# KDD091 - Management of Change (MOC)

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| **Status** | Approved |
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## Issue

Syensqo currently operates multiple **Management of Change (MOC)** systems across Syensqo to govern, fully or partially, product, process and operational changes (STARS, LAUNCH, ETQ, Gensuite, AO DOCS).

In parallel, SYWAY has defined core processes within S/4HANA environment to manage Product & Raw Materials Master Data, namely:

- 01.02.01. Manage Product and Application Development and Modification
- 01.03.01. Manage Product/Service Data
- MDM (Master Data Management)

Altogether those processes create a standardized and integrated framework for Product Creation, Product Modification as well as Raw Material Creation/Modification activities across the product lifecycle. They will be referred to as "PRMD" (Product & Raw Materials Master Data). They however do not represent of full MOC system. PRMD manages the "execution" steps of Product Creation & MOC, but not the decision, planning and approvals required upfront of the execution.

A decision is required to determine whether Syensqo:

1. Option A: Continues to use existing MOC systems with integration to SAP and MDM,
2. Option B: Activates SAP's native MOC module and retires legacy systems,
3. Option C: Implement a hybrid model, where MOC initiates certain risk-driven changes while S/4 executes all master-data creation /modification under the PRMD.

## Recommendation

Adopt **Option C – Hybrid Model** (Recommended Approach).

**MOC is out of scope for SyWay** implementation. Legacy MOC systems will continue to manage non-product changes, including operational, process-safety, environmental or site-level engineering modifications.

MOC initiates selected change processes (e.g. new raw-material creation, raw-material qualification, technical/regulatory reviews, risk assessments, sustainability checks, document validation) and performs formal approvals. The PRMD solution will govern all product-related creation and modification scenarios within SAP. Corresponding workflows and templates in existing MOC systems will be deactivated for any process covered by PRMD.

This model ensures a single source of truth for product governance while preserving local MOC control for safety and compliance and avoiding costly integrations or system duplication.

## Background & Context

**Current context:**

Syensqo is currently managing different Product Creation/Modification & MOC tools:

- STARS (Webmethod bpm) is used by SpP to manage governance, approvals, documentation and Historization of Product Creation & Modifications, Raw Material creation, Document authoring as well as some elements of MOC. It is managed jointly by R&I and Operations
- LAUNCH (Webmethod bpm) is used by P&C Novecare to manage roughly the same scope. LAUNCH support, maintenance & update is currently limited due to resources/expertise availability.
- ETQ is expected to be selected to manage Composite Materials Product related MOC governance & execution
- Gensuite: Used in Novecare & Technology Solution to manage non-project MOC requirements
- MOC guidances/formal processes are updated by each GBU/Function (TB updated).
- In addition, there are various tools used to initiate (Salesforce cases, ETQ, STARS, SDS request forms, SYRA tickets, multiple LIMs systems) or execute (in SAP or third party systems) specific MOC requests across the organization.

None of those tools are connected to SAP today. They govern the RACI for changes to be implemented by different people/job owners. Although each GBU/Function has developed ad-hoc tools & customizations, this complexity creates multiple challenges:

- Lack of standardized clear accountability
- Challenges in identifying approvers/doers for non-standard use-cases
- Delays in Product development or Management of change execution with associated lack of customer and delivery focus.

**SYWAY Design**

The PRMD process defines the standardized pathways through which Syensqo brings a product from concept to commercialization, ensuring quality, compliance and business readiness and manage Master Data updates throughout product life-cycle. The PRMD framework integrates R&D, Product Stewardship, Supply Chain, EHS and Finance functions through distinct lifecycle phases

PRMD Process overview:

- 01.02.01. Manage Product and Application Development and Modification: pivot between project execution and product life-cycle management. Used for new product introduction and project governed MOC execution.
- 01.03.01. Manage Product/Service Data: used to create/manage SAP S/4 HANA, MDM and downstream systems (GTS, Salesforce, QM...) product & materials master data
- MDM (Master Data Management): SYWAY overarching Master Data Management system (including, but not limited to Products & Materials).

### Manage Product and Application Development and Modification (L3)

Represents the Pathway to initiate requests to create and maintain Product & Raw Material Master data from a Project (PPM item). It is a pivot bpm linking PPM project execution to Product creation/MOC execution. It is essentially providing triggers to Production Order request, Raw Material Creation, New Unpackaged Product Creation, New Packaged Product Creation alongside with classical financial transactions/postings.

| Phase | Purpose / Description | Key Outcomes / Deliverables |
|---|---|---|
| Feasibility / Solution Development | Research, formulation and initial recipe design to meet target requirements. | Defined composition (BOM), processing parameters, lab-scale validation. |
| Pilot | Practical evaluation of feasibility under lab or pilot-scale conditions. | Confirm product concept viability, generate early data for scale-up |
| Scale-Up | Transfer of validated composition and process to production assets under standard conditions. | Confirm manufacturability and cost structure, finalize recipe and FMEA. |
| Industrialization | Full production with operational ownership; validate robustness and repeatability. | Process validation, qualification batches and readiness for commercialization. |
| Commercialization | Product launch, costing and replication to downstream systems. | Product release, market activation and compliance documentation. |

### Manage Product/Service Data (L3)

Represents the different Pathways to execute requests to create and maintain Product & Raw Material Master data. It contains 4 L4 processes:

- Manage New Unpackaged Product
- Manage Unpackaged Product
- Manage Packaged Product
- Manage Raw Material

Those processes can be called from a PPM project or from MDM depending on MOC execution requirements.

Each Processes govern the controlled creation and modification of key product & raw material master objects, including:

- **Unpackaged Product (ZBAS):** Represents the core chemical identity of a product, capturing intrinsic physical and chemical properties, composition and compliance-relevant information. This object underpins all regulatory data (SDS, HS Codes, labeling classification, export control/CUI) and forms the foundation for all downstream commercial and compliance activities. It is created during the Feasibility and Scale-Up phases and remains the reference entity throughout the product's lifecycle.
- **Packaged Product (ZDIR):** Represents the marketable, saleable form of the product and inherits its composition and regulatory attributes from the corresponding Unpackaged Product. It governs all packaging, labeling and transport configurations (pack size, packaging materials, dangerous goods classification). The Packaged Product becomes active during Industrialization and Commercialization phases once packaging and logistics parameters are finalized. It is the entity extended to Sales and Distribution, Inventory and Customer systems.
- **Raw Material Readiness:** Encompasses supplier and raw material qualification processes managed through PRMD. It ensures that all raw materials used in product formulations have completed the necessary quality, compliance and sourcing validation. This process governs new raw material creation, supplier change approvals and plant or country extensions, linking directly to Procurement and Product Stewardship functions.
- **BOM & Recipe:** Defines the approved product composition and its associated manufacturing resources (equipment, process parameters and routings). BOMs and Recipes are only generated and released through the PRMD process once a product has passed feasibility and scale-up validations. This ensures that only verified and approved formulations enter production environments, maintaining strict control over change traceability, versioning and master data consistency.
- **Product Hierarchy:** Provides structured classification of all products from Family  Line  Group  Commercial Product. This hierarchy links directly to master data replication and financial reporting structures in SAP, enabling clear lineage from development product to marketable SKU.

Historically, these product elements were partially governed through local MOC systems, with product changes (composition, specification or packaging) processed independently of SAP. This created significant challenges including:

- Inconsistent versioning of master data across sites.
- Duplicate or unclear approvals between MOC and SAP processes.
- Fragmented audit trails and non-aligned compliance documentation.

- Manual data maintenance and delays in replication to downstream systems.

The PRMD process now provides an enterprise-level, SAP-integrated governance mechanism for managing all product lifecycle activities — from concept definition to commercialization or end-of-life — ensuring:

- Single-source data ownership
- Automated compliance replication
- Controlled workflows with global visibility
- Seamless traceability across all product creation and modification events.

# Assumptions

- The PRMD business process covers all defined product/raw materials lifecycle scenarios as far as Master Data Management is concerned.
- MOC systems currently manage: 1) site-specific process-safety, environmental and operational changes that are outside PRMD scope, 2) formal MOC processes & approvals required before MOC execution.
- Hybrid approach allows clear functional demarcation without disrupting safety or compliance processes.
- If the PRMD process covers all functionality for the MOC system, then MOC will be retired

# Constraints

- PRMD does not manage operational, maintenance or asset-level change workflows.
- In its current design PRMD does not manage the MOC formal process or documentation
- Legacy MOC coexistence required during PRMD cutover for in-flight product changes.
- Local regulatory documentation may need to be retained in existing MOC systems for audit purposes.
- User training required to enforce correct usage boundaries between PRMD and MOC.
- P&C Novecare MOC system is obsolete/lack support & upgrades and may have to be replaced by another system in case PMRD does not cover all needs.

# Impacts

### Process Impact

- PRMD becomes the authoritative Master Data Management process for all product lifecycle governance.
- MOC systems focus solely on: 1) non-product, safety and operational changes, 2) formal MOC strategy, planning and approvals steps.
- Reduces duplicate data entry and approval steps.

### System Impact

- Simplifies integration landscape by removing redundant MOC-to-SAP interfaces.
- Strengthens traceability through native SAP data flows (EHS, GTS, Product Compliance, Salesforce).

### Data & Migration Impact

- Product change records in MOC will be retired or closed before PRMD go-live.
- Historical data archived in compliance repositories.

### Governance Impact

- Global Product Lifecycle governance owned by PRMD Process Owner.
- Site MOC Coordinators maintain accountability for local operational changes.

# Business Rules

1. All product creation and modification must be executed through the PRMD process.
2. Operational and safety-related changes remain within site MOC systems.
3. Any functional gaps outside PRMD's scope will remain in MOC until future PRMD enhancements.
4. Governance roles, data ownership and change boundaries to be defined in the PRMD–MOC demarcation matrix.

# Options considered

# Option A: Continue Using Existing MOC Systems (Full Integration with MDM and S/4HANA)

Retain all existing site-specific MOC systems for managing both product and operational changes. Each MOC platform would be integrated with the Master Data Management (MDM) layer and the multiple S/4HANA instances (ROW, CUI, China). Product changes would continue to originate in MOC, with approved data replicated to SAP post-approval.

### Benefits

- Minimal business disruption: Existing MOC tools and user familiarity are retained.
- Regulatory continuity: Maintains current workflows aligned with local EHS and compliance frameworks.
- Short-term implementation ease: Avoids re-training or process redefinition at go-live.
- Localized autonomy: Sites maintain flexibility to manage process-safety and quality changes within familiar environments.

### Limitations

- Integration complexity: Requires multiple custom interfaces to MDM and S/4, increasing cost and maintenance overhead.
- Data synchronization risk: Asynchronous updates may cause data misalignment or versioning errors between MOC and SAP.
- Governance fragmentation: Duplicated approvals and inconsistent master data ownership undermine single-source-of-truth principles.
- Limited scalability: Legacy technologies and decentralized control inhibit automation, analytics and standard reporting.
- Contradiction with program principles: This model diverges from SyWay's global standardization and data governance vision.

# Option B: Activate SAP MOC Module (Full Centralization in S/4HANA)

Activate SAP's MOC module to replace all legacy MOC systems, consolidating product, process and operational change management into a single unified platform within S/4HANA.

### Benefits

- Single governance framework: End-to-end change management integrated with SAP master data, Product Compliance and EHS modules.
- Complete traceability: Unified audit trail, approvals and document management across all change types.
- Enhanced reporting: Native alignment with SAP Analytics Cloud for enterprise-level transparency.
- Future-readiness: Creates foundation for digital twins, predictive maintenance and sustainability compliance tracking.
- Elimination of legacy maintenance: Decommissions all local systems, reducing IT overhead.

### Limitations

- High implementation cost and effort: Requires new global design, configuration and extensive change management.
- Timeline and resource impact on current project plan
- Functional coverage gaps: Standard SAP MOC does not natively support all site-specific process-safety and regulatory nuances without customization.

## Option C: Hybrid Model (PRMD for Product Changes, MOC for Operational/Safety Changes)

Adopt a hybrid governance model where all product-related creation and modification scenarios are controlled under the PRMD business process, while existing MOC systems continue to manage operational, safety and plant-level changes.

Overlapping MOC workflows related to product data are deactivated post-PRMD go-live.

### Benefits

- Governance clarity: Distinct boundaries between product governance (PRMD) and safety/operational governance (MOC).
- Alignment with SyWay principles: Supports single-source master data, standardized workflows and controlled replication across SAP modules.
- Business continuity: Local MOC systems will be maintained to ensure essential safety and environmental change tracking. The formal MOC strategy, planning, and approvals will continue to be managed outside of S/4, using legacy systems.
- Scalability: Provides a pathway for future convergence to SAP MOC when business readiness and PRMD maturity allow.
- Reduced duplication: Eliminates parallel workflows for product changes, improving efficiency and audit compliance.
- Accelerated value realization: Enables global standardization without waiting for total MOC re-platforming.

### Limitations

- Both SAP and multiple legacy MOC's systems will coexist, requiring clear procedural demarcation and governance documentation.
- Dependence on PRMD coverage: Any gaps in PRMD functionality must be managed through legacy MOC processes. Possible gap in approval workflows.
- User education requirement: Training and communication needed to ensure correct system usage and change classification.

# Evaluation

An evaluation was conducted to assess the three options, continuing with existing MOC systems, activating SAP's MOC module or adopting a hybrid governance model

**Hybrid Model (Option C)** emerges as the most balanced and pragmatic solution, delivering immediate alignment with the PRMD product governance framework, minimizing technical disruption and maintaining site-level operational control for safety and compliance.
It provides a scalable foundation for future convergence under a single enterprise MOC environment, while enabling the program to achieve rapid, measurable business value and governance consistency in the short term.

## Comparative Summary

| Evaluation Criteria | Option A<br>Continue MOC | Option B<br>Activate SAP MOC | Option C<br>Hybrid<br>(Recommended) |
|---|---|---|---|
| Process Governance Alignment | **Weak** | **Strong** | **Strong** |
| Regulatory Continuity | **Moderate** | **Moderate** | **Strong** |
| Data Integrity | **Medium** | **High** | **High** |
| Integration Complexity | **Very High** | **High** | **Low** |
| Operational Risk | **Medium** | **Low** | **Low** |
| Scalability & Future Readiness | **Low** | **High** | **High** |
| Change Management Impact | **Low** | **Very High** | **High** |
| Overall Assessment | **Not sustainable** | **Future consolidation opportunity** | **Best-fit solution** |

## PRMD Scenarios and System Coverage

| Scenario | PRMD Coverage | MOC Coverage | Decision |
|---|---|---|---|
| New Raw Material | Creation, Governance & replication | Initiation, risk assessment, regulatory checks, approvals | Hybrid |
| Raw Material Qualification | PRMD execution, Eligibility update, view creation, supplier documentation | Initiation, risk assessment, regulatory checks, approvals | Hybrid |
| Supplier Change | Full PRMD | Initiation, risk assessment, regulatory checks, approvals | Hybrid |
| New Product | Full PRMD | - | PRMD |
| Product Modification | Full PRMD | Can trigger MOC (safety/regulatory) | Hybrid |
| Change in Composition (BOM /Recipe) | PRMD execution | Risk review | PRMD |
| Change in Specifications | PRMD execution | Initiation, risk assessment, regulatory checks, approvals | Hybrid |
| Change in Packaging / Labeling | PRMD execution | Initiation, risk assessment, regulatory checks, approvals | Hybrid |
| New Marketed Country | PRMD execution | Initiation, risk assessment, regulatory checks, approvals | Hybrid |
| Extend to new Plant | PRMD execution | Initiation, risk assessment, regulatory checks, approvals | Hybrid |
| End-of-Life (Product or Raw Material) | PRMD execution | Initiation, risk assessment, regulatory checks, approvals | Hybrid |
| Change in Manufacturing Resource / Asset | - | Full MOC | Retain in MOC |
| Process-Safety / HSE Change | - | Full MOC | Retain in MOC |
| Operational / Equipment Modification | - | Full MOC | Retain in MOC |

# See also

SYWAY KDD091 - Management of Change - Stakeholder Review.eml

| File | Modified |
|---|---|
| File SYWAY KDD091 - Management of Change - Stakeholder Review.eml | Jan 14, 2026 by LEIGHTON-ext, Dean |

# Change log

| Version | Published | Changed By | Comment |
|---|---|---|---|
| **CURRENT (v. 37)** | **Jan 14, 2026 15:10** | **LEIGHTON-ext, Dean** | |
| v. 36 | Jan 14, 2026 15:09 | **LEIGHTON-ext, Dean** | |
| v. 35 | Dec 08, 2025 16:41 | **LEIGHTON-ext, Dean** | |
| v. 34 | Dec 05, 2025 15:54 | **MOREAU, Patrick** | (option B only) |
| v. 33 | Dec 03, 2025 15:22 | **MOREAU, Patrick** | |
| v. 32 | Dec 03, 2025 14:45 | **LEIGHTON-ext, Dean** | |
| v. 31 | Dec 03, 2025 14:45 | **LEIGHTON-ext, Dean** | |
| v. 30 | Dec 03, 2025 09:59 | **LEIGHTON-ext, Dean** | |
| v. 29 | Nov 28, 2025 12:15 | **MOREAU, Patrick** | |
| v. 28 | Nov 27, 2025 17:47 | **LEIGHTON-ext, Dean** | |

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# Workflow history

This view shows the 5 most recent entries. The complete workflow log is available from the 'Document Activity' menu item.

| Jan 20, 2026 | Actor | Type | Activity | Version |
|---|---|---|---|---|
| Approved | LEIGHTON-ext, Dean | State | changed state to Approved at 12:49 pm | v37 |
| Pending SteerCo Review | LEIGHTON-ext, Dean | State | gave *Final Approval* approval at 12:49 pm | |
| **Jan 14, 2026** | | | | |
| | LEIGHTON-ext, Dean | Edit | updated the page at 3:09 pm | |
| | LEIGHTON-ext, Dean | State | changed expiry date to '28 Jan, 2026 02:11 pm' at 2:11 pm | |
| | | State | changed state to Pending SteerCo Review at 2:11 pm | v37 |
| Pending Stakeholder Review | LEIGHTON-ext, Dean | State | gave *Stakeholder Review* approval at 2:11 pm | |
| | | State | changed expiry date to '21 Jan, 2026 02:11 pm' at 2:11 pm | |
| | | State | changed state to Pending Stakeholder Review at 2:11 pm | v37 |