

**United Arab Emirates
Ministry of Finance**



الإمارات العربية المتحدة
وزارة المالية

**INSTRUCTIONS MANUAL FOR
SEGREGATION OF DUTY**

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INTRODUCTION OF THE MANUAL

1.1 GLOSSARY OF TERMS

Term	Meaning
Manual	A collection of approved statements and corresponding procedural guidelines and supporting forms that direct an organization towards its operational goals
Ministry	The Ministry of Finance, UAE
Federal government entities	Federal entity/agency/authority of the U.A.E. Government
Segregation of Duties	The principle that no single individual should have control over two or more conflicting job activities is referred to as segregation of duties (SoD)
Business functions	A process or activity that is performed to carry out a specific goal of the organization
Process	A coordinated set of activities that produce a business result, either within a single organization or across several
Tasks	Work that is performed to accomplish responsibilities
Violation	Any request, action or the like, put forth that violates the SoD manual
Conflicts	When a user performs two or more conflicting tasks
Exception request	A request made by a user to be granted an exception to a specific violation
Controls	Internal measures and procedures that ensure the avoidance of violations
Temporary access	Access is granted to the user on a temporary basis, and will be revoked
Manager/Supervisor	An employee who has subordinate/s working for him/her and has defined responsibilities and accountabilities
Approver	An employee who approves the request raised to him/her
FMIS	Financial Management Information System. It is the Oracle Application ERP and Hyperion budgeting system used by MoF and other federal entities.
FAHR	Federal Authority for Human Resources system used for HR processes
IT	Information Technology
Assistant Undersecretary	A senior management position in government organizations in UAE
KPI	Key Performance Indicator
User	User of the FMIS system
FMIS Operations Head	The leader of the FMIS function responsible for the overall operations of the FMIS applications
MoF SoD Controller	Employee who is responsible for managing the governance of the SoD manual. Controller's role has been elaborated in detail in this manual

FMIS SoD Specialist	FMIS system expert who understand defining and reviewing SoD processes within the FMIS applications
Entity/Agency SoD Owner	Employee who is responsible for ensuring SoD manual implementation at each of the Ministries/Agencies.
Department Director/ Business Owners	Functional/ department directors who are responsible and accountable for SoD violations
P2P	Procure to pay process cycle
O2C	Order to cash process cycle
R2R	Record to report process cycle
A2R	Acquire to retire process cycle
RACI	Responsible, Accountable, Consulted, Informed
Bots	Software robots which are programed to do specific tasks in system

1.2 FOREWORD

The segregation of duties manual (hereinafter referred to as SoD Manual) is prepared to document the SoD principles for all the ministries, agencies and authorities falling under the ambit of 'UAE Federal Government' (hereinafter referred to as Federal Government entities). All the processes and rules contained in this manual would be mandatory for all the Federal Government entities using the FMIS applications or any other ERP applications for recording their Financial, Procurement and Payroll transactions. Processes related to Human Resource function is not covered within this manual. Any exceptions/limitations to the SoD manual have been specifically covered under section 1.3 (Purpose and Scope of the Manual) of this manual.

1.3 PURPOSE AND SCOPE OF THIS MANUAL

The purpose of this manual is to clearly articulate the rules governing the SoD principles (i.e. ensuring two conflicting rules/responsibilities/authorities are not endowed upon the same personnel) and ensuring its applicability to the day to day transactions being executed by Federal Government entities through the usage of FMIS applications or any other similar ERP deployed at the corresponding MoF entity.

All the Federal Government entities which are governed by federal policies and procedure compliance will be in scope for implementation.

This manual includes the rules to avoid SoD violations, which are related to the processes managed and governed using FMIS. The processes in scope are:

- 1) Procure to pay: This process cycle covers the requisition, sourcing, purchase order and contracting processes
- 2) Acquire to retire: This process cycle covers the acquisition, depreciation and retirement of assets

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- 3) Order to cash: This process cycle covers the sales or goods/services, invoicing and receipt of payment
- 4) Payroll accounting: This process contains process for payroll processing
- 5) Record to Report: This process cycle covers reporting of financial transactions recorded in sub-ledgers
- 6) System Configuration Access: This process contains details of configuration related processes
- 7) Budgeting in Hyperion: This process contains details of Financial Budgeting process executed in Hyperion
- 8) Financial Reporting in Hyperion: This process contains details of Financial Management process in Hyperion

Any processes and steps performed outside the above-mentioned processes are considered out of scope of this manual.

This manual does not cover specific exceptions for entities and baselining of these exceptions. It is a responsibility of the Entity/Agency SoD Owner to ensure full implementation compliance unless and until explicitly agreed with MoF SoD Controller.

This manual does not include Human Resources module of FMIS and the processes controlled by FAHR.

The purpose of this manual is not to drive/re-align organization structures of the entities in scope; prime objective is to mandate SoD compliance through FMIS usage. In addition, this manual is not constraint by actual organizational hierarchy/roles, skills and number of the employees available in the respective entities in scope.

This manual does not cover topics on 'Internal Audit', 'Fraud Resistance' and/or 'IT security'. Please contact MoF Policy team for separate manuals on these subjects.

1.4 STRUCTURE OF THIS MANUAL

The document consists of 4 main sections viz.

- Introduction of the manual (covering the purpose, change control process and glossary)
- Segregation of duty Framework (covering the definition of SoD function, principles of SoD to be applied, key design elements and adoption methodology)
- SoD Rules for FMIS processes (covering the conflicting rules which must be avoided by business processes)
- Annexures (References and responsibility assignment process)

References used for compiling the SoD manual have been listed in the annexure section 5.

1.5 CONTROLS AND OWNERSHIP

1.5.1 Document Control and Amendments

The SoD instructions and rules covered in this document apply to all the roles within the Finance, Procurement and Payroll functions. The intended audience of this manual are the employees belonging to the Finance, Procurement and Payroll functions. Unauthorized

sharing of this document with personnel outside the Federal Government entities is strictly prohibited.

Controlled & latest version of document can be obtained from the controller of this document.

1.5.2 Controller of the manual

MoF will appoint a controller for the SoD instructions manual. Any revision or issue with the rules mentioned in the document needs to be raised with the MoF SoD manual controller. The controller of the SoD should ensure:

- All revisions to the document are made only after appropriate approvals
- The controller of this document must designate a custodian who should be primarily responsible for custody, circulation and performing updates to the document
- The controller of this document must perform periodic reviews of the SoD violations to ensure no SoD violations exist within FMIS application
- The controller of this document must regularly report to the management about the existing SoD violations and corrective actions/plan to address them
- Keep the risk rating of SoD violations current and up-to-date

Section 3.2.2.1 of this document clearly mentions the RACI matrix for SoD related processes/activities.

1.5.3 Custodian of the Manual

The custodian of the manual would be nominated according to applicable procedures in the Federal Government and will report to Controller of the Manual.

1.5.4 Changes to the Document

The SoD manual is intended to be a live document which may need amendments based on the changes deployed at Federal Government entities based on new standards that may be implemented at MoF. Similarly, any changes to the current solution landscape of the FMIS application may also result into additional SoD rules being added to the document. Hence to ensure the manual is kept up-to-date, the Custodian needs to review the document on a regular basis.

The procedure for revising the manual is explained below:

- The controller of the document has the sole authority to make any changes to the manual
- Any request for revision would be directed to the controller of the document
- Any proposed changes to the manual needs to be reviewed by the controller along with the Internal Audit function and the FMIS team
- Changes would be incorporated by the custodian after receiving the approval from the Controller, Internal Audit and FMIS team
- The below version register should be maintained to shows the manual version information

1.5.5 Version Register

Version Number	Version Date	Changes
1.0	DD-MM-YY	First issue of the manual

2 EXECUTIVE SUMMARY

This manual document contains definitions, principles, rules, governance, approval and deployment details for effective Segregation of Duties (SoD) management and is applicable to all Federal Government entities. The basic concept underlying segregation of duties is that no employee or group should be in a position both to perpetrate and to conceal errors or fraud in the normal course of their duties. Segregation of Duties (SoD) separates roles and responsibilities to ensure users do not have conflicting roles.

Following are the key areas of SoD, which are covered as part of this document:

1. **Principle and Rules:** As per principle of SoD, the recording function, authorization function, the asset custody function and reconciliation, reporting or audit function should be separated among employees rather than belonging to one employee.

The principle of SoD must be considered when designing and defining job duties; processes and control procedures must be implemented to segregate duties among employees through an effective oversight of activities and transactions. A Detailed SoD rule book covering over 200 rules has been established for MoF as part of this document, to clearly identify all possible SoD conflict. Also, risk rating (high, Medium, Low) is assigned to each of the conflicts based on its impact. Risk rating criteria, and summary & detailed SoD rules can be found in section 4.2, 4.3 and 4.4 of this document

2. **Approval process and exceptions:** The user requests for 'Responsibility assignment' will only be allowed through system enabled request process. Users will have to request for responsibilities for which they require access. Once the user submits the request, it will go to the supervisor and the Business Owner/Department Director for approval. No violations will be allowed under any circumstances, except to cover the business scenarios mentioned in the next paragraph. Detailed approval workflow is available in section 3.3.3 and 5.2 of this document.
Medium risk conflicts will only be allowed for the Ministry of Finance Core Unit User exception available in section "3.3.4". Low risk conflicts will be allowed in the system for all entities. System access to contractors working in the Federal Entity can be provided in specific scenarios as detailed in section "3.3.5".
3. **Governance:** Appropriate governance roles have been established to ensure that SoD manual is effectively implemented. SoD Manual Controller will have a key role in implementing this document across the federal entities and reporting to MoF management about any violation or discrepancy. Although, the ownership of risk of the violations will rest with Department Director of the user.
4. **Deployment and Adoption:** Existing conflicts in the system will be removed based on the SoD rule book. For successful adoption of this Manual, continuous training and awareness sessions for the user community is the key.
5. **Monitoring and Reporting:** Tracking of Key Performance Indicators (KPIs) should be done for continuous monitoring and reporting of SoD risk. This will ensure that appropriate system access is assigned and maintained and necessary corrective actions are taken when required.

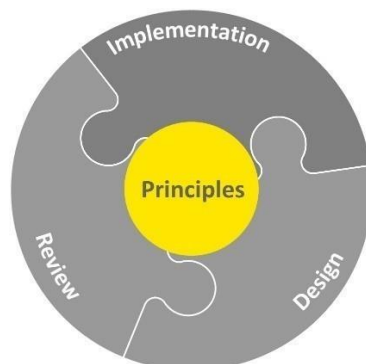
3 SEGREGATION OF DUTY INSTRUCTIONS MANUAL FRAMEWORK

3.1 OVERVIEW OF SEGREGATION OF DUTY

The basic concept underlying segregation of duties is that no employee or group should be in a position both to perpetrate and to conceal errors or fraud in the normal course of their duties. Segregation of Duties (SoD) separates roles and responsibilities to ensure users do not have conflicting roles.

The importance of SoD arises from the consideration that giving a single employee complete control of a process or an asset can expose an organization to risk. For effective SoD, the recording function, authorization function, the asset custody function and reconciliation, reporting or audit function should be separated among employees rather than belonging to one employee. SoD is critical to effective internal control as it reduces the risk of both erroneous and inappropriate actions.

The principle of SoD must be considered when designing and defining job duties; processes and control procedures must be implemented to segregate duties among employees through an effective oversight of activities and transactions. This segregation needs to be re-enforced by ensuring that the IT systems access is aligned to employee's job responsibilities and does not result in them having access to perform conflicting activities.



To ensure that appropriate system access is assigned and maintained, review of the roles and responsibilities within the Ministry should be performed periodically and necessary corrective actions should be taken as required.

3.2 PRINCIPLES AND SUCCESS FACTORS

3.2.1 Principles/Rules driving policies

To ensure effective control over the SoD conflicts, following categories of duties or responsibilities are considered incompatible and must be separated:

- 1) Initiating or recording or transaction processing function, e.g. preparing source documents (invoice, PO etc.)
- 2) Approving or authorization function, e.g. approval of invoices or PO
- 3) Custody of asset whether directly or indirectly, e.g. receiving of laptop
- 4) Verification or reconciliation or audit

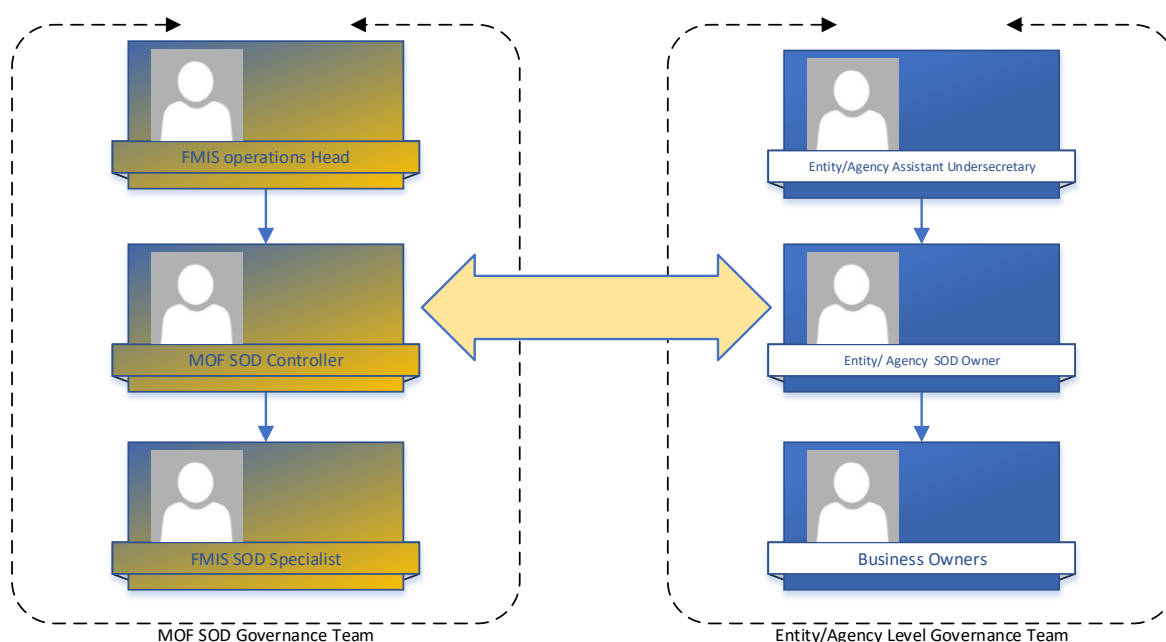
- 5) Creating/ updating master records
- 6) Granting access/authorization to systems/applications

3.2.2 Governance and Success Factors

3.2.2.1 Governance

Appropriate governance should be in place to monitor and report SoD conflicts, exceptions and remediation. Governance should include the relevant stakeholders who will be part of the governance meetings, frequency of meetings, agenda/reporting for the meetings and escalation matrix.

Following governance model should be followed:



MoF SoD Controller must monitor SoD violations, based on pre-defined KPI's. The controller must also review and report SoD compliance.

The table below provides definition of all the governance roles and their RACI matrix:

	Roles for SoD manual and approvals								
	User	Supervisor	Department Director/ Business owner	Entity SoD owner	Assistant Undersecretary	MoF SoD Controller	MoF SoD Custodian	FMIS SoD Specialist	FMIS Operations Head
Description	User of FMIS	Supervisor of User	Owner of the Business Risk (in case of exceptions)	SPOC for the entity to coordinate the implementation of SoD	Undersecretary of MoF or entity	Controller of the SoD Manual. Performs reviews and reports to management	Responsible for custody, circulation and updates of manual	FMIS specialist to provide inputs on technical aspects of conflicts	Monitoring of SoD reports and violations
MoF or Entity?	Both	Both	Both	Entity	Both	MoF	MoF	MoF	MoF
Responsibility assignment	R	C	A	C		C			
SoD document	I	I	I	C	I	R, A		C	C
Ownership of Risk/violations			R, A	C, I	I	C, I			C, I
Corrective actions for Risk/Violation			R, A	C, I	I	C, I		C	C, I
Reporting			I	I	I	R, A		I	I

3.2.2.2 Success Factors

Following are the key success factors for effective SoD management:

- 1) Adopt a top-down, risk-based approach to balance control efforts to assessed risk levels/ tolerances; focus controls on risks that matter
- 2) Clearly defined role for performing monitoring, exception reporting and remediation activities
- 3) Clearly defined role catalog
- 4) Identification of employees for governance roles
- 5) Regular monitoring and reporting of SoD violations
- 6) Prompt remediation of the violations to contain the impact of the same
- 7) Identification of manual controller for MoF and manual owner for each of the entity
- 8) Awareness and continuous training of the business users
- 9) Deployment of an automated tool for proactive monitoring and controls including KPIs and reporting
- 10) Definitions to MDM (Master Data Management) rules and policies should be in place before SoD is implemented
- 11) Considering physical/transactional business controls on ground as primary drivers and system SoD controls as enablers
- 12) Keep the SoD rule book and its risk rating current, as per business need.

3.3 KEY SoD POLICIES FOR DESIGN AND DEPLOYMENT

3.3.1 General guidelines

- 1) Responsibilities for initiating business transactions, approvals, verification and custody of assets must be separated from each other
- 2) Consider having at least two people involved within each process/sub-process. Control design must consider the possibility of collusion (when two or more parties agree to commit fraud or gain unfair advantage by compromising a process execution)
- 3) Consider having two people involved in critical/high risk controls
- 4) Responsibilities for modifying/creating master data records are normally separated from other responsibilities
- 5) Roles and responsibilities must be clearly defined and established
- 6) Establishing a system-controlled environment for assigning new responsibilities, whereby appropriate control is in place
- 7) All requests that passthrough, must satisfy all SoD rules
- 8) Common/shared accesses or default user logins must be restricted
- 9) Users must not share their passwords with any other user
- 10) Any changes to system must follow the 'ITSMS9201-POL-Change Management Policy' governance

Additionally, users can have access to enter similar transactions across business group e.g. one person might be required to enter invoices for two business group in a shared service environment (This is in context of MoF having deployed multi-business group environment even though access by users across business group is limited.)

Also, SoD process won't make any exception for the bot and any conflicts will be visible in KPI/reports. Software BOTs will have conflicting roles assigned to them as per design. MoF will review and accept these risks. Internal audit should regularly review the Bot monitoring process.

All the SoD rules as mentioned in section 4 'SoD rules for FMIS process' must be followed and no exceptions will be allowed. In case there is an emergency and exception is required, the entity department need to directly contact MoF management in order to handle such

exceptions. In case there is a crisis, the 'Business Continuity Management' policy & manual will override this instruction manual, kindly refer to the exception section 3.3.4.

3.3.2 Emergency, Crisis & Disaster Business Continuity Override

Circumstances classified as "Emergency", "Crisis", or "Disaster" may occur, disrupting standard operations and roles while critically impacting business continuity. If the circumstance being considered falls in line with at least one of the below definitions, then the 'Business Continuity Management' policy & manual will override this instruction manual.

Definitions:

Emergency: "Major disruptive event or condition that implies serious risks and damages to the population, environment, the economy and the functioning of the UAE government. They can seldom be foreseen but can be usually defined in time and space through a "state of emergency" declared by UAE authorities and international agencies."

Crisis: "An insidious event where the impacts and duration cannot be easily defined in time and space, but requires significant change, action and attention to protect lives, the economy, society, assets, property, and the environment critically affecting the UAE government's ability to carry out its functions."

Disaster: "An event where widespread human, material, economic or environmental damages and losses exceed the ability of the UAE government to mitigate their effects and recover from them, requiring intervention and support from the international community."

3.3.3 Automation and system enablement

The SoD rules needs to be re-enforced by ensuring that the IT systems access is aligned to employee's job responsibilities and does not result in them having access to perform conflicting activities. Following guidelines should be followed:

- 1) All responsibility assignment requests should only be raised through system
- 2) The system will only allow to request for responsibilities that either do not create conflicts or that create low conflicts.
- 3) Once the user submits the responsibility it will go to his/her immediate supervisor and the 'Business Owner' of the responsibility.
- 4) Once the request is approved the user will be assigned the requested responsibility automatically by system
- 5) Approval workflow must include the following:

Requestor/Approver	Approval
User	✓
Supervisor	✓
Business Owner	✓

Detailed process flow for 'Responsibility Assignment' process is available in Appendix 5.2

- 6) Additional rules which will be followed:
 - a. In case the responsibility is not active in system for more than 365 days, it will be made inactive in system.
 - b. In case user login is not active in system for more than 365 days it will be made inactive in the system
- 7) Any SoD violations will be captured and reported through system reports/KPIs

3.3.4 Ministry of Finance Core Unit User Exception

'Emergency situations during Year-End closing may arise for the Ministry of Finance where the flow of work is critically disrupted due to end users being unable to perform their responsibilities for reasons such as leaves, absences and other exigencies. If such circumstances occur and imply critical impediment to key business flows, then an exception may be raised through the relevant department head, who will attribute a "Core Unit User" status to an employee within their department.

This will give the selected employee in the Ministry of Finance access to Controller Responsibilities, enabling medium risk conflicts for them, for a limited and determined duration, allowing the department to conduct its key tasks as required. After the set duration expires, the Core Unit User access will be forfeited, and the user will revert to their original responsibilities.

The selected Core Unit User needs to be nominated by the relevant Ministry of Finance department head who will then send a validation request to the Assistant Undersecretary for Financial Management.

The selected Core Unit User needs to comply and agree with the following conditions:

- The Core Unit User must be present at times where absences and leaves are known to be common among employees.
- The Core Unit User must be informed and up to date on when the employees in their department are planned to be unavailable.
- The Core Unit User must be a key figure in the department to whom critical responsibilities and tasks can be given.
- The chosen Core Unit User must be capable of competently executing the responsibilities which they will be given.
- The Core Unit User needs to always be in touch with their department head in case they require the Core Unit User access urgently.
- The Core Unit User must not abuse their role and must solely fulfil the purpose for which the department head has given them the role
- The Core Unit User is responsible and accountable for fulfilling their Core Unit User role.
- The employee being given the role of Core Unit User must agree and sign on the role and the above requirements in order to be given the Core Unit User access.

By attributing such a role, the department head is considered the owner of the decision and will take full accountability of its risk and impacts.'

3.3.5 Federal Entity User Exception- Contractor Access

Critical situations may arise for any federal entity where the entity is working with contract-based resources due to any critical reasons. If such circumstances occur and imply impediment to key business flows, then an exception for granting the system access to users working on a contractual basis may be requested through the relevant entity's SoD controller.

This will give the selected user in the Federal Entity required access for a limited and determined duration which does not exceed their contract duration, allowing the department to conduct its key tasks as required. After the set duration expires, access will be forfeited.

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Federal entity's SoD controller after ensuring that the access requested complies with Federal Government Segregation of Duties policy and does not lead to any Medium/High risk conflict will need to nominate selected users. Federal Entity's SoD controller will then send a validation request to the Assistant Undersecretary for the respective federal entity upon whose approval a service ticket must be initiated in the support system along with the approval. Service ticket needs to be created Ministry of Finance – Information Technology Team.

The selected user needs to comply and agree with the following conditions:

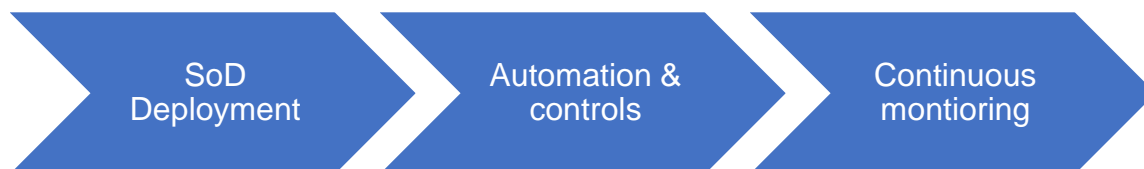
- The selected user must be capable of competently executing the responsibilities which they will be given.
- The selected user must not abuse the access provided and must solely fulfil the purpose for which the department head has given them the access.
- The selected user is responsible and accountable for fulfilling their role.
- The user being given the access must agree and sign on the above requirements in order to be given access.

By attributing such an access, the Federal Entity's Assistant Undersecretary is considered the owner of the decision and will take full accountability of its risk and impacts.

3.4 DEPLOYMENT PLAN AND ADOPTION METHODOLOGY

3.4.1 Overview and guidelines for adoptions

Approved SoD instructions manual document must be deployed at MoF and federal government entities using the FMIS system to maximize its benefits. Following sections cover key steps to ensure effective adoption of the manual.



3.4.2 Manual is deployed to an existing/new FMIS entity, following activities must be performed:

- 1) Communicate the SOD manual to the entity
- 2) Provide support to the entity in terms of workshops/trainings to familiarize them with the manual
- 3) Provide SoD violations data (existing entity)
- 4) Agree on exceptions & document baseline
- 5) Resolve the conflict in the systems and continuously review and monitor to keep the violations to the minimum.

3.4.3 System automation/proactive controls

- 1) System reports must be used to prevent SoD violations and KPIs should be defined to monitor SoD violations.
- 2) Requests for 'Responsibility assignment' must only be raised through system request within FMIS application. This will result into proper control and provide reports and log of user requests.

3.4.4 Continuous monitoring & reporting

- 1) A stringent review of the roles and responsibilities within the MoF and federal government entities using the FMIS system, must be performed periodically by MoF SoD Controller to ensure that appropriate system access is assigned and maintained. This will help minimize the factors impacting the SoD such as change in roles, responsibilities, employee turnover etc.
- 2) The outcome of the review must be communicated to the MoF Management and respective federal entity/department to get their feedback.
- 3) If any conflicts are existing in the system, the same should be addressed and closed.
- 4) System reports/KPIs will be used to monitor Segregation of Duties violations.
- 5) The low risk conflicts that are allowed for entities will be consistently monitored and reported to ensure proper control when required.

4 SoD RULES FOR FMIS PROCESSES

4.1 OVERVIEW OF PROCESS COVERED UNDER SoD MANUAL

This section covers the SoD rules which are applicable to MoF and federal government entities using the FMIS system. The rules are classified in the following key areas:

- 1) Procure to pay: This process cycle covers the requisition, sourcing, purchase order and contracting processes
- 2) Acquire to retire: This process cycle covers the acquisition, depreciation and retirement of assets
- 3) Order to cash: This process cycle covers the sales or goods/services, invoicing and receipt of payment
- 4) Payroll accounting: This process contains process for payroll processing
- 5) Record to Report: This process cycle covers reporting of financial transactions recorded in sub-ledgers
- 6) System Configuration Access: This process contains details of configuration related processes
- 7) Budgeting in Hyperion: This process contains details of Financial Budgeting process executed in Hyperion
- 8) Financial Reporting in Hyperion: This process contains details of Financial Management process in Hyperion

4.2 RISK RATING CRITERIA

Following risk rating criteria has been used to define High, Medium and Low risk

Rating	Criteria Code	Criteria Code Description	Example
High	H1	Maker-Checker conflicts for transactions involving financial impact/obligation or impacting true and fair representation of financial statement	Enter invoice vs approve invoice Enter Journals vs Approve Journals
	H2	Master Data access with access to configurations or create transactions involving third parties	Create Suppliers vs Create Invoices
	H3	Configuration access with create transaction/control access	Set up Payables vs Create Invoices
Medium	M1	Master Data access with access to create transactions not involving third parties	Create Item vs Create requisition
	M2	Maker-Checker conflicts for transactions not involving financial impact/obligation or impacting true and fair representation of financial statement	Create Requisition vs Approve Requisitions
	M3	Control functions with create transaction access	Create Invoices vs Open/Close AP Periods
	M4	Conflicts across different type of configurations	Set Up Users/ Responsibilities/ Menus vs Set Up Financials
Low	L1	Conflicts involving approvals not covered under H1 and M2	Approve Purchase Orders vs Approve Invoices
	L2	Transaction creation access across where functions which are not immediate, with more than one or more control layer in between	Receipt of Goods vs Create Payments
	L3	Conflicts transactions across Major Process	Create Invoices vs Import Journals

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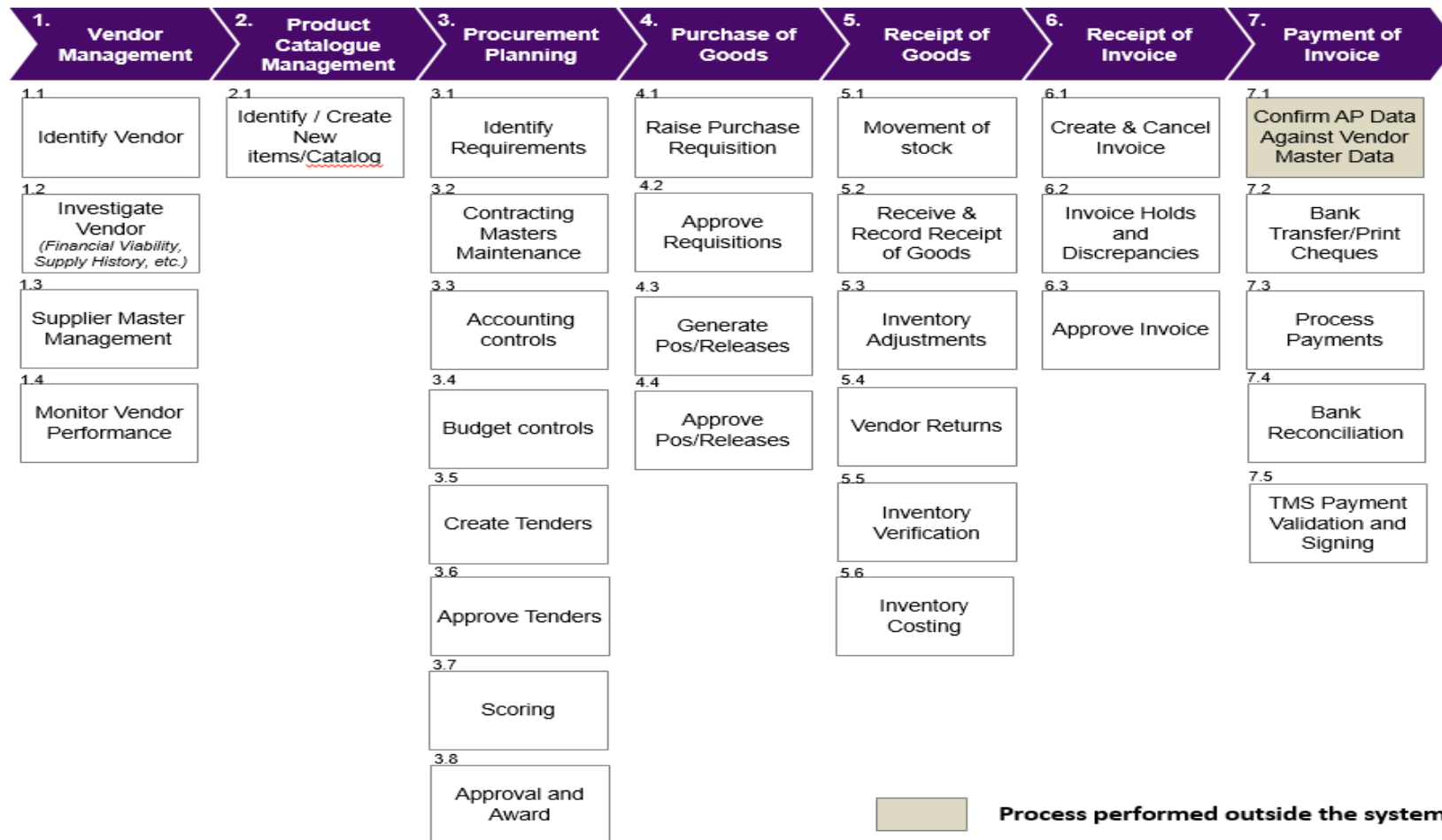
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4.4 PROCURE TO PAY: SoD RULES BOOK

Process Overview for SOD: Procure to Pay



4.4.1 Process Overview: Supplier Management

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
7.3	Process payments	User with 'create supplier' function may update bank details for the vendor and create the payment to unauthorized bank accounts	High	Create Payments	Ability to create payments against validated and approved invoices
6.3	Approve Invoice	Users with access to transactional function should not be given access to alter the master data files	Low	Approve Invoices	Ability to approve vendor invoices entered by AP accountant
4.4	Approve POs/ Releases	User may create fictitious vendors and approve purchase orders for the same	Low	Approve Purchase Order	Ability to approve purchase orders as per the assigned limit entered by PO buyer
6.1	Create and Cancel Invoice	User with create supplier and create invoices function may create fictitious supplier and initiate payments to those suppliers by creating invoices	High	Create Invoices	Ability to enter invoices received from the vendor in the oracle system
			High	Cancel Invoices	Ability to cancel validated/invalidated invoices in case of incorrect/erroneous entry/other system issues
4.3	Generate POs/ Releases	Users with access to transactional function should not be given access to alter the master data files	High	Create Purchase Orders	Ability to create standard purchase orders, blanket purchase agreements etc.
7.2	Bank Transfer/Print Checks	User with create supplier functions may update bank details for the vendor and create the payment to unauthorized bank accounts	High	Print Checks	Ability to print check for submission to vendors for payments created by the payment accountant

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Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
7.3	Process Payments	Users with access to transactional function should not be given access to alter the master data files	High	Void Payments	Ability to record the cancellation/reversal of payments made to suppliers
6.2	Invoices Holds and Discrepancies	Users with access to transactional function should not be given access to alter the master data files	High	Release Invoice Holds	Ability to Release Invoice holds created by the system based on various criterions

4.4.2 Process Overview: Contracting Masters Maintenance (Create/Update Contract/clause)

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
3.2	Contracting Masters Maintenance	Creating contract clauses in general involves the input of specific departments and therefore user approving the contract clause should be different from user approving the contract	Low	Approve Contract Clauses	Ability to approve contracts clauses
4.3	Generate POs/ Releases	Creating and approving contract and contract clauses is a legal team function and should be segregated from procurement functions	Low	Create Purchase Orders	Ability to create standard purchase orders, blanket purchase agreements etc.
4.4	Approve POs/ Releases	Creating and approving contract and contract clauses is a legal team function and should be segregated from procurement functions	Low	Approve Purchase Order	Ability to approve purchase orders as per the assigned limit entered by PO buyer

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Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
3.2	Contracting Masters Maintenance	Maker and checker conflict, user creating the document should not be allowed to approve the same.	Low	Approve Contracts	Ability to approve contracts

4.4.3 Process Overview: Identify / Create New items/Catalog

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
5.5	Inventory Verification	Users with authority to create/update masters should not be allowed with transaction recording access	Medium	Cycle Counting	Ability to record inventory subset count
5.1	Movement of stock	Users with authority to create/update masters should not be allowed with transaction recording access	Medium	Inventory Transactions	Ability to record internal inventory movements using move order transfers, move order issue etc.
5.6	Inventory costing	Users with access to transactional function should not be given access to alter the master data files	Medium	Item Costing	Ability to enter and maintain cost information for procured items
4.2	Receive and Record Receipt of Goods	User may collaborate with suppliers to create fictitious items and create unordered receipts for the same. This will later transform into payments and will lead to financial loss	Medium	Receive Goods and Services	Ability to record item receipts against purchase orders/unordered receipts/internal receipts (IR-ISO) in the system

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Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
4.3	Generate POs/Releases	Users with access to transactional function should not be given access to alter the master data files	High	Enter Purchase Order Releases	Ability to record quantity released by vendor against blanket purchase agreement
		User may create fictitious items and purchase orders for the same	Medium	Create Purchase Orders	Ability to create standard purchase orders, blanket purchase agreements etc.
4.1	Raise Purchase Requisition	Users with access to transactional function should not be given access to alter the master data files	Medium	Create Requisition	Ability to raise request internally/ to procurement for required goods and services
4.4	Approve POs/ Releases	Users with access to transactional function should not be given access to alter the master data files	Low	Approve Purchase Order	Ability to approve purchase orders as per the assigned limit entered by PO buyer

4.4.4 Process Overview: Raising Requisitions

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
1.3	Supplier Master Management	Users with access to transactional function should not be given access to alter the master data files	Medium	Create Suppliers	Ability to create supplier master file and enter crucial details like payment terms, vendor registration number, bank account details, contact details etc.

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Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
2.1	Create New Items	Users with access to transactional function should not be given access to alter the master data files	Medium	Create and Maintain Item master file	Ability to create items in item master and maintain various item attributes like costing, assets, cost accounts, unit of measurement etc.
3.3	Accounting Controls	User with transactional functions should not be given any kind of configuration controls. Recommendatory to keep period controls separate from users recording/approving the transactions as user may enter backdated/future transactions in the absence of other controls	Low Medium	Set up General Ledger Open and Close Periods - Purchasing	Ability to perform various GL set ups like ledger creation, calendar configuration, currency rate definition Ability to open and close purchasing periods to control recording of purchasing documents like purchase orders, blanket agreements, releases etc.
4.2	Approve Requisitions	Maker and checker conflict, user creating the document should not be allowed to approve the same.	Medium	Approve Requisitions	Ability to approve item requests raised
4.3	Generate POs/ Releases	Users may create requisition for items for personal use whereas the organization does not need it and substantiate such unauthorized requirements by creating a purchase order for these items	High	Create Purchase Orders	Ability to create standard purchase orders, blanket purchase agreements etc.
4.4	Approve POs/ Releases	User may create inappropriate item requests and approve the purchase orders for the same	Low	Approve Purchase Order	Ability to approve purchase orders as per the assigned limit entered by PO buyer

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Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
6.1	Create/ Cancel Invoices	User with create requisition and create invoices function may create unmatched invoices requisitions made by himself/other favored employees. When it comes to cases where prepayments are involved, user may change the payment terms to prepone the payments	Low	Create Invoices	Ability to enter invoices received from the vendor in the oracle system
7.3	Process Payments	User with create requisition and create payment may override the supplier payment term norms and prioritize the supplier payment for requisitions made by himself/other favored employees. When it comes to cases where Prepayments/Advance payments are required, this may lead to payments earlier than required	Low	Create Payment	Ability to create payments against validated and approved invoices

4.4.5 Process Overview: Approve Requisitions

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
4.1	Create Requisitions	User can create and approve their own requisitions thus resulting into creation of unwarranted requisitions	Medium	Create Requisition	Ability to create requisition in the system

4.4.6 Process Overview: Generate POs/ Releases

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
2.1	Create New Items	User may create fictitious items and purchase orders for the same	High	Create and Maintain Item master file	Ability to create items in item master and maintain various item attributes like costing, assets, cost accounts, unit of measurement etc.
3.3	Accounting Controls	Users with the authority to control approval authorization limits may change the limit and approve the purchase orders.	High	Approval Authorization Control	Ability to assign and change the purchasing documents approval limits assigned to positions and job roles
		Recommendatory to keep period controls separate from users recording/approving the transactions as user may enter backdated/future transactions in the absence of other controls	Low	Open and Close Periods – Inventory	Ability to open and close Inventory periods to control inventory related transactions like item receipts, return, move orders etc.
		Recommendatory to keep period controls separate from users recording/approving the transactions as user may enter backdated/future transactions in the absence of other controls	Medium	Open and Close Periods – Purchasing	Ability to open and close purchasing periods to control recording of purchasing documents like purchase orders, blanket agreements, releases etc.
5.2	Receipt and Record Receipt of Goods	User may create fictitious purchase orders and receive goods for the same, such receipts can be hidden by return the genuine receipts	High	Receive Goods and Services	Ability to record item receipts against purchase orders/unordered

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Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
					receipts/internal receipts(IR-ISO) in the system
5.4	Vendor Returns	User may create fictitious purchase orders and receive goods for the same, such receipts can be hidden by return the genuine receipts	Low	Return Goods and Services	Ability to record goods returned to vendors
5.5	Inventory Verification	Inappropriate procurement of items and manipulation of the physical inventory count to hide the same	Low Low	Cycle Counting Physical Inventory	Ability to record inventory subset count Ability to create physical inventory in the system to be used by the users recording the inventory counting
6.1	Create and Cancel Invoices	User may create fictitious purchase orders and initiate payment process by creating invoices for the same	Low	Create Invoices	Ability to enter invoices received from the vendor in the oracle system
6.3	Approve Invoices	User may create fictitious purchase orders and initiate payment process by approving invoices for the same	Low	Approve Invoices	Ability to approve vender invoices entered by AP accountant
4.4	Approve POs/ Releases	Maker and checker conflict, user creating the document should not be allowed to approve the same.	High	Approve Purchase Order Releases	Ability to approve purchase orders releases

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Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
		Maker and checker conflict, user creating the document should not be allowed to approve the same.	High	Approve Purchase Order	Ability to approve purchase orders as per the assigned limit entered by PO buyer

4.4.7 Process Overview: Approve POs/ Releases

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
2.1	Create New Items	Users with access to transactional function should not be given access to alter the master data files	Low	Create and Maintain Item master file	Ability to create items in item master and maintain various item attributes like costing, assets, cost accounts, unit of measurement etc.
3.3	Accounting Controls	Users with the authority to control approval authorization limits may change the limit and approve the purchase orders. Recommendatory to keep period controls separate from users recording/approving the transactions as user may enter backdated/future transactions in the absence of other controls	High Low	Approval Authorization Control Open and Close Periods – Inventory	Ability to assign and change the purchasing documents approval limits assigned to positions and job roles Ability to open and close Inventory periods to control inventory related transactions like item receipts, return, move orders etc.

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Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
		Recommendatory to keep period controls separate from users recording/approving the transactions as user may enter backdated/future transactions in the absence of other controls	Low	Open and Close Periods – Purchasing	Ability to open and close purchasing periods to control recording of purchasing documents like purchase orders, blanket agreements, releases etc.
5.2	Receipt and Record Receipt of Goods	User may create fictitious purchase orders and receive goods for the same, such receipts can be hidden by return the genuine receipts	Low	Receive Goods and Services	Ability to record item receipts against purchase orders/unordered receipts/internal receipts (IR-ISO) in the system
4.3	Generate POs/ Releases	Maker and checker conflict, user creating the document should not be allowed to approve the same. Maker and checker conflict, user creating the document should not be allowed to approve the same	High High	Create Purchase Order Enter Purchase Order Releases	Ability to create standard purchase orders, blanket purchase agreements etc. Ability to record quantity released by vendor against blanket purchase agreement
5.5	Inventory Verification	Approve the Inappropriate procurement of items and manipulate the physical inventory count to hide the same	Low Low	Cycle Counting Physical Inventory	Ability to record inventory subset count Ability to create physical inventory in the system to be used by the users recording the inventory counting

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Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
6.1	Create and Cancel Invoices	Approve fictitious purchase orders and initiate payment process by creating invoices for the same	Low	Create Invoices	Ability to enter invoices received from the vendor in the oracle system
6.3	Approve Invoices	Allowing PO and Invoices approval to same users at the same time reduces an approver layer in the transaction flow and therefore should be avoided	Low	Approve Invoices	Ability to approve vender invoices entered by AP accountant
7.3	Process Payments	Commit the company to fraudulent purchase contracts and initiate payment for unauthorized goods and services.	Low	Create Payments	Ability to create payments against validated and approved invoices

4.4.8 Process Overview: Create Contracts

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
3.2	Manage Contracts	Maker and checker conflict, user creating the document should not be allowed to approve the same.	Medium	Approve Contracts	Ability to approve contracts
		Creating contract clauses in general involves the input of specific departments and therefore user approving the contract clause should be different from user creating the contract	Low	Approve Contract Clauses	Ability to approve contracts clauses
4.3	Create POs	Creating and approving contract and contract clauses is a legal team function and should be segregated from procurement functions	Low	Create Purchase Orders	Ability to create standard purchase orders, blanket purchase agreements etc.

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4.4	Approve POs/ Releases	Creating and approving contract and contract clauses is a legal team function and should be segregated from procurement functions	Low	Approve Purchase Order	Ability to approve purchase orders as per the assigned limit entered by PO buyer
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4.4.9 Process Overview: Movement of Stocks

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
5.2	Receive and Record Receipt of Goods	User with receive goods and inventory transactions may create fictitious GRNs and later hide the same by fictitious inventory transactions	Low	Receive Goods and Services	Ability to record item receipts against purchase orders/unordered receipts/internal receipts(IR-ISO) in the system

4.4.10 Process Overview: Receive and Record Receipt of Goods

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
2.1	Identify / Create New items/Catalog	User may collaborate with suppliers to create fictitious items and create unordered receipts for the same. This may later transform into payments and may lead to financial loss.	Medium	Create and Maintain Item master file	Ability to create items in item master and maintain various item attributes like costing, assets, cost accounts, unit of measurement etc.
3.3	Accounting Control	User may embezzle the goods, create fictitious receipts for the same item and quantity and adjust the same through journal entries to hide the financial impact	Low	Enter Actual Journal Entry/ Reverse	Ability to enter manual/ recurring journal entry in GL system

4.4.11 Process Overview: Inventory Adjustments

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
5.5	Inventory Verification	Users counting the inventory may manipulate the count and create/approve adjustments to hide the same to match it with the inventory snapshot	Low	Perform Stock Count	Ability to record actual physical inventory items lying in stores
		Users with authority to approve stock counts may approve the manipulated/inappropriate stock counts and create/approve adjustments to hide the same	Low	Review and Approve Stock Count	Ability to review and approve stock count recorded in the system
		Users counting the inventory may create/approve fictitious adjustments to match the count with the inventory snapshot instead of recording write offs/variances	Low	Create Inventory Snapshot	Ability to create snapshot of inventory lying in stores as per the system on a specific date and time to be used as cut off inventory
5.3	Inventory Adjustments	Maker and checker conflict, user creating the document should not be allowed to approve the same.	Medium	Approve Adjustments	Ability to approve adjustments recorded to reconcile physical inventory with system inventory

4.4.12 Process Overview: Vendor Returns

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
6.1	Create and Cancel Invoice	User with both these functions may embezzle the goods after creating fictitious returns and debit memos covering the same	High	Create Invoices	Ability to enter invoices received from the vendor in the oracle system

4.4.13 Process Overview: Accounting Controls (Procurement)

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
3.3	Accounting controls	Users with purchasing and inventory period controls may allow creation of fictitious purchase orders and receipts	Low	Open and Close Periods – Purchasing	Ability to open and close purchasing periods to control recording of purchasing documents like purchase orders, blanket agreements, releases etc.
5.3	Inventory Verification	Recommendatory to keep period controls separate from users recording/approving the transactions as user may enter backdated/future transactions in the absence of other controls	Medium	Physical Inventory	Ability to create physical inventory in the system to be used by the users recording the inventory counting
5.1	Movement of Stock	Recommendatory to keep period controls separate from users recording/approving the transactions as user may enter backdated/future transactions in the absence of other controls	Medium	Inventory Transactions	Ability to record internal inventory movements using move order transfers, move order issue etc.
5.2	Receive and Record Receipt of Goods	Recommendatory to keep period controls separate from users recording/approving the transactions as user may enter backdated/future transactions in the absence of other controls	Medium	Receive Goods and Services	Ability to record item receipts against purchase orders/unordered receipts/internal receipts(IR-ISO) in the system
5.4	Vendor Returns	Recommendatory to keep period controls separate from users recording/approving the transactions as user may enter backdated/future transactions in the absence of other controls	Medium	Return Goods and Services	Ability to record goods returned to vendors

4.4.14 Process Overview: Inventory Costing

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
4.4	Approve POs/ Releases	Users with Item costing functions may update/increase the item costs. Later, he can collaborate with the supplier and approve the purchase order even at a higher cost which will still match the average cost appearing in the systems but, will result in a financial loss	Low	Approve Purchase Order	Ability to approve purchase orders as per the assigned limit entered by PO buyer
2.1	Identify / Create New items/Catalog	Users with access to transactional function should not be given access to alter the master data files	Medium	Create and Maintain Item master file	Ability to create items in item master and maintain various item attributes like costing, assets, cost accounts, unit of measurement etc.
4.3	Generate POs/ Releases	Users with Item costing functions may update/increase the item costs. Later, he can collaborate with the supplier and create the purchase order at a higher cost which will still match the average cost appearing in the systems but, will result in a financial loss	Low	Create Purchase Orders	Ability to create standard purchase orders, blanket purchase agreements etc.

4.4.15 Process Overview: Inventory Verification

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
5.2	Receive and Record Receipt of Goods	User with receive goods and inventory transactions may create fictitious GRNs and later hide the same by manipulating inventory counts	Low	Receive Goods and Services	Ability to record item receipts against purchase orders/unordered

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Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
					receipts/internal receipts(IR-ISO) in the system
4.4	Approve POs/Releases	Approve the Inappropriate procurement of items and manipulate the physical inventory count to hide the same	Low	Approve Purchase Order	Ability to approve purchase orders as per the assigned limit entered by PO buyer
4.3	Generate POs/Releases	Approve the Inappropriate procurement of items and manipulate the physical inventory count to hide the same	Low	Create Purchase Orders	Ability to create standard purchase orders, blanket purchase agreements etc.
2.1	Identify / Create New items/Catalog	Users with access to transactional function should not be given access to alter the master data files	Medium	Create and Maintain Item master file	Ability to create items in item master and maintain various item attributes like costing, assets, cost accounts, unit of measurement etc.
3.3	Accounting Controls	Recommendatory to keep period controls separate from users recording/approving the transactions as user may enter backdated/future transactions in the absence of other controls	Medium	Open and Close Periods - Inventory	Ability to open and close Inventory periods to control inventory related transactions like item receipts, return, move orders etc.

4.4.16 Process Overview: Create and Cancel Invoice

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
7.3	Process payments	Users with both invoices and payment options may create fictitious invoices and pay for the same	High	Create Payments	Ability to create payments against validated and approved invoices
			Low	Void Payments	Ability to record the cancellation/reversal of payments made to suppliers
7.2	Bank Transfer/Print Checks	Users with both invoices and payment options may create fictitious invoices and pay for the same	High	Print Checks	Ability to print check for submission to vendors for payments created by the payment accountant
5.2	Receive and Record Receipt of Goods	Users may create fictitious receipts and initiate the payment process by creating invoices for the same	High	Receive Goods and Services	Ability to record item receipts against purchase orders/unordered receipts/internal receipts(IR-ISO) in the system
6.2	Invoices Holds and Discrepancies	Users may create erroneous invoices and release any holds generated by the system	Medium	Release Invoice Holds	Ability to Release Invoice holds created by the system based on various criterions
3.3	Accounting Controls	User with Import Journal functions may perform unauthorized import journals for all the modules (AR, CM, Payroll etc.)	Low	Import Journals	Ability to import journal entries created for transactions entered in all the other applications like payables, receivables, inventory, payroll etc.

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Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
A2R	Asset Capitalization	User having access to record invoices as well as asset function may capitalize costs which should have been expenses off thus resulting into incorrect presentation of financial statements	Low	Assets Workbench	Ability to create assets, retire assets, change asset assignments, change asset category, change location etc. for a single asset

4.4.17 Process Overview: Invoices Holds and Discrepancies

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
7.3	Process payments	Users with Release Invoice hold function may process the invoices without the consent of invoicing team and pay the same	Medium	Create Payments	Ability to create payments against validated and approved invoices

4.4.18 Process Overview: Approve Invoices

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
6.1	Create and Cancel Invoice	Maker and checker conflict, user creating the document should not be allowed to approve the same.	High	Create Invoices	Ability to enter invoices received from the vendor in the oracle system
7.3	Process payments	Invoicing and payment functions in single pair of hands may results in creation of fictitious invoices and payment of the same.	Low	Create Payments	Ability to create payments against validated and approved invoices
			Low	Void Payments	

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Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
					Ability to record the cancellation/reversal of payments made to suppliers
7.2	Bank Transfer/Print Checks	Invoicing and print check functions in single pair of hands may results in creation of fictitious invoices and payment of the same.	Low	Print Checks	Ability to print check for submission to vendors for payments created by the payment accountant
3.3	Accounting Controls	User with Import Journal functions may perform unauthorized import journals for all the modules (AR, CM, Payroll etc.)	Low	Import Journals	Ability to import journal entries created for transactions entered in all the other applications like payables, receivables, inventory, payroll etc.
A2R	Asset Capitalization	User having access to approve invoices as well as asset function may capitalize costs which should have been expenses off thus resulting into incorrect presentation of financial statements	Low	Assets Workbench	Ability to create assets, retire assets, change asset assignments, change asset category, change location etc. for a single asset

Note: As per the standard SoD rule Raise Requisition and Invoices approval functions should be segregated. However, in the Federal Entities, usually the requestor is one of the approvals in order to confirm the material/service has been received. As a compensating control there are two additional approvers in the approval process to ensure invoices details are correct. Hence as an exception, approve invoices and Raise Requisition have not been called as a violation in the above table.

4.4.19 Process Overview: Bank Transfer/Print Cheques

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
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7.3	Bank Transfer/Print Checks	Maker and checker conflict, user creating the document should not be allowed to approve the same	High	Authorize Bank Transfer	Ability to authorized bank transfer recorded by the treasury department
7.3	Process Payments	Users with both these functions may create unauthorized payments and reinstate the bank balances by creating bank transfers Users with both these functions may create unauthorized payments and reinstate the bank balances by creating bank transfers	Low Low	Confirm Payment Batch Create Payments	Ability to create payments in batches accommodating various supplier, invoices types, payment terms etc. Ability to create payments against validated and approved invoices

4.4.20 Process Overview: Tender Scoring

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
3.8	Approval and Award	Maker and checker conflict, user creating the document should not be allowed to approve the same.	High	Review and approve evaluation	Ability to approve evaluation scores and award tender
4.3	Generate POs/Releases	Tendering and procurement process should be separate, user with create/approve purchase order should not have any role in tendering	Low	Create Purchase Orders	Ability to create standard purchase orders, blanket purchase agreements etc.
4.4	Approve POs/Releases	Tendering and procurement process should be separate, user with create/approve purchase order should not have any role in tendering	Low	Approve Purchase Order	Ability to approve purchase orders as per the assigned limit entered by PO buyer
3.5	Create Tenders	Quote Evaluation/Scoring Team should be independent and separate from team involved in tendering and procurement functions	Medium	Prepare Tender Documents and select suppliers	Ability to create negotiation in sourcing and select suppliers to whom invitation is to be given

Instructions manual for segregation of duty

3.6	Approve Tenders	Quote Evaluation/Scoring Team should be independent and separate from team involved in tendering and procurement functions	Low	Approve Tender Documents	Ability to approve negotiations created by sourcing buyer
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4.4.21 Process Overview: Evaluation Approval and Award

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
3.8	Scoring	Maker and checker conflict, user creating the document should not be allowed to approve the same.	High	Evaluate Quotation	Ability to record evaluation scores based on vendor quotations/proposals
4.3	Generate POs/Releases	Tendering and procurement process should be separate, user with create/approve purchase order should not have any role in tendering	Low	Create Purchase Orders	Ability to create standard purchase orders, blanket purchase agreements etc.
3.5	Create Tenders	Quote Evaluation/Scoring Team should be independent and separate from team involved in tendering and procurement functions	Low	Prepare Tender Documents and select suppliers	Ability to create negotiation in sourcing and select suppliers to whom invitation is to be given
3.6	Approve Tenders	Quote Evaluation/Scoring Team should be independent and separate from team involved in tendering and procurement functions	Low	Approve Tender Documents	Ability to approve negotiations created by sourcing buyer

4.4.22 Process Overview: Accounting Controls for P2P

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
6.1	Create and Cancel Invoice	Recommendatory to keep period controls separate from users recording/approving the transactions as user may enter backdated/future transactions in the absence of other controls	Medium	Create Invoices	Ability to enter invoices received from the vendor in the oracle system
6.1	Create and Cancel Invoice	Recommendatory to keep period controls separate from users recording/approving the transactions as user may enter backdated/future transactions in the absence of other controls	Medium	Cancel Invoices	Ability to cancel validated/unvalidated invoices in case of incorrect/erroneous entry/other system issues
7.3	Process payments	Recommendatory to keep period controls separate from users recording/approving the transactions as user may enter backdated/future transactions in the absence of other controls	Medium	Create Payments	Ability to create payments against validated and approved invoices
7.3	Process Payments	Recommendatory to keep period controls separate from users recording/approving the transactions as user may enter backdated/future transactions in the absence of other controls	Medium	Void Payments	Ability to record the cancellation/reversal of payments made to suppliers
3.3	Accounting controls (Inventory)	Users with purchasing and inventory period controls may allow creation of fictitious purchase orders and receipts	Low	Open and Close Periods - Purchasing	Ability to open and close purchasing periods to control recording of purchasing documents like purchase orders, blanket agreements, releases etc.
5.3	Inventory Adjustments	Recommendatory to keep period controls separate from users recording/approving the transactions as user may	Medium	Physical Inventory	Ability to create physical inventory in the system to be

Instructions manual for segregation of duty

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
		enter backdated/future transactions in the absence of other controls			used by the users recording the inventory counting
5.1	Movement of Stock	Recommendatory to keep period controls separate from users recording/approving the transactions as user may enter backdated/future transactions in the absence of other controls	Medium	Inventory Transactions	Ability to record internal inventory movements using move order transfers, move order issue etc.
5.2	Receive and Record Receipt of Goods	Recommendatory to keep period controls separate from users recording/approving the transactions as user may enter backdated/future transactions in the absence of other controls	Medium	Receive Goods and Services	Ability to record item receipts against purchase orders/unordered receipts/internal receipts(IR-ISO) in the system
5.4	Vendor Returns	Recommendatory to keep period controls separate from users recording/approving the transactions as user may enter backdated/future transactions in the absence of other controls	Medium	Return Goods and Services	Ability to record goods returned to vendors

4.4.23 Process Overview: Budget Controls

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
6.3	Approve Invoice	Users with ability to define/enter budget should not be allowed to enter/approve the budget consumption transactions	Low	Approve Invoices	Ability to approve vender invoices entered by AP accountant

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Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
4.4	Approve POs/ Releases	Users with ability to define/enter budget should not be allowed to enter/approve the budget consumption transactions	Low	Approve Purchase Order	Ability to approve purchase orders as per the assigned limit entered by PO buyer
6.1	Create and Cancel Invoice	Users with ability to define/enter budget should not be allowed to enter/approve the budget consumption transactions	Medium	Create Invoices	Ability to enter invoices received from the vendor in the oracle system
7.3	Process payments	Users with ability to define/enter budget should not be allowed to enter/approve the actual transactions	Medium	Create Payments	Ability to create payments against validated and approved invoices
4.3	Generate POs/ Releases	Users with ability to define/enter budget should not be allowed to enter/approve the budget consumption transactions	Medium	Create Purchase Orders	Ability to create standard purchase orders, blanket purchase agreements etc.
6.1	Create and Cancel Invoice	Users with ability to define/enter budget should not be allowed to enter/approve the budget consumption transactions	Medium	Cancel Invoices	Ability to cancel validated/invalidated invoices in case of incorrect/erroneous entry/other system issues
7.3	Process Payments	Users with ability to define/enter budget should not be allowed to enter/approve the actual transactions	Medium	Void Payments	Ability to record the cancellation/reversal of payments made to suppliers
R2R	Payment and Receipts	Users with ability to define/enter budget should not be allowed to enter/approve the actual transactions	Medium	Enter Customer Receipts	Ability to record amount received in AR system
		Users with ability to define/enter budget should not be allowed to enter/approve the actual transactions	Medium	Remittances	Ability to record checks submitted to banks

4.4.24 Process Overview: Create Tenders

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
3.6	Approve Tenders	Maker and checker conflict, user creating the document should not be allowed to approve the same.	Medium	Approve Tender Documents	Ability to approve negotiations created by sourcing buyer
3.7	Scoring	Quote Evaluation/Scoring Team should be independent and separate from team involved in tendering and procurement functions	Medium	Evaluate Quotations	Ability to record evaluation scores based on vendor quotations/proposals
3.8	Approval and Award	Quote Evaluation/Scoring Team should be independent and separate from team involved in tendering and procurement functions	Low	Review and approve evaluation	Ability to approve evaluation scores and award tender
4.4	Approve POs/ Releases	Tendering and procurement process should be separate, user with create/approve purchase order should not have any role in tendering	Low	Approve Purchase Order	Ability to approve purchase orders as per the assigned limit entered by PO buyer

- Note: As per the standard SoD rule Sourcing and Procurement functions are segregated. However, in the Federal Entities, the Sourcing and Procurement process is managed by the same departments. As a compensating control, the tender negotiation and approval process is managed by the 'Requesting Function/ Department' outside the system and only the final data loading into the system is done by the Procurement team. Also, there is 'Tender Award' approval process, before PO can be created. Hence as an exception, Entering Tender Documents and Creating Purchase Orders have not been called as a violation in the above table.

4.4.25 Process Overview: Approve Tender document before publishing

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
3.7	Scoring	Quote Evaluation/Scoring Team should be independent and separate from team involved in tendering and procurement functions	Low	Evaluate Quotations	Ability to record evaluation scores based on vendor quotations/proposals
3.8	Approval and Award	Quote Evaluation/Scoring Team should be independent and separate from team involved in tendering and procurement functions	Low	Review and approve evaluation	Ability to approve evaluation scores and award tender
4.3	Generate POs/ Releases	Tendering and procurement process should be separate, user with create/approve purchase order should not have any role in tendering	Low	Create Purchase Orders	Ability to create standard purchase orders, blanket purchase agreements etc.
4.4	Approve POs/ Releases	Tendering and procurement process should be separate, user with create/approve purchase order should not have any role in tendering	Low	Approve Purchase Order	Ability to approve purchase orders as per the assigned limit entered by PO buyer

4.4.26 Process Overview: Process Payments

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
7.4	Bank Reconciliation	Users may manipulate/divert the vendor payment and cover it by reconciling the same in bank statement	Low	Bank Account Reconciliation	Ability to reconcile receipts/payments recorded in the system with bank statement recorded in the system

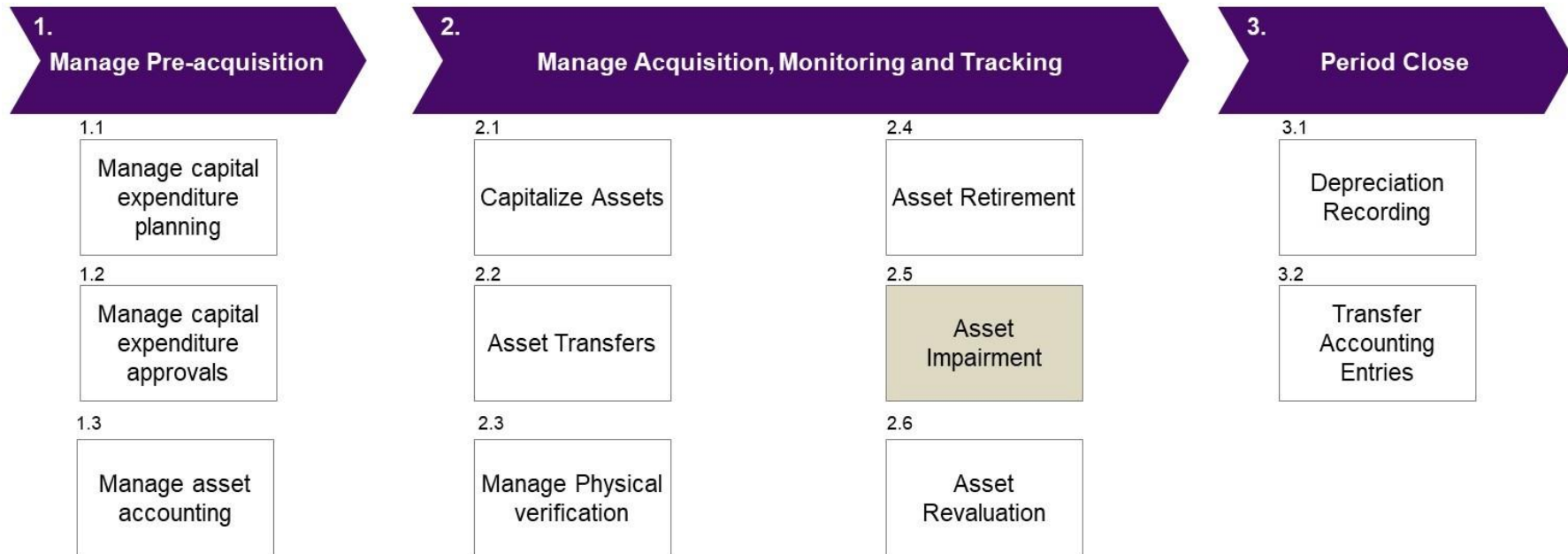
Instructions manual for segregation of duty

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
4.3	Generate POs/ Releases	Users may create fictitious purchase order and pay for covering the same.	Low	Create Purchase Orders	Ability to create standard purchase orders, blanket purchase agreements etc.
7.2	Bank Transfer/Print Cheques	Users with both these functions may create unauthorized payments and reinstate the bank balances by creating bank transfers	Low	Create Bank Transfers	Ability to record and validate transfer of funds from one bank to another
6.1	Create and Cancel Invoice	User make create fictitious invoices and process its payments	High	Create Invoices	Ability to enter invoices received from the vendor in the oracle system
7.5	TMS Payment Validation and Signing	Maker and checker conflict, user creating the document should not be allowed to approve the same	High	Payment Approval and Signing	Ability to approve and sign payments

4.4.27 Process Overview: Bank Reconciliation

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
7.3	Process Payment	Users may manipulate/divert the vendor payment and cover it by reconciling the same in bank statement	Low	Create Payments	Ability to create payments against validated and approved invoices
		Users may manipulate/divert the vendor payment and cover it by reconciling the same in bank statement	Low	Void Payments	Ability to record the cancellation/reversal of payments made to suppliers

4.5 ACQUIRE TO RETIRE: SoD RULES BOOK



4.5.1 Process Overview: Manage Pre-Acquisition

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
2	Manage Acquisition, Monitoring and Tracking	If the capital planning/budgeting team is responsible for managing asset function, then there is a risk of budget numbers being manipulated to allow higher asset acquisition	Medium	Asset Workbench	Ability to create assets, retire assets, change asset assignments, change asset category, change location etc for a single asset

4.5.2 Process Overview: Manage Acquisition, Monitoring and Tracking

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
P2P	Approve Invoices	May result into approval of inappropriate asset acquisitions	Low	Approve Invoices	Ability to approve vender invoices entered by AP accountant
3	Period Close	Run depreciation create numerous journal entries and therefore it should be run only once all assets are added. If this authority is provided to users responsible for adding the assets, there is a high possibility of numerous additional journal entries	Low	Assets Depreciation	Ability to run depreciation for all the assets in an asset book
3	Period Close	Asset Closing is a highly critical activity as oracle assets does not allow reopening the closed periods and therefore asset period close function should be independent of other asset functions	Medium	Open and Close Period - Assets	Ability to close the asset period for an asset book
2.2/ 2.4	Asset Transfers	Mass transaction access provide the users with power to retire/ transfer/ reclass all assets in the asset book in a single instance. This makes mass transaction function very critical and therefore it is recommendatory to keep it separate from regular asset functions	Low	Mass Transaction	Ability to perform asset transactions like revaluations/retirements/transfers/reclassifications etc
2.3	Manage Physical Verification	User with access to asset workbench and asset physical inventory access may retire lost/stolen assets without any approvals	High	Asset Physical Inventory	Ability to create and record location wise asset inventory in the system
P2P	Create Purchase Orders	Recommendatory to keep procurement functions independent of financial functions	Low	Create Purchase Orders	Ability to create standard purchase orders, blanket purchase agreements etc.

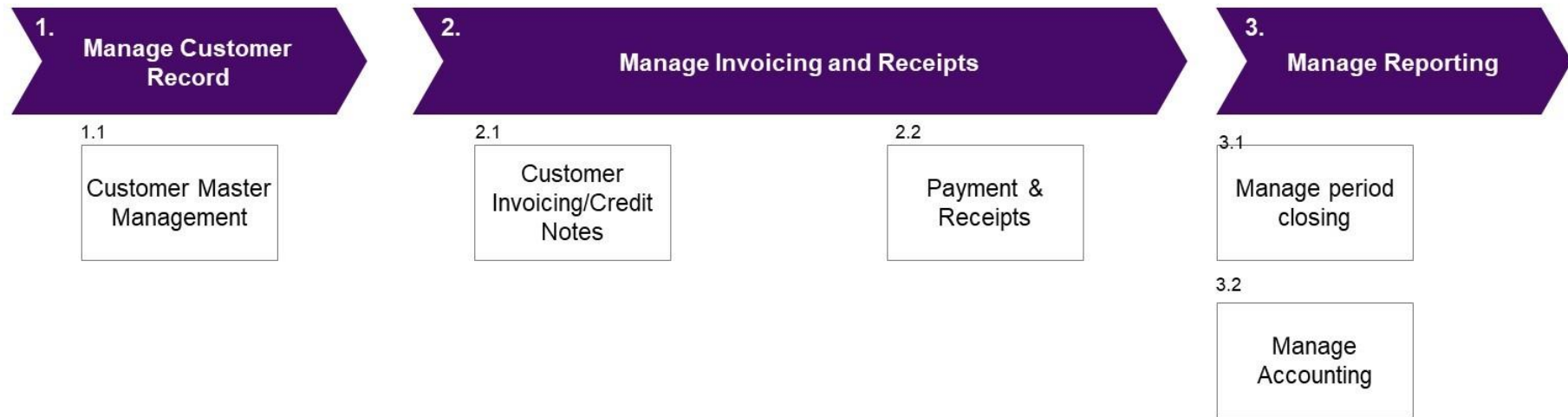
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Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
P2P	Create Requisitions	Recommendatory to keep procurement functions independent of financial functions	Low	Create Requisition	Ability to raise request internally/ to procurement for required goods and services
P2P	Create Invoices	User having access to create invoices as well as create assets may create fictitious assets and hide the same by creating fixed assets	Low	Create Invoices	Ability to enter invoices received from the vendor in the oracle system
P2P	Accounting Controls	Asset management and general ledger functions for creating of journals may cause recording of incorrect adjustments to asset data	Low	Enter Actual Journal Entry/ Reverse	Ability to enter manual/ recurring journal entry in GL system

4.5.3 Process Overview: Period Close

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
2	Manage Acquisition, Monitoring and Tracking	Asset Period Closing is a highly critical activity as oracle assets does not allow reopening the closed periods and therefore asset period close function should be independent of other asset functions	Medium	Asset Workbench	Ability to create assets, retire assets, change asset assignments, change asset category, change location etc for a single asset
R2R	Accounting Control	Asset period close and general ledger functions for creating of journals may cause recording of incorrect adjustments to asset data	Low	Enter Actual Journal Entry/ Reverse	Ability to enter manual/ recurring journal entry in GL system

4.6 ORDER TO CASH: SoD RULES BOOK



4.6.1 Process Overview: Manage Customer Master

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
2	Manage Invoicing and Receipts	Users with access to transactional function should not be given access to alter the master data files	High	Enter Customer Receipts	Ability to record amount received in AR system
		User may collaborate with the customer and extend the payment terms for the customers	High	Enter Accounts Receivable Invoice/Credit Note	Ability to record invoices/ credit note issued to the customer
		Users with access to transactional function shall not be given access to alter the master data files	Medium	Remittances	Ability to record checks submitted to banks

4.6.2 Process Overview: Customer Invoicing/Credit Notes

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
3	Manage Accounting	Recommendatory to keep period controls separate from users recording/approving the transactions as user may enter backdated/future transactions in the absence of other controls	Medium	Open and Close Periods - Receivables	Ability to open and close receivables period and swap unaccounted transactions to future periods
1	Customer Master	User may collaborate with the customer and extend the payment terms for the customers	High	Customer Account Maintenance	Ability to ability to maintain customer site details like payment terms, address, sites, contacts etc.
P2P	Accounting Controls	User with Import Journal functions may perform unauthorized import journals for all the modules (AP, CM, Payroll etc.)	Low	Import Journals	Ability to import journal entries created for transactions entered in all the other applications like payables, receivables, inventory, payroll etc.
2.2	Payment and Receipts	If invoicing and receipt are with the same users, then the user may collaborate with customers and manipulate the receipts against their invoices	High	Maintain Automatic Receipts	Ability to create automatic receipts and update the created receipts
2.2	Payment and Receipts	If invoicing and remittance creation access, User may collaborate with customers and create fictitious remittances for checks received from such customers, this will reflect such receipts lying with bank for processing.	Low	Remittances	Ability to record checks submitted to banks

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Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
2.2	Payment and Receipts	If Invoicing and customer receipts are with the same users, then the user may collaborate with customers and enter the fictitious receipts against their invoices	High	Enter Customer Receipts	Ability to record amount received in AR system
P2P	Accounting Controls	Users authorized for creating/approving invoice/payment/receipt/other subledger functions should not be allowed to pass/approve adjustment transactions in the GL as it can impact effectiveness of reconciliation	Low	Enter Actual Journal Entry/ Reverse	Ability to enter manual/ recurring journal entry in GL system

Note: In cases where retail customers are serviced by Point of Sale (PoS) systems, create customer and customer invoices is valid transaction and not an exception.

4.6.3 Process Overview: Payments and Receipts

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
1	Customer Master	User may collaborate with the customer and extend the payment terms for the customers	High	Customer Account Maintenance	Ability to ability to maintain customer site details like payment terms, address, sites, contacts etc.
P2P	Manage Accounting	User with Import Journal functions may perform unauthorized import journals for all the modules (AP, CM, Payroll etc.)	Low	Import Journals	Ability to import journal entries created for transactions entered in all the other applications like payables, receivables, inventory, payroll etc.

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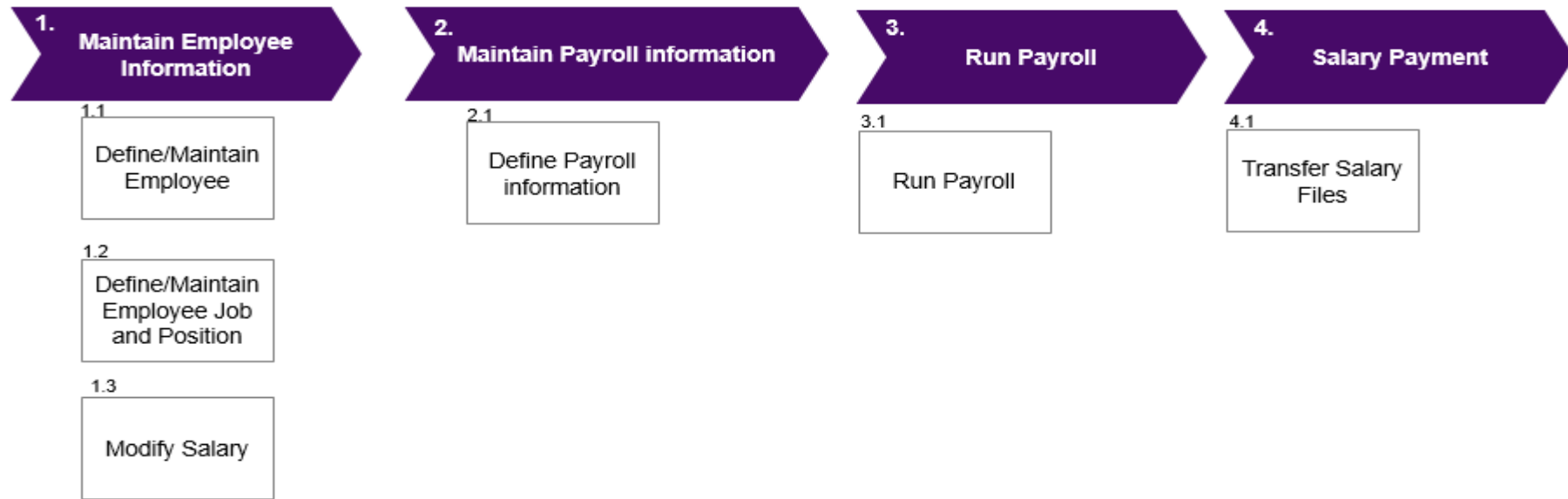
Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
P2P	Bank Reconciliation	Users may collaborate with customers to enter fictitious receipts and cover it by reconciling the same in bank statement	High	Bank Account Reconciliation	Ability to reconcile receipts/payments recorded in the system with bank statement recorded in the system
2.1	Creating of Invoices and Credit Notes	If Invoicing and customer receipts are with the same users, then the user may collaborate with customers and enter the fictitious receipts against their invoices	High	Create Transactions	Ability to create receivable invoices and credit notes
P2P	Budget Controls	Users with ability to define/enter budget should not be allowed to enter/approve the actual transactions	Medium	Control Budgets	Ability to define budget organization, account ranges, freeze budget etc.
R2R	Post Journals	Users with authority to enter/post/approve budgets should not be allowed to enter/post/approve budget consumption transactions	Low	Post Journal Entry/Reverse	Ability to post journal entries created manually/imported from subledgers to impact the account balances

4.6.4 Process Overview: Manage Reporting

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
2	Manage Invoicing and Receipts	Period end user may make unauthorized adjustments to invoices/credit notes to proceed with period closure	Medium	Create Transactions	Ability to create receivable invoices and credit notes

4.7 PAYROLL ACCOUNTING: SoD RULES BOOK

Process Overview for SOD: Payroll processing



4.7.1 Process Overview: Maintain Employee Information

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
2	Define Payroll Information	User with both these functions have the power to create fictitious employees and run their payroll	Medium	Define Payroll Information	Ability to define payroll and related information like payroll date, payroll organization etc.

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3	Run Payroll	User with both these functions have the power to create fictitious employees and run their payroll	Medium	Run Payroll	Ability to run process to calculate monthly employee wise benefits and account for the same
4.1	Transfer Salary Files	User with both these functions have the power to create fictitious employees and update the file to be sent to bank to make salary payments to such fictitious employees	Low	Transfer Salary Files	Ability to send payment details and payment instructions to bank

4.7.2 Process Overview: Define Payroll information

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
1.1	Define/Maintain Employee	User with both these functions have the power to create fictitious employees and run their payroll	Medium	Maintain Employee Information	Ability to create employee master file and maintain employee information like age, gender, nationality, date of joining etc.
1.2	Define/Maintain Employee Job and Position	User with both these functions have the power to update favored employee salary and run their payroll	Medium	Modify Employee Job and Position	Ability to enter and maintain employee compensation and benefits
2.2	Modify Salary	User with both these functions have the power to update favored employee salary and run their payroll	High	Modify Employee Salary	Ability to enter and maintain employee assignments
4.1	Transfer Salary Files	User with both these functions have the power to update favored employee salary and update the file to be sent to bank resulting in additional payments	Low	Transfer Salary Files	Ability to send payment details and payment instructions to bank

4.7.3 Process Overview: Run Payroll

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
1.1	Define/Maintain Employee	User with both these functions have the power to create fictitious employees and run their payroll	Medium	Maintain Employee Information	Ability to create employee master file and maintain employee information like age, gender, nationality, date of joining etc.

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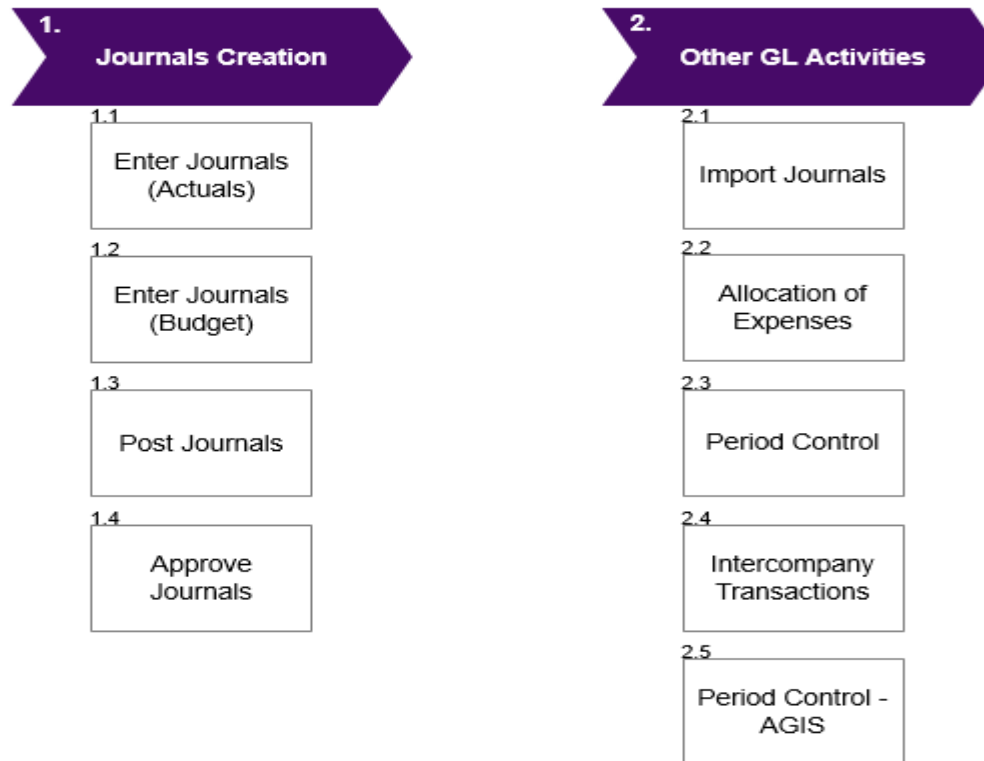
Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
1.2	Define/Maintain Employee Job and Position	User with both these functions have the power to update favored employee salary and run their payroll	Medium	Modify Employee Job and Position	Ability to enter and maintain employee compensation and benefits
2.1	Define Payroll	User with both these functions have the power to update favored employee salary and run their payroll	High	Define Payroll information	Ability to define payroll and related information like payroll date, payroll organization etc.
2.2	Modify Salary	User with both these functions have the power to update favored employee salary and run their payroll	High	Modify Employee Salary	Ability to enter and maintain employee assignments

4.7.4 Process Overview: Transfer Salary Files

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
P2P	TMS Payment Validation and Signing	Maker and checker conflict, user creating the document should not be allowed to approve the same	High	Payment Approval and Signing	Ability to approve and sign payments

4.8 RECORD TO REPORT: SoD RULES BOOK

Process Overview for SOD: Record to Report



4.8.1 Process Overview: Enter Journals (Actuals)

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
1.2	Enter Journals (Budget)	Users with authority to enter/post/approve budgets should not be allowed to enter/post/approve budget consumption transaction	High	Enter Budget Journal Entry/ Reverse	Ability to create budget journals/enter budget transfers
1.3	Post Journal	Maker and checker conflict, user creating the document should not be allowed to post the same.	Medium	Post Journal	Ability to post journal entries as per the assigned authorization limit for the specified set of books
1.4	Approve Journals	Maker and checker conflict, user creating the document should not be allowed to approve the same.	High	Approve Journal	Ability to approve journal entries as per the assigned authorization limit for the specified set of books
2.3	Period Control	Users with authority to enter/post/approve budgets should not be allowed to control period opening and closing to ensure transactions are not cleared by the period close personnel without appropriate discussion	Medium	Open and Close Periods – GL	Ability to open and close GL periods temporarily/permanently
P2P	Approve Invoice	Users authorized for creating/approving invoice/payment/receipt/other subledger functions should not be allowed to pass/approve adjustment transactions in the GL as it can impact effectiveness of reconciliation	Low	Approve Invoices	Ability to approve vender invoices entered by AP accountant
P2P	Approve POs/ Releases	Users authorized for creating/approving invoice/payment/receipt/other subledger functions should not be allowed to pass/approve adjustment	Low	Approve Purchase Order	Ability to approve purchase orders as per the assigned limit entered by PO buyer

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Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
		transactions in the GL as it can impact effectiveness of reconciliation			
P2P	Create and Cancel Invoice	Users authorized for creating/approving invoice/payment/receipt/other subledger functions should not be allowed to pass/approve adjustment transactions in the GL as it can impact effectiveness of reconciliation	Low	Create Invoices	Ability to enter invoices received from the vendor in the oracle system
P2P	Process payments	Users authorized for creating/approving invoice/payment/receipt/other subledger functions should not be allowed to pass/approve adjustment transactions in the GL as it can impact effectiveness of reconciliation	Low	Create Payments	Ability to create payments against validated and approved invoices
P2P	Generate POs/ Releases	Users authorized for creating/approving invoice/payment/receipt/other subledger functions should not be allowed to pass/approve adjustment transactions in the GL as it can impact effectiveness of reconciliation	Low	Create Purchase Orders	Ability to create standard purchase orders, blanket purchase agreements etc.
P2P	Payment and Receipts	Users authorized for creating/approving invoice/payment/receipt/other subledger functions should not be allowed to pass/approve adjustment transactions in the GL as it can impact effectiveness of reconciliation	Low	Remittances	Ability to record checks submitted to banks
			Low	Enter Customer Receipts	Ability to record amount received in AR system

4.8.2 Process Overview: Enter Journals (Budget)

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
1.2	Enter Journals (Actual)	Users with authority to enter/post/approve budgets should not be allowed to enter/post/approve budget consumption transaction as there is a risk of budget violations	High	Enter Actual Journal Entry/ Reverse	Ability to enter manual/ recurring journal entry in GL system
1.3	Post Journal	Maker and checker conflict, user creating the document should not be allowed to post the same.	Medium	Post Journal	Ability to post journal entries as per the assigned authorization limit for the specified set of books
1.4	Approve Journals	Maker and checker conflict, user creating the document should not be allowed to approve the same.	High	Approve Journal	Ability to approve journal entries as per the assigned authorization limit for the specified set of books
2.3	Period Control	Users with authority to enter/post/approve journals should not be allowed to control period opening and closing to ensure transactions are not cleared by the period close personnel without appropriate discussion	Medium	Open and Close Periods – GL	Ability to open and close GL periods temporarily/permanently
P2P	Approve Invoice	Users with authority to enter/post/approve budgets should not be allowed to enter/post/approve budget consumption transactions	Low	Approve Invoices	Ability to approve vender invoices entered by AP accountant
P2P	Approve POs/ Releases	Users with authority to enter/post/approve budgets should not be allowed to enter/post/approve budget consumption transactions	Low	Approve Purchase Order	Ability to approve purchase orders as per the assigned limit entered by PO buyer

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Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
P2P	Create and Cancel Invoice	Users with authority to enter/post/approve budgets should not be allowed to enter/post/approve budget consumption transactions	Low	Create Invoices	Ability to enter invoices received from the vendor in the oracle system
P2P	Process payments	Users with authority to enter/post/approve budgets should not be allowed to enter/post/approve budget consumption transactions	Low	Create Payments	Ability to create payments against validated and approved invoices
P2P	Generate POs/ Releases	Users with authority to enter/post/approve budgets should not be allowed to enter/post/approve budget consumption transactions	Low	Create Purchase Orders	Ability to create standard purchase orders, blanket purchase agreements etc.
R2R	Payment and Receipts	Users with authority to enter/post/approve budgets should not be allowed to enter/post/approve budget consumption transactions	Low	Enter Customer Receipts	Ability to record amount received in AR system

4.8.3 Process Overview: Post Journals

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
1.1	Enter Journals (Actual)	Maker and checker conflict, user creating the document should not be allowed to post the same.	Medium	Enter Actual Journal Entry/ Reverse	Ability to enter manual/ recurring journal entry in GL system
1.2	Enter Journals (Budget)	Maker and checker conflict, user creating the document should not be allowed to post the same.	Medium	Enter Budget Journal Entry/ Reverse	Ability to create budget journals/enter budget transfers

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Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
2.3	Period Control	Users with authority to enter/post/approve journals should not be allowed to control period opening and closing to ensure transactions are not cleared by the period close personnel without appropriate discussion	Medium	Open and Close Periods – GL	Ability to open and close GL periods temporarily/permanently
A2R	Manage Acquisition, Monitoring and Tracking	Users with authority to enter/post/approve budgets shall not be allowed to enter/post/approve actual transactions	Low	Assets Depreciation	Ability to run depreciation for all the assets in an asset book
			Low	Assets Workbench	Ability to create assets, retire assets, change asset assignments, change asset category, change location etc for a single asset
			Low	Capitalizing Assets	Ability to capitalize assets earlier created as a CWIP asset
			Low	Mass Transactions	Ability to perform asset transactions like revaluations/retirements/transfers/reclassifications etc. in one go.
			Low	Asset Physical Inventory	Ability to create and record location wise asset inventory in the system

Instructions manual for segregation of duty

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
P2P	Approve Invoice	Users with authority to enter/post/approve budgets should not be allowed to enter/post/approve budget consumption transactions	Low	Approve Invoices	Ability to approve vender invoices entered by AP accountant
P2P	Approve POs/ Releases	Users with authority to enter/post/approve budgets should not be allowed to enter/post/approve budget consumption transactions	Low	Approve Purchase Order	Ability to approve purchase orders as per the assigned limit entered by PO buyer
P2P	Create and Cancel Invoice	Users with authority to enter/post/approve budgets should not be allowed to enter/post/approve budget consumption transactions	Low	Create Invoices	Ability to enter invoices received from the vendor in the oracle system
P2P	Process payments	Users with authority to enter/post/approve budgets should not be allowed to enter/post/approve budget consumption transactions	Low	Create Payments	Ability to create payments against validated and approved invoices
P2P	Generate POs/ Releases	Users with authority to enter/post/approve budgets should not be allowed to enter/post/approve budget consumption transactions	Low	Create Purchase Orders	Ability to create standard purchase orders, blanket purchase agreements etc.
O2C	Payment and Receipts	Users authorized for creating/approving invoice/payment/receipt/other subledger functions should not be allowed to pass/approve adjustment transactions in the GL as it can impact effectiveness of reconciliation	Low	Enter Customer Receipts	Ability to record amount received in AR system

Instructions manual for segregation of duty

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
		Users authorized for creating/approving invoice/payment/receipt/other subledger functions should not be allowed to pass/approve adjustment transactions in the GL as it can impact effectiveness of reconciliation	Low	Remittance	Ability to record checks submitted to banks

4.8.4 Process Overview: Approve Journals

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
1.1	Enter Journals (Actual)	Maker and checker conflict, user creating the document should not be allowed to post the same.	High	Enter Actual Journal Entry/ Reverse	Ability to enter manual/ recurring journal entry in GL system
1.2	Enter Journals (Budget)	Maker and checker conflict, user creating the document should not be allowed to post the same.	High	Enter Budget Journal Entry/ Reverse	Ability to create budget journals/enter budget transfers
2.3	Period Control	Users with authority to enter/post/approve journals should not be allowed to control period opening and closing to ensure transactions are not cleared by the period close personnel without appropriate discussion	Low	Open and Close Periods – GL	Ability to open and close GL periods temporarily/permanently
P2P	Approve Invoice	Users with authority to enter/post/approve budgets should not be allowed to enter/post/approve budget consumption transactions	Low	Approve Invoices	Ability to approve vender invoices entered by AP accountant

Instructions manual for segregation of duty

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
P2P	Approve POs/ Releases	Users with authority to enter/post/approve budgets should not be allowed to enter/post/approve budget consumption transactions	Low	Approve Purchase Order	Ability to approve purchase orders as per the assigned limit entered by PO buyer
P2P	Create and Cancel Invoice	Users with authority to enter/post/approve budgets should not be allowed to enter/post/approve budget consumption transactions	Low	Create Invoices	Ability to enter invoices received from the vendor in the oracle system
P2P	Process payments	Users with authority to enter/post/approve budgets should not be allowed to enter/post/approve budget consumption transactions	Low	Create Payments	Ability to create payments against validated and approved invoices
P2P	Generate POs/ Releases	Users with authority to enter/post/approve budgets should not be allowed to enter/post/approve budget consumption transactions	Low	Create Purchase Orders	Ability to create standard purchase orders, blanket purchase agreements etc.
O2C	Payment and Receipts	Users with authority to enter/post/approve budgets should not be allowed to enter/post/approve budget consumption transactions	Low	Enter Customer Receipts	Ability to record amount received in AR system
		Users authorized for creating/approving invoice/payment/receipt/other subledger functions should not be allowed to pass/approve adjustment transactions in the GL as it can impact effectiveness of reconciliation	Low	Remittances	Ability to record checks submitted to banks
1.3	Post Journals	Allowing same user to approve and post journal reduces a review/approval layer in the transaction flow and therefore should be avoided	Low	Post Journal	Ability to post journal entries as per the assigned authorization limit for the specified set of books

4.8.5 Process Overview: Import Journals

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
2.3	Period Control	Users with authority to import journals should not be allowed to control period opening and closing to ensure transactions are not cleared by the period close personnel without appropriate discussion	Medium	Open and Close Periods – GL	Ability to open and close GL periods temporarily/permanently

4.8.6 Process Overview: Allocation of Expenses

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
1.1	Enter Journals (Actual)	Mass allocation is cost allocation function and should be used only by specific employees once all the balances are finalized, regular GL accountants with such function may erroneously run the process which will result in inappropriate GL balances	Low	Enter Actual Journal Entry/ Reverse	Ability to enter manual/ recurring journal entry in GL system
1.2	Enter Journals (Budget)	Mass allocation is cost allocation function and should be used only by specific employees once all the balances are finalized, regular GL accountants with such function may erroneously run the process which will result in inappropriate GL balances	Low	Enter Budget Journal Entry/ Reverse	Ability to create budget journals/enter budget transfers

4.8.7 Process Overview: Period Control

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
1.1	Enter Journals (Actual)	Users with authority to enter/post/approve journals should not be allowed to control period opening and closing to ensure transactions are not cleared by the period close personnel without appropriate discussion	Medium	Enter Actual Journal Entry/ Reverse	Ability to enter manual/ recurring journal entry in GL system
1.2	Enter Journals (Budget)	Users with authority to enter/post/approve journals should not be allowed to control period opening and closing to ensure transactions are not cleared by the period close personnel without appropriate discussion	Medium	Enter Budget Journal Entry/ Reverse	Ability to create budget journals/enter budget transfers
2.1	Import Journal	Users with authority to import journals should not be allowed to control period opening and closing to ensure transactions are not cleared by the period close personnel without appropriate discussion	Medium	Import Journals	Ability to import journal entries created for transactions entered in all the other applications like payables, receivables, inventory, payroll etc.
1.4	Approve Journal	Users with authority to enter/post/approve journals should not be allowed to control period opening and closing to ensure transactions are not cleared by the period close personnel without appropriate discussion	Low	Approve Journal	Ability to approve journal entries as per the assigned authorization limit for the specified set of books
1.3	Post Journal	Users with authority to enter/post/approve journals should not be allowed to control period opening and closing to ensure transactions are not cleared by the period close personnel without appropriate discussion	Medium	Post Journal	Ability to post journal entries as per the assigned authorization limit for the specified set of books

4.8.8 Process Overview: Period Control - AGIS

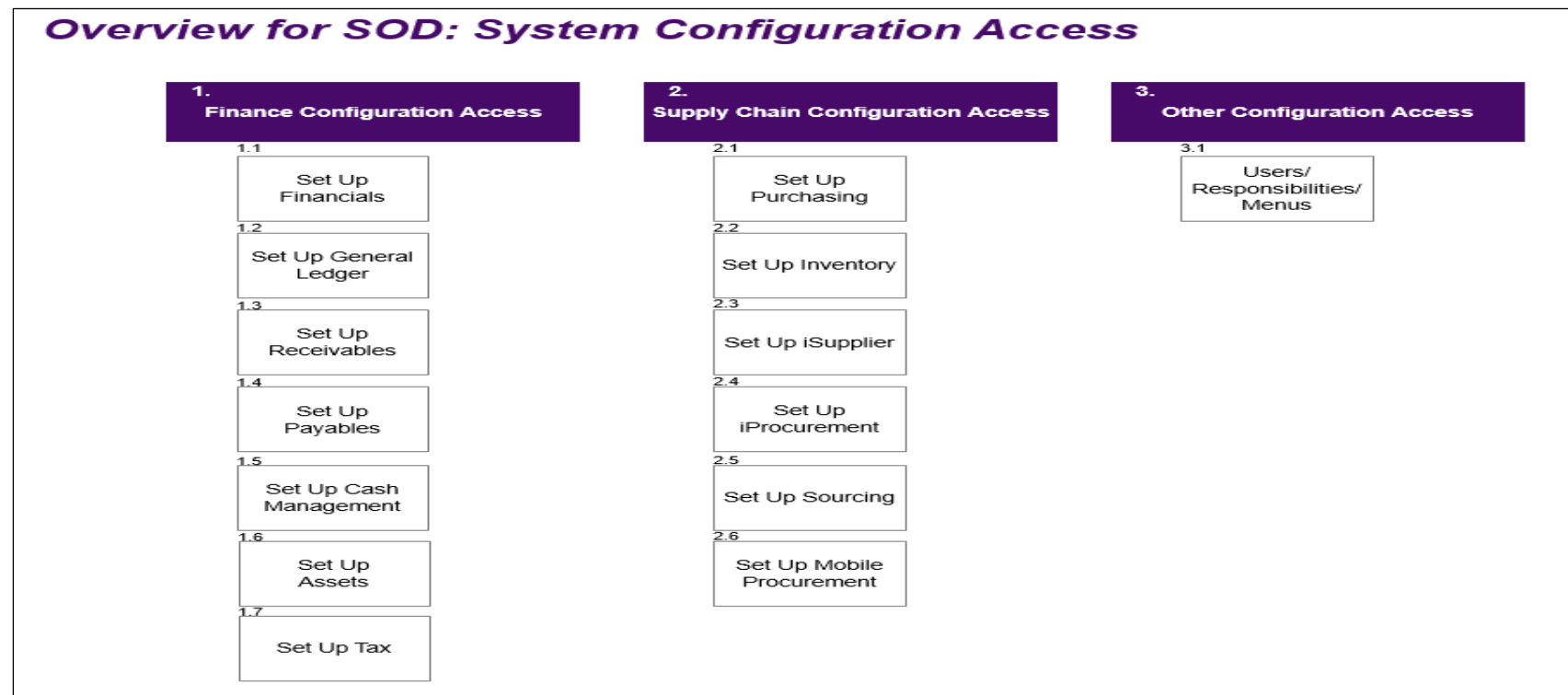
Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
2.4	Intercompany Transactions	Recommendatory to keep period controls separate from users recording/approving the transactions as user may enter backdated/future transactions in the absence of other controls	Medium	Initiate and Receive Intercompany Transactions	Ability to initiate intercompany transaction and send it to approval by recipient and vice-versa.

4.9 SYSTEM CONFIGURATIONS ACCESS: SoD RULES BOOK

System configuration access can allow users to have conflicting roles. Following principles should be followed:

1. Non-MoF employees working on FMIS projects should not have access to production
2. FMIS support team should not have access to perform any transactions on production instance
3. MoF entity end users should not have access to perform configuration changes on production
4. Following activities should be segregated among individuals and shall follow the MoF change management procedures:
 - a. Develop or change to any business process flow
 - b. Migrate/ deploy the change from development to production, and
 - c. Approve such changes to be deployed.

Detailed SoD rules are mentioned in below section



4.9.1 Process Overview: Set Up Financials

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
R2R	Enter Journals (Actual)	Users with access to transactional function should not be given access to alter the system configurations	High	Enter Actual Journal Entry/ Reverse	Ability to enter manual/ recurring journal entry in GL system
R2R	Import Journals	Users with access to transactional function should not be given access to alter the system configurations	High	Import Journals	Ability to import journal entries created for transactions entered in all the other applications like payables, receivables, inventory, payroll etc.

4.9.2 Process Overview: Set Up General Ledger

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
P2P	Raise Purchase Requisition	Users with access to transactional function should not be given access to alter the system configurations	Low	Raise Purchase Requisition	Ability to raise request internally/ to procurement for required goods and services
R2R	Enter Journals (Actual)	Users with access to transactional function should not be given access to alter the system configurations	High	Enter Journals (Actual)	Ability to enter manual/ recurring journal entry in GL system
R2R	Approve Journals	Users with access to transactional function should not be given access to alter the system configurations	Low	Approve Journals	Ability to approve journal entries as per the assigned authorization limit for the specified set of books

Instructions manual for segregation of duty

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
R2R	Post Journal Entry/Reverse	Users with access to transactional function should not be given access to alter the system configurations	Low	Post Journal Entry/Reverse	Ability to post journal entries created manually/imported from subledgers to impact the account balances
R2R	Import Journals	Users with access to transactional function should not be given access to alter the system configurations	High	Import Journals	Ability to import journal entries created for transactions entered in all the other applications like payables, receivables, inventory, payroll etc.
R2R	Enter Journals (Budget)	Users with access to transactional function should not be given access to alter the system configurations	High	Enter Journals (Budget)	Ability to create budget journals/enter budget transfers
O2C	Customer Invoicing/Credit Notes	Users with access to transactional function should not be given access to alter the system configurations	Low	Enter Accounts Receivable Invoice/ Credit Note	Ability to record invoices/ credit note issued to the customer

4.9.3 Process Overview: Set Up Payables

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
P2P	Create and Cancel Invoice	Users with access to transactional function should not be given access to alter the system configurations	High	Create Invoices	Ability to enter invoices received from the vendor in the oracle system

Instructions manual for segregation of duty

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
P2P	Process payments	Users with access to transactional function should not be given access to alter the system configurations	High	Create Payments	Ability to create payments against validated and approved invoices
		Users with access to transactional function should not be given access to alter the system configurations	High	Payments Batch Confirm	Ability to create payments in batches accommodating various supplier, invoices types, payment terms etc.
R2R	Bank Transfer/Print Cheques	Users with access to transactional function should not be given access to alter the system configurations	High	Print Checks	Ability to print check for submission to vendors for payments created by the payment accountant
P2P	Generate POs/ Releases	Users with access to transactional function should not be given access to alter the system configurations	High	Create Purchase Orders	Ability to create standard purchase orders, blanket purchase agreements etc.

4.9.4 Process Overview: Set Up Cash Management

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
P2P	Bank Transfer/Print Cheques	Users with access to transactional function should not be given access to alter the system configurations	High	Create Bank Transfers	Ability to record and validate transfer of funds from one bank to another

Instructions manual for segregation of duty

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
P2P	Process payments	Users with access to transactional function should not be given access to alter the system configurations	High	Create Payments	Ability to create payments against validated and approved invoices

4.9.5 Process Overview: Set Up Receivables

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
O2C	Payment and Receipts	Users with access to transactional function should not be given access to alter the system configurations	High	Enter Customer Receipts	Ability to record amount received in AR system
		Users with access to transactional function should not be given access to alter the system configurations	High	Remittance	Ability to record checks submitted to banks
O2C	Customer Invoicing/Credit Notes	Users with access to transactional function should not be given access to alter the system configurations	High	Enter Accounts Receivable Invoice/ Credit Note	Ability to record invoices/ credit note issued to the customer

4.9.6 Process Overview: Set Up Assets

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
R2R	Post Journal Entry/ Reverse	Users with access to transactional function should not be given access to alter the system configurations	Low	Post Journal Entry/ Reverse	Ability to post journal entries created manually/imported from subledgers to impact the account balances

Instructions manual for segregation of duty

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
A2R	Manage Acquisition, Monitoring and Tracking	Users with access to transactional function should not be given access to alter the system configurations	High	Assets Depreciation	Ability to run depreciation for all the assets in an asset book
		Users with access to transactional function should not be given access to alter the system configurations	High	Assets Workbench	Ability to create assets, retire assets, change asset assignments, change asset category, change location etc for a single asset
		Users with access to transactional function should not be given access to alter the system configurations	High	Capitalizing Assets	Ability to capitalize assets earlier created as a CWIP asset
		Users with access to transactional function should not be given access to alter the system configurations	High	Mass Transactions	Ability to perform asset transactions like revaluations/ retirements/ transfers/ reclassifications etc. in one go.
		Users with access to transactional function should not be given access to alter the system configurations	High	Asset Physical Inventory	Ability to create and record location wise asset inventory in the system

4.9.7 Process Overview: Set Up Purchasing

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
P2P	Generate POs/ Releases	Users with access to transactional function should not be given access to alter the system configurations	High	Create Purchase Orders	Ability to create standard purchase orders, blanket purchase agreements etc.
		Users with access to transactional function should not be given access to alter the system configurations	High	Enter Purchase Order Releases	Ability to record quantity released by vendor against blanket purchase agreement
P2P	Create Requisitions	Users with access to transactional function should not be given access to alter the system configurations	High	Create Requisitions	Ability to raise request internally/ to procurement for required goods and services
P2P	Create Tenders	Users with access to transactional function should not be given access to alter the system configurations	High	Prepare Tender Documents and select suppliers	Ability to create negotiation in sourcing and select suppliers to whom invitation is to be given
P2P	Scoring	Users with access to transactional function should not be given access to alter the system configurations	High	Evaluate Quotations	Ability to record evaluation scores based on vendor quotations/proposals
P2P	Supplier Management	Users with access to transactional function should not be given access to alter the system configurations	High	Create Suppliers	Ability to create supplier master file and enter crucial details like payment terms, vendor registration number, bank account details, contact details etc.

4.9.8 Process Overview: Set Up Inventory

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
P2P	Movement of Stock	Users with access to transactional function should not be given access to alter the system configurations	High	Inventory Transactions	Ability to record internal inventory movements using move order transfers, move order issue etc.
P2P	Inventory Verification	Users with access to transactional function should not be given access to alter the system configurations	High	Physical Inventory	Ability to create physical inventory in the system to be used by the users recording the inventory counting
P2P	Inventory adjustments	Users with access to transactional function should not be given access to alter the system configurations	High	Create Adjustments	Ability to record adjustments to reconcile the physical inventory and inventory available in the system
P2P	Receive and record receipt of goods	Users with access to transactional function should not be given access to alter the system configurations	High	Receive Goods and Services	Ability to record item receipts against purchase orders/unordered receipts/internal receipts (IR-ISO) in the system
P2P	Vendor Returns	Users with access to transactional function should not be given access to alter the system configurations	High	Return Goods and Services	Ability to record goods returned to vendors

4.9.9 Process Overview: Set Up Users/ Responsibilities/ Menus

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
All	All Processes	Users with access to transactional function should not be given access to alter the system configurations	High	All Functions	All Functions

4.9.10 Process Overview: Set Up iSupplier

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
P2P	Supplier Master Management	User with access to master data function should not be given access to alter the system configurations	High	Create Suppliers	Ability to create supplier master file and enter crucial details like payment terms, vendor registration number, bank account details, contact details etc.

4.9.11 Process Overview: Set Up iProcurement

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
P2P	Raise Purchase Requisition	Users with access to transactional function should not be given access to alter the system configurations	High	Create Requisition	Ability to raise request internally/ to procurement for required goods and services

4.9.12 Process Overview: Set Up Sourcing

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
P2P	Create Tenders	Users with access to transactional function should not be given access to alter the system configurations	High	Prepare Tender Documents and select suppliers	Ability to create negotiation in sourcing and select suppliers to whom invitation is to be given
P2P	Scoring	Users with access to transactional function should not be given access to alter the system configurations	High	Evaluate Quotations	Ability to record evaluation scores based on vendor quotations/proposals

4.9.13 Process Overview: Set Up Tax

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
P2P	Generate POs/ Releases	Users with access to transactional function should not be given access to alter the system configurations	High	Create Purchase Order	Ability to create standard purchase orders, blanket purchase agreements etc.
		Users with access to transactional function should not be given access to alter the system configurations	High	Enter Purchase Order Releases	Ability to record quantity released by vendor against blanket purchase agreement
R2R	Manage Invoicing and Receipts	Users with access to transactional function should not be given access to alter the system configurations	High	Enter Customer Receipts	Ability to record amount received in AR system
		Users with access to transactional function should not be given access to alter the system configurations	High	Enter Accounts Receivable Invoice/ Credit Note	Ability to record invoices/ credit note issued to the customer

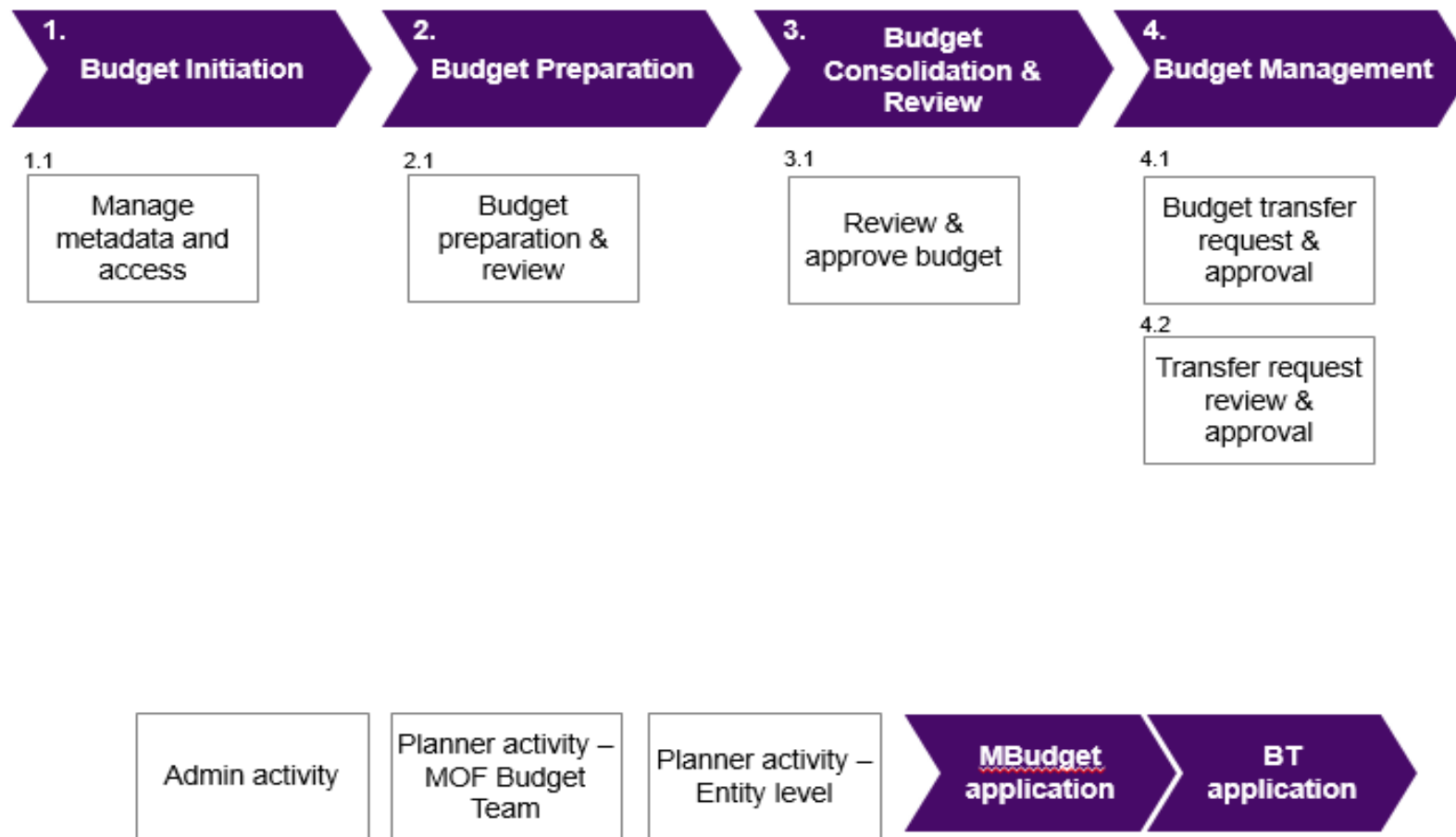
Instructions manual for segregation of duty

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
P2P	Create and Cancel Invoices	Users with access to transactional function should not be given access to alter the system configurations	High	Create Invoices	Ability to enter invoices received from the vendor in the oracle system
		Users with access to transactional function should not be given access to alter the system configurations	High	Cancel Invoices	Ability to cancel validated/unvalidated invoices in case of incorrect/erroneous entry/other system issues

4.9.14 Process Overview: Set Up AGIS

Conflicting Process		SoD Violation	Risk Categorization	Conflicting FMIS Function	Conflicting function description
P2P	Intercompany Transactions	Users with access to transactional function should not be given access to alter the system configurations	High	Initiate and Receive Intercompany Transactions	Ability to initiate intercompany transaction and send it to approval by recipient and vice-versa.

4.10 HYPERION PLANNING & BUDGETING SoD RULE BOOK



At MoF there are two main Hyperion applications which are in use-Budgeting and Hyperion Financial Management (HFM). Hyperion budgeting is used by MoF budgeting department while HFM is used by financial operations department*.

Instructions manual for segregation of duty

(* The Cash flow application is used exclusive for analysis of cash movements at a federal level by limited users (3) in the Financial Operations department at MOF. The application doesn't process any transaction nor does it interface any data back to FMIS or the budgeting system. As such the Cash flow application does not seem to be "an application under risk" within SOD principles and hence it has been excluded from SOD documentation.)

For effective maintenance of Hyperion application, administrators should have access to the functionality they need to accomplish their daily job. The following segregation of duties should be implemented between different administrators in a production environment of a Hyperion application:

4.10.1 Process Overview: Hyperion Planning & Budgeting

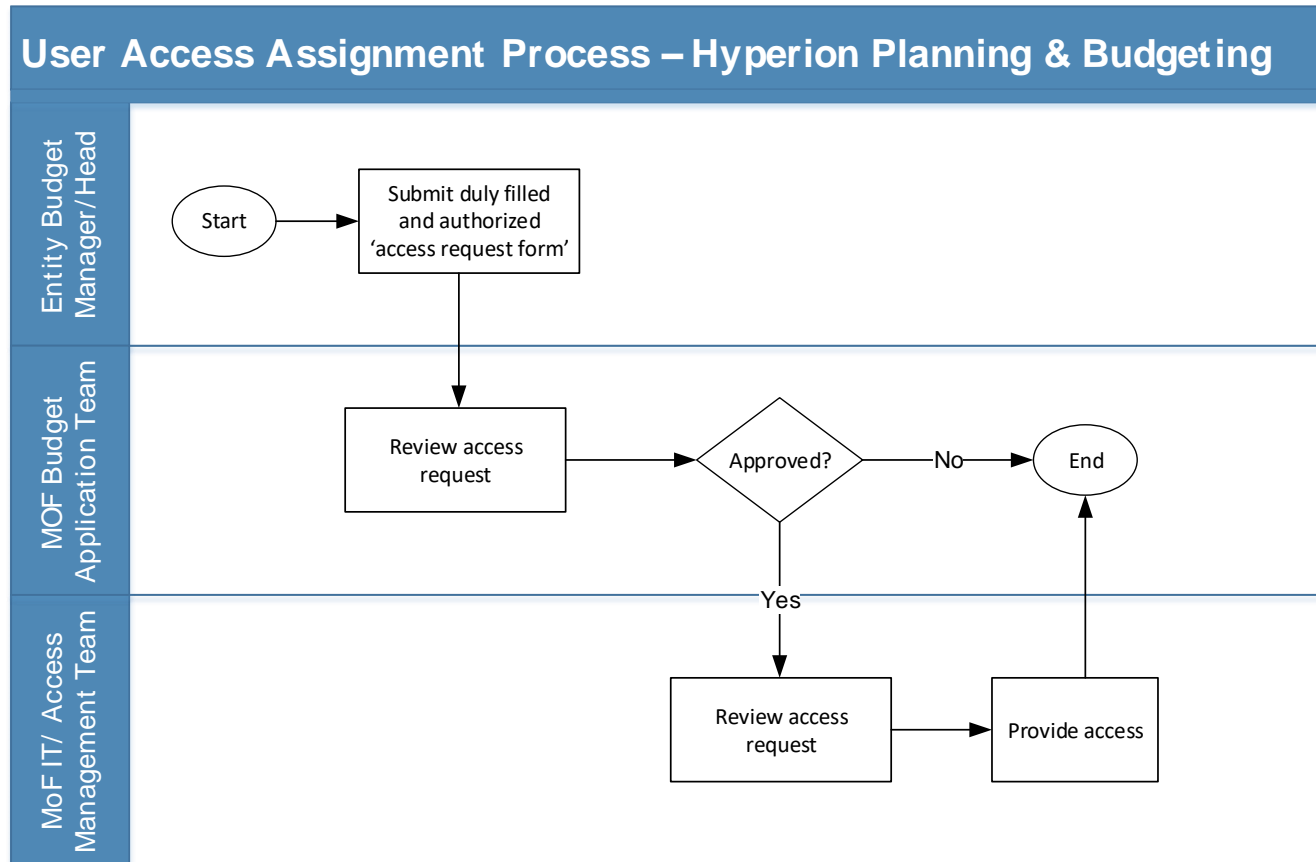
Conflicting Process		SoD Violation	Application	Risk Categorization	Conflicting Hyperion Function	Conflicting function description
1.1	Manage metadata and access	Grant access to unauthorized users (e.g. access of one entity's data to another entity user/access of HR/salary data to non-required users)	All Hyperion applications	Low	Administrator access	All 'administrator' users have access to grant such access
2.1	Budget preparation & review	Maker and checker conflict, user preparing the budget from the entity level should not be the same person approving it	MBudget application	Medium	Planning unit hierarchy	Same user can be both preparer and approver
2.1	Budget preparation & review	Access to unauthorized artifacts (metadata, task lists, forms, rules and reports)	MBudget application	Low	Security access/Shared Service	User having access to unauthorized access, due to design or by mistake or intentionally, to Hyperion artifacts can read or write confidential budget data
3.1	Review & approve budget	Access to unauthorized artifacts (metadata, task lists, forms, rules and reports)	MBudget application	Low	Security access/Shared Service	User having access to unauthorized access, due to design or by mistake or intentionally, to Hyperion

Instructions manual for segregation of duty

Conflicting Process		SoD Violation	Application	Risk Categorization	Conflicting Hyperion Function	Conflicting function description
						artifacts can read or write confidential budget data
4.1	Budget transfer request & approval	Maker and checker conflict, user submitting the budget transfer request (from the entity level) should not be the same person approving it or should not be the sole person to execute budget transfer without any approval	BT application	Medium	Planning unit hierarchy	Same user can be both preparer and approver or user can process budget transfer request without approval from supervisor
4.1	Budget transfer request & approval	Access to unauthorized artifacts (metadata, task lists, forms, rules and reports)	BT application	Low	Security access/Shared Service	User having access to unauthorized access, due to design or by mistake or intentionally, to Hyperion artifacts can read or write confidential budget data
4.2	Transfer request review & approval	Access to unauthorized artifacts (metadata, task lists, forms, rules and reports)	BT application	Low	Security access/Shared Service	User having access to unauthorized access, due to design or by mistake or intentionally, to Hyperion artifacts can read or write confidential budget data

Access to Hyperion planning applications (MBudget or BT) or to any of its components should be provided only to authorized users and in accordance to user access process after all approvals are duly obtained.

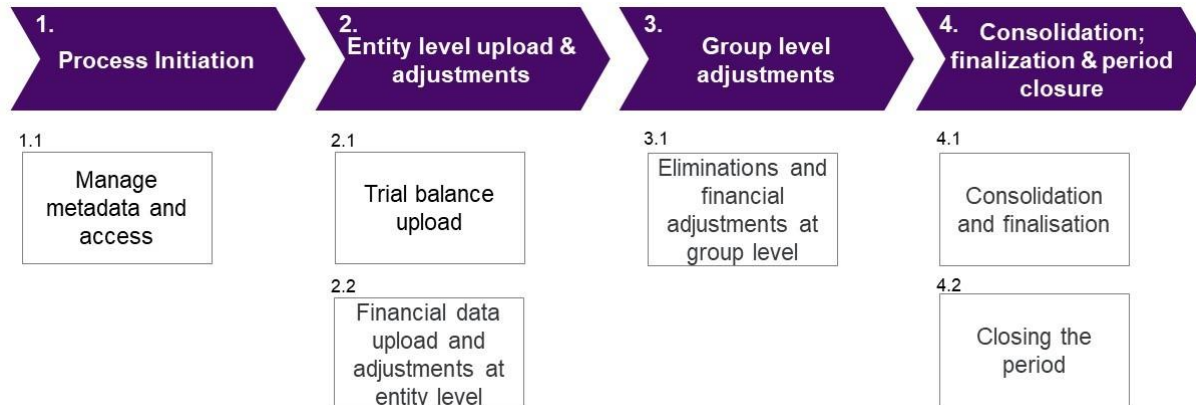
4.10.2 User Access Assignment Process – Hyperion Planning & Budgeting



MOF Budget Application Team reviews the below before approving the requests:

1. Number of users per entity - Maximum 3 and can be increased upon the top management approval
2. Available licenses

4.11 HYPERION FINANCIAL MANAGEMENT SoD RULE BOOK



At MoF there are two main Hyperion applications which are in use-Budgeting and Hyperion Financial Management (HFM). Hyperion budgeting is used by MoF budgeting department while HFM is used by financial operations department. The following segregation of duties should be implemented between different administrators in a production environment of a Hyperion application:

4.11.1 Process Overview: Hyperion Financial Management (HFM)

Conflicting Process		SoD Violation	Risk Categorization	Conflicting Hyperion Function	Conflicting function description
1.1	Manage metadata and access	Grant access to unauthorized users (e.g. access of one entity's data to another entity user/access.	High	Administrator access	All 'administrator' users have access to grant such access
2.1	Trial Balance upload	Access to write back to FMIS	Low	Integration admin access	Users having integration admin access have privileges to writeback data to FMIS
2.2	Financial data upload and	Maker and checker conflict, user uploading the financials or passing the adjustment	High	Process Management	Same user can be both preparer and approver

Instructions manual for segregation of duty

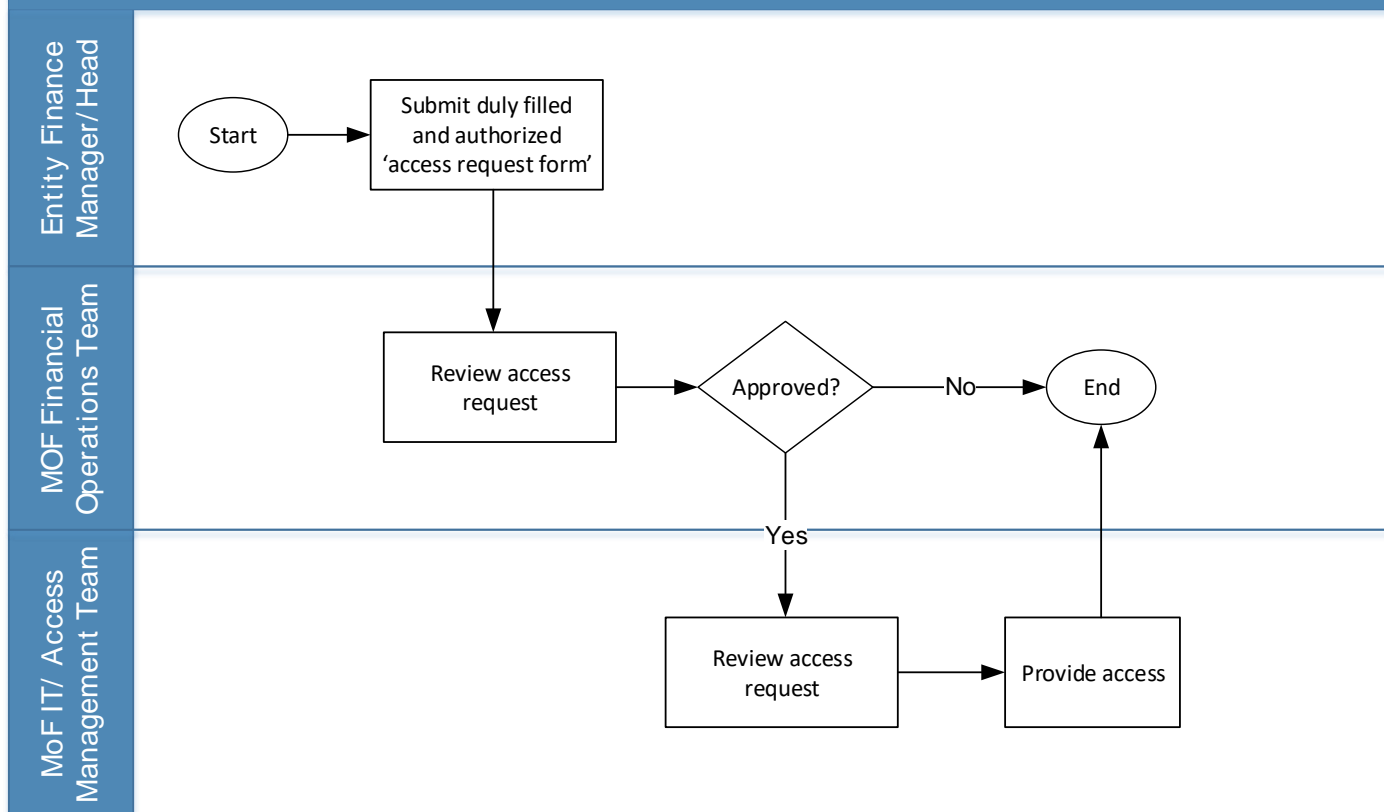
<i>Conflicting Process</i>		<i>SoD Violation</i>	<i>Risk Categorization</i>	<i>Conflicting Hyperion Function</i>	<i>Conflicting function description</i>
	adjustments at entity level	JVs at the entity level should not be the same person approving it			
3.1	Eliminations and financial adjustments at group level	Maker and checker conflict, users passing the adjustment JVs at consolidated level should not be the same person approving it	High	Process Management	Same user can be both preparer and approver
4.1	Consolidation and finalisation	Maker and checker conflict, users making any adjustments through JVs or forms at consolidated level should not be the same person approving it	High	Process Management	Same user can be both preparer and approver
4.2	Closing the period	User can leave the period open/unlocked or reopen after closing to make any changes in consolidated financials	Low	Process Management	Once consolidated financial statements are approved, periods should be closed permanently

Access to Hyperion Financial Management (HFM) or to any of its components should be provided only to authorized users and in accordance to user access process after all approvals are duly obtained.

(Note: The Cash flow application is used exclusive for analysis of cash movements at a federal level by limited users (3) in the Financial Operations department at MOF. The application doesn't process any transaction nor does it interface any data back to FMIS or the budgeting system. As such the Cash flow application does not seem to be "an application under risk" within SOD principles and hence it has been excluded from SOD documentation.)

4.11.2 User Access Assignment – Hyperion Financial Management

User Access Assignment Process – Hyperion Financial Management



5 ANNEXURES

5.1 REFERENCES

Following references have been used:

1. Information Systems Audit and Control Association (ISACA)
2. ISO/IEC 27001

5.2 RESPONSIBILITY ASSIGNMENT PROCESS

5.2.1 User Responsibility Assignment Process

The process diagram below depicts the 'Responsibility Assignment' process for FMIS, for assignment of new responsibility by the user.

