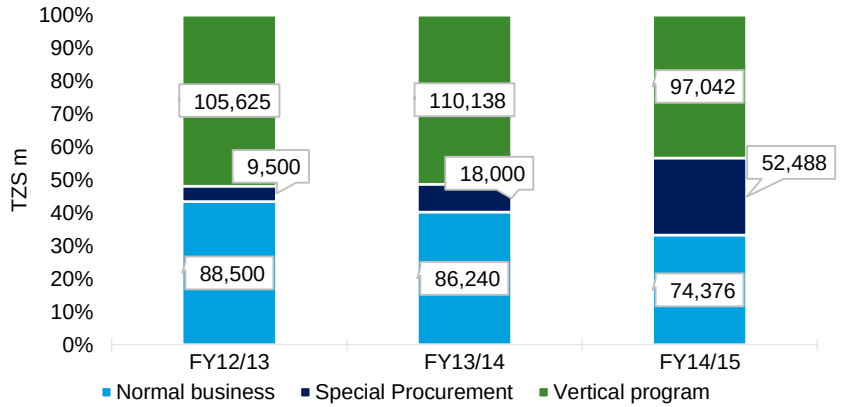
## Key budget assumptions

- Issued alongside the annual budget preparation guidelines are assumptions used by management in preparation of the budget. Some key assumptions used in MSD's budgeting process include:
  - **Timely receipt of budget disbursements from the MoHSW**. MSD's budgeting process assumes that the MoHSW will disburse all funds at the beginning of the fiscal year. However, disbursements from the MoHSW delay and when received, fall short of the annual budgeted amounts. This affects stock planning and other budgeted activities.
  - **Moderate economic assumptions** based on the Bureau of Statistics data. These include GDP, inflation and interest rates; and
  - **Stable exchange rates** of TZS/USD 1,800 with reference to the 2015-2016 budget. Notably, the TZS/USD exchange rate experienced volatility in the past. Between March 2015 and June 2015, the TZS depreciated by 11.6% against the USD from TZS/USD 1,786 to TZS/USD 2,020 respectively. The MSD's recorded foreign exchange loss increased by a 70% CAGR considering that 90% of medicines and medical supplies are purchased in foreign currency.

# Lack of confidence by donors in MSD's ability to operate effectively due to the cash flow constraints led into reduced budgeting for VP revenues

## Composition of MSD's budget

### Budgeted revenues analysis




Source: Management information

### Revenues

- **MSD's budgeted revenues from normal business declined by 16% between FY12/13** and FY14/15 due to the reduced budget allocation from the MoHSW.
- **Budgeted revenues from Vertical Programs (VP) recorded a 16% decline due to reduced funding** by donors as a result of:
  - adverse economic conditions in DP countries; and
  - the lapse of the Millennium Development Goals (MDGs) whose blue print ends in 2015
- **Currently, DPs are channelling funds directly to health facilitie**s owing to increasing lack of confidence in MSDs ability to operate effectively due to the cash flow constraints it faces.
- Management indicated that, the **direct funding of health facilities by DPs poses a risk to MSD's market share** whenever heath facilities at zones experience stock outs and opt for alternative suppliers.

## Composition of MSD's general expense budget

### General expenses

| TSZ m | FY12/13 | FY13/14 | FY14/15 | % CAGR FY13-FY15 |
|---|---|---|---|---|
| Personnel | 13,778 | 18,557 | 16,997 | *11.1%* |
| Board of Trustees | 433 | 838 | 803 | *36.2%* |
| Training and recruitment | 1,347 | 1,426 | 544 | *(36.4%)* |
| Sales and marketing | 1,389 | 1,115 | 694 | *(29.3%)* |
| Services and utilities | 5,678 | 6,401 | 7,365 | *13.9%* |
| Office and general | 6,285 | 7,097 | 5,577 | *(5.8%)* |
| Depreciation | 1,842 | 2,026 | 2,100 | *6.8%* |
| **Total general expenses** | **30,752** | **37,460** | **34,080** | *5.3%* |

Source: Management information and Deloitte analysis

- **Budgeted revenues from special procurement increased during the analysis period after DPs began funding health facilities directly**. Despite the increased budgeted revenues from special procurement, actual revenues were lower due to inadequate budget allocated by the Government

### Costs

- Personnel costs, the key driver of general expenses, averaged 48% of total general expenses between FY12/13 and FY14/15. In FY13/14, the MSD budgeted to replace retired staff. However, this was postponed due to financial constraints.
- The sales and marketing budget recorded a 37.7% decline between FY13/14 and FY14/15 due to reduced marketing activities. MSD's marketing activities include quarterly customer surveys, customer data validation and printing of banners, calendars and diaries.

# Due to the recent trend of increased Government budget deficit, MSD should rationalise its budget so as to work with a more realistic plan that also focus more on own revenue sources

## Composition of MSD's budget continued

- MSD factors Capital Expenditure (CAPEX) in its annual budget. From a review of the FY13/14 and FY14/15 budgeted and actual performance, the organisation achieved an average of 26% of its CAPEX needs owing to cash flow constraints.
- CAPEX is financed by DPs and internal resources. DPs fund warehouse construction and motor vehicles while the rest is from internal funds. Notably, between 1 July 2012 and 30 June 2015, the MSD did not replace its fleet of  motor vehicles despite being due for replacement. Depreciation is done over an average 7 years.

### The MSD's CAPEX budget

| TZS m | FY12/13 | FY13/14 | FY14/15 | FY15/16 |
|---|---|---|---|---|
| Total budgeted CAPEX | 17,340 | 14,903 | 15,199 | 16,315 |
| Actual CAPEX | (27,031) | (5,303) | (2,382) | n/a |
| **CAPEX (surplus)/deficit** | **(9,691)** | **9,600** | **12,816** | **n/a** |
| **% CAPEX deficit** | **-56%** | **64%** | **84%** | **n/a** |

n/a - not applicable as this is the current period

Source: Management information and Deloitte analysis

- DP financial support in warehouse construction resulted in a 56% CAPEX surplus in FY12/13. In FY15/16, the MSD plans to fund CAPEX from internal funds, however, this is subject to cash flow adequacy.

## Key gaps noted in the current budgeting process

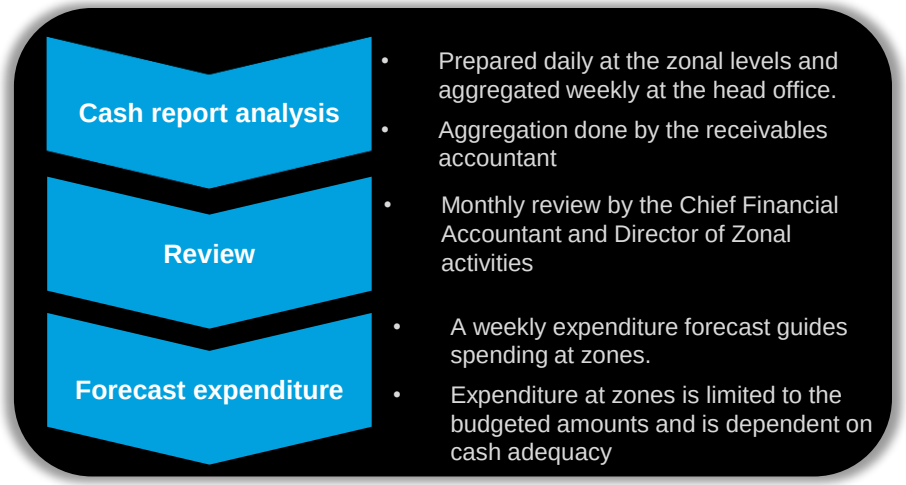
1. The Enterprise Resource Planning (ERP) system's budgeting module is yet to be configured as such, **budget preparation and monitoring is done using excel spreadsheets.** Therefore, the budgeting process is time consuming.
2. **Pegging the annual budget estimates to Government disbursements may result in poor decision** making including overstocking as evident in the increase in the average inventory days from 110 days in FY12/13 to 250 days in FY14/15. The amounts disbursed between 1 July 2012 and 30 July 2015 fell short of the budgeted amounts by an average of 26%. From discussions with management, the decline in disbursements was due to financial constraints at the MoF.

## Recommendations – opportunities for improvement to the budgeting process

1. For efficiency in budget formulation and tracking, **the ERP should be configured to support the budget system**. This will also reduce instances of human error.
2. Due to the recent trend in the increased Government budget deficit, the MSD should rationalise its budget so as to work with a more realistic plan. This would reduce instances of overstocking and consequently reduce obsolete stock.

# The cash report is prepared manually and as such prone to human errors

## An overview of MSD's cash management process




- The main contents of the cash collection report includes details of cash collected from sales to zonal health facilities during the week and estimated sales for the next week. Cash reports are done on excel spreadsheets.
- An average of the actual weekly expenditure (recorded in the cash collection report) at zonal level is used to forecast expenditure at MSD. Funds received from the MoHSW are not factored in the weekly cash report as receipt of these funds is unpredictable.
- Note that MSD maintains separate cash collection and expenditure bank accounts for each zone. **The zones have no access to the collection account but can draw from the expenditure account.** Funds from the collection accounts are credited to MSD's main account at the end of every month.
- **A monthly reconciliation of the cash report and collection bank account for each zone is done by the receivables accountant**. Review and approval is done by the Chief Financial Accountant. The monthly cash report is reviewed by the Chief Management Accountant, Chief Financial Accountant and Director of Zones.

## An overview of MSD's cash management process continued

- Expenditure estimates by each zone are submitted to the head office by the zonal managers and funds disbursed on a weekly basis to each zonal expenditure account.
- For all expenditures, the requisitioning department completes a requisition report which is approved by the departmental head and reviewed by the Chief Financial Accountant. The Director of Finance and Planning approves expenditure requisitions, based on the budget amount.

### Gaps

- **The cash report is prepared manually** and as such prone to human errors. Errors are only rectified by the receivables accountant during monthly reconciliations.

### Recommendations

- **Cash collection reports should be system generated** to reduce instances of errors.

# Delays by the MoHSW in disbursing funds to MSD in FY12/13 resulted in the lowest level of normal business revenues at TZS 68bn (USD 34m) compared to an average of TZS 77bn (USD 38m) during the analysis period

## Statement of Financial Performance

| TZS m | Audited FY12/13 | Audited FY13/14 | Unaudited FY14/15 | %CAGR FY13-FY15 |
|---|---|---|---|---|
| **Revenues** | | | | |
| Normal business | 68,164 | 86,674 | 84,794 | *11.5%* |
| Special procurement | 16,846 | 10,834 | 7,303 | *(34.2%)* |
| Vertical program | 148,991 | 70,743 | 68,475 | *(32.2%)* |
| **Total revenue** | **234,001** | **168,251** | **160,572** | *(17.2%)* |
| Cost of sales | (207,912) | (134,188) | (109,627) | *(27.4%)* |
| **Gross profit** | **26,089** | **34,063** | **50,945** | *39.7%* |
| Other operating income | 2,770 | 3,241 | 3,625 | *14.4%* |
| Finance income | 1,359 | 799 | 231 | *(58.7%)* |
| Revenue grants | 358 | 82 | - | *(100.0%)* |
| Capital grants | 568 | 2,133 | 1,820 | *79.0%* |
| Packing costs | (1,130) | (1,104) | (1,219) | *3.9%* |
| Distribution costs | (4,449) | (5,625) | (4,682) | *2.6%* |
| Staff costs | (13,886) | (15,083) | (15,853) | *6.8%* |
| Administrative expenses | *(14,262)* | *(17,665)* | *(15,875)* | *5.5%* |
| Depreciation expenses | (2,788) | (4,335) | (5,864) | *45.0%* |
| Amortisation of intangible assets | - | (269) | (284) | *n/a* |
| Total expenses | (36,515) | (44,081) | (43,778) | *9.5%* |
| **Operating profit** | **(5,371)** | **(3,763)** | **12,843** | *n/a* |
| **Other gains / losses** | | | | |
| Gain on disposal of assets | 22 | 190 | 24 | *4.8%* |
| Foreign currency gain/(loss) | 2,465 | 3,785 | 7,097 | *69.7%* |
| Impairment charge / (release) on receivables | 1,836 | (1,205) | (10,305) | *n/a* |
| Total gains/losses | 4,323 | 2,770 | (3,184) | *n/a* |
| **Surplus / (Deficit) for the period** | **(1,048)** | **(993)** | **9,659** | *n/a* |
| **KPIs** | | | | |
| *Overall gross profit margin* | *11.1%* | *20.2%* | *31.7%* | |
| *Total staff numbers* | *409* | *439* | *427* | |
| *Annual staff costs per employee (TSZ '000s)* | *33,951* | *34,358* | *37,128* | |
| *% Packing costs/total revenue* | *0.5%* | *0.7%* | *0.8%* | |
| *% Distribution costs/total revenue* | *1.9%* | *3.3%* | *2.9%* | |
| *% Administrative expenses/total revenue* | *6.1%* | *10.5%* | *9.9%* | |
| *Eligible budget allocation GoT (TZSm)* | *80,459* | *64,117* | *70,500* | |
| *Actual budget disbursements (TZSm)* | *77,292* | *49,750* | *34,215* | |
| *% budget deficit* | *3.9%* | *22.4%* | *51.5%* | |

Source: FY13, FY14 AFS and FY15 management accounts

## Financial Performance Analysis - Overview

- The analysis period covers the period from 1 July 2013 to 30 June 2015 i.e. FY12/13 to FY14/15. We used the information obtained from the Audited Financial Statements (AFS) for the financial years ended 30 June 2013 (FY12/13) and 30 June 2014 (FY13/14) and the unaudited management accounts for the financial year ended 30 June 2015 (FY14/15).
- MSD operates three lines of business namely:
  - Normal business: supplying, to health facilities, essential medicines and medical supplies in MSD catalogue;
  - Special procurement: catering for special orders, such as medical equipment, from health facilities; and
  - Vertical Programs (VP): storing and distributing medicines and medical supplies for Development Partner (DP) supported programs such as Human Immunodeficiency Virus (HIV), family planning, malaria, Tuberculosis (TB) and the Expanded Program on Immunisation (EPI).
- For the services rendered above, MSD charges a service fee to cover storage and distribution costs.
- **Normal business revenues were lowest in FY12/13 owing to delayed budget disbursements** during the year. In FY12/13, out of a total budget disbursement of TZS 77bn (USD38m), 4% of the funds (representing the MoHSW's share) were received in the second quarter (Q2) and the remainder received in the second half of the financial year. This delayed the crediting of funds into customer accounts hence the low sales during the year. Please refer to the budget disbursement analysis later in this section detailing the timing of Government funds within the last three financial years.
- The 2% decline in normal business between FY13/14 and FY14/15 was attributed to an inadequate budget allocation hence few orders from customers. The budget deficit in FY14/15 increased to 51% from 22.4% in FY13/14 due to a decline in the budget allocation to the MSD by the MoF.
- **Normal business revenues are directly impacted by the Government budgetary allocation**, which is expected in each quarter (exact date unspecified). When MSD receives its share of the budget allocation, respective health facility accounts are credited enabling them to order for medicines. Further, the timing and adequacy of the budget allocation affects the distribution of essential medicines and medical supplies.

# VP revenues declined by 52% between FY12/13 and FY13/14 following the adoption of the Pooled Procurement Mechanism by DPs

## Statement of Financial Performance

| TZS m | Audited FY12/13 | Audited FY13/14 | Unaudited FY14/15 | %CAGR FY13-FY15 |
|---|---|---|---|---|
| **Revenues** | | | | |
| Normal business | 68,164 | 86,674 | 84,794 | *11.5%* |
| Special procurement | 16,846 | 10,834 | 7,303 | *(34.2%)* |
| Vertical program | 148,991 | 70,743 | 68,475 | *(32.2%)* |
| **Total revenue** | **234,001** | **168,251** | **160,572** | *(17.2%)* |
| Cost of sales | (207,912) | (134,188) | (109,627) | *(27.4%)* |
| **Gross profit** | **26,089** | **34,063** | **50,945** | *39.7%* |
| Other operating income | 2,770 | 3,241 | 3,625 | *14.4%* |
| Finance income | 1,359 | 799 | 231 | *(58.7%)* |
| Revenue grants | 358 | 82 | - | *(100.0%)* |
| Capital grants | 568 | 2,133 | 1,820 | *79.0%* |
| Packing costs | (1,130) | (1,104) | (1,219) | *3.9%* |
| Distribution costs | (4,449) | (5,625) | (4,682) | *2.6%* |
| Staff costs | (13,886) | (15,083) | (15,853) | *6.8%* |
| Administrative expenses | *(14,262)* | *(17,665)* | *(15,875)* | *5.5%* |
| Depreciation expenses | (2,788) | (4,335) | (5,864) | *45.0%* |
| Amortisation of intangible assets | - | (269) | (284) | *n/a* |
| Total expenses | (36,515) | (44,081) | (43,778) | *9.5%* |
| **Operating profit** | **(5,371)** | **(3,763)** | **12,843** | *n/a* |
| **Other gains / losses** | | | | |
| Gain on disposal of assets | 22 | 190 | 24 | *4.8%* |
| Foreign currency gain/(loss) | 2,465 | 3,785 | 7,097 | *69.7%* |
| Impairment charge / (release) on receivables | 1,836 | (1,205) | (10,305) | *n/a* |
| Total gains/losses | 4,323 | 2,770 | (3,184) | *n/a* |
| **Surplus / (Deficit) for the period** | **(1,048)** | **(993)** | **9,659** | *n/a* |
| **KPIs** | | | | |
| *Overall gross profit margin* | *11.1%* | *20.2%* | *31.7%* | |
| *Total staff numbers* | *409* | *439* | *427* | |
| *Annual staff costs per employee (TSZ '000s)* | *33,951* | *34,358* | *37,128* | |
| *% Packing costs/total revenue* | *0.5%* | *0.7%* | *0.8%* | |
| *% Distribution costs/total revenue* | *1.9%* | *3.3%* | *2.9%* | |
| *% Administrative expenses/total revenue* | *6.1%* | *10.5%* | *9.9%* | |
| *Eligible budget allocation GoT (TZSm)* | *80,459* | *64,117* | *70,500* | |
| *Actual budget disbursements (TZSm)* | *77,292* | *49,750* | *34,215* | |
| *% budget deficit* | *3.9%* | *22.4%* | *51.5%* | |

Source: FY13, FY14 AFS and FY15 management accounts

## Financial Performance Analysis - Overview Continued

- **Special procurement revenues are dependent on requirements by health facilities**. For these products, the heath facilities are self funded or supported by third parties including DPs and Faith Based Organisations (FBOs).
- **Between FY12/13 and FY13/14, VP revenues declined by 52% following the adoption of the Pooled Procurement Mechanism (PPM) by DPs**. Under the DPs PPM system, the procurement of medical supplies is undertaken by an independent entity, on behalf of some DPs, who delivers the supplies to the MSD's stores. Notably, the Global Fund (GF) still channel funds through MSD to procure medical supplies and medical equipment for distribution to health facilities. On average, 80% of the VP revenues earned by the MSD during the analysis period arose from the GF operated program.
- Please refer to the next page for a detailed Gross Profit (GP) analysis.
- Other income comprised of distribution and storage related service fees charged on VPs for items still under the previous accounting system code. From discussions with management, these account codes cannot be changed in the new accounting system. The general growth was due to increased distribution of these medicines.
- Finance income relates to interest income from the MSD's fixed deposits. The YoY decline was in line with the reduced MoHSW disbursements during the analysis period. The Government permits the MSD to invest Government funds in fixed deposits pending the purchase of medicines and medical equipment . DP funds, however, cannot be placed in fixed deposits and are held in separate bank accounts operated by the MSD.
- Revenue grant income comprised of DP funds recognised in the income statement when expenditures relating to the grant activities are incurred. As at 30 June 2015, donor partners grants included DANIDA to fund direct delivery of VP medical supplies and UNICEF for quality assurance activities. The MSD did not utilise any of its grant income in FY14/15. The outstanding amount of grant income at the end of the financial year is booked under the deferred income grant in the balance sheet.
- Capital grants are amortised and recognised in the income statement on a straight line basis over the useful life of the respective asset. The increase in the capital grants during the analysis period was driven by additional grants from DPs to support warehouse construction. The outstanding amount of capital grant at the end of the financial year is booked under the deferred capital grant in the balance sheet.

# The YoY increase in the normal business Gross Profit margin between FY12/13 and FY14/15 was attributed to an annual inflation adjustment

## Restated Statement of Financial Performance

| TZS m | Audited FY12/13 | Audited FY13/14 | Unaudited FY14/15 | %CAGR FY13-FY15 |
|---|---|---|---|---|
| **Revenues** | | | | |
| Normal business | 68,164 | 86,674 | 84,794 | *11.5%* |
| Special procurement | 16,846 | 10,834 | 7,303 | *(34.2%)* |
| Vertical program | 135,804 | 55,245 | 38,146 | *(47.0%)* |
| **Total revenue** | **220,814** | **152,753** | **130,243** | *(23.2%)* |
| | | | | *n/a* |
| Cost of sales | (207,912) | (134,188) | (109,627) | *(27.4%)* |
| **Gross profit** | **12,902** | **18,565** | **20,616** | *26.4%* |
| Other income | 15,957 | 18,740 | 33,954 | *45.9%* |
| Finance income | 1,359 | 799 | 231 | *(58.7%)* |
| Revenue grants | 358 | 82 | - | *(100.0%)* |
| Capital grants | 568 | 2,133 | 1,820 | *79.0%* |
| Packing costs | (1,130) | (1,104) | (1,219) | *3.9%* |
| Distribution costs | (4,449) | (5,625) | (4,682) | *2.6%* |
| Staff costs | (13,886) | (15,083) | (15,853) | *6.8%* |
| Administrative expenses | (14,262) | (17,665) | (15,875) | *5.5%* |
| Depreciation expenses | (2,788) | (4,335) | (5,864) | *45.0%* |
| Amortisation of intangible assets | - | (269) | (284) | *n/a* |
| **Total expenses** | **(36,515)** | **(44,081)** | **(43,778)** | *9.5%* |
| **Operating profit** | **(5,371)** | **(3,763)** | **12,843** | *n/a* |

Note: Adjusted by excluding non Global Fund VP program revenues from VP revenues

Source: Management information and Deloitte analysis

## Financial Performance Analysis - Overview Continued

### Gross profit analysis

- Below is an analysis of MSD's GP trend between FY12/13 and FY14/15.

### MSD's reported gross profit margin

| | FY12/13 | FY13/14 | FY14/15 | %CAGR FY13-FY15 |
|---|---|---|---|---|
| Normal business | 19.4% | 22.7% | 32.8% | *30.1%* |
| Special procurement | 12.8% | 22.1% | 10.5% | *(9.5%)* |
| Vertical program - Global Fund | 10.3% | 18.6% | -3.3% | *n/a* |

Source: FY13, FY14 AFS and FY15 management accounts

- In analyzing MSD's GP trend between FY12/13 and FY14/15, we restated the financial statements by excluding non Global Fund (GF) related revenues from the total VP revenues since these did not include a corresponding cost of sales figure thus distorting the GP trend. Accordingly, we included the non GP VP revenues under other income.
- Please note that we have excluded FY14/15 accounts in our GP analysis as these are unaudited and hence may need to be adjusted.
- The YoY increase in the normal business GP margin was attributed to an annual inflation adjustment. MSD factors an inflation adjustment of between 6% and 10% annually to the normal business catalogue prices.
- Special procurement GP margins vary depending on the equipment procured as these tend to be specialised in nature. MSD tenders for procurement of specialised medical equipment whenever customers raise a requisition. The margin MSD charges is dependent on the value of the equipment and quote from the bidders.
- Please note that, in computing the VP GP margin, we have adjusted VP revenues and cost of sales to estimate the GP margin MSD earns from the GF program as highlighted.

# The channeling of funds directly to Health Facilities by the Donors have significantly reduced MSD's cash revenue collections since HFs sometimes opt to procure from private suppliers

## Financial Performance Analysis - Overview Continued

- Packing costs comprise of expenditure on packing materials and contracted labor used in repackaging medical supplies. MSD is required to deliver medicines in self branded boxes. Management did not attribute the trend in these costs to any specific incident.

## Financial Performance Analysis – Budget Disbursement Analysis

- Below we highlight the budgetary allocation to MSD during the analysis period.

**Budget disbursement analysis**

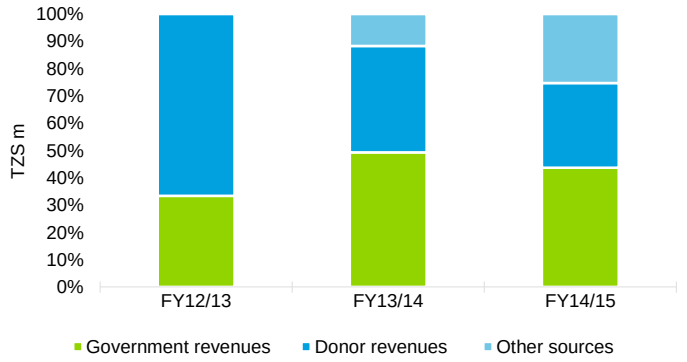
| TSZ m | Budgeted amount | Funds received per quarter | | | | Total | Deficit / (Surplus) | %Deficit / (Surplus) |
|---|---|---|---|---|---|---|---|---|
| | | Qrt1 | Qrt2 | Qrt3 | Qrt4 | | | |
| **FY12/13** | | | | | | | | |
| Basket fund | 46,459 | - | - | (26,459) | (20,000) | (46,459) | - | |
| MoHSW | 34,000 | - | (3,333) | (21,833) | (5,667) | (30,833) | 3,167 | |
| **Total** | **80,459** | **-** | **(3,333)** | **(48,292)** | **(25,667)** | **(77,292)** | **3,167** | **4%** |
| **FY13/14** | | | | | | | | |
| Basket fund | 29,241 | - | (14,500) | (8,500) | - | (23,000) | 6,241 | |
| MoHSW | 34,876 | (20,000) | (1,417) | - | (5,333) | (26,750) | 8,126 | |
| **Total** | **64,117** | **(20,000)** | **(15,917)** | **(8,500)** | **(5,333)** | **(49,750)** | **14,367** | **22%** |
| **FY14/15** | | | | | | | | |
| Basket fund | 10,500 | - | - | - | (16,598) | (16,598) | (6,098) | |
| MoHSW | 60,000 | (8,000) | (5,000) | (2,500) | (2,117) | (17,617) | 42,383 | |
| **Total** | **70,500** | **(8,000)** | **(5,000)** | **(2,500)** | **(18,715)** | **(34,215)** | **36,285** | **51%** |

- The increased budget deficit was driven by inadequate budget disbursements by the MoHSW. According to MSD, budget disbursements are effected every quarter. However, the MoHSW does not specify the specific disbursement dates and amounts.

## Financial Performance Analysis – Other revenues

- Under the normal business, MSD has capitalised on revenues from other sources through marketing activities. Revenues from other sources are increasing due to DPs and local authorities channeling funds directly to health facilities. In FY13/14 and FY14/15, revenues from other sources represented 11% and 20% of total revenues respectively as highlighted below.

**Revenue by source**




Source: Management information

- In FY13/14 and FY14/15, MSD earned TZS 16bn (USD 7.9m) and TZS 31bn (USD 15.3m) respectively as revenues from other sources.
- According to management, DPs such as DANIDA indicated that going forward, they will channel funds directly to health centers owing to inefficiencies at MSD. It is important to note that, health facilities are allowed to procure from other suppliers, when the MSD experiences stock outs, posing a risk to the sustainability of this revenue stream. Please refer to the supply chain section of this report for further details on stock outs at MSD.

# MSD's main cost drivers were staff costs and administrative costs averaging 8% and 9% of total revenues respectively during the analysis period

## Financial Performance Analysis – Operating Costs

### Operating cost structure analysis

| TZS m | Audited FY12/13 | Audited FY13/14 | Unaudited FY14/15 | %CAGR FY13-FY15 | %of revenues FY12/13 | %of revenues FY13/14 | %of revenues FY14/15 |
|---|---|---|---|---|---|---|---|
| Total revenue | 234,001 | 168,251 | 160,572 | *(17.2%)* | 100% | 100% | 100% |
| Cost of sales | (207,912) | (134,188) | (109,627) | *(27.4%)* | -89% | -80% | -68% |
| **Gross profit** | **26,089** | **34,063** | **50,945** | *39.7%* | 11% | 20% | 32% |
| Packing costs | (1,130) | (1,104) | (1,219) | *3.9%* | 0% | -1% | -1% |
| Distribution costs | (4,449) | (5,625) 1 | (4,682) | *2.6%* | -2% | -3% | -3% |
| Staff costs | (13,886) | (15,083) 2 | (15,853) | *6.8%* | -6% | -9% | -10% |
| Administrative expenses | (14,262) | (17,665) | (15,875) | *5.5%* | -6% | -10% | -10% |
| **Surplus/Deficit from operati** | **(7,638)** | **(5,414)** | **13,315** | *n/a* | -3% | -3% | 8% |

Note: Excludes finance income, revenue and capita grants

Source: FY13, FY14 AFS and FY15 management accounts

- The table above highlights MSD's cost structure between FY12/13 and FY14/15. Accordingly, MSD's main cost drivers were staff costs and administrative costs averaging 8% and 9% of total revenues respectively during the analysis period.

1 Distribution costs include the cost of fuel, driver per diems estimated at TZS 59k (USD 29) per day, fleet maintenance costs, casual laborers and travel costs. The 17% decline in these costs between FY13/14 and FY14/15 was largely attributed to route optimisation.

2 Below is a detailed breakdown of staff costs incurred between FY12/13 and FY14/15.

### Staff costs

| TZS m | Audited FY12/13 | Audited FY13/14 | Unaudited FY14/15 | %CAGR FY13-FY15 |
|---|---|---|---|---|
| Salaries and w ages | 8,998 | 9,914 | 9,932 | *5.1%* |
| Pension fund contribution | 1,241 | 1,328 | 1,354 | *4.5%* |
| Contribution to w ekeza fund | - | - | 620 | *n/a* |
| Transport allow ance | 551 | 558 | 572 | *1.9%* |
| Other staff costs | 3,096 | 3,283 | 3,375 | *4.4%* |
| **Total staff costs** | **13,886** | **15,083** | **15,853** | *6.8%* |
| **KPIs** | | | | |
| Total staff numbers | 409 | 439 | 427 | |
| Annual staff costs per employee (TSZ '000s) | 33,951 | 34,358 | 37,128 | |

Source: FY13, FY14 AFS and FY15 management accounts

## Financial Performance Overview Continued

### Administrative expenses

| TZS m | Audited FY12/13 | Audited FY13/14 | Unaudited FY14/15 | %CAGR FY13-FY15 |
|---|---|---|---|---|
| Services and utilities | (6,778) | (7,994) | (8,626) 3 | *12.8%* |
| Office and general expenses | (4,304) | (6,753) | (5,247) 3 | *10.4%* |
| Training and recruitment | (1,407) | (1,507) | (658) 4 | *(31.6%)* |
| Sales and marketing expenses | (1,515) | (803) | (786) 5 | *(28.0%)* |
| Board expenses | (258) | (608) | (558) 6 | *47.1%* |
| **Total administrative expenses** | **(14,262)** | **(17,665)** | **(15,875)** | *5.5%* |

Source: FY13, FY14 AFS and FY15 management accounts

2 The YoY growth in the annual staff cost per employee during the analysis period was attributed to a 5% annual wage increase policy at MSD.

3 Further details on services and utilities and office and general expenses are on the following page.

4 The 56% decline in training and recruitment costs between FY13/14 and FY14/15 was due to cash flow constraints. Training activities are included in MSD's annual budget but are however subject to availability of funds.

5 Management attributed the higher FY12/13 sales and marketing costs (when compared to other years) to a countrywide sensitisation program of the Direct Delivery System (DDS). Under DDS, medical supplies and medical equipment are delivered by MSD to dispensaries and health facility premises.

6 Comprise of board sitting allowances and board travel costs. In FY12/13, MSD operated without a board for approximately six months resulting in lower board expenses, when compared to the other periods. This was due to delays by the MoHSDW in replacing retired board members.

# As a result of slow moving stock, MSD incurred TZS 1.1bn and TZS 73.6m in FY13/14 and FY14/15 respectively in destroying expired medicines

## Financial Performance Analysis – Services and Utilities

- Below we highlight the key trends in services and utility expenses.

**Services and utilities**

| TZS m | Audited FY12/13 | Audited FY13/14 | Unaudited FY14/15 | %CAGR FY13-FY15 |
|---|---|---|---|---|
| Rent expenses | 3,694 | 3,864 | 4,308 (1) | *8.0%* |
| Telecommunication expenses | 1,195 | 1,388 | 1,440 (2) | *9.8%* |
| Security expenses | 621 | 1,317 | 1,169 (3) | *37.2%* |
| Electricity and w ater | 512 | 820 | 873 | *30.6%* |
| Office Cleaning | 452 | 419 | 701 | *24.5%* |
| Fuel-Generator | 142 | 81 | 114 | *(10.3%)* |
| Storage Pallets | 102 | 46 | 22 | *(53.3%)* |
| Other Materials | 60 | 59 | - | *(100.0%)* |
| **Total** | **6,778** | **7,994** | **8,626** | *12.8%* |

Source: FY13, FY14 AFS and FY15 management accounts

(1) The increase in services and utilities costs was driven by an annual increase in the rent expense (for warehouses) and the depreciation of the TZS to the USD. Rent per square meter increased from USD 6.7 in FY13/14 to USD 8.2 in FY14/15. Additionally, pricing the rental agreements in USD exposes MSD to forex risks especially when the TZS depreciates against the USD as was the case during the analysis period. The depreciation of the TZS implies that the MSD pays more TZS in rent for the same USD amounts.

- From discussions with management, lease contracts are reviewed each year. Currently, the MSD leases five warehouses in addition to operating eight DP funded warehouses.

(2) MSD uses TTCL fibre optic services for its telecommunication services and has a standing back up contract with Vodacom. MSD pays TZS 50m per month for both services.

(3) Between FY12/13 and FY13/14, security costs were driven by the opening of new warehouses in Dodoma, Tabora, Mbeya and Tanga.

## Financial Performance Overview Continued

- Below we highlight the key trends in office and general expenses.

**Office and general expenses**

| TZS m | Audited FY12/13 | Audited FY13/14 | Unaudited FY14/15 | %CAGR FY13-FY15 |
|---|---|---|---|---|
| Repairs and maintenance buildings | 341 | 579 (1) | 284 | *(8.7%)* |
| Repairs and maintenance furniture, fittings and equipment | 71 | 96 | 129 | *34.7%* |
| Repairs and maintenance vehicles | 196 | 150 | 94 (2) | *(30.9%)* |
| Travel and per diems | 984 | 1,138 | 1,199 | *10.4%* |
| Quality control costs | 39 | 1,097 (3) | 76 | *39.6%* |
| Stationery and Office Supplies | 400 | 693 | 663 | *28.7%* |
| Professional fees | 259 | 659 | 231 | *(5.5%)* |
| Insurance | 205 | 445 | 420 | *43.1%* |
| Vehicle fuel and oil | 376 | 407 | 533 | *19.1%* |
| General procurement costs | 488 | 400 | 478 | *(1.0%)* |
| Audit fees | 448 | 399 | 613 | *17.0%* |
| Office equipment | 219 | 343 | 348 | *26.0%* |
| Bank charges | 132 | 92 | 74 | *(24.9%)* |
| Donation | 16 | 85 | 43 | *64.4%* |
| Softw are licences | 50 | 79 | 31 | *(21.0%)* |
| Sundry office and general expenses | 63 | 73 | 8 | *(65.1%)* |
| Motor vehicle road license | 15 | 18 | 23 | *24.3%* |
| Fines and penalties | 2 | - | - | *(100.0%)* |
| | **4,304** | **6,753** | **5,247** | *10.4%* |

Source: FY13, FY14 AFS and FY15 management accounts

(1) FY13/14 costs were 70% higher when compared to the average of FY12/13 and FY14/15 costs due to significant power system repairs at the warehouses.

(2) This relates to Motor vehicle used for administrative purposes (i.e. excluding fleet). Repairs recorded a YoY decline during the analysis period since major repairs were undertaken in FY12/13 and FY13/14.

(3) The highest levels of office and general expenses were recorded in FY13/14 mainly due to the disposal of expired medicines at a cost of TZS 1.1bn (USD 543k).

# In FY13/14 professional fees were higher because MSD undertook an asset revaluation exercise, customer satisfaction survey and a balanced scorecard review

## Financial Performance Overview Continued

### Office and general expenses

| TZS m | Audited FY12/13 | Audited FY13/14 | Unaudited FY14/15 | % CAGR FY13-FY15 |
|---|---|---|---|---|
| Repairs and maintenance buildings | 341 | 579 | 284 | *(8.7%)* |
| Repairs and maintenance furniture, fittings and equipment | 71 | 96 | 129 | *34.7%* |
| Repairs and maintenance vehicles | 196 | 150 | 94 | *(30.9%)* |
| Travel and per diems | 984 | 1,138 | 1,199 (1) | *10.4%* |
| Quality control costs | 39 | 1,097 | 76 | *39.6%* |
| Stationery and Office Supplies | 400 | 693 | 663 | *28.7%* |
| Professional fees | 259 | 659 (2) | 231 | *(5.5%)* |
| Insurance | 205 | 445 (3) | 420 | *43.1%* |
| Vehicle fuel and oil | 376 | 407 | 533 | *19.1%* |
| General procurement costs | 488 | 400 | 478 | *(1.0%)* |
| Audit fees | 448 | 399 | 613 (4) | *17.0%* |
| Office equipment | 219 | 343 | 348 | *26.0%* |
| Bank charges | 132 | 92 | 74 | *(24.9%)* |
| Donation | 16 | 85 | 43 | *64.4%* |
| Softw are licences | 50 | 79 | 31 | *(21.0%)* |
| Sundry office and general expenses | 63 | 73 | 8 | *(65.1%)* |
| Motor vehicle road license | 15 | 18 | 23 | *24.3%* |
| Fines and penalties | 2 | - | - | *(100.0%)* |
| | **4,304** | **6,753** | **5,247** | *10.4%* |

Source: FY13, FY14 AFS and FY15 management accounts

(1) Increased travel per diems were due to the adoption of the Direct Delivery system as earlier discussed.

(2) In FY13/14 professional fees were higher as MSD undertook an asset revaluation exercise, customer satisfaction survey and a balanced scorecard review.

(3) Increased insurance costs between FY12/13 and FY13/14 were in tandem with the asset revaluation where some assets were revalued upwards hence an increase in the sum insured.

(4) Audit fee was higher in FY13/14 and FY16 due to costs incurred on a debt verification exercise by the MoF and a GF funded audit respectively.

# Setting commodity fee structure based on the commodity value is not an appropriate method as it does not reflect the actual cost of doing business

## MSD's fee structure

### Standard mark up

- As highlighted in the previous analyses in this report, MSD earns revenues by charging a service fee to cover its operating costs broadly classified into packing, distribution and general overheads. Since MSD's establishment, service fees have been charged based on the value of medicines and medical equipment distributed i.e. the value based method. According to Management, the merits of this system include the ease of calculation and simplicity when orienting new staff.

- In the recent past, however, key stakeholders have raised concerns due to the lack of equity when using the value based method to charge service fees. Specifically, the John Snow Inc. (JSI) report "Optimal Service Fees for Tanzania Medical Stores Department Supply Chain" dated April 2015, highlighted that the value based method tends to overcharge high value low volume products and undercharge low value high volume products.

- **Generally, MSD charges a standard mark up of up to 20.4% for normal business, special procurement and VPs**. However, the service fee charged on VP supplies may also vary depending on terms of the MoU's signed between the DP program and the MoHSW. The standard mark up was computed based on the MSD's actual historical costs relative to its revenues as illustrated below using the FY12/13 and FY13/14 AFS figures. Please note that we have categorised the costs into the MSD's supply chain activities.

### Standard mark up illustration

| TZS m | FY12/13 | FY13/14 | % of total revenues | | FY14 - FY15 Average |
|---|---|---|---|---|---|
| | | | FY12/13 | FY13/14 | |
| Distribution | 15,293 | 17,854 | 7% | 11% | 9% |
| Receiving | 3,474 | 4,814 | 1% | 3% | 2% |
| Storage | 11,725 | 16,248 | 5% | 10% | 7% |
| Dispatch | 2,063 | 2,859 | 1% | 2% | 1% |
| Procurement | 1,850 | 1,697 | 1% | 1% | 1% |
| **Totals** | **34,405** | **43,472** | | | **20.3%** |

Source: FY14 and FY15 AFS and management information

## The MSD's fee structure continued

### Standard mark up

- The foregoing illustration is a common size income statement analysis of MSD's AFS expressing the actual costs relative to the total revenues. A summation of the average costs for each year when expressed as a percentage of total revenues approximates 20.3%. This is an estimate of the current mark up of 20.4%.

- However, the limitations noted when using this method to estimate service fees are:
  1. The standard mark up, as is computed, is based on revenues and hence does not take into account the actual cost of sales when calculating the service fees and as such may understate the revenues; and
  2. The method does not consider activities consumed along the supply chain.

### Current pricing structure

- The standard mark up, as earlier illustrated, is the basis of MSD's current service fee pricing structure. MSD apportions the standard mark up based on its cost structure as indicated below.

#### Current pricing structure

| Business line | Normal business | Special procurement | Vertical program* |
|---|---|---|---|
| Packing costs | 1.4% | 1.4% | 0% - 20% |
| Distribution costs | 6.0% | 6.0% | 0% - 20% |
| General costs | 13.0% | 13.0% | 0% - 20% |
| **Total mark up** | **20.4%** | **20.4%** | **0% - 20%** |

* - range depends on donor MoU

n/a - not applicable

Source: Management information

- **Please note however, that this method of apportioning the costs to the mark-up is not an objective method of estimating actual costs** incurred as it is based on historical financial performance which in the case of MSD is prone to inefficiencies as highlighted later in this section.

# JSI suggested that the use of the cost driver approach is more objective when determining service fees

## MSD's fee structure continued

### Current pricing structure

- Later on in this section we shall assess the adequacy of the current pricing structure to cover MSD's current costs while operating "as is" and when operating more efficiently.
- The following section highlights the recommendations, of the JSI study on MSD's pricing structure. Further, we shall compare, in a scenario analysis, the time it would take the MSD to break even when using the current pricing structure and that of the JSI study.

### JSI recommended fee structure

- JSI, in April 2015, undertook a study of MSD's pricing structure following dissatisfaction from DPs on the use of the value based method of charging service fees. The study relied on MSD's actual financial data for the period 1 July 2013 to 30 June 2014 and analyzed MSD's supply chain costs and the consumption along the supply chain.
- The study identified MSD's cost drivers as highlighted below and suggested that the use of the cost driver approach is more objective when determining service fees.

**Costs and cost drivers identified**

| Cost component | Cost driver |
|---|---|
| Procurement | Number of tenders |
| Clearing | Volume/tonnage |
| Receiving | Volume |
| Central storage | Volume |
| Dispatch | Volume |
| Distribution to zone | Weight, volume, distance |
| Distribution to health facility | Weight, volume, distance |

Source: Management information

- Other recommendations resulting from the JSI study included:
  - Maintaining a differential fee structure for the three main business lines but adjust the current pricing. This is due to the fact that products in each business line have different characteristics in terms of weight, value and volume;

## MSD's fee structure continued

  - Charge customers for the supply chain services used. Separate fees to be based on specific services utilised;
  - Tailor fees for products with special characteristics. For instance, high value and cold chain products have unique characteristics which increase costs;
  - Fees should reflect the current costs as such there is need for frequent review.
- The study consequently recommended a differential fee structure highlighted below. The recommendation was a result of a scenario analysis considering various fee structures. A lower rate was charged on VP which incurs lower the storage and distribution costs in MSD's supply chain.

**JSI recommended fee structure**

| | % |
|---|---|
| Normal business | 35% |
| Special procurement | 35% |
| Vertical program | 9% |

Source: JSI report

## MSD's actual cost of doing business

- We analysed MSD's actual costs incurred in FY12/13 and FY13/14 based on the AFS. The FY14/15 accounts were unaudited hence excluded from our analysis. Below we highlight the MSD's supply chain costs incurred in both years as a percentage of the cost of goods sold in each year to estimate the average mark up that would enable MSD meet its current costs.

**Current cost of the MSD to do business**

| TZS m | FY12/13 | FY13/14 | % of total cost of sales | | Average |
|---|---|---|---|---|---|
| | | | FY12/13 | FY13/14 | |
| Distribution | 15,293 | 17,854 | 7% | 13% | 10% |
| Receiving | 3,474 | 4,814 | 2% | 4% | 3% |
| Storage | 11,725 | 16,248 | 6% | 12% | 9% |
| Dispatch | 2,063 | 2,859 | 1% | 2% | 2% |
| Procurement | 1,850 | 1,697 | 1% | 1% | 1% |
| **Total indirect costs** | **34,405** | **43,472** | 17% | **Total** | **24.5%** |
| **Total cost of sales** | **207,902** | **134,189** | | | |

Source: Management information

# MSD retained the value based pricing system owing to challenges in implementing the cost driver based approach

## MSD's actual cost of doing business continued

- From the foregoing illustration, we estimate that by pricing service fees at an average mark up of 24%, MSD would be able cover its current cost base. Please note that the computation is based on the current cost structure which has inherent inefficiencies including demurrage charges (included in the cost of sales) and provides a high level indication of what the MSD should charge
- From a review of the current cost structure, we highlight possible areas of cost savings largely based on the inefficiencies noted in MSD's operations including:

### Normalised earnings

| TZS m | Audited FY12/13 | Audited FY13/14 | Unaudited FY14/15 |
|---|---|---|---|
| **Reported surplus / (Deficit)** | **(1,048)** | **(993)** | **9,659** |
| Stock provisions | 1,097 | 6,669 | 1,649 |
| Demurrage charges | 107 | 2,862 | 2,742 |
| Disposal of medicine | 15 | 908 | 66 |
| **Adjusted surplus / (Deficit)** | **171** | **9,446** | **14,116** |

Note: Normalised items are 90% of amounts actually incurred

Source: FY13, FY14 AFS and FY15 management accounts

  - Provisions for obsolete stock due to inefficient stock planning and inadequate budget disbursements to facilitate distribution of medicines and medical supplies;
  - Demurrage charges associated with delayed clearing of normal and VP medicines and medical supplies; and
  - Costs incurred in disposing expired medicines in tandem with the delayed movement of stock at the stores.
- Also note that our normalization workings are 90% of actual costs incurred therefore accommodate a normal level of expected loss inherent to the operations of MSD in an ideal environment.
- Under a more efficient structure, we estimate that MSD would be able to meet its current costs by charging a service fee of 20% as highlighted on the adjacent table.

## MSD's actual cost of doing business continued

### Current cost of the MSD to do business under an efficient structure

| TZS m | FY12/13 | FY13/14 | % of total cost of sales FY12/13 | % of total cost of sales FY13/14 | Average |
|---|---|---|---|---|---|
| **Current overheads** | 34,405 | 43,472 | 16.5% | 32.4% | 24.5% |
| Less: cost savings | (171) | (9,446) | -0.1% | -7.0% | -3.6% |
| **Normalised overheads** | **34,235** | **34,026** | **16.5%** | **25.4%** | **20.9%** |

Source: Management information and Deloitte analysis

- Note that this illustration is an indicator of the service fee level MSD should charge and not a basis for supporting the use of the value based method.
- In the scenario analysis (later in the section), we assessed the duration it would take MSD to break even under the current pricing structure, the JSI recommended pricing structure and our analysis of the current overall cost of doing business. In the scenario analysis we assume that MSD charges an overall mark up of 24.5% of the product value i.e. normal business, VP and special procurement.

### The pricing structures compared

| | Current structure Scenario A | JSI study Scenario B | Deloitte estimate Scenario C |
|---|---|---|---|
| Normal business | 20.4% | 35% | |
| Special procurement | 20.4% | 35% | 24.5% |
| Vertical program | 11.6% | 9% | |

Note: Scenario C represents an overall mark up

Source: Management information

## Basis for the pricing structure

- As earlier indicated, our estimated pricing structure of 24.5% is based on MSD's ability to cover its current cost base under an the current inefficient structure. However, we were unable to recommend a separate mark up for each line of business largely due to:
  1. **Inadequate financial information** – the current accounting system does not categorise the operating costs into the respective lines of business thus impeding our ability to analyse and identify costs attributed to each line of business.

# We were unable to recommend a separate pricing structure for normal business and VP because MSD's current financial reporting system does not separate costs associated with these products

## MSD's actual cost of doing business continued

2. Currently, MSD predominantly distributes VP as compared to normal business, its core product. As highlighted below, in FY13/14 and FY14/15, 82% of MSD's total quantities distributed were VP implying that most of the costs incurred were attributed to VP. The trend noted below was due to the Governments inability to disburse funds hence reliance on donors to carry out their programs.

### Quantities of products distributed

| | FY13/14 | FY14/15 | Average | % of total (using average numbers) |
|---|---|---|---|---|
| Normal business | 7,153,967 | 7,066,726 | 7,110,346 | 18% |
| Vertical program | 28,162,529 | 36,271,350 | 32,216,940 | 82% |
| Total | **35,316,496** | **43,338,076** | **39,327,286** | 100% |

Note: The data above represents actual quantities distributed in the respective years whose units of measurement vary from item to item.

Source: Management information

Therefore, if we were to rely on the data above, a higher mark up may be charged on VP when compared to normal business. However, since the current financial reporting structure does not separately present costs per line of business, the use of an activity based cost pricing method would directly identify costs attributed to a specific product hence providing a more realistic estimate of the service fees to be charged.

# Service fees determined using the activity cost pricing is more accurate, when compared to the value based method, as it is based on actual costs incurred when delivering the service

## Comparison of value based and cost driver based methods of pricing

- Effective 1 July 2015, MSD commenced using the cost driver based method when charging service fees on some VP medical supplies, specifically cholera vaccines and mosquitoes nets. The ERP system is yet to be configured to compute service fees using this method hence the computation is done on an excel spread sheet from which a manually generated invoice is raised using the ERP system.
- Below, we compared the service fees charged on a recent consignment of cholera vaccines, using the activity based pricing method as compared to the service fees using the value based method.

### Activity based pricing

| | | | TZS | |
|---|---|---|---|---|
| Service | UoM | Qty | Rate per activity driver | Invoice amount |
| Distribution | Kilometres | 1,244 | 9,000 | 11,196,000 |
| Receiving | Centimetre cubed | 33 | 16,000 | 528,000 |
| **Total** | | | | **11,724,000** |

### Value based pricing

| Item value | | Item value | Service fee rate | Invoice amount |
|---|---|---|---|---|
| USD | Rate | TZS m | TZS | TZS |
| 470,991 | 2,200 | 1,036,180,200 | 5.2% | **53,881,370** |

Source: Deloitte analysis and Management Information

- The service fee of TZS 11.7m (USD 5.7k) using the activity based pricing method was 78% lower than what would have been charged using the value based method TZS 53.8m (USD 26.6k), an indication of the inaccuracies when using the value based method.
- Service fees determined using the activity cost pricing is more accurate, when compared to the value based method, as it is based on actual costs incurred when delivering the service. As such service fees computed using the activity based method could be higher or lower than that using the value based method.

## MSD clearing and forwarding costs

- In addition to service fees, MSD charges for clearing of medicines and medical equipment, when required to do so by the MoHSW. The percentage is based on the cost of the medicines and medical equipment. MSD, in June 2015, proposed new charges, as highlighted below, following stakeholder concerns of the basis used to charge these costs.
- Generally, MSD based rates on actual rates levied by various Government entities and prevailing market rates as we shall highlight below. Clearing and forwarding costs comprise of:

### Clearing and forwarding costs

| | Item | Current | Proposed |
|---|---|---|---|
| 1 | Marine insurance | 0.5% | 0.3% |
| 2 | Cargo surveillance | 0.1% | 0.1% |
| 3 | Wharfage and handling | 2.8% | 1.7% |
| | Removal | 0.1% | - |
| 4 | Demurrage and container rent | 0.8% | 0.5% |
| 5 | Transport to MSD store | 1.2% | 0.2% |
| 6 | Destination inspection | 0.0% | 0.6% |
| 7 | Bank costs | 0.7% | 0.2% |
| 8 | TFDA Inspection costs | 2.2% | 2.0% |
| 9 | Clearing fee | 0.0% | 0.3% |
| | **Total** | **8.4%** | **5.9%** |

Note: The percentage above is as a % of the value of FOB value

Source: Management information

1. Marine insurance cover for imported medicines and medical supplies. MSD's pays an annual premium of TZS 800m for marine insurance. We compared MSD's rate to that of Jubilee Insurance Tanzania Ltd, whom we contacted, whose commercial marine insurance rates ranged between 0.25% to a maximum rate of 2% of the value of the sum insured.
2. Cargo surveillance - also levied by insurers to ensure safe arrival of consignments to the final destination;
3. Wharfage and handling levies - charged by the Tanzania Ports Authority (TPA) for any goods passing through the port;

# Due to cash flow constraints, related to VP, MSD incurred an average of TZS 1bn on normal business demurrage charges between FY12/13 and FY13/14

## MSD clearing and forwarding costs continued

4. Demurrage - levied by the TPA for goods stored at TPA's facilities for more than seven days;
5. Transport to MSD stores - estimated cost charged by private logistics companies for transporting costs from the port to MSD central stores;
6. Destination inspection fees - charged by TRA for inspecting imported items;
7. Bank costs - based on fees for opening letters of credit when purchasing medicines and medical equipment;
8. TFDA inspection costs - charged to test imported medicines and medical equipment; and
9. Clearing fee - charged by the clearing and forwarding section at the MSD for clearing services rendered. From discussions with Management this is also based on market rates charged by third parties.

- The rates for items 3,4,6 and 8 were in line with the report "Review of Handling Fees and other Charges Levied on MSD for Imported Medicines and Related Medical Supplies" we reviewed dated August 2015.
- MSD's charges clearing and forwarding costs whenever VP invoices are raised. We were able to ascertain the amount charged on one invoice we sampled based on a standard computation of the clearing fee associated with the item. Further, management explained that the accounting system was configured to charge different rates for each VP item based on the clearing and forwarding component incurred when clearing the item from the port.

## MSD clearing and forwarding costs continued

- Below we highlight the total clearing and forwarding costs incurred by MSD between 1 July 2012 and 30 June 2015. Included in the total amount are demurrage changes incurred on VP and essential medicines.

### The MSD's demurrage charges

| TZS m | FY12/13 | FY13/14 | FY14/15 | % CAGR FY13-FY15 |
|---|---|---|---|---|
| Total clearing and forwarding costs | 2,146 | 5,906 | 2,761 | *13.4%* |
| Demurrage costs - normal business | 18 | 2,185 | 1,022 | *651.4%* |
| Demurrage costs - vertical program | 100 | 995 | 2,025 | *349.3%* |
| **Total demurrage costs** | **118** | **3,180** | **3,048** | *407.3%* |
| **% demurrage costs of clearing and forwarding costs** | **6%** | **54%** | **n/a** | |

n/a - excluded FY15 due to erroneous classification of clearing costs

Source: Management information

- Total clearing and forwarding costs increased by 275% between FY12/13 and FY13/14 was attributed to increased demurrage charges on normal business and VP due owing to cash flow constraints. The composition of storage and demurrage costs relative to total clearing and forwarding costs increased during the period owing to delayed clearing of medicines and medical equipment at the port due to cash flow constraints and late arrival of shipping documents. In Appendix 2, we have detailed the consignments at the port awaiting clearing as at 30 June 2015.
- Notably, the MoHSW uses its internal funds to clear VP medicines and medical equipment as the MoHSW does not allocate a budget to cater for this.
- Further, during the analysis period we noted that an average of TZS 1bn was incurred on demurrage charges related to normal business. This highlights the adverse impact that cash flow constraints, related to VP, had on normal business. A breakdown of the clearing and forwarding costs is detailed in Appendix 3 of this report.

# Implementation of the cost driver pricing method and configuration of the ERP will improve MSD's pricing and billing system

**Recommendations on fee structure**

- From our analysis of the current MSD' actual cost of doing business, at the current operational inefficiencies, MSD requires an average fee of 24.5% to cover its operational expenses. So the current fee structure of 20.4% is not adequate for MSD to recover its operational expenses. Further more, our analysis revealed that, under efficient operations (using the value based approach of pricing), an average service fee of 20.9% will be adequate to enable MSD cover its operational expenses. Since the inefficiencies highlighted within the supply chain process, can be rectified, we therefore recommend that, **in the short run MSD should continue charging a fee of 20.4% for its normal business and work towards improving its operational inefficiencies.**

- Accordingly, in the short term, for VP services, we recommend that **MSD adopts an average fee of 20.4% across all the VPs to enable it to meet its operational expenses.** However, of this 20.4% fee charges for VPs, the decision on what percent should be covered by the Donors and what should be covered by the Government, should be discussed and agreed upon by the two sides (i.e Donors for each program and the Government). Our recommendation to increase the VP service fee is also driven by the following facts;

➢ Currently, approximately 82% of the medicines and medical supplies distributed by the MSD relate to VPs making VPs a significant portion of the MSD's operations.

➢ Under efficient operations, MSD requires and average of 20.9% to cover its operational expenses. Therefore the current charge rate for VP good (an average of 11.6%) is not adequate for MSD to cover its operational cost

- Furthermore, in the medium term, (6 months to 12 months), we recommend the fast tracking of the implementation of the activity based cost pricing method, which will objectively capture costs directly related to the distribution of normal and VP goods. We believe that, implementing the activity based costing will reduce further the fee structure to below 18%. Our normalization adjustments were conservative given the information constraints we faced in assessing the MSD's costs in more detail. However, we understand that the roll out of the activity based pricing approach has been undermined by:

  1. Adoption of labor intensive and time consuming manual processes in measuring the medicines and medical equipment;
  2. Lack of consistency in packaging of medicines that would require recalculation whenever different packaging is used; and
  3. Reconfiguration of the ERP to support the calculation method. The activity based costing method requires the ERP to capture different variables of a product from which service fees are determined. The ERP should be aligned to support the activity based pricing method.

  As such, tackling these issues should be prioritized to effectively implement the activity based cost pricing method.

# The value of Property Plant and Equipment (PPE) declined from TZS 74.6bn (USD 36.8m) in FY12/13 to TZS 67.3bn (USD 33.3m) in FY14/15 due to a higher depreciation charge when compared to additions in fixed assets

## Balance sheet

| TZS m | Audited 30-Jun-13 | Audited 30-Jun-14 | Unaudited 30-Jun-15 | % CAGR FY13-FY15 |
|---|---|---|---|---|
| **Non current assets** | | | | |
| Property plant and equipment | 74,600 | 72,012 | 67,316 | *(5.0%)* |
| Intangible assets | 1,003 | 856 | 582 | *(23.9%)* |
| Capital w ork in progress | 13,526 | 17,079 | 18,299 | *16.3%* |
| **Total non current assets** | **89,129** | **89,947** | **86,197** | *(1.7%)* |
| **Current assets** | | | | |
| Inventories | 62,387 | 85,319 | 75,047 | *9.7%* |
| Government receivable | 61,555 | 92,874 | 114,242 | *36.2%* |
| Other receivables | 2,056 | 2,220 | 1,430 | *(16.6%)* |
| Advance payments to suppliers | 20,127 | 18,972 | 7,316 | *(39.7%)* |
| Prepayments | 2,365 | 1,628 | 2,151 | *(4.6%)* |
| Deferred customer debit | - | 1,507 | - | *n/a* |
| Cash and bank balances | 43,021 | 43,006 | 75,165 | *32.2%* |
| **Total current assets** | **191,511** | **245,526** | **275,352** | *19.9%* |
| **Total assets** | **280,640** | **335,473** | **361,549** | *13.5%* |
| **Equity** | | | | |
| Capital | 17,258 | 17,258 | 17,258 | - |
| Accumulated surplus | 75,842 | 74,849 | 85,309 | *6.1%* |
| **Total equity** | **93,100** | **92,107** | **102,567** | *5.0%* |
| **Current liabilities** | | | | |
| Deferred customer credit | 609 | - | 2,877 | *117.4%* |
| Deferred income grants | 95 | 13 | 13 | *(63.2%)* |
| Deferred capital grants | 55,295 | 62,240 | 60,420 | *4.5%* |
| Trade and other payables | 30,539 | 66,663 | 84,682 | *66.5%* |
| Advance payments from customers | 55,783 | 72,318 | 45,657 | *(9.5%)* |
| Project accounts | 45,219 | 42,132 | 66,133 | *20.9%* |
| **Total liabilities** | **187,540** | **243,366** | **259,782** | *17.7%* |
| **Total equity and liabilities** | **280,640** | **335,473** | **362,349** | *13.6%* |

Note: Balancing error noted in FY15 accounts

Source: FY13, FY14 AFS and FY15 management accounts

## Historical financial position overview continued

- **The YoY decline in Property Plant and Equipment (PPE) was due to the higher depreciation charge when compared to additions during the period**. 78% of MSD's PPE comprises of buildings which are mainly the storage facilities operated by the organisation. As at 30 June 2015, the MSD operated 9 zonal warehouses.

## Historical financial position overview (continued)

- Included under intangible assets are training costs and incidental costs incurred to set up the current ERP system, EPICOR version E9. The system was donated by USAID and its utilisation commenced in July 2012. Notably, the cost of the ERP system is yet to be capitalised in the MSD's books, although it was reported to be around USD 5min.
- Capital Work in progress comprises of the ongoing construction of the MSD's headquarters in Keko and two warehouses in Tanga and Tabora. 44% of the WIP as at 30 June 2015 was attributed to the headquarters construction which is self funded. The construction of the warehouses is funded by USAID.
- Please refer to the separate section of this report for a comprehensive analysis of the MSD's working capital components i.e. inventories, government receivable and trade and other payables.
- During the analysis period, an average of 97% of total other receivables related to staff receivables. Staff receivables comprise of general staff loans and development loans. General staff loans and development loans are recoverable within one year and six years respectively. Development loans attract a 2% interest rate while general staff loans are interest free.
- Cash and bank balances averaged TZS 51.5bn (USD 25.5m) during the analysis period. As at 30 June 2015, 99% of the cash and bank balances were restricted funds (included in project accounts) being donor funds set aside to purchase medical supplies or acquire assets.
- Advance payments from customers refer to the total amounts due to health facilities in terms of medical supplies and equipment. When MSD receives a budget allocation from the MoHSW, the respective health facility accounts are credited. The health facilities are then eligible to draw medical supplies to the extent of the amounts in their accounts. From discussions with management, at any given time there is balance outstanding in the customer accounts allowing customers to make orders when the need arises. The 37.5% decline between FY13/14 and FY14/15 was due to low budget disbursements received from MoHSW.
- Project accounts represent funds provided by donors for specific designated activities with agreements signed, as such the use of these funds is restricted and no interest is earned from these funds.

# MSD's working capital position has worsened during the recent years due to late and inadequate budget disbursements from MoF and a growing MoHSW debt

## Working capital analysis

| TZS m | FY12/13 | FY13/14 | FY14/15 | % CAGR 2013-15 |
|---|---|---|---|---|
| Inventories | 62,386 | 85,319 | 75,047 | *10%* |
| Government receivable | 61,555 | 92,874 | 114,242 | *36%* |
| Trade and other payables | (30,539) | (66,663) | (84,682) | *67%* |
| **Total** | **93,402** | **111,530** | **104,608** | *6%* |
| **KPIs** | | | | |
| Current ratio | 4.1x | 2.7x | 2.2x | |
| Quick ratio | 2.0x | 1.4x | 1.3x | |
| Inventory days | 110 | 232 | 250 | |
| Receivable days | 96 | 201 | 260 | |
| Payable days | (54) | (181) | (282) | |
| Cash conversion cycle | 152 | 252 | 228 | |

Source: FY13 and FY14 AFS and FY15 management accounts

- During the analysis period, MSD's liquidity position worsened, as highlighted by an increased cash conversion cycle. Between FY12/13 and FY14/15, the cash conversion cycle recorded a 22% CARG implying an increase in the number of days taken to convert inventory into cash. This was attributed to:

  1. A 51% CAGR in the average inventory days due the purchase of stock the MSD was unable to distribute owing to low and delayed budget disbursements. The MSD purchases stock in anticipation of budget disbursements to enable health facilities order for medicines and medical supplies. Consequently, the provision for obsolete stock increased by 875% from TZS 1.2bn as at 30 June 2013 to TZS 10.5bn as at 30 June 2015. The average inventory levels have been analysed on a quarterly basis later in this section. A detaied breakdown of ; and

  2. A general increase in trade receivable days to 260 days in FY14/15 from 96 days in FY12/13 owing to the growing Government receivable. The Government receivable resulted from service fees charged by the MSD in relation to clearing, storage and distribution of VP medicines and medical supplies.

- As a result of the above factors the MSD delayed in paying local suppliers by an average of 142 days, instead of the 30 days credit policy period, owing to the cash flow constrains.

## Trade and other payables

| TZS m | FY12/13 | FY13/14 | FY14/15 | % CAGR FY15 |
|---|---|---|---|---|
| Trade creditors | 24,814 | 47,055 | 41,882 | *29.9%* |
| TFDA | 539 | 1,951 | 24,082 | *568.4%* |
| Non trade creditors | 4,359 | 9,784 | 10,193 | *52.9%* |
| Global Funds inspection cost unutilised | - | 6,055 | 8,119 | *n/a* |
| Others | 827 | 1,819 | 406 | *(30.0%)* |
| **Total** | **30,539** | **66,663** | **84,682** | *66.5%* |

Note: Variance noted between FY15 trade creditors balance and ageing report

Source: FY13, FY14 AFS and FY15 management accounts

4. For the first time during the analysis period, in FY14/15, MSD booked an accrued liability of TZS 24bn being fees levied by the Tanzania Food and Drugs Authority (TFDA) for testing imported VP medicines and medical supplies. MSD recognised the liability in FY14/15 after receiving a demand letter from TFDA. TFDA and MSD both operate under the MoHSW as such TFDA allowed MSD to operate on credit. The amounts outstanding as at the end of FY12/13 and FY13/14 were in relation to essential medicines and medical supplies.

5. Non trade creditors are mainly utility service providers. The YoY increase was due to the cash flow constraints facing MSD.

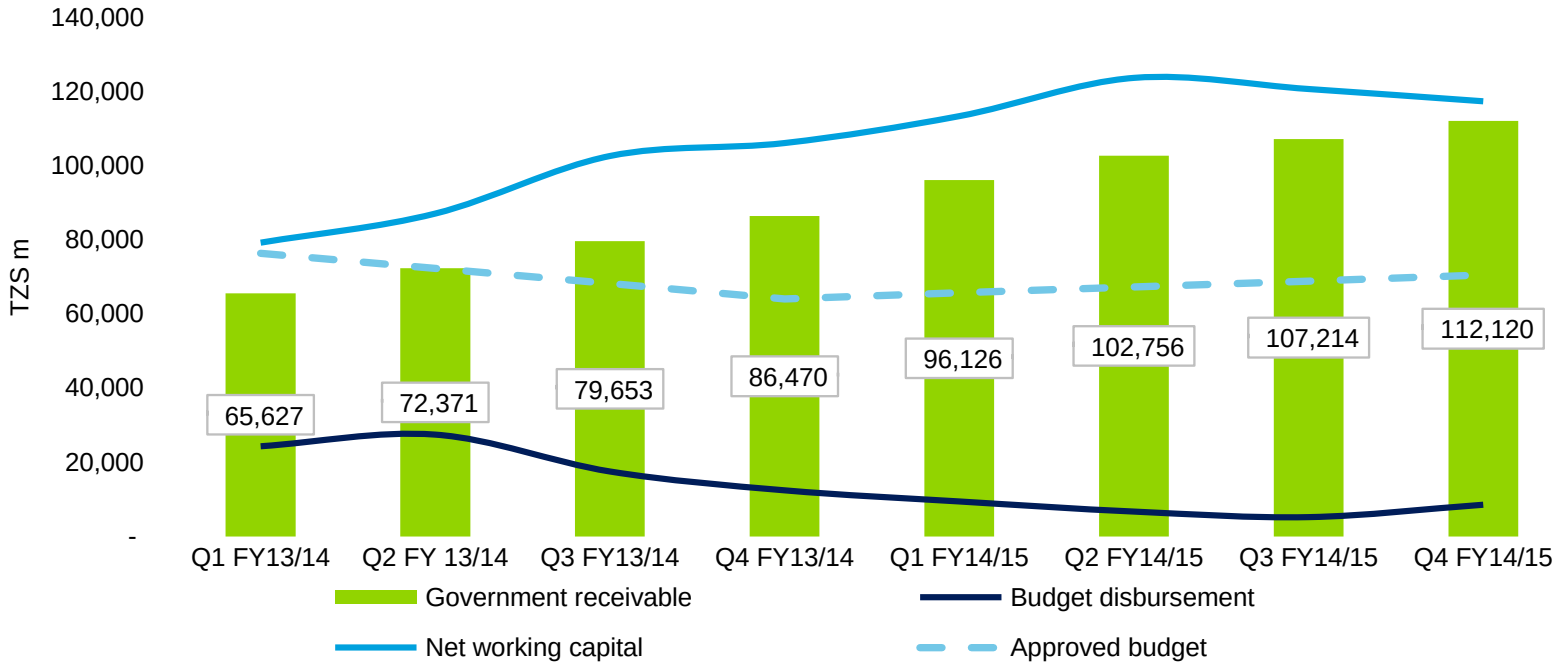
6. Are funds set aside to cover inspection costs for Global Fund procured medicines. The use of these funds is restricted to Global Fund activities. Accordingly, the funds are deposited in a separate account which is audited every quarter by Global Fund auditors.

# MSD's working capital gap has worsened as depicted by the growing difference between the net working capital and budget disbursement

## MSD's working capital trend

- The graph below analyses MSD's 12 month moving average net working capital position on a quarterly basis by comparing the MSD's working capital position and budget disbursements.
- MSD's networking capital position at every quarter is the sum of the inventory and Government receivables less trade creditors. In the case of MSD, the increasing net working capital is driven by an average increase in inventory, trade receivables and trade payables balance. These are attributed to the factors earlier discussed. Accordingly, the MSD's cash is tied in inventory and trade receivables and as such the Organisation is unable to meet its obligations.

## Twelve month trending average working capital analysis




Source: Management information

## Working capital statistics

| Details | Amount TZSm | Period |
|---|---|---|
| Average working capital | 96,008 | n/a |
| Maximum working capital position | 130,996 | Q2 2015 |
| Minimum working capital position | 56,979 | Q2 2015 |

Source: Deloitte analysis

- The subsequent pages of this section highlight further the components of working capital and explain the reason for the trends.

# As at 30 June 2015, 85% of the net Government receivables arose from VP related clearing, storage and distribution costs largely as a result of Government's inability to pay MSD for these services

## Government receivables

| TZS m | FY12/13 | FY13/14 | FY14/15 | % CAGR 2013-15 |
|---|---|---|---|---|
| Vertical Programmes - services | 36,344 | 59,177 | 86,496 | 54% |
| Vertical Programmes - goods | 4,365 | 12,789 | 10,136 | 52% |
| Dispensaries | 5,819 | 7,211 | 9,890 | 30% |
| District Executive Director and Town Councils | 3,222 | 3,252 | 4,421 | 17% |
| District hospitals | 2,757 | 2,693 | 3,183 | 7% |
| National hospital | 4,205 | 2,850 | 3,122 | -14% |
| Special hospitals | 1,898 | 1,636 | 3,100 | 28% |
| Government Institutions (Army, Police, Prisons, etc.) | 1,961 | 2,696 | 2,579 | 15% |
| Health centres | 1,007 | 1,207 | 1,636 | 27% |
| Regional hospitals | 957 | 699 | 1,272 | 15% |
| Private sector (Faith Based Organisations) | - | 520 | 605 | n/a |
| Local Authorities basket funds | 798 | 513 | 472 | -23% |
| Zonal referral hospitals | 4 | - | 123 | 455% |
| Private District Designated Hospitals | 21 | 1 | 65 | 75% |
| Baka | - | 176 | 26 | n/a |
| Public District Designated Hospitals | 116 | 44 | 11 | -70% |
| **Sub total** | **63,474** | **95,461** | **127,134** | 42% |
| Less: Provision for doubtful debts | (1,919) | (2,587) | (12,892) | 159% |
| **Net government receivable** | **61,555** | **92,874** | **114,242** | 36% |

Source: FY13 and FY14 AFS and FY15 management accounts

## Government receivables

- As at 30 June 2015, 85% of the net Government receivables arose from VP related clearing, storage and distribution costs. MSD is responsible for clearing, storage and distribution of donated medicines and in turn charges a service fee to the relevant MoHSW program. A general increase in the receivables balance was due to failure by Government pay service fees to MSD.

1. VP services are storage and distribution services rendered by the MSD for donated medicines and medical equipment on behalf of MoHSW and DP programs. The rates charged depend on the MoUs signed between the DPs and the MoHSW.

## Government receivables continued

2. VP goods arise from MSD distributing actual medicines and medical equipment for VP programs where the DPs disburse funds directly to MSD e.g. the Global Fund.

- According to the MoU between the Global Fund and MoHSW, the Global fund caters for 6% of the distribution and storage fees while the Government will pay 12.4%. Accordingly, the Global Fund has been making its contributions but the Government has been unable due to cash flow constraints and hence the debt.

3. Comprise of various health facilities categorised based on size and area of jurisdiction. Key categories of health facilities in Tanzania include dispensaries, special hospitals and district hospitals. The MoHSW often directs MSD to supply essential medicines to these health facilities during calamities or shortages of medical supplies. In many instances the MoHSW does not pay MSD for these services. We reviewed written communication from the MoHSW directing MSD to execute such distributions.

- MSD's trade debtors are all Government related due to the fact that the MoHSW coordinates distribution of medical supplies to health facilities. In this case, the MSD delivers medicines and medical supplies without receiving payment.
- As at 30 June 2014, the MoF verified TZS 64bn of the total outstanding Government receivable, in a verification exercise undertaken by an independent internal auditor. We reviewed the letter to MSD from the Permanent Secretary in the MoF dated 12 May 2015 acknowledging the verification.

# Despite MSD receiving TZS 35bn from the MoHSW to partially settle the current debt, there is no agreed formal timelines from the MoHSW to settle the remaining debt

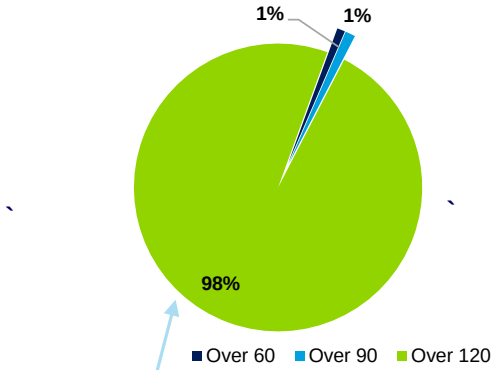
## Trade and other receivables continued

### Government receivables ageing

| Account name | Current | Over 30 | Over 60 | Over 90 | Over 120 | Total |
|---|---|---|---|---|---|---|
| Vertical program services | (11,211) | 3,979 | 4,229 | 2,322 | 68,057 | 67,377 |
| Donors | 25 | 1 | 92 | 240 | 27,183 | 27,541 |
| Vertical program goods | (341) | 172 | 22 | 59 | 12,402 | 12,314 |
| Dispensaries | 485 | 818 | 795 | (201) | 7,883 | 9,779 |
| District Executive Director and Tow n Council | (254) | 503 | 55 | 38 | 4,074 | 4,416 |
| District hospitals | (249) | 979 | 152 | (734) | 2,972 | 3,120 |
| National hospitals | (6) | 129 | 175 | (118) | 2,826 | 3,006 |
| Government Institutions | 137 | 41 | 24 | 102 | 2,402 | 2,705 |
| Local authorities | 10 | 92 | 59 | (36) | 884 | 1,010 |
| Private hospitals | (62) | 166 | 117 | (127) | 862 | 956 |
| Public district designated hospitals | (51) | 23 | 86 | (43) | 91 | 106 |
| **Total** | **(11,516)** | **6,903** | **5,805** | **1,501** | **129,637** | **132,330** |

Note: Variance noted between the receivables ageing and the Government receivable listing
Source: Management information

### Government receivables ageing analysis




Note: Over 60 days includes current and over 30 day balances
Source: Management information and Deloitte analysis

98% of total Government receivables are over 120 days

## Trade and other receivables continued

### Other issues

- When analysing the Government receivable we noted the following:
  1. Variances between the Government receivable listing and the ledger balance attributed inaccuracies with the ERP when generating reports;
  2. Credit amounts in the ageing analysis both largely due to user errors by not matching credit notes to invoices earlier raised; and
  3. **We noted a lack of coordination in VP record keeping at the MoHSW and the respective VP program offices**. From our discussions with the VP Managers, Chief Accountant, and Chief internal Auditor at the MoHSW, we established that no invoices were received at the MOHSW. Instead MSD sends monthly statement of accounting to show the position of the Government receivables. Furthermore**, there was no evidence that the accounts department at MoHSW**

### Government receivables ageing

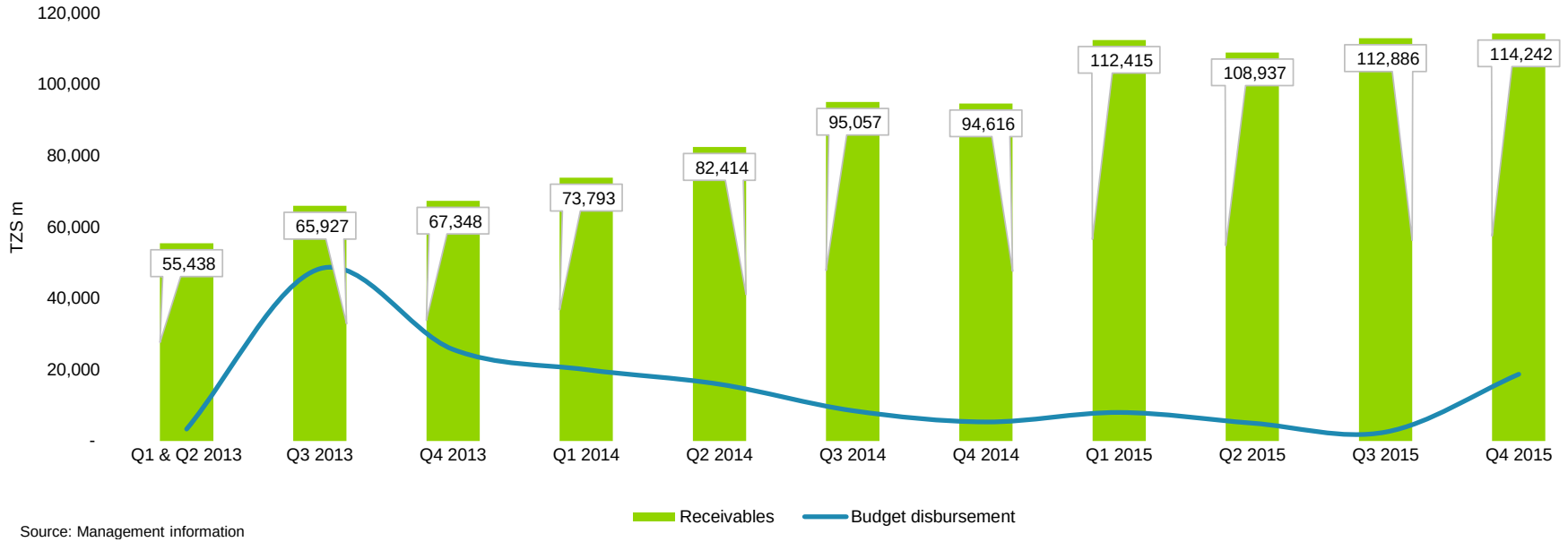
- Please note that variances noted between the trade receivables ageing above and Government receivables listing on the previous page, and credit balances above were attributed to accounting related issues when generating the aging report. As such, management was unable to reconcile the variances
- 98% of the Government receivables were over 120 days. As at 30 June 2015, the MSD and MoHSW had an unsigned MoU that contained terms of the relationship between the two parties. According to management, in FY14/15, partially settled TZS 35bn of the Government receivable. However, there is not formal commitment, in terms of timelines, to clear the outstanding debt.
- Further, the MoF, being key stakeholder in financing health sector activities in Tanzania, should be a signatory to the MoU between the MSD and MoHSW.

# The increasing Government receivable was due to continued distribution of VP medicines and medical supplies as such repayments were inadequate to offset the receivables

## MSD's Government receivable position

- The graph below represents MSD's average Government receivable position on a quarterly basis between 1 July 2012 and 30 June 2015.
- A decline in the Government receivables position was noted in Q4 2014 and Q2 2015 when MoHSW partially settled the current receivable by paying TZS 8bn and 27.5bn respectively. The net effect was an increased Government receivable due to continued distribution of VP medicines and medical supplies.
- Despite the growing government receivable, the Government receivables have continued to decline.

## Month on month Government receivable analysis




Source: Management information

# 99% of MSD's total receivables are Government receivables of which 85% arise from clearing, storage and distribution charges of VP medicines and medical equipment

## Debt verification

- As part of our scope, we sampled the additional Government receivables recorded between 1 July 2014 and 30 June 2015 and verified the amounts to supporting invoices at the Dar es Salam Zone.

**Debt verification summary**

| Details | Amount TZS m | Verification source |
|---|---|---|
| Amount verified as at 30 June 2014 | 64,296 | MoF letter |
| Amount verified during field work | 39,709 | Deloitte analysis |
| **Total verified debt** | **104,005** | |
| **Total Government debt** | **114,242** | |
| **% of debt verified** | **91%** | |

Source: Deloitte analysis, TFDA and MoHSW

- As part of the debt verification, we sampled 10 VP invoices to ascertain the charging system used by the EPR. This is documented in Appendix 4 of this report. No exceptions were noted during our verification exercise.
- Please note that the MSD's was unable to categorise the Government receivable as clearing, storage and distribution as the accounting system is not configured to do the classification. Accordingly, as at 30 June 2015, invoices raised by the MSD failed to categories service fees into clearing, storage and distribution. Consequently, the MSD's he basis of the amounts billed hence disputing the invoices which further contributes to the increased Government receivables

## Conclusion

### Reasons for payment arrears

- This is attributed to the Government receivables which constitute 99% of MSD's total receivables arising from:
  - **Charges on clearing, storage and distribution of VP supplies and Donations. This forms 85% of the total Government receivable; and**
  - Offering services to dispensaries and Health facilities on credit bases under special directives from the MoHSW. This forms the remainder of the Government receivable.

## Conclusion continued

### Root cause of the accumulation of debt

1. Lack of a structured planning process between the Government and MSD on the management of VP supplies and Donations. This results into;
   - Receipt of unplanned donations of medical supplies which lack budget allocations for clearance, storage and distribution; and
   - Inadequate budget allocation for clearing, storage and distribution of VPs;
2. Inefficient records management at MoHSW which makes reconciliation difficult; and
3. Lack of performance contract (MoU) between MSD and MoHSW clearly describing the roles, responsibilities and KPIs of each party.

## Recommendations on available options to settle the existing debt and prevent recurrence

### Government to settle the current debt

- Government through the MoH should settle the Government the debt through direct budget allocation to the tune of the current debt amount or a soft loan from multilateral financial institutions such as the World Bank.
- Further, priority should be placed on clearing the debt in the short term, specifically within the current financial year, as it directly impacts the MSD's ability to operate.

### Offsetting the Government debt against liabilities due to Government agencies

- Clearing charges levied by Government agencies could be netted off against the Government receivable. For instance, as at 30 June 2015, an amount of TZS 24bn (USD 12m) due to the TFDA could be offset against the service fees due from GoT.

# Unplanned donations and hence costs for clearing and distributing VP medicines and medical equipment are not factored in the budget

**Prevention of recurrence continued**

**1. MSD should enforce its cash and carry policy**

Similar entities, including the National Medical Stores (Uganda) and Kenya Medical Stores Department (Kenya) operate similar policies to manage debts in their operations. Specifically, in KEMSA currently requires county Governments to pay for medicines and medical supplies in advance.

**2. Inclusion and ring –fencing of VP clearing, storage and distribution costs in the annual budget**

- Currently, the budget allocation to MSD is inadequate to cover clearing, storage and distribution of VP medicines and medical equipment. The MSD is directed by MoHSW to clear VP medicines at its own cost and distribute to health facilities. According to management, cash constraints are due to use of internal resources to clear VP medicines without timely repayment
- The Government should increase its allocation for VP and ring-fence these funds to limit the use to VP.

**3. Clarity in computation of the service fees when billing**

- MSD was unable to classify the Government receivable into clearing, storage and distribution owing to the accounting system configuration issues.
- From a physical review of invoices raised to various programs, the amounts are presented as a block figure and not broken down into clearing, storage and distribution related. Discussion with the MoHSW and the VP managers indicated that the absence of a clear basis to compute resulted in dissatisfaction with the MSD's billing system further contributing to delayed payments of the Government receivable. Further, the ERP system should be configured to automatically compute all charges and indicate the basis i.e. rates and applicable variables, for clarity.

**4. Strengthen Financial management skills at Board level**

- The composition of Board members should be strengthened to include members with the requisite financial managerial skills to enable effective strategic decision making as provided in MSD Act. This will improve/ensure the scrutiny of financial challenges at Board level.

**Prevention of recurrence continued**

**5. Enforcing implementation of the donation guideline**

- There is inadequate communication between the Donors, the Government and the MSD in handling the supply chain process for some of the VP goods such as Vaccinations. This has resulted into inefficiencies in the clearing, storage and distribution of these VP goods causing either delays in clearing goods from the port and overstocking at the MSD because the entire supply chain process is disturbed due to ad hock receipt of good.
- Of recent, the Government has issued a donation guideline to enhance the management of donations. If implemented effectively, this will help to improve communication process between the donors, the Government and the MSD, therefore increasing efficiency in the management of donations

**6. Executing planned disbursements**

- The MoF should establish a planned disbursement process which detailing the amounts (or percentages) and the due dates to enable better stock planning, procurement and storage management. Specifically, this should involve exploring upfront credits to health facility accounts in one (frontloading) or maximum, two tranches a year at the beginning and at the middle of the FY.

**7. Develop inter-agency agreements to fast-track clearance of the MSD goods**

- Various authorities levy charges to the MSD in the course of its operations .e.g. TFDA, TRA and TPA. To avoid accumulation of demurrage charges and fines due to delayed clearance the MSD can enter into agreements that fast track clearance of the MSD stock at the port and allow for other QA and inspection procedures to take place at the MSD premises prior to distribution.

**8. A signed MoU between the MoHSW, MoF and MSD on the management of VP goods**

- The MoU between MSD, MoF and MoHSW should be signed and clearly identify the roles and responsibilities of each institution in handling VP goods. This should include clear performance targets for each entity, and could save as a mechanism to strengthen communication and collaboration between these institutions.

# A funded universal heath care system either through taxes or health insurance would guarantee MSD sustainable revenues and hence sufficient funds for operations

**Prevention of recurrence**

**9. Direct delivery of all medicines and medical equipment by MSD suppliers / DPGs to MSD Central warehouse**

- To avoid future occurrence of high demurrage and clearing charges, all suppliers of essential medicines and medical equipment should be directed to deliver at the MSDs central store.
- DPG's should also deliver VP medicines and medical equipment directly to the MSD central store to prevent instances of demurrage charges levied on the MSD. This will also serve goods from staying longer at the port which affect the shelf life of these medicine, in addition to the medicine staying at unfavourable condition which could reduce quality.

**10. Introduction of Universal health-care**

- A universal health care system aims at ensuring that all people obtain the health services they need without suffering financial hardship when paying for them. A funded system either through taxes or health insurance guarantees the MSD sustainable revenues hence sufficient funds for operations.
- This system has worked in other African counties including Burkina Faso, Botswana, Malawi, Rwanda, Niger and Zambia.
- However, for the successful implementation of a universal health care system, the following may be required:
  - A stable source of funding such as donor aid;
  - Counties to collect revenues from taxes charged on civil servants' paychecks;
  - Raising of funds from debt relief as practiced in Tanzania;
  - Citizens to pay monthly or annual premiums;
  - Instituting tax that will solely be for the National health care insurance scheme; and
  - Establishment of risk pools - health programs for certain groups of the people with special requirements.
- Potential challenges that have arisen form the implementation of a universal health-care scheme are:
  - Gaps in the quality of health care services offered in different regions of a country as multiple companies provide the healthcare services;
  - Slow down in Government financed health care;
  - Inadequate number of medical workers needed to work in the medical facilities and
  - An increase in health services and making contributions less affordable for the poorest citizens.

# Delays in paying suppliers may result in imposing of more stringent credit terms to MSD such as interest

## Trade payables ageing

### Top 20 trade creditors ageing analysis

| | TZSm | Current | Over 30 | Over 60 | Over 90 | Over 120 | Amount | Nature of relationship | Tenure of relationship | Days credit | Location |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Jilichem (T) Limited | 81 | 332 | 254 | 328 | 4,301 | 5,296 | Supplier of medicines and equipment | 2 years | 30 days | Local |
| 2 | Hv International Fzc | - | 28 | 132 | (0) | 2,795 | 2,955 | Supplier of medicines and equipment | 2 years | 80% advance 20% on delivery | Foreign |
| 3 | Astra Pharma (T) Ltd | - | - | - | 413 | 1,717 | 2,130 | Supplier of medicines and equipment | 2 years | 30 days | Local |
| 4 | Harsh Pharmaceuticals Ltd | - | 29 | - | - | 1,939 | 1,968 | Supplier of medicines and equipment | 2 years | 30 days | Local |
| 5 | H.H Hillal & Co. Ltd | - | - | - | - | 1,934 | 1,934 | Supplier of medicines and equipment | 2 years | 30 days | Local |
| 6 | Anudha Limited | (2) | 701 | - | - | 1,223 | 1,922 | Supplier of medicines and equipment | 2 years | 30 days | Local |
| 7 | Biocare Health Products Limited | 205 | - | 695 | (14) | 753 | 1,638 | Supplier of medicines and equipment | 2 years | 30 days | Local |
| 8 | Vita Foam (T) Ltd | 174 | - | - | - | 1,441 | 1,615 | Supplier of medicines and equipment | 2 years | 30 days | Local |
| 9 | Famy Care Ltd | 1,518 | - | - | - | 6 | 1,525 | Supplier of medicines and equipment | 2 years | 80% advance 20% on delivery | Foreign |
| 10 | Hebei Oriental Pharm le Corporation | - | - | - | - | 1,416 | 1,416 | Supplier of medicines and equipment | 2 years | 80% advance 20% on delivery | Foreign |
| 11 | Tanzania Food And Drug Authority | - | - | - | - | 1,411 | 1,411 | Regulator | N/A | 30 days | Local |
| 12 | Salama Pharmaceuticals Ltd | - | - | - | 248 | 1,142 | 1,389 | Supplier of medicines and equipment | 2 years | 30 days | Local |
| 13 | Samiro Pharmacy | 143 | 186 | 23 | 342 | 389 | 1,083 | Supplier of medicines and equipment | 2 years | 30 days | Local |
| 14 | Crow n Healthcare (T) Ltd | (1) | - | - | - | 970 | 969 | Supplier of medicines and equipment | 2 years | 30 days | Local |
| 15 | Mw anza City Council | - | - | - | - | 870 | 870 | Purchase of and land | Contract | 30 days | Local |
| 16 | Claris Lifesciences Limited | - | - | - | - | 828 | 828 | Supplier of medicines and equipment | 2 years | 80% advance 20% on delivery | Foreign |
| 17 | Elys Chemical Industries Ltd | (227) | 601 | - | - | 433 | 807 | Supplier of medicines and equipment | 2 years | 80% advance 20% on delivery | Foreign |
| 18 | Keko Pharmaceutical Industries (1997) Ltd | (198) | - | (3) | - | 994 | 794 | Supplier of medicines and equipment | 2 years | 30 days | Local |
| 19 | Okinaw a Pharmacy | (1) | - | - | - | 564 | 564 | Supplier of medicines and equipment | 2 years | 30 days | Local |
| 20 | Jaffery Industries Ltd | - | - | - | - | 556 | 556 | Supplier of beds | 2 years | 30 days | Local |
| | **Top 20 total** | **1,693** | **1,877** | **1,101** | **1,317** | **25,682** | **31,670** | | | | |
| | **List total** | **3,378** | **2,783** | **1,426** | **1,547** | **34,211** | **43,345** | | | | |

Source: M anagement information

- As at 30 June 2015, 79% of the total trade payables were over 120 days due to cash flow constraints resulting in delayed supplier payments. Over 98% of the total creditors as at 30 June 2015 were suppliers of essential medicines and medical equipment. Biocare Health Products Limited (Biocare) was the only VP supplier in the ageing as at 30 June 2015. Out a total amount of TZS 1.6bn to Biocare, TZS 205m was due to VP related medical supplies for Global Fund supported programs. Management confirmed that there were no disputed creditor amounts as at 30 June 2015.
- From the table above, local suppliers comprised of 76% of the top 20 trade payables largely because their supply contracts do not require MSD pay for goods in advance. However, delayed payments of local suppliers who bill in foreign currency increases the forex risk. Suppliers 1,3,4, 6, 7, 8, 13 and 14 bill in foreign currency. Between March 2015 and June 2015, the TZS depreciated by 11.6% against the USD from TZS/USD 1,786 to TZS/USD 2020 respectively.
- Debit amounts in the ageing above were due to advance payments to foreign suppliers for medicines.

# Erosion of MSD's working capital was attributed to the Growing Government receivable on account of the slow settlement of the amount due to MSD

**Conclusion**

**Root cause of working capital erosion**

1. Growing Government receivable on account of the slow settlement of the amount due to MSD,
2. Inadequate funding to distribute medicines and medical supplies which results into poor stock movement, and
3. Operational inefficiencies causing overstocking, accumulation of DOS and Expired Goods, and Demurrage charges

**Recommendations of improving working capital**

1. Settlement of the current Government debt
2. Increased allocation and Ring-fencing of budget for handing VP goods
3. Timely disbursement of Government budget ideally at the beginning of the financial year or in set tranches to enable effective stock planning and settling of trade payables, and
4. Improving operational efficiencies across the supply chain operations

# High level implementation timelines

| Issue | Recommendations | Impact | Ease of implementation | Timelines | Responsible |
|---|---|---|---|---|---|
| Opportunities for improvement to the budgeting process | For efficiency in budget formulation and tracking, the ERP should be configured to support the budget system. This will also reduce instances of human error. | | Low | 0 – 2 years | MSD - DFP |
| | Due to the recent trend in the increased Government budget deficit, MSD should rationalise its budget so as to work with a more realistic plan. This would reduce instances of overstocking and consequently reduce obsolete stock. | | Low | Ongoing | MSD-DFP |
| Improvement in reporting | Cash collection reports should be system generated to reduce instances of errors | | Medium | 0 – 1 year | MSD - DFP |
| Improvement of fee structure | Implementation of the activity based costing approach to pricing | | Low | 0 – 2 years | MSD - DG |
| | ERP system should be configured to provide clarity in billing and financial reporting | | Low | 0 – 2 years | MSD - DFP |
| Recommendations on available options to settle the existing debt and prevent recurrence | Settlement of the current debt | | Medium | 0 – 2 years | PS - MoHSW |
| | Offsetting the Government debt against liabilities due to Government agencies | | Low | 0 – 1 year | Chief Pharmacist - MoHSW |

# High level implementation timelines

| Issue | Recommendations | Impact | Ease of implementation | Timelines | Responsible |
|---|---|---|---|---|---|
| Recommendations to avoid further recurrence of the Government debt | MSD should enforce its cash and carry policy | | Medium | 0 – 1 year | MSD - DG |
| | Inclusion and ring –fencing of VP clearing, storage and distribution costs in the annual budget | | Medium | 0 – 2 years | PS - MoHSW |
| | Clarity in computation of the service fees when billing | | Medium | 0 – 1 year | MSD - DFP |
| | Strengthen Financial management skills at Board level | | High | 0 – 6 months | PS - MoHSW |
| | Enforce implementation of the donation guideline | | High | 0 – 6 months | Chief pharmacist |
| | Executing planned disbursements | | Medium | 0 – 1 year | PS - MoHSW |
| | Develop inter-agency agreements to fast-track clearance of MSD goods | | Medium | 0 – 1 years | Chief Pharmacist |
| | A signed MoU between the MoHSW, MoF and MSD on the management of VP goods | | High | 0 – 1 year | PS - MoHSW |
| | Introduction of Universal health-care in the long run | | Low | 0 – 10 years | PS - MoHSW |
| | Direct delivery of all medicines and medical equipment by MSD suppliers / DPGs to MSD central warehouse | | High | 0 – 1 year | Chief Pharmacist |

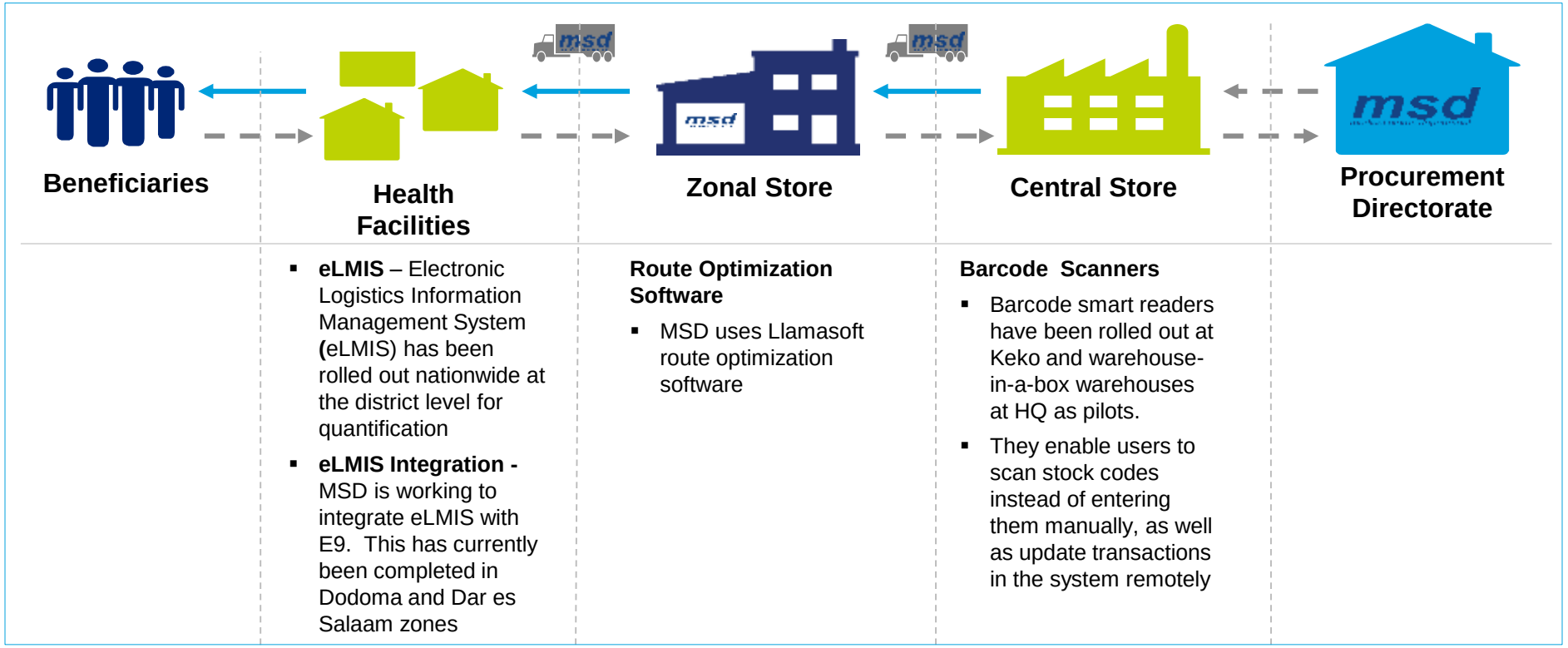
# Contents

# Our review of the technology aimed at understanding MSD ERP, with a focus on its effectiveness in enabling the supply chain management process.

**E9 Context:**

- The primary system used for the Supply Chain Process in MSD is the EPICOR ERP (Version 9)
- Implementation of E9 was conducted in 2 phases. Phase 1 rolled out Logistics, Finance, Sales and Procurement modules in 2012, replacing the previous ERP – Orion.
- Phase 2 originally planned to implement Human Capital Management (HCM), Material Requirements Planning (MRP), Payroll, Customer Relationship Management (CRM), Enterprise Performance Management (EPM), Budget Control and Demand Forecasting modules.
- Only HCM, MRP and Payroll modules were rolled out by the close of Phase 2 in September of 2015

**Other Current Technology Initiatives:**




**Current E9 Modules**

| | | | |
|---|---|---|---|
| Logistics | Finance | Sales | Procurement |
| HCM | MRP | Payroll | |

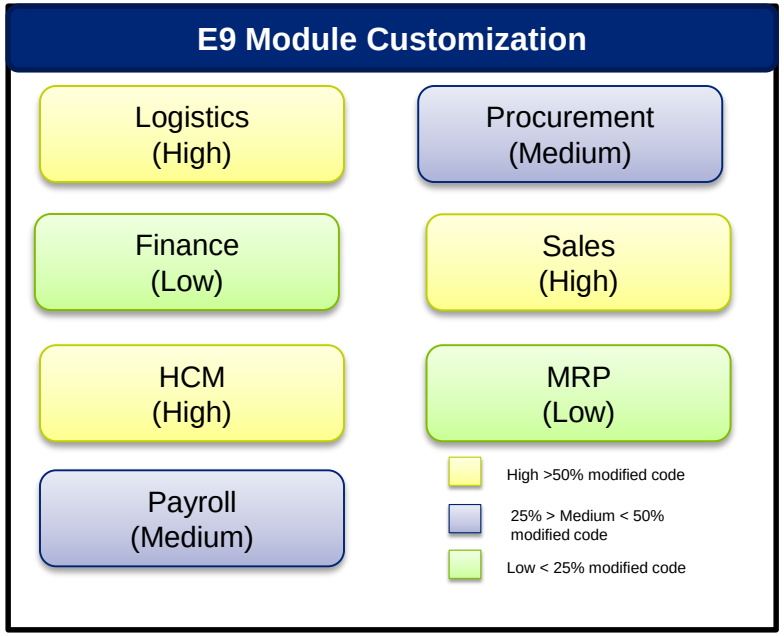
**E9 – Modules Not Delivered**

| | |
|---|---|
| EPM | CRM |
| Budget Control | Demand Forecasting |

- Implementation of CRM, Budget Control and Demand Planning was not started due to reported Project Timelines
- Implementation of EPM was attempted, however failed due to a reported technical issue. This was not resolved before the end of the project.

# MSD's E9 was delivered with an unusually significant level of customization (up to 80% modified code in some key modules).

| Key Findings/Current Reality | Implication to MSD |
|---|---|
| Extensive Customization<br>▪ Given the limited level of complexity around the MSD Supply Chain Process requirements, the extensive customization can be attributed to challenges in the following two key areas during implementation:<br>○ Business Process Transformation – An ERP automates and integrates the majority of business processes within an organization. To this respect, it is critical that the Business evaluate its Business Processes as part of the Design phase, and where needed adapt them to ensure they are streamlined. From our interview with JSI, it was mentioned that MSD was resistant to business process changes. Resistance to Business Process enhancements can result in making unnecessary changes to the system i.e. customization, forcing it to align to current state processes. Change Management strategies must be applied to prepare the organization for such a major transformation to mitigate this resistance<br>○ Rigorous Project Management – ERP implementation projects are large scale in nature in that they involve transformation of Business Processes across functions. To this respect, they require rigorous project management to prevent risks such as inadequate system selection, scope creep, missing functionality, etc. For example if functional requirements are not developed to the required level of detail, this risks selecting a system that may not meet the unique needs of the business in its vanilla form. As a result, customization would be required to develop the arising needs for functionality.<br>Lack of Customization Support<br>▪ The standard Annual Technical Support (ATS) contract with the vendor does not cover the customization component of the system. The customized component is most likely to need support. Support for this must therefore be done on a consultancy basis. Current ATS stands at USD. 60,026. Customization support was being provided through an arrangement with USAID which has now ceased as of September 2015. Customization support can range from USD 800 to USD 1500 per day, depending on whether a contract is in place. | ▪ Development Bugs– Increased customization increases the likelihood of the system having development bugs. In addition, due to an ERP's integrated nature, heavy customization of respective modules within an ERP have a resultant impact on the level of customization of linked modules or functionality.<br><br>▪ Upgrades – Due to the significant proportion of code modified, upgrades to the system will require code to be rewritten to support the new version, which is often costly and time consuming, compared to lightly customized solutions<br><br>▪ Support Costs – The cost of resolution on a consultancy basis is higher than standard ATS rates. This in turn raises the overall cost of system maintenance<br><br>▪ Resolution Time – As a large component of the system is customized, most development bugs are likely to fall outside of the ATS. Without a standard ATS in place to support these issues, resolution time will inevitably increase |




**EPICOR Support Plans:**

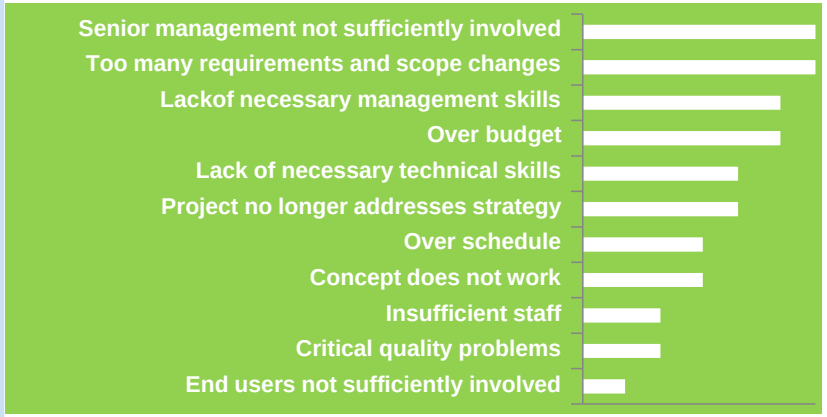
- EPICOR has 3 plans for Annual Technical Support (ATS); standard, premium and premium plus plans. The plans are on annual basis for which payment is done upfront. The standard plan is charged at 40,000USD, the premium plan is 60,340USD and the premium plus is 80,272USD. The costs do not include time for walkthrough to EPICOR professionals on customized components and travel and accommodation costs.
- EPICOR requires its customers to have latest patches/upgrades within 90 days after a release of an update or upgrade for it to continue supporting the customer. The standard and premium plans do not include software upgrades, the premium plus plan includes 1 software upgrade to a new version.
- The premium plus plan also covers for EPICOR toolsets customized components provided code
- If MSD will require on-site support then MSD will have to agree with EPICOR on additional costs depending on the nature of service.

# MSD may have the opportunity to remediate some of the challenges caused by customization through a project to upgrade to E10, however a detailed feasibility study based on functional requirements and E10 capabilities must be conducted to determine the cost benefit

| Industry Benchmark | Recommendations | Impact | Ease of Implementation | Timeline | Responsible |
|---|---|---|---|---|---|
| ▪ Best Practice: Minor customization (up to 25% of code modified) | Assess feasibility to remediate E9 issues caused by customization<br>Work with EPICOR to gain detailed understanding of scope of upgrade, and whether it will remediate unnecessary customization and address functionality gaps. Feasibility study should include:<br>▪ Review and confirm detailed Business Processes in the MSD to ensure they are optimized for Business operations and system use<br>▪ Review and refresh detailed functional requirements for MSD ERP as per current arising system challenges and Business drivers<br>▪ Identify detailed functional specification of E10 against MSD functional requirements. Determine gaps, and level of customization required<br>▪ Identify effort, timelines and associated costs<br>▪ Cost benefit analysis between upgrade and fresh end-to-end ERP implementation including costs associated to sourcing potentially different system and vendor, blueprinting, etc. | 🔴 | Medium | 0-6 Months | MSD Director of ICT |
| ▪ Established contract for customization support in ATS or in separate predefined contract agreed during project implementation | Establish annual contract for customization support with vendor<br>▪ Currently, MSD does not have a standing support contract for customization support. EPICOR can provide this support through its premium plus plan ($80,272USD). A similar support plan can also be sourced from other EPICOR suppliers. | 🔴 | Medium | 0-6 Months | MSD Director of ICT |
| | Invest in in-house level 2/3 support for customization component<br>▪ Given the level of customization, there is a case to invest in in-house customization support. This can be done by either training an existing resource or recruiting | 🟡 | Low | 6-12 Months | MSD Director of ICT |

Over 60%$ of ERP Implementations fail to achieve their objectives. Implementation of a new version of EPICOR or a new ERP will require rigorous project management

**Leading Causes for ERP Implementation Failure ("Chaos Report", The Standish Group)**




**Project Management**

- Scope Management
- Schedule Management
- Cost Management
- Governance & Reporting
- Integration Management
- Quality Management
- Risk & Issue Management

**Organizational Readiness**

- Leadership Alignment & Stakeholder Engagement
- Outreach & Communication
- Change Management
- Training

# MSD's E9 users experience intermittent interruption to service availability resulting primarily from interruptions to network connectivity. In addition, SLAs between ICT and Business are not in place and expectations have not been agreed in detail

| Key Findings/Current Reality | Implication to MSD |
|---|---|

**Service Level Management**

- The E9 system is composed of 3 key components that impact availability – **Application Server, Terminal Server, Network uplink.** MSD tracks availability of all 3 key components, however does not have Service Level Agreements (SLAs) in place between the ICT department and the Business. In the period of July – September 2015, MSD reported the following availability:
  - Application Server: 99.9%
  - Terminal Server: 91.2%
  - Connectivity: 98.3%
- Related KPIs have been defined, however they only focus on connectivity and the application server. When all components are combined, the overall service availability experienced by users in the last 3 months drops to approximately 96.5% which is equivalent to approximately 50 minutes. downtime per day.

**Network connectivity Issues**

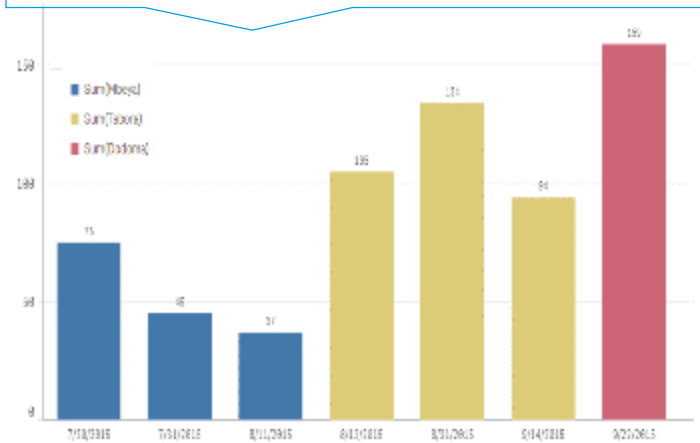
- In the period of July – September 2015, MSD reported a total of 10.8 hours network connectivity downtime throughout all its sites. This is equivalent to 98% availability for connectivity
- MSD is currently using 2 types of connections, TTCL Fiber, and Vodacom Microwave (Backup) to link the 10 zones nationally. MSD has implemented the Vodacom service as a backup. Due to infrastructural challenges, the TTCL link experiences negligible interruptions which impact connectivity of terminal services, but are not always tracked as interruptions.

**Power outages**

- Some zones outside of HQ do not have standby generators that automatically initiate during an outage. The network connectivity is therefore lost whenever there is a power outage at these sites.

- **Unmanaged Expectations–** Service Level Management monitors performance against SLAs and takes corrective action as required. Lack of SLAs between the Business and ICT results in unclear expectations for service availability. The Business may expect the system to be available 99.9% of the time, while the infrastructure or controls only allow for 99%, not meeting the needs of the Business.
- **Limited User Productivity** – Interruptions to service availability to the users results in interruptions to completion of tasks. This has an impact on staff productivity.
- **Limited Organizational Productivity** – Impact on productivity is not isolated in the supply chain due to the integrated nature of E9 ERP, and resultant automated processes. There is therefore a follow on effect to other departments which may not have experienced the service interruption, but are unable to proceed with the process

- In the period of July-September 2015 network availability downtime was observed in three zones of Tabora, Dodoma and Mbeya. The Tabora zone led with total downtime of 333 minutes experienced on three different days of August 12 (105 minutes), August 31 (134 minutes) and September 14 (94 minutes). Mbeya zone also experienced downtime on three different days of July 29 (75 minutes), July 31 (45 minutes) and on August 11 (37 minutes). Dodoma zone experienced downtime of 159 minutes on one occasion in that period which was on September 22.
- Both providers of TTCL and Vodacom are faced with infrastructural challenges in these zones.
- All zones outside of HQ do not have standby generators. The network connectivity is therefore lost whenever there is a power outage



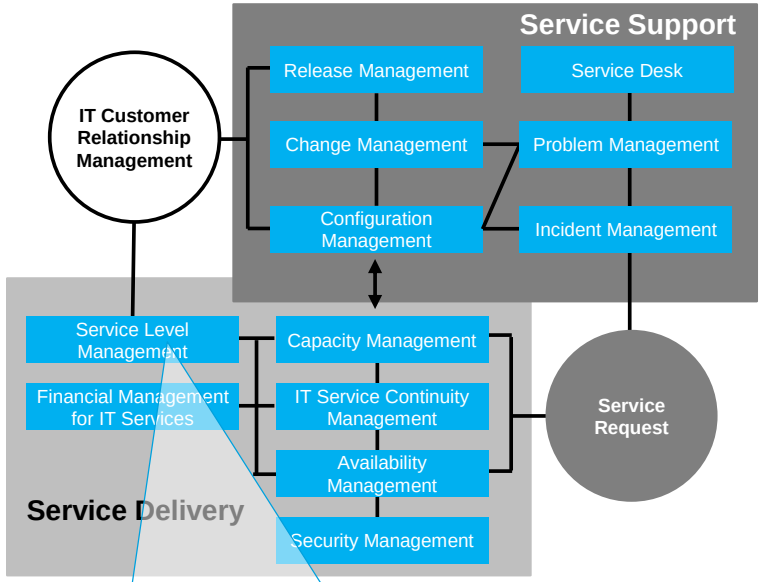

Network Connectivity (July – September 2015)

| Zones | Stores Point | Network Downtime April (Min) | Network Downtime May (Min) | Network Downtime June (Min) | Total Net Downtime (Min) | % Network Availability | Remark |
|---|---|---|---|---|---|---|---|
| | HQ | 0 | 0 | 0 | 0 | 100.00 | |
| | UBUNGO | 0 | 0 | 0 | 0 | 100.00 | |
| | MWANZA | 0 | 0 | 100 | 100 | 99.80 | Power outage from Tanesco |
| | MOSHI | 0 | 0 | 0 | 0 | 100.00 | |
| | DODOMA | 0 | 0 | 0 | 0 | 100.00 | |
| | TABORA | 40 | 0 | 0 | 40 | 99.89 | Power outage from Tanesco |
| | TANGA | 0 | 0 | 0 | 0 | 100.00 | |
| | IRINGA | 0 | 0 | 88 | 88 | 99.75 | Power outage from Tanesco |
| | MBEYA | 34 | 280 | 0 | 323 | 99.09 | Power outage from Tanesco |
| | MTWARA | 0 | 0 | 0 | 0 | 100.00 | |
| | MULEBA | 0 | 0 | 105 | 105 | 99.71 | Power outage from Tanesco |
| | JAMHANA | 0 | 0 | 0 | 0 | 100.00 | |
| % AVERAGE NETWORK AVAILABILITY IN FOURTH QUARTER | | | | | | 99.84 | |
| OVERALL AVERERAGE PERCENTAGE NETWORK AVAILABILITY FOR FY 2014/15 | | | | | | 88.52 | |

Network Downtime Reasons (4th Quarter 2014/15)

# MSD must formalize Service Level Management, including establishment of SLAs between the Business and ICT. In addition, service availability must be measured based on service interruptions as experienced by the user

| Industry Benchmark | Recommendations | Impact | Ease of Implementation | Timeline | Responsible |
|---|---|---|---|---|---|
| ▪ Established SLAs between ICT and the Business, including agreed service uptime targets (e.g. 99.9%), | **Implement Service Level Management**<br>▪ Negotiate and agree SLAs with the Business and ensure that services meet requirements.<br>▪ Ensure that IT Service Management processes, Operating Level Agreements (OLAs) and Underpinning Contracts (UCs) support end-to-end service targets.<br>▪ Monitor performance against SLAs on a monthly basis, ensure consistent reporting, hold regular review sessions with the Business and implement reactive and proactive improvement measures. SLAs should not be limited to KPIs, rather be established for all IT Service Management Processes<br>▪ Identified Service Level requirements will in turn inform investment requirements for respective services. E.g. if Business requires 99.99% uptime, then investment in standby generators at zonal locations is requisite. | ● | High | 0-12 Months | MSD, Director of ICT |
| | **Implement Network Connectivity & Power Outage Controls**<br>▪ Implement network monitoring tools with automated real time notifications (e.g. via SMS), to monitor network uplink at all locations including zonal offices, to allow for quick response and resolution times<br>▪ Deploy standby alternative sources of power e.g. standby generator, solar, etc. to zonal offices and sales points.<br>▪ Ensure all servers, including Terminal Server, have real time server monitoring with notifications (e.g. via SMS) to allow for quick response and resolution time. | ● | Medium | 0-12 Months | MSD, Director of ICT |




Successful IT Customer relationship management begins with Service Level Management. The ICT Department must:

- Work with the Business to understand their needs, manage expectations and drive continuous service improvement
- Define services, negotiate and agree SLAs with the Business, report on performance and drive corrective action
- Ensure that SLAs are achievable and underpinned by processes, OLAs and contracts
- Work across the Business, suppliers and vendors to ensure that capacity and availability support SLAs, standards and future requirements, including regular and rigorous reporting on all IT Service areas

# EPICOR ERP lacks audit trail functionality in most of its ERP components. MSD must ensure audit trail functionality is incorporated in the next upgrade as a priority

| Key Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendations | Impact | Easy of implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|
| **Limited Audit Trail Capabilities**<br>▪ E9 lacks audit trail functionality in most parts of the system. E9 Features Summary released by EPICOR Software Corporation in 2008 notes audit trail functionality only in the Sales Management module under Approval which logs *user ID* and *approval date* only; in Production Management module under *Material Transaction Detail report;* and in *Accounts Receivable – Adjustments* in the Financial Management module.<br>▪ E9 provides the Business Activity Manager (BAM) feature to track data changes by monitoring predefined fields from selected tables within a database. As data is entered and updated in the database, an event is triggered. BAM communicates the event through change logs, global alerts and automatically printed reports. The change logs generated can only track transactional changes and when the transactions are deleted, the logs are also deleted. This is a tedious process as the change log is activated per field, per table and per transaction while a transaction can be generated from four different tables and can contain up to 100 fields. This also develops logs which quickly fill up storage capacity which is unsustainable. However the change logs are deleted when the transaction is deleted.<br>▪ Audit trail logging can be set up in the SQL server database, however this only captures changes of users logging into the database and not detailed transaction changes in the E9 application.<br>▪ EPICOR advised MSD to deploy a third party vendor software for it to be able to get audit trail functionality but the recommended Microsoft application is able to track changes in Microsoft database and not in E9 application.<br>▪ The ICT department has applied a workaround by using a feature in the system that prevents deletion. This has been applied for receipts, invoices and purchase orders. A permanent solution however is needed. | ▪ **Potential Fraud –** Lack of adequate audit trail creates a high risk of fraud as the system is unable to keep track of users who may delete or change transactions fraudulently. This may include changing POs, Invoices or Cash Receipts. | ▪ Standard Audit Trail logging capability<br>▪ Able to track when (date & time) changes are made, by who (user ID), the original value and the new value in the transaction. | ▪ Ensure audit trail functionality is incorporated in next upgrade / implementation<br>▪ Customize prevention of Change Log Deletion |  <br>  | Low<br>Low | 0 – 1 year<br>0 - 1 year | MSD Director of ICT<br>MSD Director of ICT |

# E9 Reporting functionality was not included as part of the initial implementation project. In addition, the system is not designed to produce IFRS Financial Statements. MSD must ensure this functionality is incorporated in the next upgrade

| Key Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendations | Impact | Ease of implementation | Timelines | Responsible |
|---|---|---|---|---|---|---|---|
| **Lack of Financial Statements Functionality**<br>▪ E9 Financial Management module currently does not have the capability to produce Financial Statements. It was not designed based on the International Financial Reporting Standards (IFRS). It is based on the US Generally Accepted Accounting Principles (GAAP). As a result, Finance users are unable to produce accounting financial statements at a click of a button<br>▪ As a workaround, Finance is forced to use a manual process whereby a Trial Balance is created by the system, followed by manual manipulation in Excel to produce the Financial Statements.<br>▪ In addition, there are variances between E9 financial reports and the manually created Financial System,<br>▪ This gap in functionality was known during implementation, with an intended solution of using the Advanced Financial Reporting (AFR) tool, which was to link with the system. Roll out of this tool was unsuccessful<br>**Lack of Stock Reports -**<br>▪ The system was not deployed with stock reports. All reports have reportedly been developed by ICT, on an ad-hoc basis.<br>**Non-Functional Enterprise Performance Module (EPM)**<br>▪ The original specification of the system included a Performance Module which was to include dashboards, analytics and standard reporting capability, however this module is currently not operational | ▪ Financial Statement Variances – Manually creating financial statements raises the risk of data integrity issues within financial reporting. This practice also lowers productivity and fails to achieve a key objective of the Financial module<br>▪ **Development Time –** The process of developing reports can be time consuming, as it requires development each time. This involves working closely with the requestor to understand requirements, development, testing, and deploying. If the user does not work closely with the developer to ensure the reports is adequately specified and tested, there is a risk of it being deployed with errors, or it not meeting requirements.<br>▪ **Strategic Reporting and Decision Making–** An EPM module would enhance data driven decision making at the strategic level | ▪ Stock Financial Statement capability<br>▪ Availability of Stock Reports<br>▪ Availability of Enterprise Performance Module | ▪ Ensure financial statement functionality is included in next upgrade/ implementation as critical requirement<br>▪ Ensure development of stock reports is included in next upgrade/ implementation<br>▪ Assess feasibility to remediate EPM module as part of next upgrade / implementation |  <br>  <br>  | Low<br>Low<br>Low | 0 – 6 months<br>0 – 6 months<br>0 – 6 months | MSD Director of ICT<br>MSD Director of ICT<br>MSD Director of ICT |

**E10 Technical Updates at a glance:**

E10 is built on a different technology platform . The server code has been migrated from ABL to C#. The applications are hosted in IIS and new data migration framework. Further, Progress-based stack components have been replaced with the Microsoft .NET framework. All base reports will be delivered only in SQL Server Reporting Services, but Crystal Reports will still continue to be supported in the ICE Framework.

# Data in E9 has been reported as inaccurate in places. MSD should continue its existing efforts to remediate identified system bugs and continuously train users to mitigate user errors

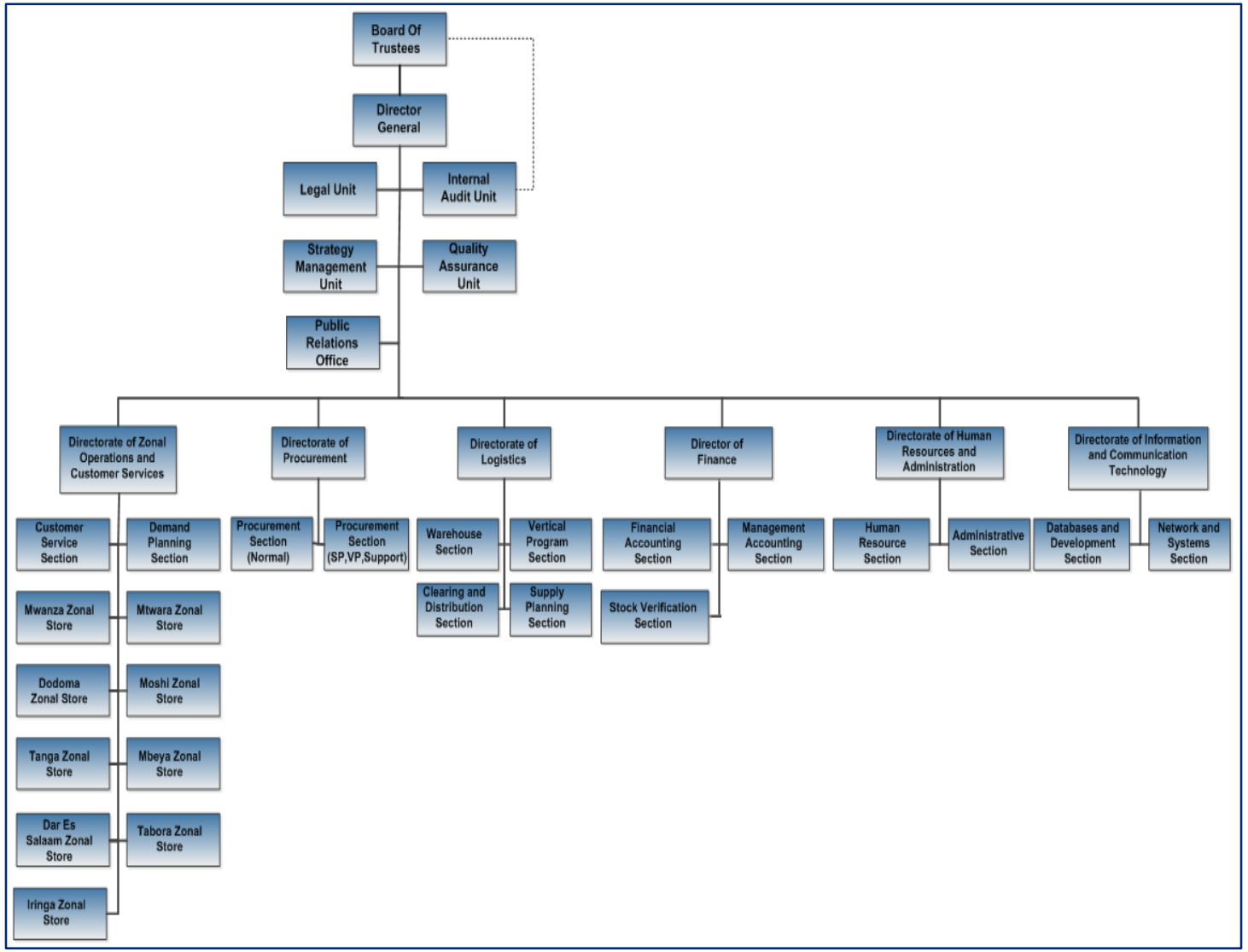
| Key Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendation | Impact | Ease of Implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|
| **Data in the system is inaccurate in places**<br><br>▪ **Variances –** Variances have been detected within E9 including those related to Financial Statements when compared to Financial Reports. There have also been reported inconsistences in stock count in different reports i.e. in detailed stock on hand report, stock status report and daily stock movement report. There are reportedly instances when stock quantities vary for a given stock code across different reports This can be Variances within the system can be caused by one of 3 key issues:<br><br>✓ **System bugs** – Bugs in the system code can cause these variances. The high level of customization increases the likelihood to encounter these bugs<br><br>✓ **User Error –** Users may enter codes incorrectly at times and /or may take shortcuts in the process, not making required updates to the system to ensure data reflects actuals<br><br>✓ **User Knowledge –** User knowledge on system use was low when the system was first implemented. MSD now requires all users to be trained and certified before being given access. From July – September reviewed helpdesk tickets, 83% of the tickets were on functional challenges. | **D**ata integrity impact stretches across the supply chain as data is centralized and process is automated.<br><br>▪ **Misinformed Strategic Decisions -** Incorrect data risks MSD management making misinformed decisions.<br><br>▪ **Misinformed Operational Decisions - I**t may also cause impact to operations, e.g. supplier being billed incorrectly or insufficient quantities being delivered to a facility | ▪ Data consistency within the system | ▪ Remediation of system bugs should be conducted to ensure data consistency across reports<br><br>▪ Complete roll-out of Barcode Smart Readers to all warehouses to reduce manual entry<br><br>▪ Controls should be put in place to ensure users can not skip a step when entering data in the system for transactions with frequent errors<br><br>▪ Refresher training should be carried on regular basis for functions with low data integrity caused by User Knowledge |  <br>  <br>  <br>  | High<br><br>Medium<br><br>Medium<br><br>Low | 0 – 6 Months<br><br>0 – 6 Months<br><br>0 – 6 Months<br><br>0 – 6 Months | MSD Director of ICT<br><br>MSD Director of ICT<br><br>MSD Director of ICT<br><br>MSD Director of ICT |

# Contents

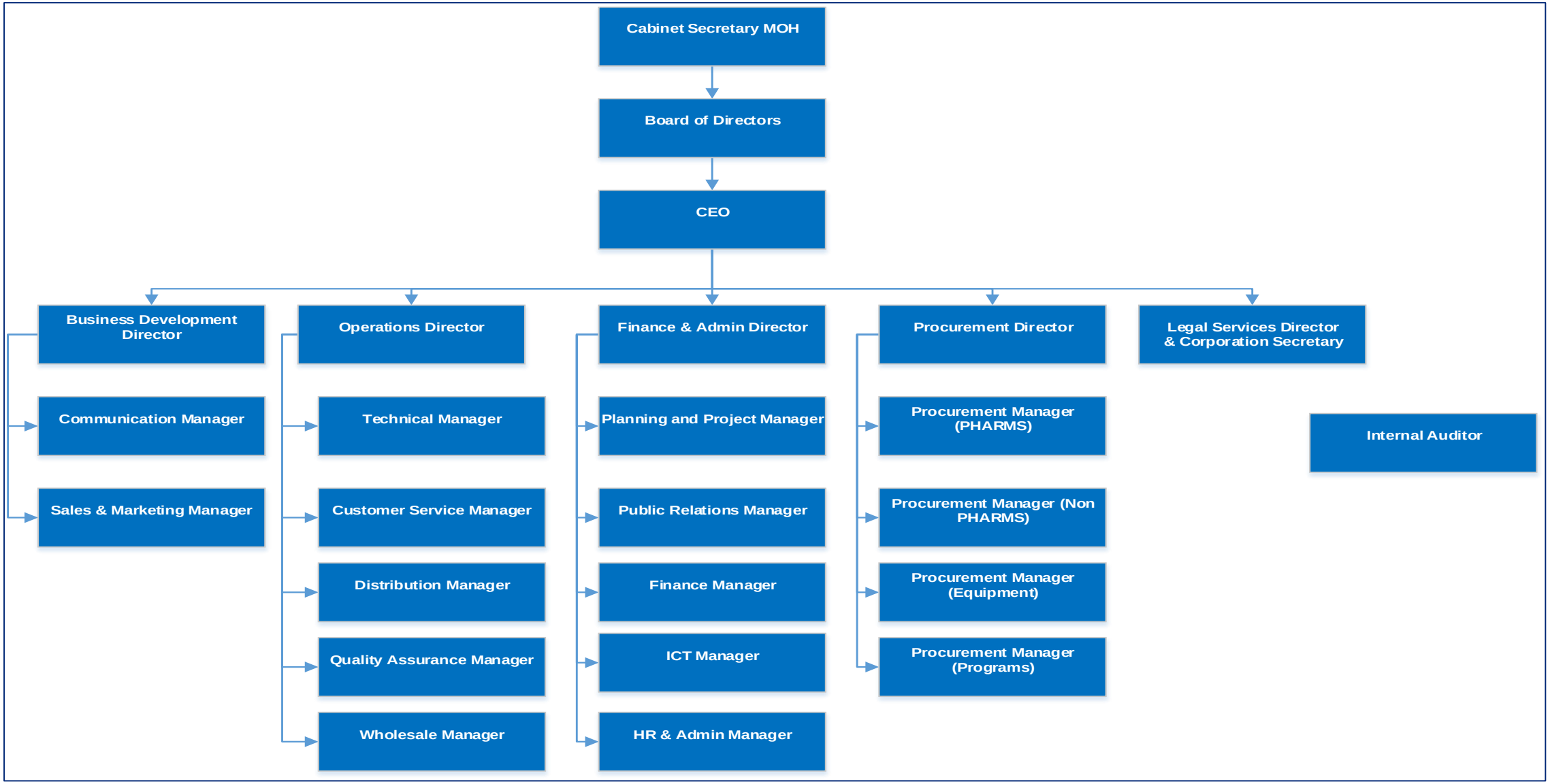
# Analysis of Current Organisational Structure

# MSD has 6 departments, 5 independent units and 24 Sections headed by Managers

- MSD structure has undergone a number of structural changes; the current structure was made effective in November 2013 following an internal review
- The current structure was put in place to fulfil the strategic objectives outlined in the Medium Term Strategic Plan II (2014 – 2020)
- The current structure has 6 departments, 5 independent units and 24 sections headed by Managers
- The current MSD structure largely follows a functional configuration;
    - This is the most common structure in general and for healthcare organisations which groups employees according to similar sets of roles.
    - Structures of this nature are normally based on the principle that a managers have specialised knowledge on a specific function and will be able to take better decisions regarding the function.
    - This structure is also characterised by a strict chain of command and line of reporting.

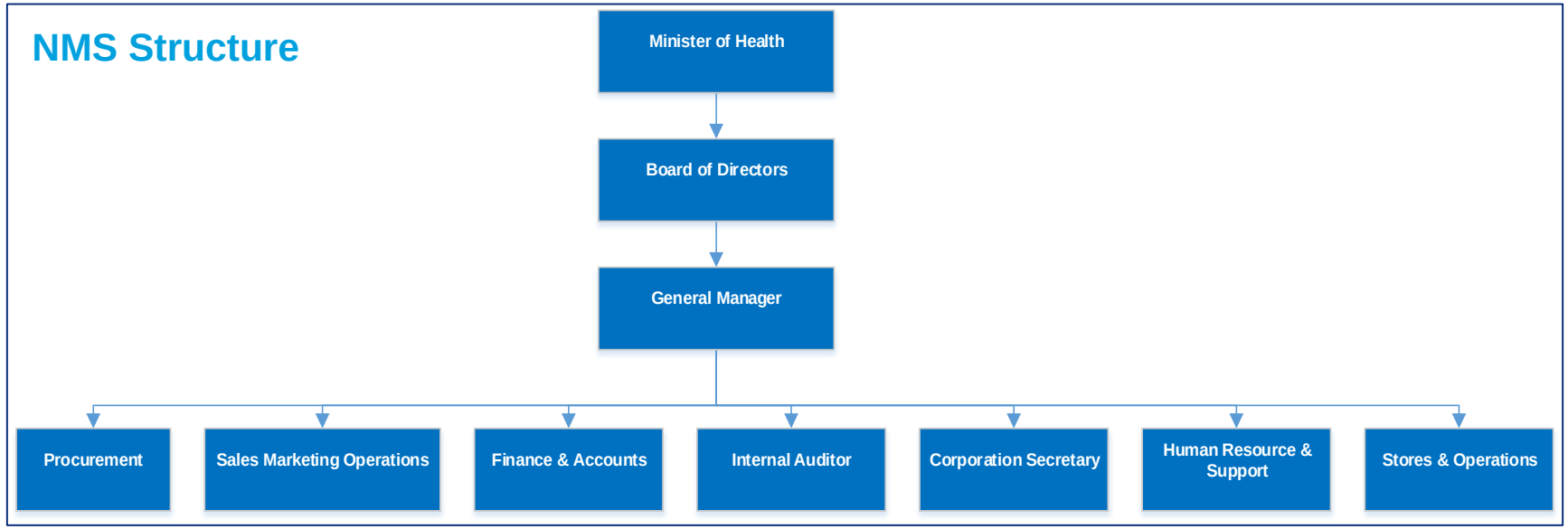


# KEMSA's departments are structured in a way that allows the CEO to have overall oversight of all activities without having too many direct reports



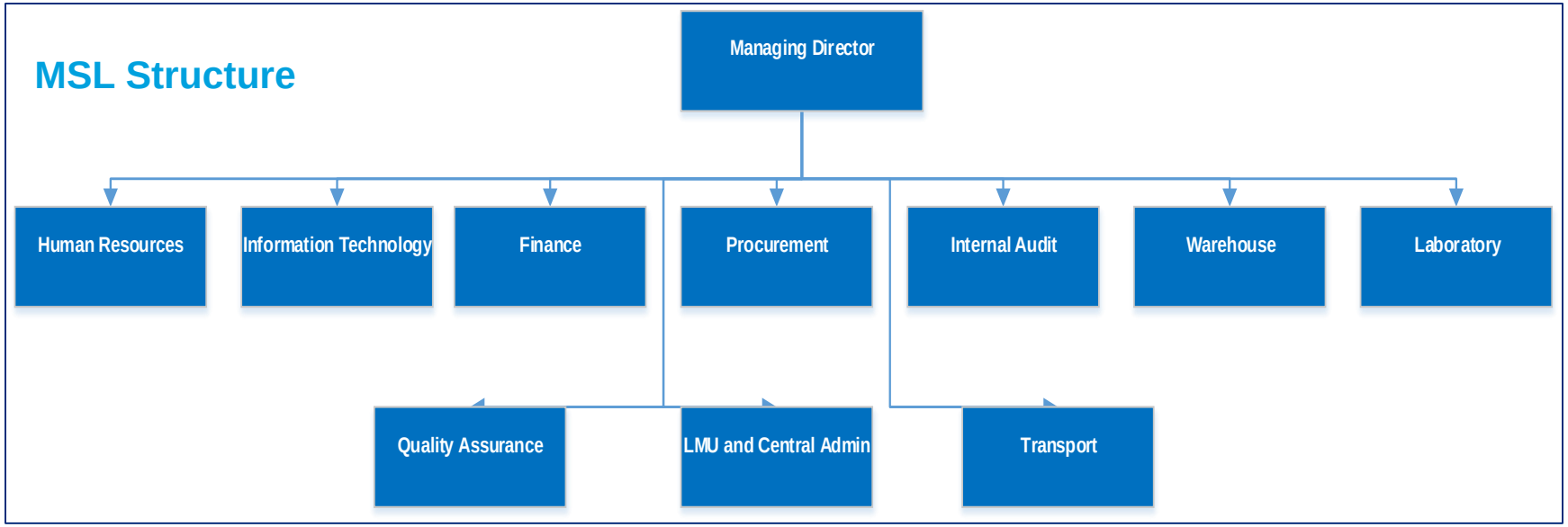
# Similar to MSD, both NMS and MSL structures are functional based, which is the most common structure in healthcare organisations promoting specialization across the organisation

## NMS Structure




- NMS structure is designed in a way that allows for both technical and administrative oversight by the General Manager
- Promotes functional diversification - combing technical roles with administrative roles; to facilitates Multiskilling for Senior Management Roles

## MSL Structure




- MSL's departments are divided in a way that covers the following three areas: financial and commercial, transport and logistics, and pharmaceutical standards
- The Structure puts more emphasis on MSL's core mandate
- Promotes functional specialization

# The current MSD structure aimed at giving the Director General direct oversight of all key functions and centralization of zonal operations

## Key Considerations for the current structure.

- **Overall oversight of key functional areas of the MSD for the Director General:** The current structure was introduced to enable the DG to have a direct reporting line in relation to the core operations that are essential to the efficient running of the MSD.
- **Centralisation of zonal operations:** The current structure allowed for all zonal clusters to report to one Director as opposed to the three that were previously in place. This addressed the issues of duplication of roles as well as the uncoordinated reporting that was experienced as a result of having the zones report to three different directors.
- **Introduction of the Director of Human Resource and Administration:** The current structure renamed the Directorate of Corporate Affairs to the Directorate of Human Resources and Administration in order to reflect the majority of the work undertaken by the role. In addition, the Corporate Relations Unit that was previously under the Director of Corporate Affairs was moved to be under the Director of Zonal Operations and Customer Service.
- **Elevation of the Procurement Management Unit:** The current structure elevated the role of the Procurement Management Unit to Directorate status in order to recognise the importance of procurement as a core activity at the MSD.

## Key Strengths of the Current Structure from our review (2015)

- **Functional Specialisation:** The structure ensures that employees within similar disciplines are largely grouped together allowing for functional specialisation. Specialisation can lead to operational efficiencies and enhance productivity levels as it allows for in-depth knowledge and skill development in the respective functions.
- **Mandate:** The departments cover the Mandate of MSD as defined in Section 2 of the Act No. 13 of 1993 with a clear definition of its business processes. In addition, the structure caters for Zonal operations and allows for a wider coverage which is also in line with their mandate.
- **Reporting lines:** The structure has clear reporting lines with clarity in terms of responsibility and authority. For example it is clear from the structure that the Mbeya Zonal Store Manager reports to the Director of Zonal Operations and Customer Services and the Warehouse Manager reports to the Director of Logistics.

# The current MSD Organizational structure has a wider span of control for some senior positions which could reduce their operational and strategic efficiency

| Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendations | Impact | Ease of implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|
| ▪ Wide span of control (for the Director General and the Director of Zonal Operations and Customer Service). Under the current structure, the DG and the Director of Zonal Operations and Customer services have more that 10 direct reportees. | ▪ Apart from hindering operational efficiency of the supervisors, a wide spans of control might also hinder communication and slow down decision making. | ▪ Average span of control for similar institutions is 6 to 7 direct reportees at senior management level. For example NMS DG has a span of control of 7, while MSL MD has a span of control of 10. Best practices at Management level, is for Directors to have a span of control between 4 to 5. For example KEMSA Directors have a span of control between 2 – 5 | ▪ In dealing with the potential gap related to the span of control MSD should sensitize on the performance culture by entrusting staff with being able to make key decisions. The subordinates under the DG can be entrusted with making operational decisions related to their functional area while allowing the DG to focus on more strategic matters. This will alleviate some of the burden in terms of supervision. Delegating would also allow for staff at lower levels to exercise a greater level of autonomy as well as increasing their commitment towards the overall organisation goal by feeling involved in the decision making process.<br><br>▪ Fully integration of eLMIS will allow for information to be shared more easily, allowing for the Zonal stores to compile and report on matters with greater ease. Utilised efficiently, this can improve connectivity between the headquarters and the service delivery points, that is, zonal stores. |  <br>  | High<br><br>High | 0 – 6 Months<br><br>0 – 6 Months | MSD- DG<br><br>MSD Director of ICT |

# Demand and supply chain units should work closely to enhance planning and coordination of the procurement and distribution process

| Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendations | Impact | Ease of implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|
| ▪ Demand and Supply chain planning is done in silos because the two units sit in separate directorates | ▪ Separation of the planning units/functions may hinder the effective coordination of planning as it limits the smooth flow of information hence slowing down decision making. | ▪ To ensure efficiency, planning is conducted centrally under one department. This is the current structure at KEMSA | ▪ We recommend the current structure encourage working groups between different departments that will allow for innovation in terms of ideas, and will lead to more improved decisions. Having project teams consisting of representatives from both planning sections would allow for greater information sharing. |  | Low | 0 – 6 Months | MSD- DHRA |
| ▪ Limited mandate of the Quality Assurance Unit | ▪ Certain functions such as Pre-qualification of supplies is not carried out adequately | ▪ Quality Assurance responsible for setting technical standards, inspection of receipts, processing verification certificates, monitoring storage and stock management, and coordinating quality management system . This is the current structure at NMS and MSL | ▪ We recommend that the role of Quality Assurance be enhanced to oversee the total quality management system at MSD, and have oversight of MSD in terms of ensuring compliance with ISO standards. This will ensure that even as the Procurement Department carries out its acquisitions, the QA unit is able to oversee and manage the activities in terms of the quality of good procured. |  | Low | 0 – 6 Months | MSD - DG |

# Also, although the current MSD's performance management framework (DRIVE), is good; the framework has not been cascaded effectively

## General overview

- The MSD is continuously investing in building capacity of the Monitoring and Evaluation (M&E) team and training of all managers for effective implementation of the PM framework.
- Competencies are included in the performance review form, demonstrating a desire to move towards measuring both technical/functional objectives (the 'what') and behavioural objectives (the 'how');
- There are inconsistencies in the EMT's ability to align individual KPI's to the departmental scorecards i.e. some scorecards are very clear and specific in terms of objectives, measure, computation parameters and target, while others are not;
- There is an inconsistency in how performance is reviewed as evidenced in the staff files. This may pose a challenge in terms of providing accurate feedback and putting in place an appropriate learning and development strategy for EMT.

## Key strength of the current PM Framework

- The Director General has clear views on what his vision is for MSD and how PM can support.
- MSD has key sponsors in the form of the M&E unit who support the development of the framework; while the M&E and the HR department facilitate the usage. Their aims include enhancing the performance of the organisation, creating a cultural change and assisting in employee engagement;
- There appears to be an understanding amongst EMT on the department KPI's and how their performance contributes to the overall achievement of corporate results.
- While the PM programme is in its infancy, DRIVE contains all the performance management components as per recommended benchmarks i.e. strategic objectives (KPI's), core competencies, training and development plan, interim review and year-end review;
- The PM calendar, with associated activities, has been developed and communicated out with high level guidelines on how to complete the performance management review form;
- There appears to be positive perceptions throughout management regarding PM, with Directors viewing it as a tool and methodology for having structured and recorded performance conversations;

# Mis-alignment between individual Directors' scorecards and the Departments' which could lead into inappropriate cascading of the Performance management targets

| Sn | Findings | Implication to MSD | Industry Benchmark | Recommendation | Impact | Ease of implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|---|
| 1 | Inconsistency on how the objectives, measures and indicators are captured.<br>○ Some of the departmental scorecards have elaborate description of the 'Directorates Objectives', while others not<br>○ Some measures and indicators appear exactly the same in two different departmental scorecards and without differentiating description.; (e.g. sales in both DF and DCSZO); | • In practice it becomes a challenge to hold two directors accountable for the performance | Checks in place to ensure consistency and quality use of PM. | • Align the organizational strategic goals with staff performance goals and institute a consistent approach to cascade and measure staff performance goals across the entire organization. This could be done through carrying out consistency meetings. A consistency meeting is a forum in which Directors come together to discuss each departments' scorecard, with the goal of finalising objectives, measures and indicators using a consistent and similar standard for all<br>• Conduct an HR audit of objectives to check for and ensure consistency |  | High | 0 – 6 Months | MSD DHRA |
| 2 | Mis-alignment between individual Directors' scorecards and the departments' whereby some of the strategic objectives from the annual business plan are omitted or DRIVE forms contain objectives not listed on the scorecards e.g. DP, DCSZO). | Directors' efforts may be spent in areas that are not contributing to the achievement of the overall strategy | | | | | | |
| 3 | Most of the Directors' DRIVE forms reflect only self evaluation and not the supervisor's; yet they have a final rating and signed (e.g. DP, DFP, DL, DHRA and DCZO). | Inability to gauge if: the achieved results were based on the required actions; or how to determine areas of development and have in place the appropriate improvement plan per Director | | | | | | |

# The current performance management framework does not explicitly provide a link between performance and rewards mechanism

| Sn | Findings | Implication to MSD | Industry Benchmark | Recommendation | Impact | Ease of implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|---|
| 4 | There is no explicit link between performance and rewards, which is an essential component in creating a motivational value for a significant portion of employees. | MSD may not be able to motivate staff to perform at the desired level | Have a clear link between performance framework and reward policy i.e. positive for good performance and punitive for poor performance | Put in place a reward policy that is clearly linked to the performance framework. The link between performance and reward should be in monetary and non-monetary rewards such as recognition programmes and learning and development initiatives. Salary increment should also be linked to performance |  | Medium | 0 – 6 Months | MSD - DHRA |
| 5 | Although competencies form are part of the performance review form, there is no evidence that these were included in the Directors' DRIVE forms for the FY 2014/15; or that there is a clear link on how the competencies link to the KPI's. This would assist managers in reviewing how business results are achieved through individual compliance | Inability to assess if the results (the what) were achieved the right way (the how – following the approved processes and procedures). If this is not implemented consistently, it threatens sustainability of an organization | A matrix performance evaluation where the how intersects with the what; and<br><br>A reward policy that favors how things are achieved in addition to what was achieved in order to foster the right performance culture | Clearly define the core value and develop a proficiency map for all relevant levels |  | Medium | 0 – 6 Months | MSD - DHRA |
| 6 | There is no link between MSD's KPIs and MoHSW's expectations of the Department. | This has led to conflicting views of the Department's performance, hindering effective cooperation between the two entities | Agreement between a Ministry and its agency on KPIs. This could be in form of an MoU or a performance contract between the two entities | Develop a performance agreements between MSD and MoHSW clearly describing the specific KPIs for MSD. These need to be cascaded to the latter's Board and DG; and reviewed semi-annually |  | High | 0 – 6 Months | Chief Pharmacist MoHSW |

# The current PM framework does not address how staff learning and development opportunities and actions should be identified and planned

| Sn | Findings/Current Reality | Implication to MSD | Industry Benchmark | Recommendation | Impact | Ease of implementation | Timeline | Responsible |
|---|---|---|---|---|---|---|---|---|
| 7 | While training and development is addressed, it is not explicit how the broader learning opportunities and actions are identified and planned for. | High training costs in areas which could adequately be addressed within the organization | Clearly defined strategy for Broader Learning and Development opportunities for all employees | Learning opportunities should be aligned to the 70:20:10 model of development where 70% of learning comes from on the job (stretch assignments, projects, job shadowing), 20% comes from support networks (mentoring, coaching) and 10% comes from formal courses; |  | Medium | 0 – 6 Months | MSD- DHRA |
| 8 | Although PM is an important aspect of people management, managers are not formally held accountable for the process. | Inadequate level of behavioral change required for an organisation to adopt a performance based culture. | Directors are held responsible for the performance and development of their direct reports, | People and performance management KPI is in place for them and provide additional training and support for less experienced Directors to ensure they successfully achieve this KPI; |  | Medium | 0 – 6 Months | MSD - DHRA |
| 9 | PM is paper based with completion rates tracked manually by HR.; | Low overall team performance visibility at the Director level as they cannot run reports;<br><br>HR spending significant amount of time with administration associated with PM instead of allowing for more valuable contributions | Automated PM system | Consideration should be given towards introducing a system to support the HR process with the functionality for data analysis and detailed reporting |  | Low | 0 – 3 years | MSD -DHRA |
| 10 | The PM programme is currently in its infancy, it is important that metrics and measures are developed for evaluating effectiveness in relation to its contribution to the business strategy. | Having a system that is not well aligned to the strategy or that is not being implemented in a way that really drives performance | Annually | A formal evaluation programme should be put in place and communicated to MSD staff |  | Medium | 0 – 6 Months | MSD - DHRA |

# The implementation of an effective management system in its entirety is usually a systematic and well planned exercise. Given that MSD's performance Management framework has just been deployed, MSD should consider the following in addition to the recommendations given

| Theme | 0 – 6 months | 6 months + |
|---|---|---|
| Performance Management Strategy | • Document and explicitly communicate the business strategy and aligned performance management strategy including objectives and benefits of PM;<br>• Identify PM champions in each department and use their support to move PM beyond a tick the box activity – communications on PM should come from the business and supported by HR. | • Develop a detailed talent strategy to incorporate all aspects of talent, performance and reward with clear links to the business strategy;<br>• Review the effectiveness of the PM strategy against the overall talent and business strategy. |
| Performance Management Programme | • Develop a formal means to evaluate the effectiveness of the performance management programme, both qualitative (employee and managerial feedback) and quantitative data (quality, completion rates);<br>• Provide on-going training and support to Directors to assist them in the 'softer' elements of performance management (e.g. mentoring, managerial workshops, case studies etc.);<br>• Develop the Training and Development section of the performance review form to focus on learning beyond training in order to develop employees capabilities (stretch assignments, projects etc.);<br>• Review and validate the competency model to ensure it relevant, clearly defined and lined to the KPIs;<br>• Develop the current competency model to include detailed behaviours underpinning each competency by broad job level. | • Following on from the talent strategy, develop an all-encompassing Talent Programme covering Succession Management, Learning & Development, Reward, Workforce Planning, etc.;<br>• Continually assess the PM programme for effectiveness and update as required; |
| Performance Management Process | • Set a PM KPI for all Directors in order to hold them formally accountable for the management and development of their people;<br>• Develop and document a set of PM controls (e.g. quality checks) to ensure consistency in the setting and evaluating objectives;<br>• Place performance management as an agenda item in Executive Management Team meetings;<br>• Identify the support tools required by managers and employees to effectively work through the PM framework (e.g. Manager Guidelines, Employee PM workshops etc.). | • Implement and conduct annual consistency meetings for performance ratings to benchmark and validate performance reviews;<br>• Establish and communicate a PM audit to ensure consistency of use and evaluation of process throughout the organisation; |

# Additional considerations (cont.)

| Theme | 0 – 6 months | 6 months + |
|---|---|---|
| Metrics | • Have a rating scale that can be used effectively in the performance reviews as per the DRIVE forms i.e. the ability of employees to 'exceed expectations' by meeting all the KPI's but not the required performance under each behavioural competency or the development plan.<br>• Introduce weightings for each KPI to ensure certain objectives are given priority. | • Consider enabling Directors to select 3 – 4 critical competencies for the performance year instead of assigning priority to all; |
| Tools & Technology | • Develop a reporting template to aid in the monitoring and tracking and communication of PM results; | • Assess the feasibility of using the current HR system for PM or introducing a new technology for assisting in the process. |
| Support & Accountability | • Develop a Rewards Policy that shows a clear link to DRIVE and revise the Staff Handbook to reflect how DRIVE is operationalized;<br>• Set out a performance management KPI for all managers in order to hold them accountable for the cascading of KPIs, performance and development of their direct reports;<br>• Identify and develop additional PM supports for EMT and M&E to include training, guidelines and toolkits;<br>• EMT as a group review the departmental scorecards and streamline to ensure consistency and remove any ambiguity. | |
| Consistency | • Start reporting using the balanced scorecard approach a per approved strategic plan;<br>• Have directors/heads of unit track own performance on a monthly basis and take corrective actions within their level mandate; | |
| Wider Talent Strategy | • Regularly evaluate the PM framework for effectiveness to ensure it is aligned to the business strategy and fit for purpose;<br>• Automate the PM framework | |

# Culture

# We carried out a staff survey to a selected sample of MSD staff. The survey responses enabled us to gain an understanding and insight of the current cultural dynamics of the MSD with regards to its norms and behaviors, leadership and organizational management and infrastructure process

## Overview

**Norms and Behavior:** Norms and behaviours describe how people take actions and achieve results in an organization. To attain the strategic objectives, MSD needs to improve her efforts towards ensuring organizational wide understanding and alignment of its strategic context in order to provide more clarity on roles and actions required by staff to increase customer satisfaction; to emphasize on importance of submitting quality work deliverables, and ensure consistent staff efforts towards the same through exercising a zero tolerance policy on inadequate deliverables; and redefine the controls in place for their policies and regulations to further improve staff adherence and compliance.

**Leadership:** Leadership describe how leaders act in an organization and how they influence culture. To attain the strategic objectives and ensure business continuity, MSD's leadership needs to improve and implement the staff training and development program, reward staff who embrace change and invest and implement on a monitoring program that checks for compliance to rules and regulations.

**Organizational management and infrastructure process:** Organizational Infrastructure and Management Process describe the structures and processes that support MSD. To attain the strategic objectives, MSD will need to have a good performance system in place that recognizes and rewards exceptional performance, foster team work and boost staff morale.

**Scope limitation**

- Survey response was poor and therefore statistical significance of the survey is not conclusive; and
- We did not conduct focus group sessions with staff to assess the reasons behind the responses.

**Approach**

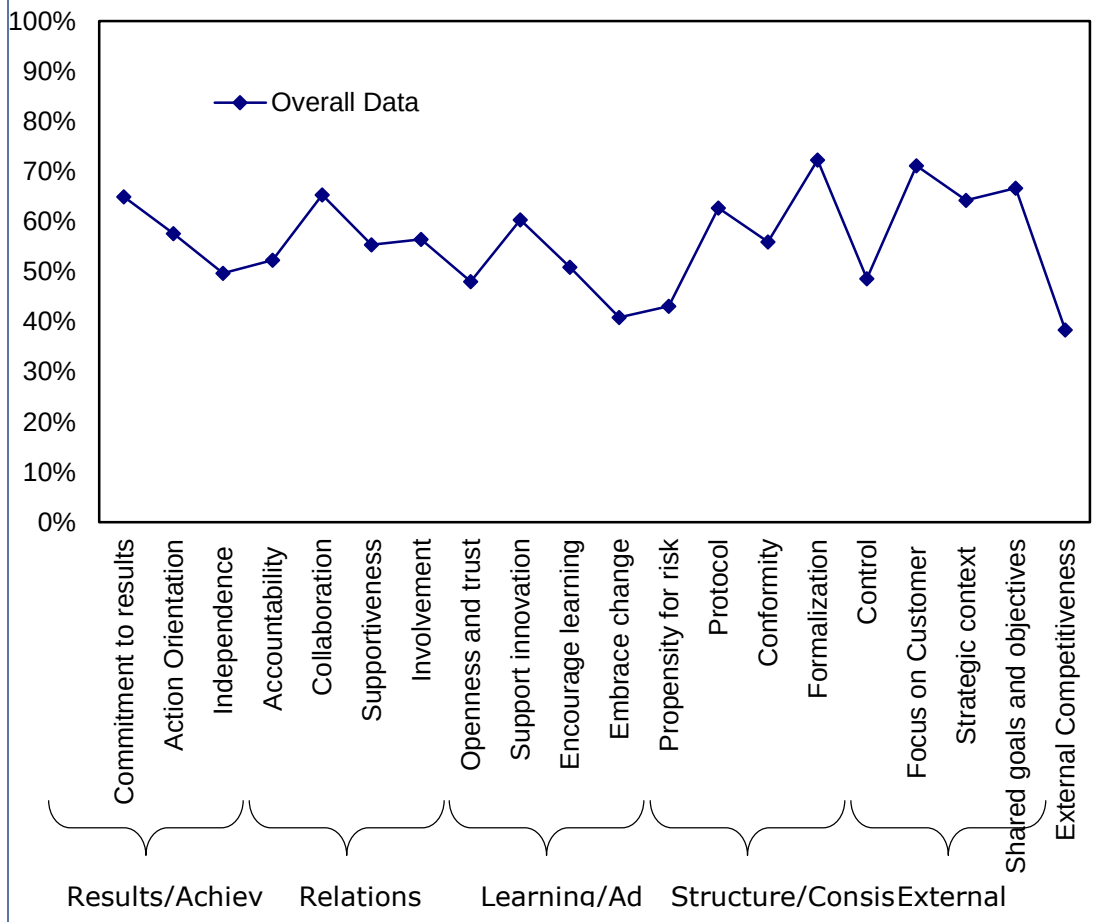
In analyzing key results of the survey, we mapped the Strategic Goals/Objectives for MSD as defined in their Medium Term Strategic Plan II into the three areas of the survey.

**Cascading MSD objectives into three areas of the survey**

| | Norms and behavior | Leadership | Structure |
|---|---|---|---|
| **MSD Strategic Objectives** | Improve work environment | Improve knowledge and skills | Improve performance based culture |
| | Improve service delivery | Improve use of technology | |
| | | Enhance compliance | |
| | Enhance financial performance | Strengthen stakeholder's relationship | |
| | | Increase market share | |

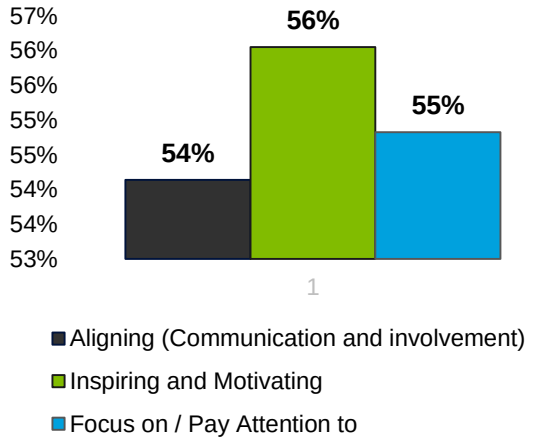
# On overall, performance and accountability culture needs to be improved at MSD

## Norms and Behaviors



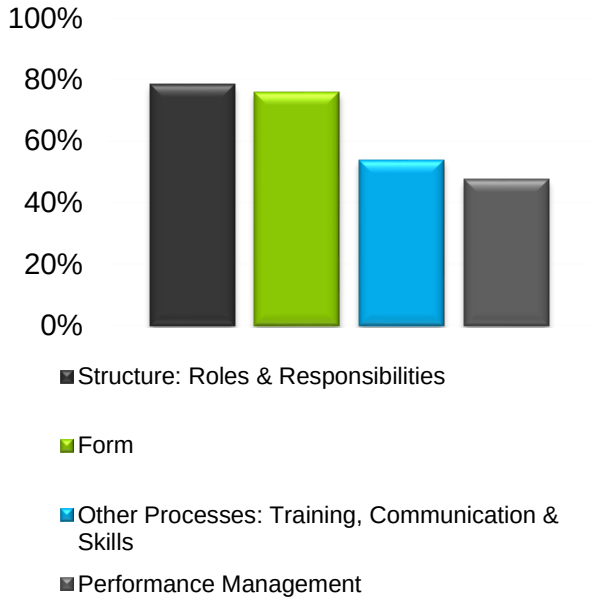

- 67% of staff believe that MSD's strategy is in line with the operating environment and that it focuses
- 53% of staff perceive that the organization have appropriate results monitoring process and adheres to rules, regulations and procedures
- 58% of MSD staff perceive that there is ownership; and commitment to high standards and quality work.

## Leadership




- 56% of MSD staff perceive that its leadership inspire and motivate towards ensuring business continuity and attaining people excellence.
- 55% of staff perceive that MSD leadership enforce compliance and reward those who embrace change.
- 55% of MSD staff perceive that the organization has focus in ensuring compliance to organization's rules and regulations, which implies high risk for the organization.
- 56% of MSD staff perceive the organization's leadership to be motivating and inspiring towards ensuring business continuity and supporting people excellence.

## Organizational Infrastructure and Management Process




- 63% of MSD staff reported to have role clarity and an effective performance management system.

# The type of culture currently at MSD may not be aligned to the strategies put in place to enhance financial performance

| The MSD MSTP II Objectives | Related Culture Dimension | Findings | Implication | Recommendations |
|---|---|---|---|---|
| **Enhance financial performance** | ✓ **Focus on Customer:** Striving to meet or exceed customers' expectations<br>✓ **Strategic Context:** understanding MSD strategic context in based on changes of the external environment | • 67% of staff believe that MSD's strategy is in line with the operating environment and that it focuses on exceeding customers' expectations. | • This level of perception might mean either MSD needed to have had higher staff involvement in the development process; or the staff don't fully understand the strategy and need it communicated differently. | • In order for the MSD to enhance its financial performance, they may need to use a different approach in communicating their strategy to broaden staff understanding which will facilitate its execution. |
| **Improve Service Delivery** | ✓ **Control:** The level of control in place to monitor results and ensure that certain standards are met<br>✓ **Conformity**: the level of compliance and adherence to the procedures, standards and rules | • 53% of staff perceive that the organization have appropriate results monitoring process and adheres to rules, regulations and procedures. | • This may be due to MSD not having adequate controls in place; or inconsistent implementation of rules and procedures. | • As the MSD has placed emphasis on improving service delivery, there is a need for an objective and comprehensive system in place to monitor results and enforce compliance in real time. Improvement in this cultural dimension will have a positive impact on at least 3 of the 9 strategic objectives. |
| **Improve work environment** | ✓ **Commitment to Result:** Striving to achieve high standards and quality in all aspects of work<br>✓ **Action Oriented:** A drive to get things done and take initiative to achieve desired results<br>✓ **Accountability:** The need to take responsibility for one's own success and feel a sense of ownership for one's work/job | • 58% of MSD staff perceive that there is ownership; and commitment to high standards and quality work. | • This result may be indicative of management style that creates an 'us' and 'them' mentality for the staff leading to mistrust and resisting accountability. | • In order for the MSD to improve work environment, leadership will need to explore new ways of: communicating; sharing information; delegating; and informally providing feedback on performance. In addition, implementation of a good recognition system will increase the chances of behavioral change |

# MSD leadership needs to do more to inspire and engage staff; and improve performance and compliance

| The MSD MSTP II Objectives | Related Culture Dimension | Findings and recommendations | Implication | Recommendation |
|---|---|---|---|---|
| **Improve knowledge and skills** | ✓ **Inspiring and motivating:** ensuring business continuity – people excellence | ▪ 56% of the MSD staff perceive that its leadership inspire and motivate towards ensuring business continuity and attaining people excellence. | ▪ **This response may indicate a combination of the following:**<br>▪ Challenges with the development and/or implementation of the staff training and development program;<br>▪ Perceive few opportunities for multiskilling and growth;<br>▪ Unclear on how to move along the vertical career path; and<br>▪ Inconsistent recruitment practices. | ▪ Going forward MSD leadership will need to develop a clear implementation plan for this strategic objective with performance indicators and timelines. The plan and results then have to continuously be communicated to the varied groups of staff. |
| **Improve use of technology**<br><br>**Enhance compliance** | ✓ **Focus on / Pay Attention to:** ensuring compliance and rewarding performance | ▪ 55% of staff perceive that the MSD leadership enforce compliance and reward those who embrace change. | ▪ This could result into less commitment from staff to embrace change. For example, from our interview with JSI who supported the implementation of E9, it was mentioned that resistance to technology adoption is the main reason why implementation of new technology fails in organizations. | ▪ Therefore if MSD is to realize this strategic goal, it will need to identify and reward those who are eager to embrace change in order to create a domino effect. At the same time, have zero tolerance for those who fail to comply |
| **Enhance compliance** | ✓ **Focus on / Pay Attention to:** ensuring compliance and rewarding performance | ▪ 55% of MSD staff perceive that the organization has focus in ensuring compliance to organization's rules and regulations, which implies high risk for the organization. | ▪ **This may stem from a combination of the following:**<br>▪ Lack of awareness<br>▪ Perception of inconsistent application<br>▪ Absence or ineffective punitive and reward mechanism | ▪ In order for MSD to attain high compliance and minimize risk in all areas of operations, it will need a robust monitoring system and view compliance as part and parcel of sustainability and growth at strategic level |
| **Strengthen stakeholder's relationship**<br><br>**Increase market share** | ✓ Motivate and inspire: ensuring business continuity – people excellence | ▪ 56% of MSD staff perceive the organization's leadership to be motivating and inspiring towards ensuring business continuity and supporting people excellence. | ▪ This may indicate that staff may not perceive MSD to be operating in a predictable manner; or have stable leadership including leadership pipeline. | ▪ In order for MSD to obtain this objective, it needs to implement a stakeholders' management strategy. When this is well communicated, appropriately cascaded and visibly implemented it inspires and motivates staff as there is a sense of continuity. |

# A good and consistently applied performance management system, will go a long way to help MSD achieve its strategy

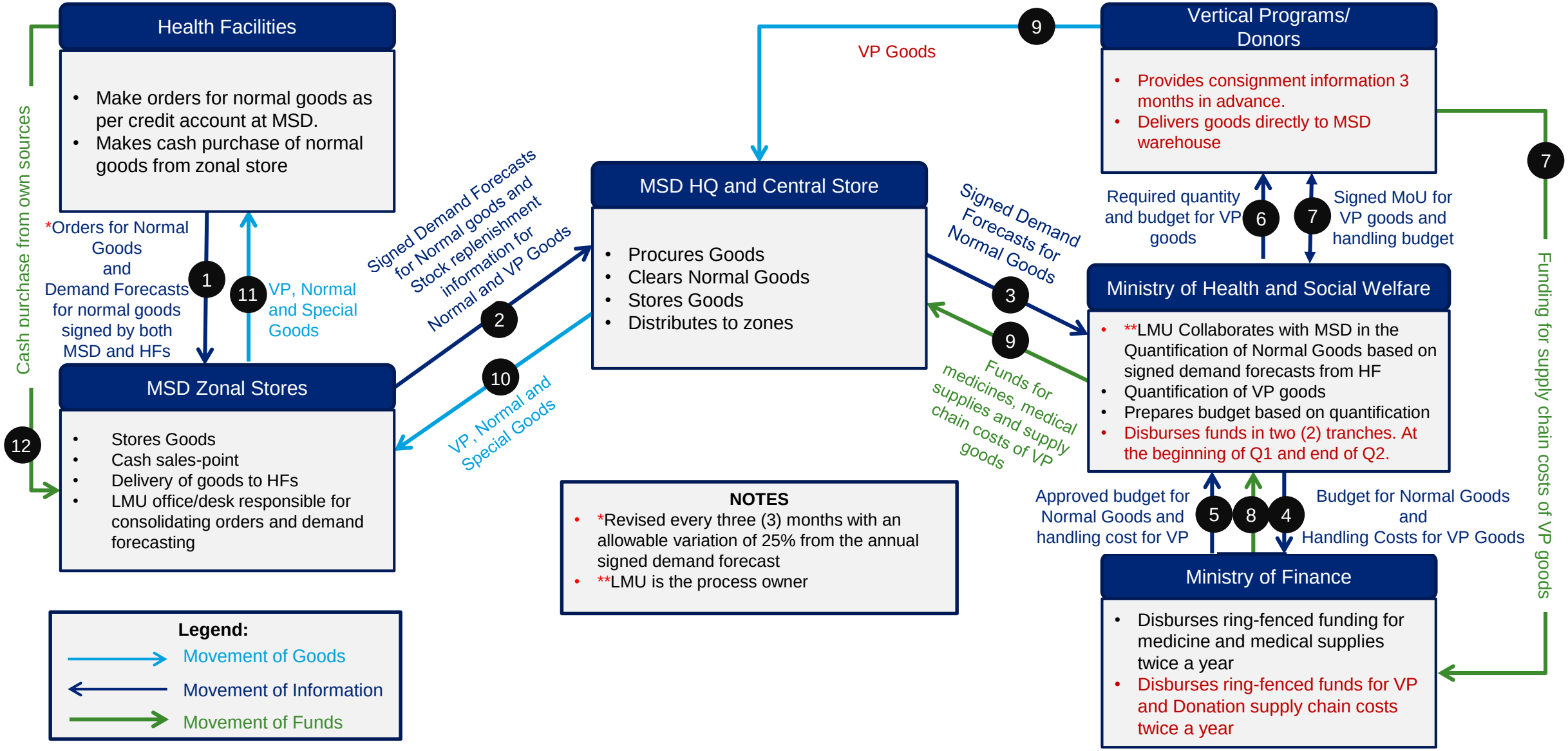
| The MSD MSTP II Objectives | Related Culture Dimension | Findings and recommendations | Implication | Recommendation |
|---|---|---|---|---|
| **Improve performance based culture** | ✓ **Structure:** Ensuring clarity of roles and responsibilities at all levels<br>✓ **Performance Management:** consistently measuring and rewarding desired behaviors and performance | • 63% of the MSD staff reported to have role clarity and an effective performance management system. | **This may stem from either:**<br>• The recent organization structure changes whereby have not yet truly assimilated into their new roles;<br>• Inadequate documentation or communication of the changes;<br>• Undiscovered duplication of roles. | • In order for the MSD to have a high chance of successfully executing MSTP II, it will need a good performance system that will inter alia: build and maintain high morale; foster team work, compliance, and innovation in service delivery. |

## Way forward

| Focus Group Sessions | Alignment with PM Framework | Alignment with the Processes |
|---|---|---|
| • MSD to conduct focus group sessions with the different groups of employees to find the underlying reason for the responses | Review the core values 'the how' of the MSD PM and see if they are adequate to building desired culture;<br><br>Ensure that these behavioral competencies are measurable and are fully incorporated in the matrices of the PM framework | Align processes to facilitate the development and sustainability of the types of behaviors MSD wants to be part of its culture |

# Contents

# Fully implementation of the afore given recommendation will translate into changes in MSD's operations model resulting into a more efficient model as presented below



# Contents

# Based on our review, we have identified the following as key KPIs for MSD's financial and supply chain operation. These KPIs should be in addition to the KPIs set by the BRN

| Strategic Pillar | KPI | What to Measure | Rationale |
|---|---|---|---|
| Financial | Gross profit (GP) margin | Profitability | GP margin analyses profitability after deducting direct costs. Its is crucial when assessing the break even point and informing pricing decisions |
| | Quick ratio | Liquidity | The ratio excludes prepayments and inventory from current assets, assuming these are not readily convertible into cash |
| | Inventory days | Efficiency | Efficiency in stock management is measured by the duration cash (working capital) is tied in stock |
| | Receivable days | Efficiency | Efficiency in managing trade debtor is determined by the duration cash (working capital) is tied in debtors |
| | Payable days | Efficiency | The level of trade creditors should reflect efficiency in managing recovery of debtors |
| | Cash conversion period | Efficiency | The cycle (in terms of days) taken to convert inventory into cash and settling creditors should be as short as possible. This vary from industry to industry |
| **Strategic Pillar** | **KPI** | **What to Measure** | **Rationale** |
| Supply Chain | Order fulfillment rate | Efficiency | A measure of quality of services. It will help understand the level at which customer needs and demands are fulfilled. |
| | Storage space utilization | Efficiency | It will help determine the % of warehouse space utilized for value-added warehouse processes. |
| | Customer satisfaction rate | Efficiency | To gauge the overall satisfaction with the service customers received from MSD using survey questions that are graded on a pre-determined scale ranging from "very dissatisfied" to "very satisfied." |
| | % stock availability | Efficiency | Determining the current availability of the product. This measures the % of stock items that are in-stock |
| | % adherence of suppliers to SLAs | Efficiency | Measure for suppliers' ability to deliver orders on agreed schedule.<br>• (# Orders Received on Time / Total # of Supplier Orders )*100<br>• # On time shipments / Total shipments |
| | Order turn around time | Efficiency | It measure the average elapsed time from when the customer order is received to actual delivery. This will help understand efficiency is MSD in meeting customer orders. |
| | Complaint resolution cycle | Efficiency | A measure of the average period between complaint submission and solution |

# Contents

# Recruitment of the Results Management Office (RMO) should the first step to ensure effective planning and coordination of the implementation process

| | Task | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 | 6 to 12 Months | > 1 year | Responsible Institution |
|---|---|---|---|---|---|---|---|---|---|---|
| Governance | **1 MSD should have legal mandate to make strategic decisions and operate commercially to enable it become financially independent** | | | | | | | | | |
| | • Transform MSD to an Authority | | | | | | | | ▬ | MoHSW |
| | • Set term limits for Director to be re-appointed to the Board | | | | | | | | ▬ | MoHSW |
| | **2 Improve skills – mix within the Board** | | | | | | | | | |
| | • Competitive recruitment of Board members | | ▬ | ▬ | | | | | | MoHSW |
| | **3 Strengthen the Board Charter** | | | | | | | | | |
| | • Develop Board Charters for each Board committee | | ▬ | ▬ | | | | | | MSD |
| | • Annual performance review of the Board | | | | | | | ▬ | | MSD |

# Recruitment of the Results Management Office (RMO) should the first step to ensure effective planning and coordination of the implementation process (Cont…)

| | Task | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 | 6 to 12 Months | > 1 year | Responsible Institution |
|---|---|---|---|---|---|---|---|---|---|---|
| Supply Chain | **4 Improve coordination between Procurement and Logistics directorates so as to boost stock and order visibility** | | | | | | | | | |
| | • Conduct inter-departmental coordination meetings within MSD | | | | | | | | | MSD |
| | • Fast tracking of bar coding systems to enable real-time visibility of stock data | | | | | | | | | MSD |
| | **5 The Logistics Management Unit (LMU), and MSD should work closely to improve communication around management of VPs** | | | | | | | | | |
| | • MSD commitment and participation in the technical working groups to be reinforced | | | | | | | | | MSD |
| | • Define performance targets for LMU for efficient management of the flow of VP goods | | | | | | | | | MoHSW |
| | **6 Undertake a holistic supply chain system review** | | | | | | | | | |
| | • ***Review key performance metrics for the entire supply chain processes from planning to final delivery | | | | | | | | | MSD |
| | **7 Minimize stock out occurrences** | | | | | | | | | |
| | • Adequate allocation and timely disbursements of funds inline with demand estimations | | | | | | | | | MoHSW |
| | • Timely payments to suppliers to avoid delivery delays | | | | | | | | | MSD |
| | **8 Improve stakeholder management** | | | | | | | | | |
| | • Develop a stakeholder engagement strategy | | | | | | | | | MSD |

# Recruitment of the Results Management Office (RMO) should the first step to ensure effective planning and coordination of the implementation process (Cont…)

| | Task | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 | 6 to 12 Months | > 1 year | Responsible Institution |
|---|---|---|---|---|---|---|---|---|---|---|
| Finance | **9 Institute a mechanism for MSD to generate additional sources of funds to reduce overdependence on Government funding** | | | | | | | | | |
| | • Coordination between MoHSW, MSD and PMO-RALG for MSD to tap into funds from LGAs | | | | | | | | | MoHSW |
| | • Sale medicines to private health facilities under clear guidelines from MoHSW | | | | | | | | | MoHSW |
| | **10 Actively initiate preparations for universal health-care** | | | | | | | | | |
| | • Assess the feasibility of Universal Health Care | | | | | | | | | |
| | **11 Revision of the current fee structure to cover operational expenses** | | | | | | | | | |
| | • Undertake activity based costing | | | | | | | | | MSD |
| | **12 Develop inter-agency agreements to fast-track clearance of the MSD goods** | | | | | | | | | |
| | • Agreement with relevant authorities to fast track clearance of MSD goods | | | | | | | | | MoHSW |
| | • Agreement with Government to remove VAT on MSD medicine and medicine supplies | | | | | | | | | MoHSW |
| | **13 Clearance of the current Government receivables** | | | | | | | | | MoHSW |
| | **14 Upfront disbursement of funds in a maximum of two tranches** | | | | | | | | | MoHSW |

# Recruitment of the Results Management Office (RMO) should the first step to ensure effective planning and coordination of the implementation process (Cont…)

| | Task | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 | 6 to 12 Months | > 1 year | Responsible Institution |
|---|---|---|---|---|---|---|---|---|---|---|
| Finance | **15 Prevent Future accumulation of Government receivables** | | | | | | | | | |
| | • Inclusion and ring–fencing of adequate budget for VP clearing, storage and distribution costs | | | | | | | ■ | | MoHSW |
| | • Instituting a delivery-duty-paid policy for all VP goods | | | | | | | ■ | | MoHSW |
| | • Enforcing the cash-and-carry policy at MSD | | | | | | | ■ | | MSD |
| | • Maintaining adequate documentation at MoHSW and performing monthly reconciliations of the Government receivable between MoHSW and the MSD | | ■ | | | | | | | MoHSW |
| | • Enforce implementation of the donation guideline | | ■ | | | | | | | MoHSW |
| Technology | **16 Conduct detailed Post Implementation Review of E9** | | | | | | | | | MoHSW |
| | • Assess feasibility to upgrade to E10 comparing specific gaps | | | ■ | ■ | ■ | | | | MSD |
| | • Engage vendor to remediate critical system bugs and put controls to address data integrity issues identified in post implementation review | | | | | | | ■ | ■ | MSD |
| | **17 Implement Service Level Agreements between ICT, the business and vendors** | | | | | | | | | |
| | • Negotiate and agree SLAs with the Business | | | | | | | ■ | | MSD |
| | • Urgently establish annual contract for customization support with vendor | | ■ | ■ | | | | | | MSD |
| | • Ensure that IT Service Management processes, Operating Level Agreements (OLAs) and Underpinning Contracts (UCs) support end-to-end service targets | | | | | | | ■ | | MSD |

# Recruitment of the Results Management Office (RMO) should the first step to ensure effective planning and coordination of the implementation process (Cont…)

| | Task | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 | 6 to 12 Months | > 1 year | Responsible Institution |
|---|---|---|---|---|---|---|---|---|---|---|
| Technology | **18 Complete roll-out of Barcode Smart Readers to all warehouses** | | | | | | | | | |
| | • Enforce system usage to reduce manual entry to mitigate data integrity issues | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | MSD |
| | **19 Improve budget formulation and tracking** | | | | | | | | | |
| | • The ERP should be configured to support budgeting system | | | | | | | ■ | ■ | MSD |
| People | **20 Strengthen the performance management frameworks at MSD to improve staff performance in implementing the organizational strategy** | | | | | | | | | |
| | • Alignment of MSD's organizational strategic goals with staff performance goals | | | ■ | ■ | ■ | | | | MSD |
| | • Institute a consistent approach to cascade and measure staff performance goals at all levels within MSD | | | ■ | ■ | ■ | | | | MSD |
| | • Develop and institute a reward and recognition system which is aligned with the performance management framework at MSD | ■ | ■ | | | | | | | MSD |
| | • Enhance accountability in performance management process | | | | | | ■ | ■ | ■ | MSD |
| | **21 Set clear performance expectations between MoHSW and MSD** | | | | | | | | | |
| | • Define clear performance targets for MSD linked to the MoHSW's expectations of the Department | | | ■ | ■ | | | | | MoHSW |
| | • Improve accountability of the LMU Unit by developing and instituting clear KPIs for the LMU in coordinating work between MSD and the MoHSW | ■ | ■ | | | | | | | MoHSW |

# Contents

# Appendices

# Background information

# Documents reviewed

The key objective for our review of documents was to understand the MSD's current strategic aspirations, success and challenges with regards to MSD operations

## List of documents reviewed

1. MSD medium Terms Strategic Plan II 2014 - 2020
2. MSD Act
3. Assessment if MSD Direct Delivery system
4. Strategic Review of the National Supply Chain for Health commodities
5. USAID/JSI costing study
6. Guidelines for medicines and medicine suppliers Donations for Tanzania Mainland
7. BRN reports
8. Internal Audit reports
9. Audited Financial Reports
10. Management Quarterly performance Reports for 3 yrs (2013, 2014, 2015)
11. Fee Service and Pricing Structure Documents
12. Staff Performance Management Reports
13. Epicor 9 system architecture
14. Epicor 9 documentation – features documentation, user guide and work instructions for different departments
15. eLMIS documentation
16. LAN/WAN setup plan
17. MSD ERP assessment of March 2009
18. MSD fee structure breakdown (current and proposed)

## List of documents reviewed

19. MSD Expenditure Breakdown
20. Orion audit report of September 2008
21. Downtime statistics report of July-September 2015
22. A list of working E9 reports for different departments
23. ATS contract & TOR with EPICOR
24. Donation guideline
25. MSD inventory and stores management reports
26. Supply Planning Section Reports
27. MSD Fleet management
28. Performance reports on the end to end procurement process
29. MoHSW MoUs with various programs
30. MoHSW Budget items for FY 14/15
31. MSD Supply chain review reports
32. Documentation on zonal distribution planning
33. DSM Zonal Stores Distribution Calendar
34. MSD Board meeting minutes;
35. VP program managers meeting minutes
36. Cycle Count Calendar; (if applicable); and
37. ILS operation manual

**Focus Areas of the documentation review**

- **Strategic Direction**
- **Key gaps and challenges**
- **Identified Required Capabilities**
- **Gaps and recommendations**

# Stakeholders interviewed

## Our team spoke to multiple stakeholders in order to understand their views on the bank's current operations

### List of internal interviewees

1. Board Chair and Board Members (8)
2. Director General;
3. Director/Officers of Human Resources and Administration
4. Director/Officer of ICT
5. Director/officers of Finance & Planning
6. Director/officers of Procurement
7. Director, and managers of Customer Service and Zonal Operations
8. Director/officers of Logistics
9. Head of Legal Unit
10. Head of Public Relations
11. Head of Quality Assurance Unit
12. Head of Audit Unit
13. Database Development Section manager
14. Network and System Section manager
15. Financial Accounting Section manager
16. Management Accounting Section manager
17. Stock and Verification Section manager
18. Operation Officer for EPICOR system
19. Head of Internal Audit Unit
20. Warehouse Section manager
21. Vertical Program Section manager
22. Supply Planning Section manager
23. Procurement manager- Supporting Service
24. Procurement Section manager – Laboratory items
25. Procurement Support Services Section manager
26. Clearing and Forwarding Section manager
27. Contracting Compliance manager
28. Dar es Salaam Zonal Stores manager
29. Demand and Planning Section manager
30. Mtwara and Mwanza Zonal Stores managers

### List of external interviewees

1. MSD customers (Dar Es Salaam, Mwanza and Mtwara)
2. Ministry of Health and Social Welfare (MoHSW)
3. Vertical Programe Managers
4. Ministry of Finance – Government Treasurer
5. JSI
6. MSD suppliers (4)
7. Big Results Now (BRN)
8. E- Government
9. Ministry of Finance (MoF)

**Focus Areas of the stakeholders interview**

- **MSD performance**
- **Improvement areas**
- **Required Capabilities**
- **Recommendations**
- **MSD Leadership capabilities**

# Supply chain

# Expired goods FY14/15

**Value of Expired Stock Normal – All Locations**

| Location | Value in tzs | Value in % |
|---|---|---|
| Dodoma zone | 1,655,659 | 0.1% |
| Dar zone | 678,794,188 | 50.3% |
| Hq -keko | 388,160,137 | 28.8% |
| Iringa zone | 24,871,344 | 1.8% |
| Mbeya zone | 35,175,622 | 2.6% |
| Muleba sales point | 31,009,786 | 2.3% |
| Moshi zone | 43,430,333 | 3.2% |
| Mtwara zone | 43,765,051 | 3.2% |
| Mwanza zone | 49,252,369 | 3.6% |
| Tabora sales point | 36,468,743 | 2.7% |
| Tanga zone | 7,293,043 | 0.5% |
| Hq-ubungo | 10,224,913 | 0.8% |
| Grand total | 1,350,101,189 | 100.0% |

**Value of Expired Stock Vertical Program – All Locations**

| Location | Value in tzs | Value in % |
|---|---|---|
| Dodoma | - | 0.0% |
| Dar es salaam | 1,587,959,256 | 66.2% |
| Hq-keko | 316,760,122 | 13.2% |
| Iringa | 55,102,380 | 2.3% |
| Mbeya | 45,925,887 | 1.9% |
| Muleba – sales point | 5,925,687 | 0.2% |
| Moshi | 48,729,469 | 2.0% |
| Mtwara | 5,376,277 | 0.2% |
| Mwanza | 117,993,021 | 4.9% |
| Tabora | 57,127,674 | 2.4% |
| Tanga-sales point | 467,835 | 0.0% |
| Hq-ubungo | - | 0.0% |
| Hq-wib | 159,149,755 | 6.6% |
| Grand total | 2,400,517,363 | 100.0% |

# Snapshot of DOS goods FY14/15

| Dos | Description | Uom | Qty | Total value in DOS |
|---|---|---|---|---|
| Dormant | Ethyladiamine tetra acetic acid + sodium | 1kg | 84 | 843,274 |
| Dormant | Acetic acid glacial | 2.5l | 80 | 730,113 |
| Dormant | Pottasium ferocynide | 500ml | 46 | 262,016 |
| Dormant | Methylene blue | 50g | 57 | 211,789 |
| Dormant | Leishmans stains | 25g | 9 | 83,466 |
| Dormant | Sodium citrate | 500ml | 18 | 44,344 |
| Dormant | Eosin bluish | 50g | 10 | 20,000 |
| Dormant | Ferric chloride | 500g | 2 | 10,402 |
| Dormant | Sodium tungstate | 25g | 3 | 10,140 |
| Obsolete | Volumetric pipettes 50mls | Each | 351 | 2,864,020 |
| Obsolete | Cassettes for x-ray films 30cm x 24cm,mounted with intensifying screen green sensitive | Each | 2 | 216,115 |
| Obsolete | Bijou bottles | Each | 173 | 85,066 |
| Obsolete | Bottle reagents 250 mls | Each | 36 | 82,070 |
| Obsolete | Test tube size 15cm | Each | 90 | 27,803 |
| Obsolete | Beaker 50mls | Each | 39 | 22,975 |
| Slowm | DISPOSABLE MACKINTOSH (UNDERPADS) , SIZE 60cm x 90cm | 20pc | 5,221 | 37,615,511 |
| Slowm | Thiopental pdr f inj 500 mg | 25vl | 151 | 14,768,354 |
| Slowm | Suction pump foot/hand operated 600ml (twin) | Each | 12 | 3,808,232 |
| Slowm | Forceps sterilizer bowl 25 cm | Each | 122 | 1,129,366 |
| Slowm | Scissor dissecting ss sharp point straight 17.5 cm | Each | 74 | 915,576 |
| Slowm | Ferrous sulphate + folic acid tablets 200+0.25 mg | 1000tb | 19 | 284,195 |

# Finance

# Budget variance analysis

## Budget variance analysis

| | Management accounts | | | Budgeted | | | Variance analysis | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TSZ m | FY12/13 | FY13/14 | FY14/15 | FY12/13 | FY13/14 | FY14/15 | FY12/13 | | FY13/14 | | FY14/15 | |
| **Revenues** | | | | | | | | | | | | |
| Normal business | 68,772 | 87,445 | 84,847 | 88,500 | 86,240 | 74,376 | (19,728) | Delayed disbursement of funds from MoHSW | 1,205 | Increase in other funds from District Councils | 10,471 | |
| Special procurement | 16,846 | 10,312 | 7,303 | 9,500 | 18,000 | 52,488 | 7,346 | | (7,688) | Delays and decrease in funds availability by health centres | (45,185) | Challenges of timelines of order submission by zones. Orders are dependent on fund availability from other sources. |
| Vertical program | 148,991 | 69,801 | 75,188 | 105,625 | 110,138 | 97,042 | 43,366 | Increased in donations | (40,337) | Delayed and non remittance of funds from donors | (21,854) | Controlled by donated products funds releases |
| **Total sales** | **234,609** | **167,558** | **167,338** | **203,625** | **214,378** | **223,906** | **30,984** | | **(46,820)** | | **(56,568)** | Attributed by VP and SP issues |
| **Cost of sales** | | | | | | | | | | | | |
| Normal sales | 58,994 | 70,053 | 60,726 | 74,948 | 70,912 | 63,583 | (15,954) | Delayed disbursement of funds from MoHSW | (859) | Price fluctuation | (2,857) | |
| Special procurement | 15,337 | 7,580 | 6,523 | 7,997 | 14,801 | 43,566 | 7,340 | | (7,221) | | (37,043) | Challenges of timelines of order submission by zones. |
| Vertical program | 130,138 | 47,464 | 60,476 | 88,910 | 91,098 | 80,545 | 41,228 | Increased in donations | (43,634) | Delayed and non remittance of funds from donors | (20,069) | |
| Total cost of sales | 204,469 | 125,097 | 127,725 | 171,855 | 176,811 | 187,694 | 32,614 | | (51,714) | | (59,969) | |
| **Total gross margin** | **30,142** | **42,461** | **39,613** | **31,770** | **37,568** | **36,213** | **(1,628)** | | **4,893** | | **3,400** | |
| Net income from services | 2,625.0 | 4,007 | 9,770 | 9,409 | 9,844 | 5,640 | (6,784) | | (5,837) | | 4,130 | Increased specific services by donors |
| **Direct expenses** | | | | | | | | | | | | |
| Packing costs | (1,125) | (1,033) | (1,280) | (1,041) | (1,041) | (1,143) | (84) | Low sales due to late disbursement of funds | 8 | | (137) | Increased normal business |
| Distribution costs | (4,318) | (5,553) | (4,609) | (7,871) | (6,136) | (5,503) | 3,553 | | 583 | | 894 | Decrease of fuel prices and volume of supplies |
| **Contribution** | **27,324** | **39,882.0** | **43,494** | **32,267** | **40,235** | **35,207** | **(4,943)** | | **(353)** | | **8,287** | |

# Budget variance analysis

## Budget variance analysis

| TSZ m | Management accounts FY12/13 | Management accounts FY13/14 | Management accounts FY14/15 | Budgeted FY12/13 | Budgeted FY13/14 | Budgeted FY14/15 | Variance analysis FY12/13 | | Variance analysis FY13/14 | | Variance analysis FY14/15 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **General expenses** | | | | | | | | | | | | |
| Personnel | 13,771 | 15,535 | 15,345 | 13,778 | 18,557 | 16,997 | (7) | | (3,022) | No recruitment done due to cash constraints | (1,652) | No recruitment done due to cash constraints |
| Board of Trustees | 258 | 596 | 559 | 433 | 838 | 803 | (175) | | (242) | Not implemented due to shortage of fund | (244) | Less board visits |
| Training and recruitment | 910 | 1,501 | 614 | 1,347 | 1,426 | 544 | (437) | Increased overseas training | 75 | Increased overseas training | 70 | Warehouse and ERP system trainings |
| Sales and marketing | 1,052 | 798 | 874 | 1,389 | 1,115 | 694 | (337) | | (317) | Postponed implementation of activities owing to cash flow constraints | 180 | Media coverage and response |
| Services and utilities | 5,856 | 8,252 | 8,521 | 5,678 | 6,401 | 7,365 | 178 | Increase electricity costs for warehouses | 1,851 | Increase electricity for warehouses and rent | 1,156 | Increase electricity costs |
| Office and general | 4,152 | 5,305 | 5,120 | 6,285 | 7,097 | 5,577 | (2,133) | | (1,792) | Some activities not implemented | (457) | |
| Provision of bad debts | - | - | 4,000 | - | - | - | - | | - | | 4,000 | |
| Depreciation | 2,313 | 2,026 | 5,822 | 1,842 | 2,026 | 2,100 | 471 | | - | | 3,722 | Accounting provision due to deprecation |
| **Total general expenses** | **28,312** | **34,013** | **40,855** | **30,752** | **37,460** | **34,080** | **(2,440)** | | **(3,447)** | | **6,775** | |
| **Operating results** | **(988)** | **5,869** | **2,639** | **1,515** | **2,775** | **1,127** | **(2,503)** | | **3,094** | | **1,512** | Cost control and procumbent savings |
| **Finance costs** | | | | | | | | | | | | |
| Finance income and bank interest | 1,600 | 396 | 146 | 803 | 803 | 900 | 797 | | (407) | Low deposit | (754) | Lower interest issued by banks and currency fluctuations |
| Exchange difference | - | - | 53 | 60 | 60 | - | (60) | | (60) | | 53 | |
| Gain/(loss) on disposal | 2,490 | 148 | 1 | 10 | 10 | - | 2,480 | | 138 | | 1 | |
| **Total finance costs** | 4,090 | 544 | 200 | 873 | 873 | 900 | 3,217 | | (329) | | (700) | |
| **Net operating results** | **3,102** | **6,413** | **2,839** | **2,388** | **3,648** | **2,027** | **714** | | **2,765** | | **812** | Cost cutting and increased normal business |

Source: Management information

# Inventory breakdown

## Inventories and consumables

| TZS m | FY12/13 | FY13/14 | FY14/15 | % CAGR 2013-15 |
|---|---|---|---|---|
| Catalogue stock | 59,348 | 88,028 | 82,317 | *18%* |
| Special procurement stock | 259 | 777 | 934 | *90%* |
| Lubricant, tyres & spare | 91 | 62 | 273 | *73%* |
| Cold chain equipment | 64 | 59 | 77 | *9%* |
| Packaging materials | 446 | 52 | 126 | *-47%* |
| Stationery & office supplies | 218 | 277 | 224 | *1%* |
| Other stock | 3,251 | 4,765 | 1,631 | *-29%* |
| Less: Provision for obsolete | (1,291) | (8,701) | (10,534) | *186%* |
| **Total** | **62,386** | **85,319** | **75,047** | |

Source: FY13 and FY14 AFS and FY15 management accounts

# Estimated working capital requirements

## Estimated working capital requirements

| TZS m | FY12/13 | FY13/14 | FY14/15 | Average |
|---|---|---|---|---|
| Inventory | 102,532 | 66,175 | 54,063 | **74,256** |
| Receivables | 9,616 | 6,914 | 6,599 | **7,710** |
| Payables | (17,089) | (11,029) | (9,010) | **(12,376)** |
| **Total** | **95,060** | **62,060** | **51,651** | **69,590** |
| **Current average** | **93,402** | **111,530** | **104,608** | **103,180** |
| **Estimated deficit/(surplus)** | **1,658** | **(49,470)** | **(52,957)** | **(33,590)** |

Source: Deloitte analysis and management information

## Commentary

- The table above highlights the MSD's estimated working capital requirements based on the target working capital KPI's highlighted below:

### MSD's working capital KPIs

| | Target | FY14/15 |
|---|---|---|
| Inventory days | 180 | 250 |
| Receivable days | 15 | 260 |
| Payable days | 30 | 282 |
| **Cash conversion cycle** | **165** | **228** |

Source: Management information

- When compared to the target levels, the MSD actual working capital position was higher resulting increased cash being tied in receivables and inventory.
- The MSD's average target net working capital position during the analysis period was TZS 69bn (USD 34m) against an actual average position of TZS 103bn (USD 50m) implying that the entity's working capital gap was estimated at TZS 33bn (USD 16m).
- As a result, the MSD faced cash flow constraints and was unable to effectively operate as discussed in earlier sections of this report.
- Our recommendations on settling the current debt would address the working capital gap by Government settle its debt and in turn enabling the MSD distribute inventory and settle its creditors.

# Clearing and forwarding costs

## Clearing and forwarding costs breakdown

| TZS m | FY12/13 | FY13/14 | FY14/15 | % CAGR FY13-FY15 | % of total FY13 | % of total FY14 | % of total FY15 |
|---|---|---|---|---|---|---|---|
| Importation Costs | 2,685 | (1,607) | (1,156) 1 | *n/a* | 125% | -27% | -42% |
| Bank Costs Normal Business | 3 | 71 | 40 | *266.6%* | 0% | 1% | 1% |
| Bank Costs Special Business | - | 2 | - | *n/a* | 0% | 0% | 0% |
| Bank Costs Vertical Business | 15 | - | - | *(100.0%)* | 1% | 0% | 0% |
| Inspection Costs Normal Business | 1 | 283 | 102 | *950.0%* | 0% | 5% | 4% |
| Inspection Costs Special Business | - | 6 | 4 | *n/a* | 0% | 0% | 0% |
| Inspection Costs Vertical Business | 55 | 1,878 2 | 350 | *152.8%* | 3% | 32% | 13% |
| Marine Insurance Vertical Business | - | 331 | 179 | *n/a* | 0% | 6% | 6% |
| Clearing & Forwarding Normal Business | (1,313) 1 | 459 | 132 | *n/a* | -61% | 8% | 5% |
| Clearing & Forwarding Special Business | 0 | 2 | 1 | *49.2%* | 0% | 0% | 0% |
| Clearing & Forwarding Vertical P Business | 372 | 835 2 | 401 | *3.9%* | 17% | 14% | 15% |
| Storage And Demurrage - Normal Business | 18 | 2,185 3 | 1,022 | *651.4%* | 1% | 37% | 37% |
| Storage And Demurrage Special Business | - | - | (1) | *n/a* | 0% | 0% | 0% |
| Storage And Demurrage - Vertical Business | 100 | 995 2 | 2,025 2 | *349.3%* | 5% | 17% | 73% |
| Transport Port To Msd Normal Business | - | 412 | 263 | *n/a* | 0% | 7% | 10% |
| Transport Port To Msd Special Business | - | - | 18 | *n/a* | 0% | 0% | 1% |
| Transport Port To Msd Vertical Business | 75 | 45 | 33 | *(33.7%)* | 4% | 1% | 1% |
| Import Duty Costs Normal Business | - | 0 | (130) 1 | *n/a* | 0% | 0% | -5% |
| Import Duty Vertical Business | (4) | 6 | - | *(100.0%)* | 0% | 0% | 0% |
| Vat Normal Business | - | - | (539) 1 | *n/a* | 0% | 0% | -20% |
| Vat Vertical Program | 12 | - | - | *(100.0%)* | 1% | 0% | 0% |
| Excise Duty Normal Business | - | 1 | - | *n/a* | 0% | 0% | 0% |
| Distribution Services | 78 | 2 | - | *(100.0%)* | 4% | 0% | 0% |
| Transport Services | 45 | 1 | 18 | *(36.1%)* | 2% | 0% | 1% |
| Clearing And Forwarding Services | 4 | - | - | *(100.0%)* | 0% | 0% | 0% |
| Storage Services | 1 | - | - | *(100.0%)* | 0% | 0% | 0% |
| Cost of Free Issues | - | - | 0 | *n/a* | 0% | 0% | 0% |
| **Total clearing and forwarding costs** | **2,146** | **5,906** | **2,761** | ***13.4%*** | 100% | 100% | 100% |

Source: Management information

## Commentary

1. Please note that the negative amounts are as a result of over recoveries of importation costs whenever service fees are generated. These mostly affect normal business since most stock purchases relate to essential business. This implies that the MSD charges more than it spends on importation charges.

2. Increased inspection costs and clearing and forwarding costs due to delays in clearing of stock as a result of cash flow constraints.

3. Delays in clearing essential stock also attributed to cash flow constraints.

# VP consignments (resulting from unplanned donations) at the port as at 30 June 2015

**Consignments at the port as at 30 June 2015**

| | Date of receipt of shipping documents | Description of consignments | Currency | Invoice amount | Number of delays days from ship arrival 30 May 2015 | No of containers | Owner | Charges | | | Total | Status as on 18 August 2015 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Inland Container Depots charges | Tanzania Port Authority charges | Demurrage charges | | |
| 1 | 13-Apr-15 | Syringes and safety boxes from UNICEF | USD | 430,823 | 129 | 8 | MOHSW - RCH | 181,136,640 | 16,068,818 | 56,605,200 | **253,810,658** | Customs process not completed. Clearance expected w eek starting 24th, August 2015 |
| 2 | 4-Nov-13 | Safety boxes - 5 LTR | EUR | 22,533 | 1,363 | 1 | EPI | 189,904,064 | 953,056 | 42,389,300 | **233,246,420** | Documents w ere misplaced at UNICEF. Effort to seek for w aiver on demurrage and storage w as pursued. Shipping line offered 50% and ICD (AMI) issued 30%. TRA offered 100% on w arehouse rent. |
| 3 | 19-Mar-14 | Medical Devices (Donation from project hope) | USD | 1,002,803 | 462 | 1 | MOHSW (Project Hope) | 81,090,240 | 5,676,077 | 24,327,072 | **111,093,389** | Clearing process completed but no funds to pay ICD, w arehouse rent and TPA charges. |
| 4 | 19-Feb-15 | X-ray equipment from Phillips | USD | 348,000 | 189 | 2 | MOHSW | 66,346,560 | 12,979,704 | 19,903,968 | **99,230,232** | Customs process completed. No funds to pay ICD, Warehouse rent and TPA charges; and DO fees charge USD 404.84 |
| 5 | 14-Aug-14 | Medical supplies & drugs (Donation from Project Hope) | USD | 967,861 | 366 | 1 | MOHSW (Project Hope) | 64,240,320 | 5,676,077 | 19,272,096 | **89,188,493** | Clearing process completed but no funds to pay ICD, w arehouse rent and TPA charges. |
| 6 | 23-Mar-15 | Medical devices | USD | 313,792 | 147 | 2 | MOHSW (Coca-Cola) | 51,602,880 | 11,703,817 | 16,125,900 | **79,432,597** | Customs process completed but no funds for further clearance. Efforts are being pursued by MOHSW and Donor (Azam) to solicit funds. |
| 7 | 5-Nov-13 | Medicaments and Medical devices (Chinese Donation) | USD | 79,412 | 655 | 1 | MOHSW (Chinese) | 57,482,800 | - | 17,244,840 | **74,727,640** | Clearing process completed but no funds to pay ICD, w arehouse rent and TPA charges. |
| 8 | 10-Apr-15 | Safety boxes from Unicef | USD | 79,424 | 123 | 3 | MOHSW - RCH | 53,972,400 | 2,962,356 | 16,731,444 | **73,666,200** | Customs process completed and release order obtained. Funds for clearing charges received at MSD clearing unit on mid August. Clearance expected during the w eek starting 24 August 2015 |
| 9 | 5-Jun-14 | Medicine granules (Chinese donation for Muhimbili) | USD | 47,059 | 570 | 1 | MOHSW (Chinese) | 50,023,200 | 1,565,337 | 15,006,960 | **66,595,497** | Clearing process completed but no funds to pay ICD, w arehouse rent and TPA charges. |
| 10 | 30-Apr-15 | Medical supplies | USD | 331,140 | 110 | 2 | MOHSW (Coca-Cola) | 38,614,400 | 12,350,859 | 12,067,000 | **63,032,259** | Customs process completed but no funds for further clearance. Efforts are being pursued by MOHSW and Donor (Azam) to solicit funds. |
| 11 | 5-Jun-15 | Medical supplies | USD | 481,052 | 56 | 3 | MOHSW (Coca-Cola) | 29,487,360 | 17,942,273 | 9,214,800 | **56,644,433** | Customs process completed but no funds for further clearance. Efforts are being pursued by MOHSW and Donor (Azam) to solicit funds. |
| 12 | 4-Jun-15 | Syringes | USD | 135,554 | 67 | 3 | MOHSW | 35,279,520 | 5,055,878 | 11,024,850 | **51,360,248** | Customs Process completed. No funds for further processes including DO fee charges |
| 13 | 13-May-15 | Syringes | USD | 91,237 | 96 | 2 | MOHSW - EPI | 33,699,840 | 3,402,943 | 10,531,200 | **47,633,983** | Customs Process completed and ICD,TPA collected and applied. No fund |
| 14 | 19-Feb-15 | Amoxicillin and ORS zinc (diarrhoea KIT) | USD | 25,152 | 196 | 1 | MOHSW - RCH | 34,401,920 | 938,125 | 10,320,576 | **45,660,621** | Customs process completed. Funds for clearing charges received at MSD clearing unit on mid August. Clearance expected w eek starting 24 August 2015 |

# VP consignments (resulting from unplanned donations) at the port as at 30 June 2015

**Consignments at the port as at 30 June 2015**

| | Date of receipt of shipping documents | Description of consignments | Currency | Invoice amount | Number of delays days from ship arrival 30 May 2015 | No of containers | Owner | Charges | | | Total | Status as on 18 August 2015 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Inland Container Depots charges | Tanzania Port Authority charges | Demurrage charges | | |
| 15 | 4-Jun-15 | Medical supplies | USD | 119,097 | 66 | 2 | MOHSW (Coca-Cola) | 23,168,640 | 4,442,097 | 14,480,400 | **42,091,137** | Customs process not completed but not collected due to non payment of demurrage charges. |
| 16 | 8-Jul-15 | Medical Supplies | USD | 377,981 | 35 | 3 | MOHSW (Coca-Cola) | 18,429,600 | 14,097,939 | 5,759,250 | **38,286,789** | Customs process not completed. VAT 220 forms for VAT exemption submitted to TRA and rejected due to non availability of valid MOU. |
| 17 | 20-Nov-14 | Amoxicillin tablets for oral suspension 250mg | USD | 80,862 | 270 | 1 | MOHSW - RCH | 23,695,200 | 3,015,982 | 7,108,560 | **33,819,742** | Clearing process completed. Funds for clearing were received at MSD clearing unit on mid August and clearance expected on 20th August 2015 |
| 18 | 8-Jul-15 | Medical Supplies | USD | 308,931 | 37 | 2 | MOHSW (Coca-Cola) | 12,988,480 | 11,522,506 | 4,058,900 | **28,569,886** | Customs process not completed. VAT 220 forms for VAT exemption submitted to TRA and rejected due to non availability of valid MOU. |
| 19 | 29-Dec-14 | Medicine and Medical Devices (Donation from Chinese) | USD | 79,412 | 224 | 1 | MOHSW (Chinese) | 19,658,240 | 2,961,900 | 5,897,472 | **28,517,612** | TFDA originally rejected to issue permit in addition to lack of funds. Permit was finally obtained on 18 June 2015. Customs process not completed. |
| 20 | 4-Feb-15 | Office machines from Korea | USD | 48,800 | 193 | 1 | MOHSW | 16,937,680 | 1,820,142 | 5,081,304 | **23,839,126** | Customs process completed. Waiting fund to pay wharfage, storage and demurrage charges |
| 21 | 11-Aug-15 | Syringes & Safety boxes | USD | 154,153 | 12 | 3 | MOHSW (TB) | 6,318,720 | 5,749,583 | 1,974,600 | **14,042,903** | New consignment for TB |
| 22 | 26-Mar-15 | Syringes | USD | 9,847 | 112 | 1 | MOHSW - EPI | 9,829,120 | 1,015,413 | 2,948,736 | **13,793,269** | Custom process completed but inadequate funds to complete clearance. |
| 23 | 20-Jul-15 | Medical Supplies | USD | 342,368 - | 7 | 2 | MOHSW (Coca-Cola) | - | 12,769,655 | - | **12,769,655** | Customs process not completed. VAT 220 forms for VAT exemption submitted to TRA and rejected due to non availability of valid MOU. |
| 24 | 23-Jun-15 | Cold Boxes | EUR | 38,986 | 38 | 1 | MOHSW - EPI | 3,781,760 | 1,648,952 | 1,134,528 | **6,565,240** | No fund to Tanzania Bureau of Statistics charge of TZS 30,000 and shipping line charge USD 1,107 |
| 25 | 23-Jul-15 | Medical Supplies | USD | 31,956 | - | 1 | MOHSW (Coca-Cola) | - | 1,191,902 | - | **1,191,902** | Customs process not completed. VAT 220 forms for VAT exemption submitted to TRA and rejected due to non availability of valid MOU. |
| | | | | | | | | | | **Total** | **1,588,809,932** | |

Source: Management information

# Invoice test

## Debtors invoice test

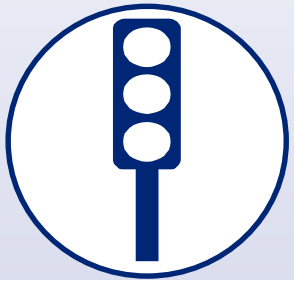
| | | | | Unit details | | | | Basis for pricing | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Invoice date | Invoice number | Details | No | Name | Rate | Invoice amount | Base price | Exchange rate | TZS equivalent | Invoice amount | Comments |
| 1 | 2-Feb-15 | 211275 | ABX Mintrol Control High | 1 | | 20.4% | | 377,015 | 1 | 377,015 | 75,816 | Billing and base price agreed to system |
| | | | ABX Mintrol Control Normal | 1 | | 20.4% | | 377,015 | 1 | 377,015 | 75,816 | Discount given on this invoice |
| | | | ABX Mintrol Control Low | 1 | | 20.4% | | 377,015 | 1 | 377,015 | 75,816 | |
| | | | | | | | 227,448 | | | | 227,448 | Logistical charges |
| 2 | 1-Jun-15 | 237247 | Microscope slide | 15 | Pcs | 8.0% | 36,000 | 2,400 | 1 | 2,400 | **36,000** | Discount given on this invoice |
| | | | | | | | | | | | | Billing and base price agreed to system |
| | | | | | | | | | | | | Logistical charges |
| 3 | 30-Apr-15 | 230643 | Hand sanitizer dispenser | 2 | | *20.4%* | 315,448 | 131,000 | 1 | 131,000 | **315,448** | Billing and base price agreed to system |
| | | | | | | | | | | | | Invoice total |
| 4 | 15-Apr-15 | 222663 | Kerosene | 5 | | n/a | | 2,000 | 1 | 2,000 | 10,000 | Billing and base price agreed to system |
| | | | Tinna | 120 | | n/a | | 1,500 | 1 | 1,500 | 180,000 | |
| | | | Bar soap | 165 | | n/a | | 4,400 | 1 | 4,400 | 726,000 | |
| | | | General disinfectant | 69 | | n/a | | 10,640 | 1 | 10,640 | 734,160 | |
| | | | | | | | 1,650,160 | | | | **1,650,160** | Logistical charges |
| 5 | 11-Mar-15 | 216690 | Microscope binocular | 1 | | 8% | 260,000 | 3,200,000 | 1 | 3,200,000 | 260,000 | Billing and base price agreed to system |
| | | | Microscope binocular | 1 | | 8% | 260,000 | 3,200,000 | 1 | 3,200,000 | 260,000 | |
| | | | | | | | **520,000** | | | | **520,000** | Invoice total |
| 6 | 17-Apr-15 | 223902 | Now filariasis test kit | 340 | | n/a | 680,000 | 2,000 | 1 | 2,000 | **680,000** | Billing and base price agreed to system |
| | | | | | | | | | | | | Logistical charges |
| 7 | 15-May-15 | 233151 | Membenazille tablets | 160 | 100TB | 20.4% | | 1,200 | 1 | 1,200 | 192,000 | Billing and base price agreed to system |
| | | | Plumpy nut | 3 | CT | 20.4% | | 17,210 | 1 | 17,210 | 51,630 | |
| | | | | | | | 243,630 | | | | **243,630** | Logistical charges |
| 8 | 3-Jun-15 | 238000 | Levonrgestrel tablets | 18,000 | 2tb | 20.4% | | 100 | 1 | 100 | 1,800,000 | Billing and base price agreed to system |
| | | | Levonrgestrel tablets | 28,800 | 2tb | 20.4% | | 100 | 1 | 100 | 2,880,000 | |
| | | | Levonrgestrel tablets | 198,000 | 2tb | 20.4% | | 100 | 1 | 100 | 19,800,000 | |
| | | | Levonrgestrel tablets | 5,200 | 2tb | 20.4% | | 100 | 1 | 100 | 520,000 | |
| | | | | | | | 25,000,000 | | | | **25,000,000** | Logistical charges |

Note: N/a represents discounts given on the items as such a pricing rate does not apply

Source: Deloitte analysis

# Out of scope issues which require further study

# Below are the areas not covered in our review which may require further studies to ensure an overarching transformations of MSD



## People

1) Assess competency of the current management to transform the MSD. This will enable identification and development of capacity building initiatives that are aligned to attainment of shareholders (MoHSW) values.

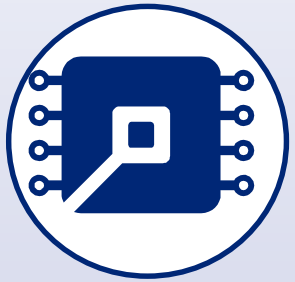
2) Conduct skills gap assessment. This will enable the MSD determine the skill available in each unit versus what is required for the MSD to effectively execute its mandate.

3) Review of manning level – This will help to understand whether or not each unit/Directorate within the MSD is adequately staffed.

## Finance and Procurement

1) Developing an activity based costing for the MSD processes to understand MSD's actual cost for undertaking each operational process. This would then be used to inform an appropriate fee structure for the MSD

2) Assessment of the cost benefit analysis for mass procurement and procurement from the source. This would evaluate the effectiveness of engaging, negotiating, and purchasing directly from the producers as opposed to using middle suppliers



## Technology

1) Conducting a feasibility assessment of EPICOR 9 system, to assess its relevance in supporting supply chain operations. This would also include evaluating whether the system should be upgraded to EPICOR 10, or should be upgraded to a new system


## Distribution

1) Assessment of the efficiency and cost effectiveness of the last mile delivery

Deloitte.