

# MNsure Phase II Project

## Deliverable #2 – Program and Project Management Assessment

July 11, 2014

# Document Control Information

## Document Information

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1.0	6/03/2014	Draft	Deloitte Consulting LLP
2.0	7/11/2014	Incorporated Feedback from MNsure, DHS, and MN.IT stakeholders	Deloitte Consulting LLP

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## **Lead Vendor Project Background**

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# Lead Vendor Project Background

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## Project Background and Objective

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Deloitte Consulting LLP (Deloitte) was engaged by the State of Minnesota to assess, identify potential impacts and provide recommendations for the State's consideration on the go-forward strategy for ongoing operations, 2015 open enrollment and beyond

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## Project Scope

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1. Conduct an assessment of governance structure, decision-making processes, program and project management practices and provide recommendations for consideration to implement governance structure, program and project management controls and oversight
2. Conduct an assessment of the current state of the MNsure system from functional and technical perspective and provide recommendations for consideration for the short-, mid-, and long-term
3. Perform the following project activities:
  - Program and Project Management
  - Project Planning
  - Functional and Technical Systems Assessment
  - Release Management
  - Defect and Issue Tracking
  - Leadership and Planning of User Acceptance Testing (UAT)



Scope of this deliverable

## Project Deliverables

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Deloitte is contracted to produce five deliverables:

1. Report and reconciliation matrix of current status of Deliverables across existing vendor agreements
2. **Project Management Analysis and Considerations Report**
3. Phase 1 Functional and Technical Assessment Report with a categorization of key functional and system gaps and considerations for a near-term system roadmap
4. Application Project Work Plan
5. Phase 2 Functional and Technical Assessment Report with a categorization of key functional and system gaps and considerations for a mid-term and long-term

The focus of this deliverable is the Project Management Analysis and Considerations Report

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## **Executive Summary**

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## Executive Summary

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Deloitte Consulting LLP (Deloitte) was engaged to conduct an assessment of the governance structure, accountability and decision making, project management controls and software development lifecycle (SDLC) phases of testing, defect, and release management. This assessment focused on identifying considerations for the State for the immediate term (calendar year 2014) and for a sustainable project management structure and lifecycle.

During the Fall of 2013, much of the State's efforts were focused on addressing issues that arose at the time of initial open enrollment (October 1, 2013). During this period, we understand the governance and project management processes for the project became less effective and resulted in a lack of coordination, integration and decision-making across the project teams and stakeholders. Recognizing these challenges in early 2014, the State began to refresh efforts to reinstate its governing and project management processes it had instituted at the outset of the project.

Deloitte identified observations, impacts and considerations in the following areas: (1) Governance; (2) Communication and information flow; (3) Status reporting; (4) Risk management; (5) Issue management; (6) Change control; (7) Defect management; (8) Testing management and (9) Release management. For each of the areas, the overall maturity of the process/area was assessed against Deloitte's proprietary project management methodology.

**Governance:** While positive efforts were noted in the reestablishment of a model of governance and related processes earlier this year, their effectiveness remain diluted for a variety of structural, procedural, role definition, decision-making and accountability challenges. The cumulative effect has been to create confusion among most leads and stakeholders, inconsistent adherence to processes, untimely decision making and issue resolution. In addition to streamlining project execution responsibility under a new Project Director role (within the Minnesota IT organization and has day to day responsibility for the MNsure IT system project), the full establishment of a MN.IT MNsure Project Management Office (PMO), empowerment and staffing of all governance bodies (including Change Control Board) was identified.

Prioritization of key tasks, activities and decisions made, need to be documented, communicated, and not revisited or changed. MNsure IT system project work needs to be documented in an integrated project work plan to include testing and release management activities built into the approach. Clarity of roles and establishing measurable accountability are key takeaways of the observations.

## Executive Summary (cont.)

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**Project management processes:** Reconstitution of many critical project management processes were evident, however many of these processes lacked consistency in operation and varied in maturity. The primary impacts to project effectiveness are concentrated in a number of areas that are prioritized below:

- It was observed that testing of complex functionality (such as batches, interfaces and notices) often occurs directly in the live production environment - where actual user processing occurs. This specific functionality was not tested with State involvement, and broader testing was limited or entirely missing prior to promotion to production. The State needs to address the barriers preventing thorough testing in the lower (earlier) environments. In addition to significant disruption risk to the production environment, the cost of remediating an issue found in production is generally significantly more costly than when found much earlier in the testing cycle.
- Controls for risk, issue, and decision management (including logs and spreadsheets) are available for the project but there is not active or consolidated management of these logs. Specifically, prioritization of risks and issues at an appropriate level does not occur, nor does timely decision making occur. This can lead to issues, risks, and decisions not being fully understood, communicated, or acted upon with the appropriate degree of prioritization.
- Tracking and timely reporting of current and cumulative project status is critical to understanding where the project stands at any point in time and thereby allowing leadership to respond to issues, unplanned events, and resource impacts in particular. Comprehensive status reporting for the project was not timely, consistent or fully representative of all IT vendor partners and agency groups.
- System defects do not appear to be comprehensively captured, resulting in a far lower number of total open defects. Initial reports showed only 60-162 total open defects. Upon follow-up and detailed analysis, 399 total open defects were identified. The defect types are split roughly in half between product and functional issues, have been identified in the production environment and fixes pending to be delivered by vendors were identified in lower environments. The State should validate and confirm that this is the exhaustive list of defects and one system should be used to track and manage all defects. The non-capture and active management of system defects will challenge system improvement efforts and may pose additional financial burden on the State.

While our observations are pervasive across the governance model and project management processes – addressing these needs with a positive impact to project momentum can usually be achieved in a short timeframe. The remainder of this document provides the detail and considerations to affect this effort.

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## **Approach and Scope**

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# Approach

*Deloitte's approach to assessing the current project governance, project management and software development lifecycle processes and tools was to interview stakeholders, review documents and processes, and identify gaps. Gaps were compared with Deloitte's Project Management Body of Knowledge (PMBOK) based project management methodology to develop considerations for each of the assessment areas.*

## Inputs and Activities



Identify Stakeholders



Review Existing Analysis



Deloitte's Project Management Methodology



Process Walkthroughs



Interviews



Document Reviews

## Outputs

Observations, Impacts and Considerations for:

- Governance, decision-making and accountability
- Communication and information flow
- Status reporting
- Risk management
- Issue management
- Change control
- Defect management
- Testing management
- Release management

Proposed processes and tools (to-be implemented by the MN.IT MNSure PMO) for:

- Status reporting
- Risk management
- Issue management
- Change control
- Defect management
- Testing management
- Release management

# Scope

The scope of this assessment is to provide observations and considerations focused around governance, prioritization, communication and information flow, status reporting, risk and issue management, defect, test and release management



## Governance

### Governance scope:

- Governance structure
- Accountability and decision-making



## Communication and Information Flow

### Communication and information flow scope:

- Internal and external stakeholders (agencies, vendors, health plans, counties, navigators, brokers)
- Information flow



## Status Reporting

### Status reporting scope:

- Reporting of status content
- Status preparation and distribution



## Risk and Issue Management

### Risk and issue scope:

- Risk/issue plan
- Risk/issue tools and maintenance
- Risk/issue prioritization and categorization



## Change Control

### Change control scope:

- Change control board
- Change control request process
- Change control log and request form



## Defect Management

### Defect management scope:

- Defect triage
- Defect prioritization, ownership, resolution, closure
- Defect management tool
- Defect dashboards and metrics



## Test Management

### Test management scope:

- Testing plan
- Testing lifecycle spanning unit test, integration, system test, user acceptance test, production smoke test, and regression test
- Performance test, security test, and American Disabilities Act (ADA) testing types



## Release Management

### Release management scope:

- Release management plan
- Release schedule and calendar
- Release estimates standards
- Release checklists
- Release notes
- Deployment standards

————— **Governance, Decision-making, and Accountability** —————



## Project Governance – Overview

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- Deloitte was engaged by the State of Minnesota (“the State”) to assess the project governance, organizational structure, and project management approach and to recommend critical changes needed to improve overall management of the project. The “project” is defined as the MNsure Phase II Project - which in short is the project to effect remediation and enhancements to the system to fully enable the enrollment process for 2015 (which starts on November 15, 2014).
- Three primary state entities have a stake in the project – the Minnesota Insurance Marketplace (MNsure), the Department of Human Services (DHS) and the Minnesota Information Technology agency (MN.IT). Our review included understanding the business interests, relationships and impacts of these organizations on the project.
- Today a Board of Directors governs the relatively newly formed MNsure organization (“MNsure”). At a summary level, the Board by its charter predominantly determines strategy and delegates “day to day” operational management to its appointed Executive Director, while also maintaining particular focus on the financial underpinnings of the organization. The business of the organization (including policy setting) is exclusively that of the Board, who nonetheless can delegate responsibility to its executive director or a committee(s).
- The Department of Human Services (DHS), a more mature organization, is headed by a Commissioner with an underlying executive team. The Commissioner has a permanent appointment on the MNsure Board of Directors.
- The Minnesota Information Technology agency (MN.IT) is led by a Commissioner and the organization has broad ownership of the State’s technology assets and resources, and operates as a “shared services” organization for their respective business customers, including DHS and MNsure.
- Although the MNsure and DHS organizations have unique business goals and interests, they share common interests as they relate to providing health coverage to Minnesotans, and the underlying processes and system (“MNsure system”) that enables that processing. MN.IT’s stake in the relationship relates to the enablement and ongoing management of the technology system as a shared services entity.



## Project Governance – Overview

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- We understand from interviews, that events following the initial open enrollment period (October 2013) led to a significant breakdown in project governance and management processes. This was due to the State being primarily focused on addressing and remediating the issues that arose at the time of open enrollment.
- Following the departure of the Executive Director of MNsure, the Board of Directors essentially stepped into the operational leadership role left void by her departure. Since that time the Board has continued to play a significant role in the operations of the Exchange, was successful in appointing a new Executive Director, and working collectively with DHS and MN.IT has started to reestablish critical governance and project processes.
- Unclear roles and responsibility, authority, lines of communication, reporting relationships, team and governing bodies composition have added significant inefficiency and have fostered no or poorly informed decision-making across the project. Priorities or decisions are not timely or at the appropriate governing level and often are revisited and or changed.
- Of particular concern, was the inconsistent and unclear engagement of MN.IT, the state’s information technology agency, with broad responsibility for all state IT activities and assets, and their role in managing and delivering the system (particularly within the context of the systems plan for the state enterprise).
- Management of the MNsure IT system development vendors has been inconsistent and appears to have impeded outputs and progress.
- The dominant “engagement model” has tended towards a “siloed” approach among key stakeholder agency staff - further exasperated by loose vendor management who themselves have operated in a silo from one another.
- Absence of a baseline and updated/maintained consolidated work plan for the project - that is comprehensive of all task level details for all contributing resources and vendors through system delivery and post system go live stabilization – has made project direction, execution, progress tracking and management challenging.
- A number of essential roles/positions were not defined/ vacant for the vast majority of the project (including Project Director, Testing Lead) that further challenged the governance and project management processes and project effectiveness.



# Project Governance – Summary Observations

## Governance, Decision-making, and Accountability

Component Expectation	Summary Observation
<p>Relevant business interests, strategic intent and priorities of all agency stakeholders are defined, duly aligned and represented in the form of a project long-term plan.</p>	<p><b>Partially present</b> While most near-term interests are known and a long term MN.IT@ DHS strategic plan exists; alignment, prioritization and longer-term plans need to be finalized and communicated.</p>
<p>A governance and enabling organizational model for the project exists, is well defined, been duly constituted and understood by all impacted parties.</p>	<p><b>Partially present</b> Model components exist and are operating – clarification of select roles and project ownership, role realignment and addition of new roles should be considered. Upon finalization, clear and broad communication is needed.</p>
<p>Roles and responsibilities of the project governing body(ies) and participants are well defined and align with the governance and organization model</p>	<p><b>Partially present</b> For a select few governance bodies Roles and Responsibilities were reasonably well defined, in general they were are not uniformly defined, clear or well understood across all impacted parties.</p>
<p>Clear delegation of responsibility and role definition of all committees (including appropriate peering of all participants).</p>	<p><b>Partially present</b> A number of committees exist (from direction setting, control to quasi-operational). Certain committees roles, operation and effectiveness may be diluting the overall governance process. We observed some peering inconsistencies that should be addressed.</p>
<p>Responsibility for priority setting is clear and priorities are adhered to once establish.</p>	<p><b>Partially present</b> Many governing groups at MNsure set priorities but they are not established with a clear methodology. Once established, priorities are often modified or fully changed.</p>
<p>Decision-making authority and escalation pathway is well defined and understood by all affected parties.</p>	<p><b>Partially present</b> Although partially evident and improvements over time were noted - to avoid decision-making delays and to engage the most relevant experience/skills at the right time, there is a need to (re)align and empower the decision-making process.</p>
<p>Key project governance and organizational roles are staffed with appropriately experienced and skilled resources.</p>	<p><b>Partially present</b> Although many roles exist, critical ones are absent (including Project Director and a number of subordinate but important roles such as a Testing Manager).</p>
<p>The enabling governance processes (including tools, reports and meetings) to support an effective project exist.</p>	<p><b>Partially present</b> While most processes exist, consolidation and further role and expectations clarifications are needed to improve effectiveness.</p>



# Project Governance – Detailed Observations

ID	Observation	Impact	Considerations
1	<p>Although the interests and goals of the Business Owners of the project (MNSure and DHS) are generally well defined and understood for the near-term, they and their enabling tactics lack prioritization. Further, the long term strategic intent has been less clear. DHS has developed a 5 year project/system modernization plan, however MNSure's longer-term needs are still in progress. The absence of alignment and harmonization of these longer-term interests is a barrier to completing the project long-term plan</p>	<p>Governance is reactive to latest developments and decision-making is not fully guided by a immediate and longer-term strategy. Staff and vendors are unclear on priorities, significant milestones or targets, and objectives for longer-term</p> <p>The absence of a full and clear long-term plan adds the risk of inefficient investment being made in how future system components are developed</p>	<p>Complete long-term business planning within the respective project Business Owners and consolidate those as they relate the project (system). Together with near term interests set the business prioritization for the project (with the advice and guidance of the MN.IT organization). Finalization of this process should include relevant staff, vendors and other stakeholders</p>
2	<p>Fragmented and unclear decision-making authority and role confusion across the project at multiple levels is leading to decision-making delays, bottle-necking of issues in need of resolution, protracted activity planning, and unmet objectives</p>	<p>Project delivery resources progress is impeded as issue resolution, prioritization or other decision-making is bottle-necked or protracted</p>	<p>Clarify decision-making authority for each governance body and representative role(e.g. PMT,CCB, EST); define the issue and decision-making escalation pathway; set expectations and accountability measures for each governance body and role. Monitor and report periodically on expectations and accountability measures</p>
3	<p>Vendors are given conflicting direction on priorities of work and system requirements from business, technology and management teams operating in "silos", without coordination or integration across State and vendor teams. This appears to have exasperated the lack of coordination and teaming across the legacy vendors</p>	<p>Absent a common control point, vendors are unsure how to proceed, or proceed in conflict with other activities of the project and lose production time clarifying tasks, priorities, and requirements</p>	<p>MN.IT should provide project execution leadership and management of all "SDLC" duties including tasks such as managing technical teams to the project plan activities, communicating priorities, managing system requirements, daily supervision of IT vendors, coordinating and integrating across State and vendor teams, and providing to progress reporting through the project governance leadership and business owners</p>



## Project Governance – Detailed Observations

ID	Observation	Impact	Considerations
4	Participant roles and responsibilities are not clearly defined and adhered to within governing bodies	Participants are often unsure of what contribution they should provide to the governing group leading in some cases to both under and over-involvement of participants, lack of focus on critical aspects and inefficient use of senior resources	Establish/clarify governing body participant expectations, roles and responsibilities, accountability and decision-making authority
5	Participants in certain governing bodies are not peered at the same level, which may inhibit engagement and equitable decision-making	By mixing participants of different organizational levels on a governance body, there is a risk of representation bias, uneven engagement and value creation and decision-making independence	Wherever possible, participants on the project governance bodies should be at the same peer level. A review of current participants peering level across governing bodies and realignment as needed is recommended



## Project Governance – Detailed Observations (cont.)

ID	Observation	Impact	Considerations
6	<p>The Minnesota Insurance Marketplace (MNSure) governance has been undergoing a transition over the past year (<i>separate and distinct from the project governance</i>)</p> <p>After the departure of its initial Executive Director (ED) and in the aftermath following the open enrollment period, we understand the MNSure Board (“Board”) essentially stepped into the ED role, responsible primarily for daily operations. We further understand, that as a result of a historical lack of operational transparency, timely and accurate reporting and appropriate level decision-making, the Board decided to further fortify the organizational leadership by establishing several Board workgroups including one focused on Technology and the project which is the focus of Deloitte’s review</p> <p>In more recent months, MNSure has successfully appointed a new Executive Director, added new senior leadership capability and begun to realign the legacy organization. Coincident with these changes, cooperation and coordination with the other key agency stakeholders (DHS and MN.IT) accelerated rapidly</p>	<p>Over the past few months as the new Executive Director and Leadership team established itself and began operating the business (including managing it’s stake in the project to remediate and enhance the underlying system), one of the unintentional consequences of the Board and Committee/Workgroups prevailing operating mode may have contributed to project inefficiencies</p> <p>Until operational management and decision-making rebalances between the Board and Executive Leadership there exists another layer of decision-making, coupled with the risk of conflicting project intervention and direction which may impact overall project effectiveness</p>	<p>As the new Executive team solidifies, a new project governance model (with clear implementation accountability), full and appropriate engagement by key agency stakeholders (DHS and MN.IT) is completed and accompanying project processes (including transparent performance reporting) is established, we would encourage a realignment of roles, responsibilities and decision-making between the Board, the relevant Board workgroups/subcommittees and the Executive team in the governance of the project</p>



## Project Governance – Detailed Observations (cont.)

ID	Observation	Impact	Considerations
7	Vendor management and direction setting for the project system vendors has vacillated and was often unclear	Vendors and staff are confused about who is responsible and has authority to direct System Development Life Cycle (SDLC) activities, and how to prioritize their related activities, adversely impacting project progress	MN.IT be responsible for day-to-day management of SDLC duties including tasks such as managing teams to the project plan activities and supervision of IT vendors
8	State and vendor leadership, managers, and subject matter experts (SMEs) are not involved at an appropriate level in the governance and decision-making	State and vendor SMEs are not utilized appropriately to inform the governing groups, and leadership and managers are not providing appropriate input. It is unclear as to the how or why decisions are made, and have limited visibility into the process	Participation roles in governing groups should be defined for State and vendor leadership. Management and staff should be utilized at meetings as appropriate to provide insights necessary to inform the governing groups and provide clear communication and visibility to the decision-making process
9	The role of an overall Project Director for the project is not defined and accordingly unfilled. Furthermore, there is no central PMO coordinating project functions	Inconsistent application of Project leadership and management tasks and many are conducted to varying degrees by multiple stakeholders resulting in lack of coordination	Develop scope, roles and responsibilities, and reporting structures for a MNsure IT Project Director and a MN.IT MNsure PMO. Communicate to stakeholders the roles, responsibilities, and authorities of the Project Director and the MN.IT MNsure PMO. Coordinate and integrate the activities of the MN.IT MNsure PMO with other agency PMO's within DHS, MNsure and MN.IT
10	Turnover of staff associated with the project has occurred in participant roles in governance	Institutional knowledge of governance goals, activities, and outcomes is lost when turnover occurs. New staff in governance roles need to be on-boarded to the governance participant role	Develop a workforce transition plan that identifies project governance participant roles and documentation so that knowledge transfer from one State staff person to a new State staff person to fulfill the governance participation role



## Project Governance – Detailed Observations

ID	Observation	Impact	Considerations
11	Agenda topics and discussions at governing groups are not at the appropriate level needed to meet the purpose of the governing group	Topics and discussions outside of scope of the group reduces the ability of the group to fulfill its role and responsibilities and can result in conflicts. Project staff also consume time and effort providing materials that are outside of scope of the governing groups	Provide agenda items that are within scope of the governing group. Maintain facilitation for each group that manages adherence to the scope for the governing groups
12	Meeting cadence including sequence and frequency of meetings for governing groups is not appropriate for the objectives, activities, and outcomes required of the governing groups	Improper meeting cadence, for instance too frequent, encourages discussions that are not within scope, or cadence that is not frequent enough prevents discussions that are in scope. Currently activities such as meeting preparation, meeting time, and post meeting activities are consuming participant and project staff time	Meeting cadence should be defined that allows the goals, activities, and outcomes of the governing groups to be met while reducing unnecessary meetings. A master schedule of all meetings should be developed to manage duplication, inefficiency and resource conflicts



## Project Governance – Detailed Observations (cont.)

ID	Observation	Impact	Considerations
13	An integrated project work plan is not established with project activities, dates, milestones, releases, interdependencies, and resource ownership of project activities	The State leadership and management have limited insight into the activities of specific vendors and dependencies which reduces their ability to make decisions based on planned activities	Develop an integrated work plan for all IT-related project activities. The plan serves as the primary document governing the activities on the project including dates, milestones, deliverables, responsible parties, and dependencies
14	Processes for deliverable submittal, review, acceptance or rejection, remedy, and invoicing are unclear to the State and vendor partners	State and vendors use time and effort determining what has been submitted, what should be approved or needs additional activities to remedy, and what decisions should be made regarding payment of invoices	Establish and document the standard approval process for deliverables and communicate to appropriate vendors and State staff
15	The naming convention of the IT system (MNsure system) being synonymous with the governing organization (MNsure) for the health insurance exchange creates confusion in communication and direction-setting	The system is intended to support multiple agency/organizational interests. Unwarranted and unintended confusion can be caused when stakeholders address organizational needs and issues rather than the enabling IT system demands	For clarity purposes - the system should be assigned a unique name/moniker – that allows clear differentiation of the enabling system (project) from any vested agency/organization



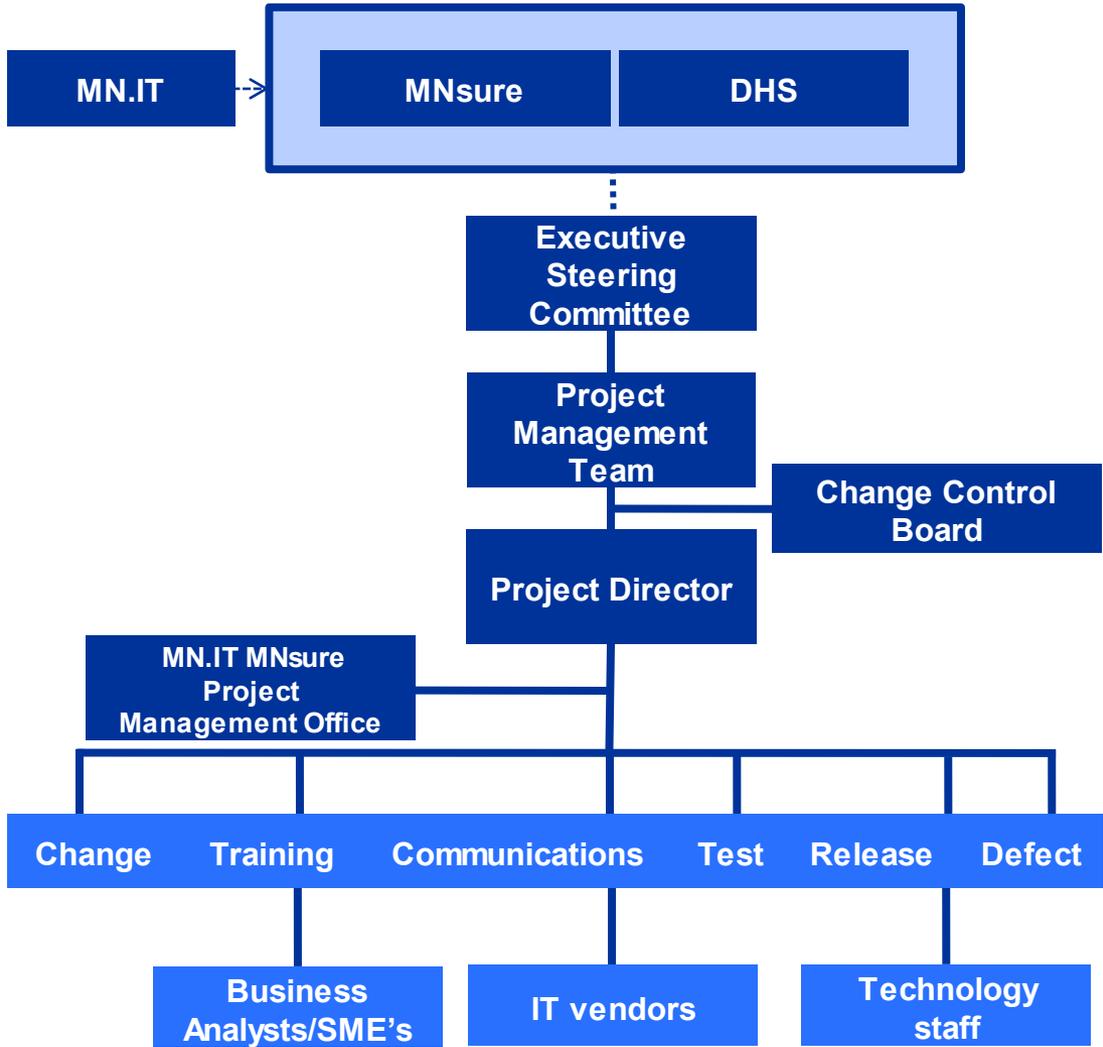
## Project Governance – Detailed Observations (cont.)

ID	Observation	Impact	Considerations
16	MNsured work is divided into many projects without a full documentation of dependencies or an overall project work plan or consolidated schedule to drive project work	The State and vendor project leaders lack visibility into project dependencies and activities on the project are not managed based on a plan or schedule	Develop an integrated work plan for all IT-related project activities including: design, development, testing, and release activities. Empower the Project Management Team, Project Director, and the MN.IT MNsure PMO to manage and drive the activities of the project based off the project work plan
17	No one person is in charge of the day to day operations for the MNsure IT project	Gaps in accountability develop as governing groups spend energy determining who is responsible for a particular issue rather than effort to resolve the issue	Create a MNsure IT Project Director position to manage the day to day work of the project for both vendors and State staff. This position should report to MN.IT staff and coordinate frequently with MNsure, DHS, MN.IT, and vendor stakeholders
18	MNsured board working groups lack clear cadence, definition, duration, or role for MNsure	Frequent meetings drain time and resources away from the MNsure leadership and staff as they prepare and conduct briefings for Board members	Clearly articulate the role and objective of MNsure Board working groups. Consider a sun setting or postpone work groups during times of reduced activity on the MNsure project



# Project Governance – Proposed Model

*Business Owners/Sponsors*

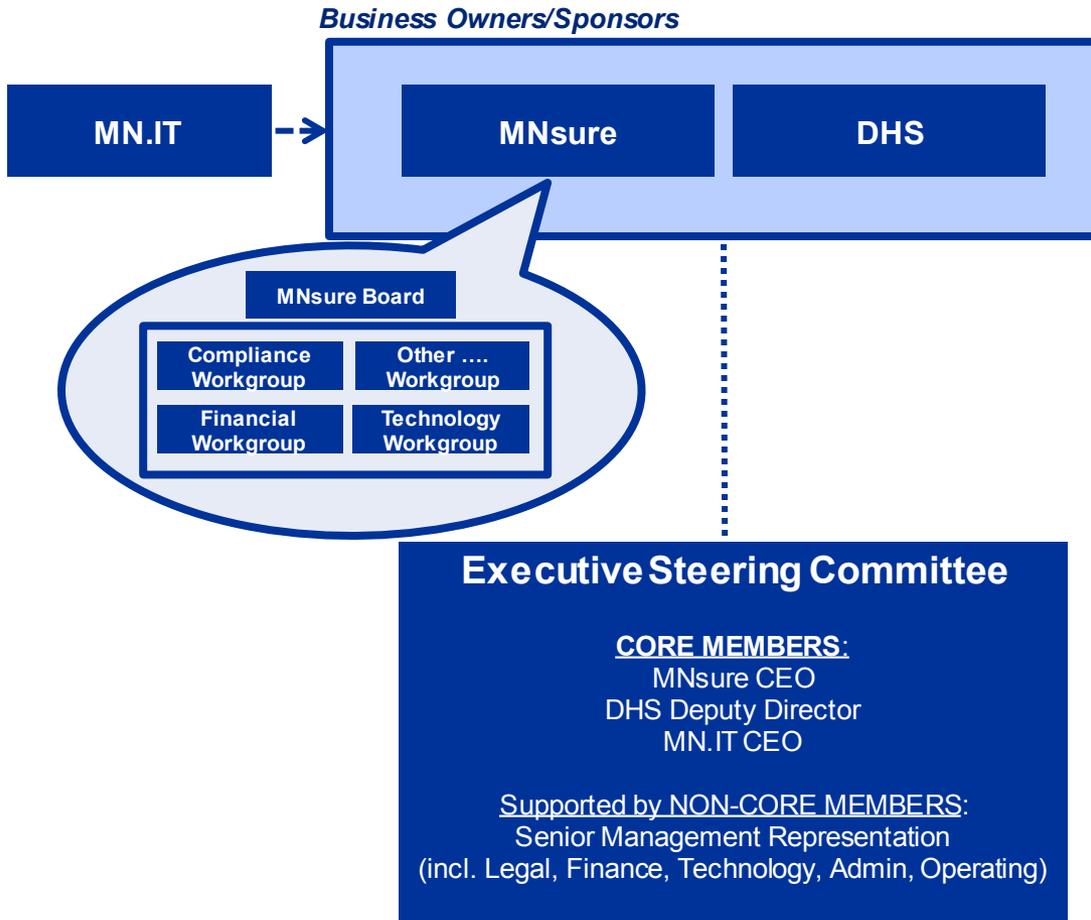


- *The structure supports the two Business Owners/Sponsors setting overall direction, policy and reviewing progress of the project based on their strategic business needs. While some of those interests are shared, many are independent of one another. A process for setting, reconciling and reviewing the related demands on the project will need to be established*
- *The MN.IT agency, as the State's Information Technology shared services agency is positioned to provide input to this process and serve as technology advisor to the Business Owners*
- *The Executive Steering Committee has operational responsibility for the success of the project and primarily with the setting and monitoring of the tactics to achieve the goals set by the Business Owners, including major operational issue resolution. The process for reviewing and reconciling competing business demands on the project will be handled by the Executive Steering Committee. The EST will provide progress updates to MNsure and DHS and inform them of any serious risks or issues related to the goals the business owners have set*
- *The Project Management Team serves as the Project Director's immediate cross-agency operating group to aide in resource, project and other operational issue resolution*
- *The Project Director who is staffed by MN.IT as part of their delivery responsibility for the project and system, manages and oversees the day-to-day activities of the project and the system delivery teams*



# Project Governance – Proposed Model

## Governance Model Detail – Senior Level



- Today the MnSure Board executes its responsibilities largely through several workgroups comprised of Board Members who in turn report back to the collective Board on their respective focus area (including Compliance, Financial, Technology). Similar responsibilities for the DHS agency are incorporated within the role of the DHS Commissioner
- As it relates to the project, the Business Owners role is to set the strategic direction, based on their business interests and mission/charter, for the project and underlying system. The Board should expect regular timely and relevant updates on progress from the Executive Steering Committee, as well as being made aware of significant critical risks and issues as they arise, that may impact the project and attainment of their goals. (In the case of MnSure, the Board may exercise these responsibilities through its current workgroup structure or another model)
- The Executive Steering Committee has operational responsibility for the success of the project to achieve the business goals set by the Business Owners. It will determine and execute operational level tactics to achieve those goals, resolve all issues escalated to it by the downstream governance team(s), monitor project progress and keep the Business Owners accordingly apprised



# Governance – Proposed Business Owners Framework

## Role for the MNsure Project

The Business Owners provide overall guidance, policy setting and direction for the project based on their respective organizational strategy and business needs. Where the Business Owners needs and priorities differ, due to mutually exclusive charter or strategies; they must reconcile those differences and priorities such that the project direction is clear and unimpeded. The Business Owners retain broad oversight for the project and should be kept apprised of progress through pre-determined executive updates. The Board should also expect to be made aware of any significant critical events and risks that may impede progress and/or success of the project

## Members Roles and Representation

- **MNsure Board:** Represented in the form of either it's Board Chair and/or another Board delegate (this could take the form of a representative Board workgroup)
- **DHS Commissioner:** The Commissioner for the Department of Human Services
- **Note:** While MN.IT is not considered a Business Owner, their value as State IT "shared services" agency is recognized as important and as such as should provide input and advisory support to the Business Owners

## Key Responsibilities

- Strategic Planning
- Policy determination/setting
- Governance
- Organizational/project direction setting
- Project review and monitoring (in particular where significant events or risks may impede progress or success)

## Key Relationships

- **Governor:** Direct responsibility for the Department of Human Services;
- **Legislature:** Authorized the establishment of the Board and authorized the Commissioner of DHS to serve as a Board member. Exercises oversight of MNsure:

## Key Decisions

- Strategic
- Policy
- Communications themes and approach

## Meeting Cadence

- One meeting per month (up to quarterly meetings when project is stabilized and operating)



# Governance – Proposed Executive Steering Committee Framework

## Role for the MNSure Project

The core Executive Steering Committee is comprised of the senior leadership peers from MNSure, MN.IT, and DHS, and provides the project direction, monitoring and management of operational tactics needed to achieve the goals set out by the Business Owners. The Committee provides overall coordination of efforts among leadership at MNSure, DHS and MN.IT. The process for reviewing and reconciling competing business demands on the project will be handled by the Executive Steering Committee. In addition, the Committee serves to resolve issues and assist with major project risk mitigation that is escalated up to them from downstream governance team(s)

## Members Roles and Representation

- **CORE Members:** MNSure Executive Director, DHS Deputy Commissioner, MN.IT CIO
- **SUPPORT Members:** Key Operating, Technical, Administrative, Legal, Financial representation. These members are not considered voting members but advisory and support to the Core Members.

## Key Responsibilities

- Executive level coordination between MNSure, DHS, MN.IT
- Direction to the Project Management Team on guidance and policy set by the Business Owners
- Overall management responsibility for operations, policy, technology, and communications on the MNSure IT system project
- Review and approve resource plans and commitments
- Establish priority criteria for project activities
- Resolve issues escalated by the Project Management Team

## Key Relationships

- **Business Owners:** Overall Strategy and Policy setting
- **MNSure, DHS and MN.IT:** Communication of plans and operational impacts and coordination with respective organizations
- **PMT:** The PMT provides project updates to the Executive Steering Committee and escalates issues and risks for final resolution
- **Public and Media:** These stakeholder groups look to the leadership for information about the status of project
- **Committees (incl. Health Industry Advisory Committee and the Consumer and Small Employer Advisory):** These groups consult with and provide recommendations to operational leadership

## Key Decisions

- High level project operational setting and that provides more detailed direction to the project
- Issues resolution (escalated by the PMT)
- Strategic recommendations to the Board
- Statusing and communications recommendations to the Board

## Meeting Cadence

- Weekly or bi-weekly until project key milestones are achieved (can then revert to monthly)



# Governance – Proposed Project Management Team (PMT) Framework

## Role for the MNsure Project

The Project Management Team (PMT) is comprised of business and technology managers that are peers from the three key stakeholder agencies of MNsure, MN.IT, and DHS. The PMT reviews and approves more detailed administrative and operational project level activities and decisions including forecasting, resourcing, planning, and prioritizing project activities, major enhancements, continuous improvements, and maintenance of service delivery. Their direction to the Project Director is based on effective demand and capacity management of business and technology agency resources, and management of cross agency interdependences and impacts. The PMT addresses risks, issues, and action items escalated from the Project Director. The PMT operates within it's authority and escalates issues to the EST as needed/required

### Participant Roles and Representation

- **MN.IT:** MN.IT is a member representing the overall technology goals of the project and MN.IT provides technology knowledge and expertise to the PMT. The MN.IT representative acts with MNsure and DHS input, as the decision authority for MNsure IT system related decisions brought to the PMT
- **MNsure:** The MNsure representative is responsible for representing the business and technical goals of MNsure
- **DHS:** DHS is a member representing the interests of DHS programs that are affected/dependent by/on MNsure
- **Vendors:** Representatives from each of the IT vendors attend the meeting and provide input as requested by the PMT members

### Key Responsibilities

- Provide direction to the Project Director for managing all areas of the project including: scope, schedule, budget, quality, resources, communications, risk, procurement, and integration
- Monitor the progress of project activities through the planning, execution, monitoring, controlling, and closing of project phases
- Finalize recommendations from the Change Control Board regarding change requests

### Key Relationships

- **Executive Committee:** Issues outside their authority or that cannot be resolved by the Project Management Team should be escalated to the Executive Committee for final decision/resolution
- **Project Director:** The PMT receives status from the Project Director and the PMT provides guidance, decisions and issue resolution support to the Project Director

### Key Decisions

- Remediation steps for issues that are impacting scope, schedule, budget, quality, human resources, communications, risk, procurement, and integration
- Prioritization of risks and issues
- Recommendations for change orders
- Release schedule
- Identification of issues for escalation to the Executive Steering Committee

### Meeting Cadence

- One meeting per week



# Governance – Proposed Project Management Office (PMO) Framework

## Role for the MNsure Project

The MN.IT MNsure Project Management Office (PMO) provides support to the Project Director and to the project by providing tools and processes, templates, standards, methodology, policies and procedures for activities including the project work plan, status reporting, risk and issue tracking, change control, defect management, release management, testing management, and communication. The MN.IT MNsure PMO coordinates with MN.IT PMO, MNsure PMO and DHS PMO. The MN.IT MNsure PMO has responsibility for “rolling-up” (consolidating) the respective stakeholder PMO and vendor work plans and status reporting into a master plan and status report

## Members Roles and Representation

- **MNsure IT system Project Director:** Directs the MNsure IT system PMO and the activities of the MNsure IT system work plan
- **MN.IT MNsure PMO:** The MN.IT PMO maintains the integrated work plan for the MNsure IT system, and manages status reporting, risk and issue tracking, change control, defect management, release management, testing management, and communication. The State provides necessary staff to assist the PMO including staff such as: change manager, release manager<sup>1</sup>, test manager<sup>1</sup>, defect manager<sup>1</sup> and communications manager.
- **Vendors:** Project managers from each of the IT vendors are to required to provide input to the PMO for each of the areas managed by the PMO

<sup>1</sup> These roles are described in their respective section on following slides

## Key Responsibilities

- Manage the project work plan, status reporting, risk and issue tracking, change control, defect management, release management, testing management, and communication
- Provide reports to the Project Director on areas managed by the MN.IT MNsure PMO
- Communicate with key stakeholders
- Develop project status reports and distribute to stakeholders

## Key Relationships

- **Project Director:** The Project Director guides the activities of the MN.IT MNsure PMO. The PMO supports the activities of the Project Director in managing the MNsure IT system
- **MN.IT and DHS:** Other PMO staff coordinate with the MN.IT MNsure PMO to maintain MN.IT MNsure PMO alignment with tools, processes, templates, standards, methodology, policies and procedures used by other State PMOs.
- **Vendors:** Vendor work plans are integrated into the master project work plan, vendors provide input to the areas managed by the MN.IT MNsure PMO

## Key Decisions

- Determination of tools and processes, templates, standards, methodology, policies and procedures for project activities
- Assignment of risk and issue owners

## Meeting Cadence

- Coordination occurs daily as a matter of on-going operations

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**Immediate Key Resource Needs**

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## Immediate Key Resource Needs for MNSure IT System Project

Top 5 Positions and Descriptions		
Priority	Position	General Description
1	Project Director	The Project Director for the MNSure IT system manages and oversees the day-to-day activities of the project management lifecycle. This full time resource is empowered to make key decisions for the MNSure IT system and will escalate issues to the Project Management Team as needed. The MN.IT MNSure PMO will support the Project Director in driving MNSure IT system activities
2	Test Manager	Test Manager is accountable for testing, test plan development and execution in the MNSure IT system including: test cases and scenarios, results and defect management, testing status communications and defining entry and exit criteria across all test phases (integration, system, performance/regression, and UAT)
3	Release Manager	The Release Manager will lead release management end-to-end activities and ensure compliance to quality in release management execution. The Release Manager defines and enforces standards and processes for release management across all environments
4	Communications Manager	The Communications Manager is accountable for MNSure IT system communications affecting MNSure, MN.IT, DHS and their key stakeholder groups (vendors, carriers, counties, navigators, and brokers). The Communications Manager is responsible for the development of an integrated communication plan for project stakeholders and for monitoring communications triggers such as updated release functionality, technical events, and operational changes
5	Defect/Triage Lead	The Defect/Triage Lead will be a member of the testing team and will track and manage all defects, will lead defect and triage meetings, and will report on identified defects and their status to the State and vendor partners

*Other personnel gaps or needed positions were identified during the course of the governance assessment of the MNSure organization, those considerations are identified in the remainder of Deloitte Deliverable #2: Program and Project Management Assessment report.*

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## **Communication and Information Flow**

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## Communications and Information Flow – Overview

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- Communication is an integral part of the success of the MNsure IT system. Communications leverage familiar methods to reinforce messaging and use multiple methods for each stakeholder group. Various communication methods are used depending on the purpose of the message and its intended audience. Communications are used to either inform or engage specific stakeholders. Selecting the appropriate method to target the right stakeholders is key to the successful execution of the communication at hand
- It was observed that communication silos exist within MNsure, MN.IT, DHS and their key stakeholder groups - vendors, counties, navigators, and brokers. Meetings are being conducted and communications are being distributed within the individual silos. An integrated communication plan for project stakeholders has not been developed. In addition, communication ownership and triggers such as technical events, operational changes, and policy modifications have not been defined. Vendor communications have not been formalized and vendors currently do not interact with end users of the application. As part of information flow bidirectional communication occurs with feedback being actively solicited
- Summary Observations from the assessment, and additional detailed observations, impacts, and considerations for the Communication and Information Flow area are presented on following slides



## Communications and Information Flow – Summary Observations

Communication and Information Flow	
Component	Summary Observation
Integrated project communication plan with key communications events as well as the target audience, timing, delivery mechanism, key messages, and responsible parties	Not present An integrated communications plan does not exist, communication occurs in silos
Stakeholder matrix implemented for project communications that identifies and categorizes stakeholders and key areas for communication or focus	Partially present Matrixes exist, however communication categorization and focus is not included
Project templates, triggers, timing, and channels for communications	Not present Templates, triggers, and timing, are not standardized and integrated with the project
Project communication creation, approval, distribution, and processes that formalize communications processes	Not present A formalized process is not documented for communication creation, approval, and distribution processes
Project communication feedback mechanisms that obtain bi-directional feedback	Partially Present Bidirectional feedback mechanisms have not been fully and consistently implemented to measure stakeholder engagement
Multiple forums and channels for project communications	Partially present Communication forums take place within individual stakeholder groups. Additional communication forums have not been implemented for project communications such as: <ul style="list-style-type: none"> <li>• Newsletters</li> <li>• Collaboration Groups</li> <li>• Town halls</li> </ul>



## Communications and Information Flow – Detailed Observations

ID	Observation	Impact	Considerations
19	A consolidated plan and strategy for stakeholder communications including vendors, health plans, counties, navigators, brokers and internal stakeholders does not exist	Communications with internal and external stakeholders are fragmented and not formalized resulting in stakeholders being updated on an ad-hoc basis that could result in inconsistent messages	Develop and manage to an integrated communication plan for stakeholders that details: types of communications, target audience, timing, delivery mechanism, messages, triggers, and responsible parties to standardize and formalize communications
20	Communication channels are not managed across DHS, MNsure, and MN.IT; there are individual owners responsible for communications that relate to the MNsure IT system, including distributing related communications	Due to the lack of defined ownership between business and technology groups non-standard communications are sent which may lead to inconsistent stakeholder communication by both the business and technology groups about project-related decisions creating confusion about operational procedures, schedule, policies and technology	Identify a Communications Manager that is part of the MN.IT MNsure PMO and is responsible for coordinating communications related to the IT System across the project and is responsible for making sure that communications are aligned and planned for with key system milestones
21	There is a lack of standardization in communications triggers, templates, and processes for both business and MN.IT; communications, are not defined or standardized for audience, templates, and triggers	Details such as release status and scope, release schedule, release functionality, and downtime may not reach the right stakeholders at the right time in the right format, leading to misunderstandings and confusion and may limit ability to serve the customer	MN.IT can define a set of triggers, templates, and processes for communications as well as their audience, focus can occur on the following technical communications: <ul style="list-style-type: none"> <li>▪ Release plan</li> <li>▪ Release calendar</li> <li>▪ Release notes</li> <li>▪ System outages</li> <li>▪ Testing status</li> </ul>



## Communications and Information Flow – Detailed Observations (cont.)

ID	Observation	Impact	Considerations
22	Internal stakeholders receive inconsistent communications from various stakeholders such as business and technology groups and communications feedback is not solicited	As a result of inconsistent communications, confusion and miscommunication may occur and ultimately stakeholders could become disengaged	Solicit feedback and develop forums for internal stakeholder communications such as town halls and newsletters to promote open and transparent communications, town halls occur quarterly and newsletters are distributed monthly and engage stakeholders to provide feedback channels
23	MNsure and MN.IT communications with vendors are not structured and formalized and vendors have limited involvement with user groups of the application	Vendors can receive informal contradictory guidance from MNsure and MN.IT which could lead to inaccurate priorities, rework, and confusion. Vendors do not receive feedback from end users of the application leading to missed opportunities to improve the system	MN.IT assumes the leadership role over communications with IT vendors, MN.IT works with MNsure and DHS operations staff to help set priorities and the overall plan and create focus groups that provide user feedback to the vendors
24	Meetings with stakeholders including health plans, navigators, brokers, and counties are scheduled but not coordinated in terms of communication content and messaging	Due to the lack of coordination around stakeholder communications for health plans, navigators, brokers, and counties each group may have receive different messaging with different content at different times	Incorporate health plans, navigators, brokers, and counties into the overall MNsure communication strategy and develop an integrated communications calendar and detail communication triggers to synchronize communications for these stakeholders to maintain a defined communication schedule, so that all stakeholders receive timely coordinated messages



## Communications and Information Flow – Detailed Observations (cont.)

ID	Observation	Impact	Considerations
25	Health plan meetings occur weekly to discuss business and technology processes but are not aligned with MNsure communications and are tactical in nature	Health plan meetings are not integrated into an overall communication plan or strategy which could lead to missed opportunities to improve communications with Health Plans	Incorporate health plans into the overall MNsure communication strategy and develop a communications calendar and detail communication triggers to for timely and specific communications to relevant stakeholders
26	Forums for county communications exist to share business policy and system information, however communication gaps exist in terms of sharing policy, operational, and technology information	Counties are one of the largest group of the MNsure system users and often deal with some of the most complex family situations It is critical that communications for policy, operational, and technology are targeted, concise, and timely to prevent inaccurate information	Incorporate county information needs into the overall communication strategy and detail triggers for policy, operational, and technology updates. Also consider implementing additional county communications strategies such as: <ul style="list-style-type: none"> <li>▪ Testimonials</li> <li>▪ Fact Sheets</li> <li>▪ Job Aids</li> <li>▪ Frequently Asked Questions (FAQs)</li> <li>▪ Newsletters</li> <li>▪ Blogs or Collaboration Groups</li> </ul>
27	The primary means of navigator communications occur through weekly e-mail communications	Navigator communications are not timely and this is causing frustration amongst this stakeholder group	Incorporate navigators plans into the overall MNsure communication strategy and develop a communications calendar and detail communication triggers for timely and specific communications

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## **Status Report**

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## Status Report – Overview

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- The project status report presents information on the activities of the MNsure IT system project including an overall project status, an executive summary, and updates from vendors on scope, resources, schedule, and quality. The status report utilizes dashboards to provide succinct, clear information for executives and managers
- The project status report relies on close coordination between vendors and State resources to represent the project status. The status report serves as an opportunity to communicate clearly across the project about activities and possible issues or risks that may be present, and reduces the need for clarification or re-explanation of project status during the course of project activities. It provides governance groups with appropriate information to allow the groups to make decisions that fulfill their responsibilities
- Summary Observations from the assessment, and additional detailed observations, impacts, and considerations for the Status Reporting area are presented on following slides

## Status Report – Summary Observations

Change Control	
Component	Summary Observation
Overall project status report including weekly project progress and performance	Present A status report is produced weekly, however not all key project health metrics are included
Executive Summary Section in status report	Not present An overall executive summary that provides a high level overview of the status is not present
Summarized items requiring leadership attention	Not present A summary of executive items is not included in status report
Upcoming milestones detailed in report include future releases, policy or business operations updates	Partially present Report describes some upcoming activities but does not fully detail project interdependencies
Updates from vendors called out in specific sections	Partially present Vendors provide only brief updates in the status report
Red, yellow, green status for scope	Present
Red, yellow, green status for resources	Not present Not included in status report, a view of resources is not present
Red, yellow, green status for schedule	Present
Red, yellow, green status for quality	Not present Not included in status report, a view of quality is not present



## Status Report – Summary Observations (Cont.)

Change Control	
Component	Summary Observation
Project metrics included in status report	Partially present Key metrics for managing the project are missing such as variances and completion percentages
Project assessed using dashboards	Partially present Insights are provided at a summary level, but detailed dashboards do not exist for trends, change requests, risks, issues
Distributed appropriately to stakeholders	Partially present Currently distributed to project leadership but not all stakeholders

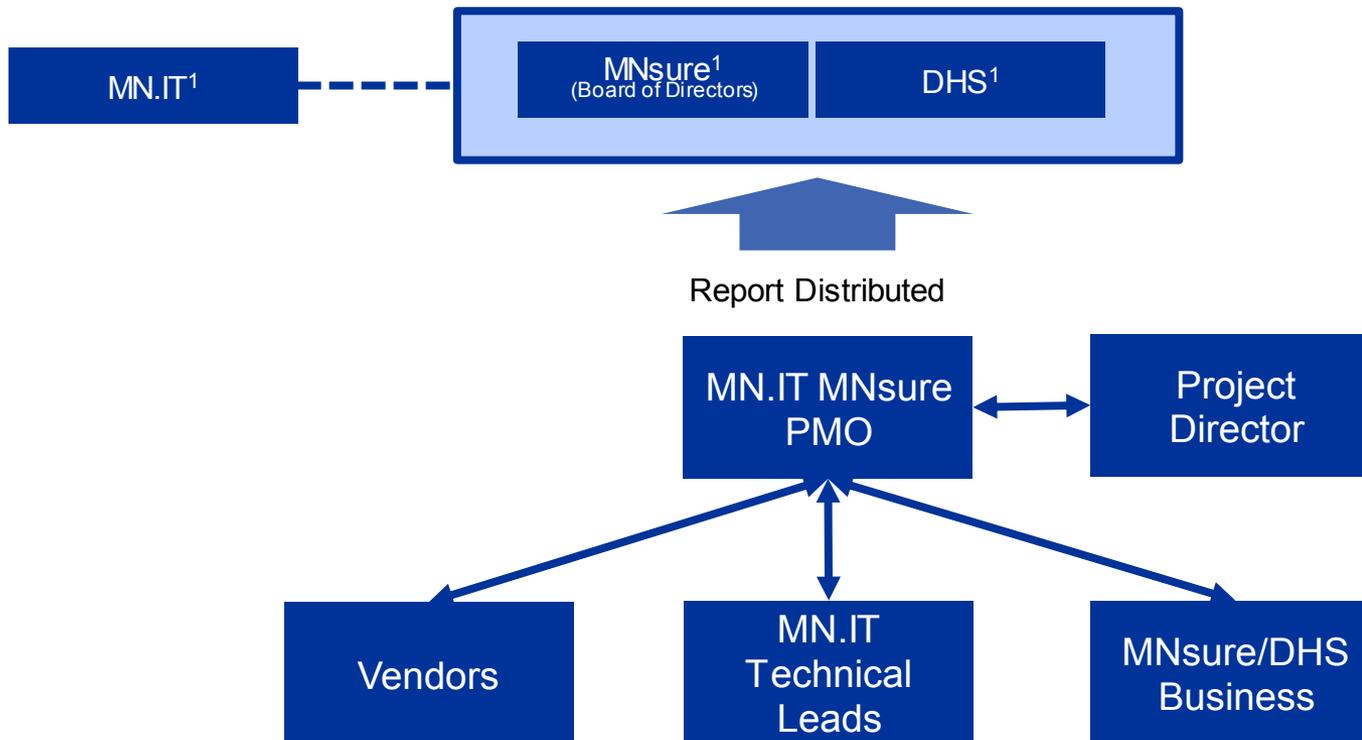


## Status Report – Detailed Observations

ID	Observation	Impact	Considerations
28	The project is currently producing project status reports, however gaps exist in terms of consolidating information from many stakeholders including MNSure, DHS, and vendors	Overall status may not be reported accurately due to the lack of integration between MN.IT, MNSure, DHS, and vendors	MN.IT MNSure PMO is responsible for creating an integrated project status report that includes status from stakeholders including MN.IT, MNSure, DHS, and vendors
29	Executive level project dashboards do not currently exist for managing the MNSure project at an executive level or displaying impactful information to an executive audience	Executives do not receive consolidated dashboard views for the project making it difficult to understand the full project status including budget, scope, and schedule	Develop and implement a project wide dashboard that will display overall status and provide metrics for change requests, risks, and issues
30	Limited metrics reporting is included in the project status report	Limited metrics do not provide sufficient information to decision makers for the purposes of managing the project	The MN.IT MNSure PMO is responsible for including additional metrics that indicate the overall health of the project and alert stakeholders to variances in metrics as appropriate <ul style="list-style-type: none"><li>▪ Key metrics include:<ul style="list-style-type: none"><li>▪ Financial health variance</li><li>▪ Requirements volatility</li><li>▪ UAT test case first pass rate</li><li>▪ Execution issues</li></ul></li></ul>

## Status Report – Proposed Structure

The MN.IT MNsure PMO is responsible for consolidating information for the weekly status report. The Project Director reviews the status report prior to distribution of the status report. The MNsure status report will be sent to a varied audience of stake holders that includes agency executives, project leadership and management, and vendors



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## **Risk and Issue Management**

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## Risk and Issue Management – Overview

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- Risk and issue management are similar processes that enable the Project Director and MN.IT MNSure PMO to monitor identified risks and issues during the course of the project. Risks and Issues may be proposed at any time during the project and once confirmed, they are added in JIRA, are managed or resolved as appropriate, and are included in the weekly status report
- The assessment of risk and issue management included evaluating existing risk and issue management processes and tools to provide assessment results, go-forward considerations, and an approach of how risks and issues can be communicated across the project. The assessment was conducted across the elements of governance, process, tools, and metrics for the entire issue and risk life cycle ranging from issue and risk reporting, tracking, assignment, ownership, prioritization, resolution, and closure
- A risk is defined as an event that has not occurred that will, if it does occur, impact the project schedule, scope, budget, or quality. Risks need to be managed in terms of impact and probability. Mitigation strategies need to be defined for all risks. These will be tracked and published in the weekly status report and escalated if not resolved timely to reduce the likelihood that they become issues
- An issue is defined as an event that has occurred that will impact the project schedule, scope, budget, or quality. Unresolved Critical and High priority issues will be reported in the Weekly Status Report; medium issues greater than 1 week past due will also be reported
- The MN.IT MNSure PMO will conduct a weekly risks and issues meeting to proactively manage MNSure IT system issues and risks
- Summary Observations from the assessment, and additional detailed observations, impacts, and considerations for the Risk and Issue Management area are presented on following slides



## Risk and Issue Management – Summary Observations

Risk and Issue Management	
Component	Summary Observation
Risk/issue plan in project management plan	Partially present Issues/risk management is present but plan is over a year out of date
Risk log present and currently maintained	Partially present Risk log is present but out of date
Issue log present and currently maintained	Present
Risk status present in risk log	Partially present Risk status is present but risk log is over a year out of date
Closed risk documented in risk log	Partially present Risk status categorized but risk log is over a out of date
Risk types categorized (i.e., Cost, Functional, Quality, Organization, Performance, Project Management, Resource, Schedule, Scope, Technical, General)	Not present Risks in the log are not categorized by type
Prioritization of risks and issues	Partially present Risk prioritization framework in place but risk log is out of date
Issue types categorized (i.e., cost, functional, quality, resource)	Partially present Some issues are categorized but others are not categorized



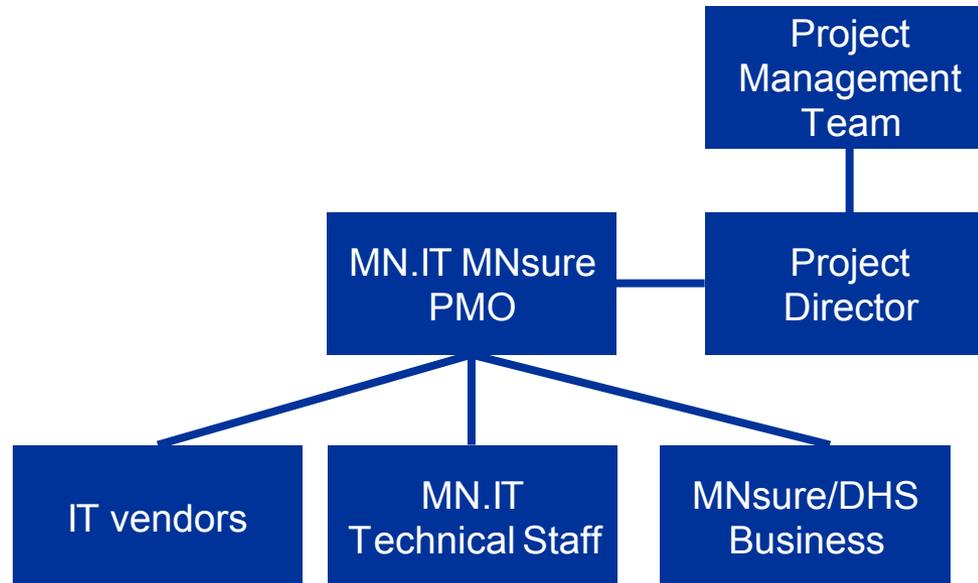
## Risk and Issue Management – Detailed Observations

ID	Observation	Impact	Considerations
31	There is a lack of a formal risk/issue escalation process	Leadership is challenged to identify risk/issues across the project and holistically identify threats to the project	Implement a formal risk/issue escalation process, this would limit a reactionary and inconsistent approach to mitigating risks and issues
32	Risk and issue logs are not standardized or used across the MNsure governance structure	Project status cannot be clearly monitored without a central location to track the progress or resolutions of tasks, this presents risks to project schedule, costs, and scope	Develop and manage risk and issue in JIRA that will give each item a reference number, owner, due date, and priority
33	Risks and issues lack owners and priority, documentation of a process for escalating issues and risks is limited	Due to limited detail for risk and issues, decision-making can be prolonged leading to additional cycles to refine information	Implement risk and issue through the MN.IT MNsure PMO to allow for scoring (Probability * Impact) of risks and document a process for risk and issue management
34	Risk and Issue logs do not contain needed information to fully track risks and issues as they arise on the project	Risks and issue logs are incomplete and project leaders cannot fully use them in making project decisions	Develop risk and issue management in JIRA that track item owners, priority, owner, date creation, and criteria for closure



## Risk and Issue Management – Proposed Structure

*The MN.IT MNsure PMO is responsible for managing the risk and issue processes. The PMT is responsible for risk and issue resolution and escalation*



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## **Change Control**

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## Change Control Process – Overview

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- The change control process manages all changes requested during the MNSure IT system project. This includes technical changes to application functionality, requested changes to schedule, and changes to scope. Change control is an integral part of the project governance as it allows for changes to be proposed, approved and implemented through the appropriate governing groups with responsibilities to manage change. Effective change control advises stakeholders and project team members of the schedule for implementation of proposed changes
- Summary Observations from the assessment, and additional detailed observations, impacts, and considerations for the Change Control area are presented on following slides

## Change Control Process – Summary Observations

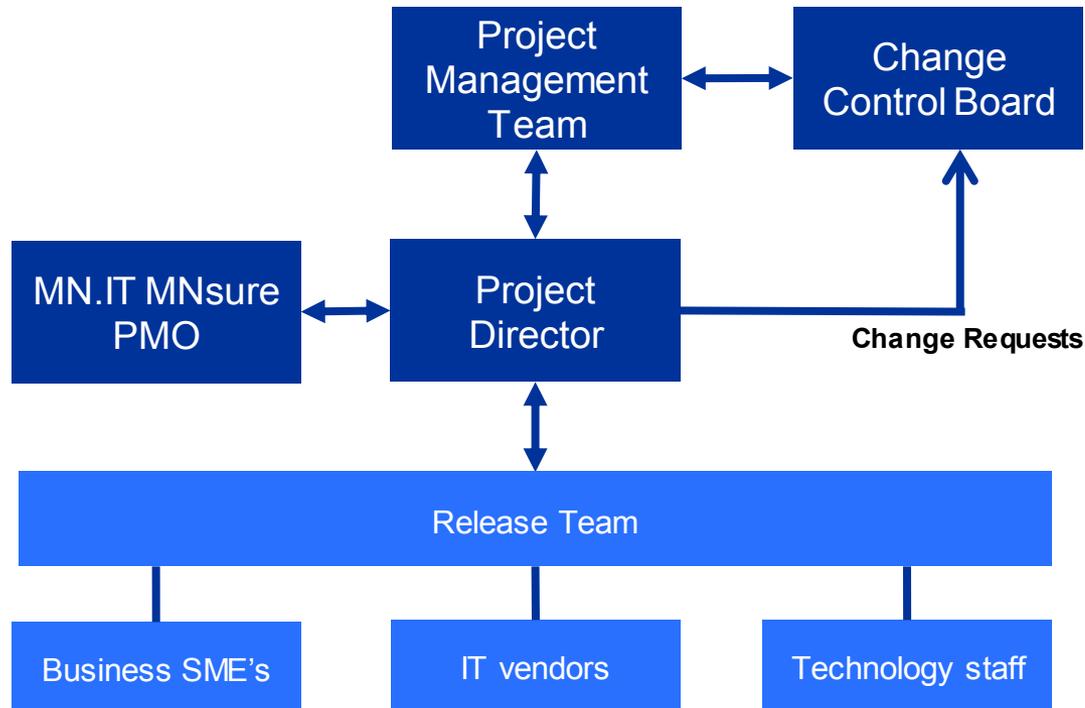
Change Control	
Component	Summary Observation
Change control log present and being used by project team members	Partially present Log is present but not used consistently at the CCB
Impact analysis performed on change requests	Partially present Impacts discussed at the CCB but level of analysis is inconsistent
Change control request template used for all change requests	Partially present Request template in place, however it is inconsistently used at the CCB
CCB operating on the project	Present
Change requests/orders in project status report	Not present Change requests/orders not in status report

## Change Control Process – Detailed Observations

ID	Observation	Impact	Considerations
35	“Projects” are being proposed to governing bodies by various State project members and vendors to determine a group of activities that should be conducted as a project and prioritized	Projects are being used to manage activities that should be driven by, and prioritized, by an integrated project work plan and these projects present conflicting priorities and consume resources to develop, discuss, and determine validity	Project activities should be driven by an integrated project work plan that is used to determine and prioritize activities. A change control process should be used to manage requests to deviate from the project plan (which is based on a baseline set of requirements and approved design)
36	Change requests are made to vendors by various project team members without going through a formal change control process prior to the work being conducted	The State is being presented with invoices for change orders from vendors and the State is unable to determine why a change was requested or how the work was authorized to be completed. Vendors are receiving conflicting direction on activities and are unclear on scope of activities	Project activities should be driven by an integrated project work plan that is used to determine and prioritize activities. A change control process should be used to manage requests to deviate from the project plan (which is based on a baseline set of requirements and approved design)
37	Decision prioritization of project change requests cannot be determined because governing groups are not provided with sufficient information such as impact analysis; including resource requirements and dependencies to other activities	Priorities for change requests are undetermined or conflicting and the organization cannot provide effective direction to State staff and vendors	Provide governing groups with appropriate information to make decisions regarding change requests to allow them to determine priorities including: a detailed work plan and an impact analysis for requested changes to the overall project plan
38	Change request logs are not standardized or used across the project	Project status cannot be clearly monitored without a central location to track the progress or resolutions of tasks, this presents risks to project schedule, costs, and scope	The Project Director should oversee the MN.IT MNSure PMO to develop and manage change request in JIRA that will give each item a reference number, status, justification, and impact summary

## Change Control Process – Proposed Structure

The MN.IT MNsure PMO is responsible for coordinating change requests for submission to the CCB. The MNsure Project Director then reports the proposed changes in the form of change requests to the CCB for their decision to approve or deny the change. Following the CCB action, the approved change orders are reported to the PMT for consolidation into the overall release plan as needed



# Change Control Process – Proposed Change Control Board Framework

## Role for the MNSure Project

The Change Control Board evaluates proposed changes to the MNSure IT system. Changes can be proposed by MNSure, IT vendors, other state agencies, and stakeholders using a MNSure IT system change request form. The Change Control Board evaluates, prioritizes, and approves or denies requested changes for the MNSure IT system project. If approved, change requests become change orders and are passed to the PMT for implementation into future releases

## Members Roles and Responsibilities

- **MN.IT:** Chairs the Change Control Board and is responsible for managing the activities during the CCB meetings
- **Project Director:** Responsible for presenting change requests to the CCB
- **DHS:** DHS is a member and represents the interests of other DHS programs that are affected by changes to the MNSure project
- **MNSure:** MNSure is a member and represents the business and operations impact of changes as they relate to the MNSure IT system
- **Other Stakeholders:** IT vendor project managers may be asked to attend at the request of the chair to provide input to the change request being discussed; other project members may be asked to attend to provide input to the Board

## Key Responsibilities

- Evaluate change requests
- Prioritize change requests and change orders
- Approve or deny change requests

## Key Relationships

- **Project Management Team:** Once change requests are approved by the CCB, the project management team works with the release manager, and technology and business stakeholders to evaluate the implementation of the change
- **Release Management Team:** Provides input to inform the board's discussion regarding the feasibility of the change requests
- **Vendors:** IT vendors provide input to the CCB and the PMT regarding the impacts of the change request

## Key Decisions

- Approve or deny change requests

## Meeting Cadence

- One meeting per week

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## **Defect Management**

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## Defect Management – Overview

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- Defect Management addresses all aspects of the defect life cycle from effective defect reporting and logging, ongoing review, triage and prioritization, assignment to the appropriate owners for resolution, testing and validation, and certification to promote the defect fixes to the production environment
- Defect Management is closely integrated with testing and release management, and effective defect management contributes to the quality of the system
- Our defect management assessment spanned the review of existing defect management processes and tools to provide assessment results and go-forward considerations, and the review of the current set of defects to support a re-prioritization to align with State objectives. The assessment was conducted across the dimensions of governance, process, tools, and metrics for the entire defect life cycle ranging from defect reporting, tracking, triage, assignment and ownership, prioritization, resolution, retest, and closure
- Summary Observations from the assessment, and additional detailed observations, impacts, and considerations for the Defect Management area are presented on following slides



## Defect Management – Summary Observations

Defect Management	
Component	Summary Observation
Centralized owner or lead for defect management	Not present Overall Defect Manager and defect management team does not exist
Centralized ownership of defect management tools	Not present The State does not maintain or have ownership of the central defect repository (JIRA)
Consistent capture and recording of all reported defects accurately in the defect management tool (JIRA)	Not present Reported defects are not captured accurately in JIRA, resulting in a far lower number of total open defects in JIRA
One system of record for production defects	Not present Initial JIRA reports showed only 60-162 total open defects. Upon further follow-up and detailed analysis of JIRA, 399 total open defects were identified, including duplicates.
Right complement of a defect management team	Partially present Structured, coordinated involvement of MN.IT, MNsure business entities, and vendor teams in defect triage, prioritization, and resolution is missing
Centralized access to defect management tools	Partially present Key State personnel do not have the right access setup to close resolved defects in JIRA
Coordinated defect handling from multiple defect channels and sources	Partially present Defects reported from the field help desk, and various contact centers are lost in transition and do not always make it to JIRA
Established guidelines for the defect management life cycle	Partially present Documented and established guidelines for the defect life cycle are not fully in place



## Defect Management – Summary Observations (cont.)

Defect Management	
Component	Summary Observation
Centralized defect triage	Not present Regular and structured defect triage meetings and process not in place
Coordinated defect prioritization, ownership, resolution, closure	Not present Coordinated defect prioritization meetings, and tracking to resolution and closure not in place
Pre-defined, timely defect resolution timeframes	Not present Defects from the go-live timeframe are still open/unresolved in JIRA without clarity as to the expected resolution timeframe
Coordinated, cross-vendor defect resolution with limited churn and iterations	Not present Established meetings and processes for reviewing and confirming defect fix cross-vendor impacts prior to resolution not in place. Can lead to cross-module issues getting uncovered for the first time in integrated test/UAT leading to multiple iterations and rework
Adequate defect resolution details	Not present Lack of clarity in JIRA when a defect is closed as to what was fixed, and how the problem was addressed. Root cause details are missing. Often, defects are closed prematurely in the early part of the SLDC without UAT validation and approval
Robust defect management tool that supports defined defect processes	Partially present JIRA is not configured and setup to support defect management processes needed on a project of this scale and complexity
Summary and detailed defect dashboard and metrics	Not present Detailed defect dashboards and metrics are currently not in place and not being distributed to management or executive teams. A clear, concise current state of defects not depicted in JIRA



## Defect Management – Detailed Observations

ID	Observation	Impact	Considerations
39	Capture of reported defects is not occurring consistently in the defect management tool (JIRA)	Results in far fewer defects being tracked and reported for the project, thereby not providing an accurate picture of system quality	Establish, communicate, and enforce clear guidelines and setup resources to enable all reported defects to be captured in JIRA
40	Total number of open defects not reported consistently, and reported numbers very low (range from 60-399 total open defects for the entire project)	In the absence of an accurate system of record for defects, a clear picture of system quality cannot be procured, and focused, prioritized plans for resolution cannot be put in place	Establish a centralized owner for JIRA and enforce process for defect reporting, capture, and management across the life cycle to create a clear defect picture for the project
41	Lack of a centralized owner for defect management across the entire defect life cycle	May lead to a lack of clarity and limited understanding as to the current state of defects and can result in outcomes of the defect management process not meeting expectations	Designate a Defect Manager from MN.IT who is responsible and accountable for defect management for UAT and production. Define clear roles and responsibilities and owners for each step of the defect life cycle. Define clear ownership for defect resolution
42	Access to JIRA is limited to a few individuals, access is not aligned with the duties of the individual, and licensing issues have been observed, preventing JIRA from scaling up for MNsure	This impacts the reporting of defects and closure of reported defects, and may impact the overall quality of the system and detracts focus from the “real” set of defects	With the proposed MN.IT ownership of JIRA, configure JIRA to meet project needs and align access groups and controls with project roles and responsibilities. Once the JIRA access structure is established, review license needs and upgrade as needed



## Defect Management – Detailed Observations (cont.)

ID	Observation	Impact	Considerations
43	Ownership and maintenance of the defect management tool (JIRA) is not with the State	A single, consolidated view of the universe of defects is lacking, thereby potentially limiting the ability to use defects as a reflection of system quality	Consider that MN.IT take responsibility and accountability for the defect management tool (JIRA), including setup, access, usage, and maintenance, to effectively leverage the tool for defect management
44	Access to JIRA is limited to a few individuals, access is not aligned with the duties of the individual, and licensing issues have been observed, preventing JIRA from scaling up for MNsure	This may impact the reporting of defects and closure of reported defects, and impacts the overall quality of the system and detracts focus from the “real” set of defects	With the proposed MN.IT ownership of JIRA, configure JIRA to meet project needs and align access groups and controls with project roles and responsibilities. Once the JIRA access structure is established, review license needs and upgrade as needed
45	Centralized, coordinated defect resolution process does not exist across vendors	Can result in multiple iterations of testing and churn to successfully resolve a defect to closure, and can cause rework and additional usage of resources such as people and time	Established a centralized prioritization and resolution plan following defect triage and expand testing in the lower environments to reduce churn, achieve more successful defect resolution with fewer iterations, and prevent the scenarios of having to rush partially tested code to the production system



## Defect Management – Detailed Observations (cont.)

ID	Observation	Impact	Considerations
46	Limited resources (knowledge base and dedicated time) to triage and route defects for resolution	Lack of defect triage can lead to issues lingering in production longer than they should and as a result, can be an impact to system quality and end user access to functionality	Setup a dedicated triage team structure (MN.IT with support from business SMEs and vendor developers) for timely triage support
47	A single, consistent system of record for all defects is missing. JIRA has been setup and is being used, but not consistently and effectively	Lack of consistent usage of JIRA results in defects being reported and tracked via email or not being reported at all, which can lead to issues lingering in production longer than they should and impacting the quality of the system	Establish, document, communicate, and implement clear defect reporting, tracking, and resolution guidelines and roles and responsibilities so that defect processes are being consistently followed across all users and entities (MNSure, MN.IT, and DHS). Clarify specifically how JIRA will be used for recording the right content and for driving defects to closure
48	Established guidelines for defect reporting, tracking, and resolution do not exist. Reported defects are missing necessary pieces of data such as severity, priority, and associated business function which makes the triage and prioritization a challenge. Definitions of defect attributes and values, for example, defect severity, environment defect was identified in, are unspecified or setup as optional in JIRA	May lead to fewer than actual defects being reported. Insufficient information may lead to issues with replicating the defect and causing it to be deemed invalid (when it is not). Defects are not logged at the correct severity level, impacting the ability to prioritize and fix critical issues. Defects are closed prematurely outside the testing/SME group with limited clarity on the resolution and root cause	Implement a full end-to-end defect lifecycle, including guidelines for reporting and detailed defect logging (including the severity level, detailed descriptions, screenshots, etc.), tracking, and resolution, with detailed processes, roles and responsibilities for each stage of the lifecycle. Analyze and revise definitions and data values for defect fields in JIRA



## Defect Management – Detailed Observations (cont.)

ID	Observation	Impact	Considerations
49	Defect triage and prioritization are missing and there is lack of clarity during triage on items that function as designed vs. “real” defects	A clear representation of system quality is lacking as defects are not being accurately reported and defect queues are not being monitored, triaged, and prioritized. This may ultimately impact the quality of the system	Designate a MN.IT Defect Manager accountable for production defects Conduct a defect clean-up effort in concert with vendor teams, business, and MN.IT to bring the current set of defects up-to-date. Establish a team of defect personnel from MN.IT with business SMEs in an advisory role to monitor defect queues on an ongoing basis. Establish recurring defect triage meetings with key stakeholders (MN.IT, business, vendors) to review defect status reports, key findings, and triage outcomes. Have triage outcomes include impact analyses to drive prioritization of defect work load to the vendor teams and developers and drive defects to resolution
50	Defect triage and defined resolution timeframes are missing	In the absence of pre-defined timeframes, there is limited accountability from the responsible parties to turnaround defect triaging and resolution within expected timeframes. This causes defects to linger in production and impact system quality	Amend the contract to include official, pre-defined timeframes for defect triaging and resolution based on defect severity and impact. Clarify scope and expectations around ownership and accountability for each step during the timeframe



## Defect Management – Detailed Observations (cont.)

ID	Observation	Impact	Considerations
51	Inadequate resources (masked production data, environment setup, etc.) to triage and route defects for resolution	Valid defects may get canceled if unable to be replicated and the corresponding issues may continue to linger in production and impact system quality and end user access to functionality	Dedicate a team (MN.IT, business, vendor developers) to have bi-directional communication and escalation in the event of insufficient defect data. Take corrective measures to provide a production-like environment with masked production data that is refreshed at regular intervals, to facilitate successful defect replication and to augment reported defects with additional information for developers to resolve. Provide access to canceling and closing defects to a select group of individuals
52	Issues reported via the field help desks, contact centers, escalation centers and other sources do not migrate effectively to the central source of defects (JIRA)	Can cause a breakdown of critical information flow and may result in delaying the resolution of critical defects and in causing ambiguity and uncertainty to the reporting party around the status and resolution of reported issues	Identify and define possible sources of defects. Identify clear roles and responsibilities for each defect source. Provide the required tools, skills, training, documented process, and dedicated resources to the defect source centers. Establish a mechanism to allow for bi-directional communication and escalation between the source centers and central defect team on the project
53	When defects are resolved, there is lack of clarity on what the root cause was or how the defect was resolved	Limits insight into the perceived quality of the system and the volume of potentially duplicate issues	Leverage the defect management tool (JIRA) effectively to enforce that key data be entered as part of the defect lifecycle process

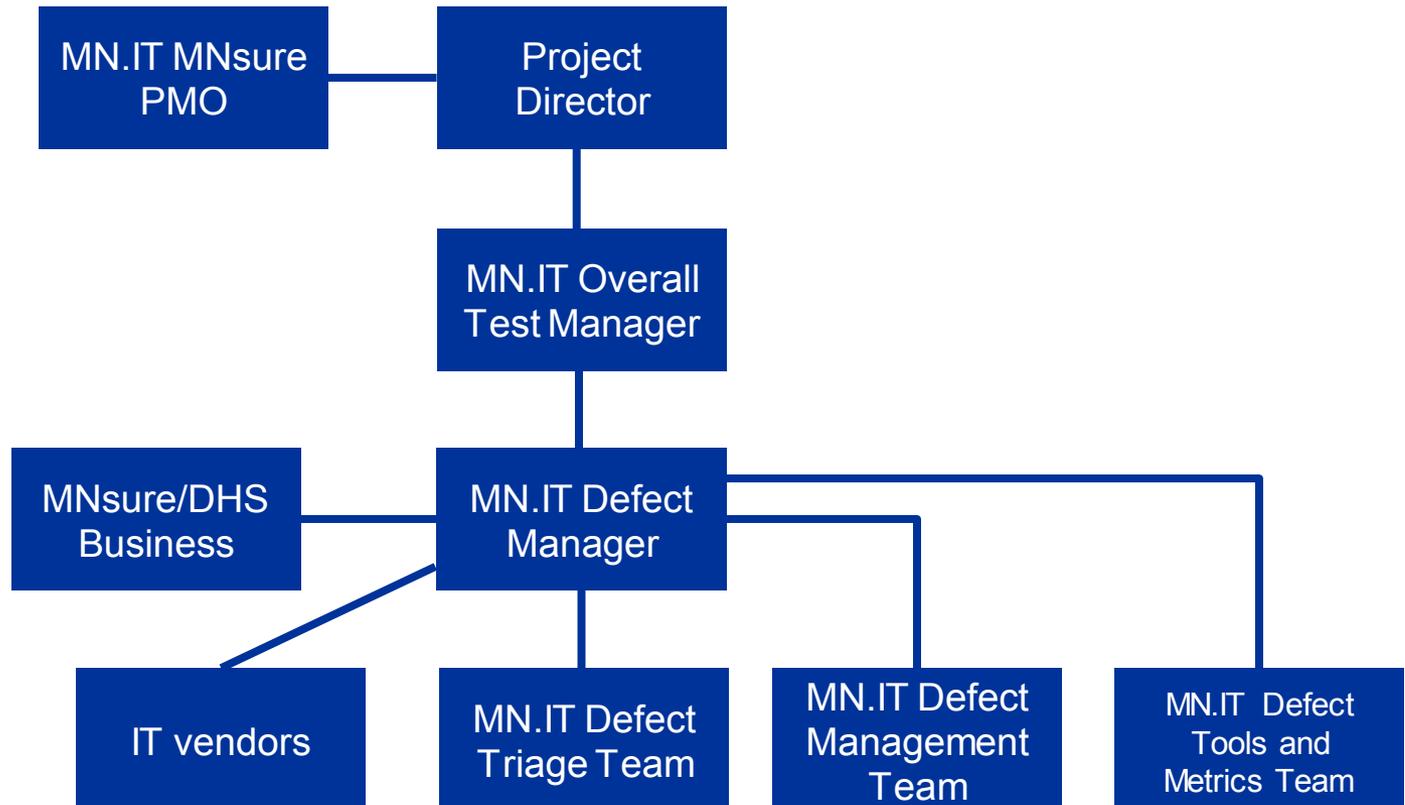


## Defect Management – Detailed Observations (cont.)

ID	Observation	Impact	Considerations
54	Although JIRA is being used as the defect management tool, JIRA has not been adequately setup, configured, and leveraged to an extent that could make defect management more effective	Defect reporting, tracking, and prioritization are impacted as a result of the limitations imposed by the current setup and usage of JIRA	Setup and configure JIRA for the needs of the MNsure project. Identify critical defect fields to be mandatory and create training guides for defect reporting so that defects are reported consistently. Dedicate focused resources and time to keep JIRA up-to-date and conduct ongoing review and triage to further defect prioritization and resolution. Establish and communicate clear guidelines on managing the defect life cycle in JIRA
55	Status dashboard and metrics for defect management are not being created, maintained, and distributed	Can lead to limited transparency and visibility around the status of defects and can result in lack of clarity or an impact to perceived system quality. Can also hinder focus on the “real” issues and the ability to prioritize and resolve them to closure	Conduct a clean-up of the current state of defects in JIRA. Define a team for daily review, triage, clean-up, assignment, and prioritization of defects. Define and publish a detailed defect status report that includes data such as defect status, severity, priority, and impacted business function. Define the frequency, content, and audience for an executive summary dashboard of defect results. Identify the stakeholders who will receive dashboard and drive outcomes and resolution

## Defect Management – Proposed Structure

The MN.IT Defect Manager is responsible for defect clean-up and prioritization, defect assignment, tracking resolution, and closure. The Defect Manager manages multiple teams that support the various defect management activities. The MN.IT Defect Manager reports up to the overall Test Manager who is ultimately accountable for defect management, and who in turn, reports up to the MNsure Project Director





# Defect Management – Proposed Defect Management Team Framework

## Role for the MNSure Project

Addresses all aspects and activities of defect management from establishing and implementing processes throughout the defect lifecycle, enforcing SLAs for tracking, and resolution of defects, and manage defect triage and prioritization. The team is led by a Defect Manager who is responsible for this and who reports up to the overall Test Manager who is ultimately accountable for Defect Management

## Members Roles and Representation

- **MN.IT:** Provides the Defect Manager who is responsible for owning and managing the process and a triage team experienced and knowledgeable in MNSure. Is responsible for maintaining the defect tool (JIRA)
- **MNSure and DHS:** Provides business analysts and SMEs for subject matter clarifications and representation, sign-off, and approval at the triage and prioritization meetings
- **Vendors:** Provide development leads as vendor product SMEs, support for defect triage, estimation for prioritization of defects

## Key Responsibilities

- Monitor defect reporting and defect processes and their adherence to established processes
- Monitor defect queues
- Drive defect triage
- Drive prioritization
- Monitor defect SLAs
- Track defects to resolution
- Defect status reporting
- Stakeholder communication

## Key Relationships

- **Project Management Team:** Understand the status and progress of the current state of defects and the resolution plan relative to the overall release schedule
- **MNSure and DHS:** Active representation across business areas for review and approval of work prioritization
- **Vendors:** Provide triage and produce SME support, provide estimations to factor into the prioritization and defect resolution plan for information about the status and future of MNSure

## Key Decisions

- Defects triage outcomes are confirmed
- Defect prioritization is established
- Escalation checkpoints are established, triggered, and escalated issues are tracked to resolution
- Resolution plans, including estimates, are confirmed and communicated officially to vendor groups



# Defect Management – Defect Prioritization

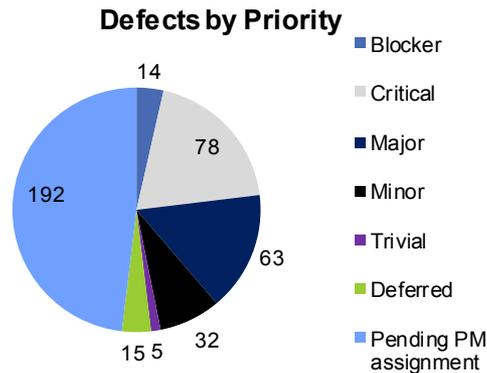
The below aspects have been taken into consideration for defect prioritization for the MNsure IT system project

## Scope:

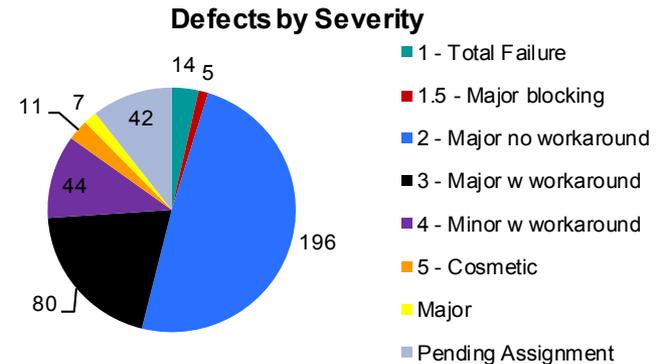
- It was not possible to get a consistent result of the total universe of non-closed defects in JIRA
- Multiple data requests sent for a report of non-closed JIRA defects yielded inconsistent results, ranging from a total of 60 to 162 defects
- An independent assessment of the universe of total non-closed\* defects in JIRA on 5/8/2014, was 399 defects, which is the basis of this prioritization

## Below is an existing breakdown of the 399 non-closed defects by Priority and Severity

Existing Breakdown of 399 non-closed defects by Priority



Existing Breakdown of 399 non-closed defects by Severity



A summary of the existing breakdown by Priority is:

- 48% have no value assigned for Priority (of which 70% are major severity defects)
- 39% are categorized as blocker/ critical/ major
- 13% are categorized as minor/trivial/deferred

A summary of the existing breakdown by Severity is:

- 11% have no value assigned for Severity
- 5% are categorized as SEV 1, 1.5
- 71% are categorized as SEV 2, 3, Major
- 13% are categorized as SEV 4, 5

\* Non-closed includes all statuses except closed, from all projects in JIRA (MNHIX\*, SCM Team, Short Term Projects, Security Domain)



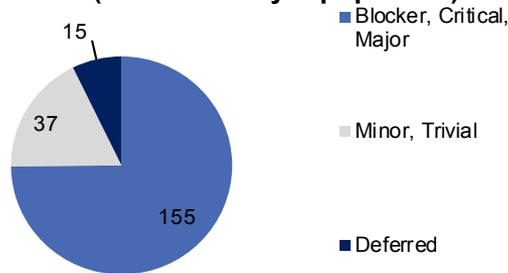
# Defect Management – Defect Prioritization (cont.)

## Re-Prioritized Resolution Criteria:

- The existing universe of 399 defects have been analyzed and grouped into the below three priorities to address for resolution:
  - Priority 1 – based on critical functionality (as defined in the Key Function Matrix (KFM) in the functional assessment in deliverable 3)
  - Priority 2 – based on functionality (outside of critical functionality addressed in priority 1). Defects still pending triage and open more than 90 days are also included in this priority
  - Priority 3 – based on functionality deferred or not in near-term scope, or internal, isolated, technical errors for vendor-specific modules that may not be reproducible or are open for more than 90 days

Of the 399, non-closed defects, 52% are currently assigned a priority

Defects breakdown by Priority for 207 defects (where Priority is populated)

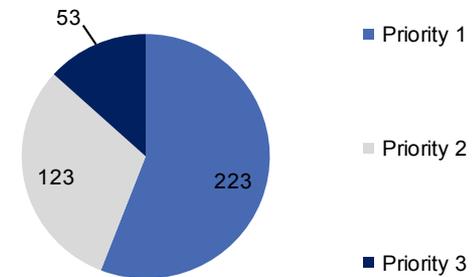


A summary of the breakdown **before** re-prioritization is:

- 75% are categorized as top priority
- 18% are categorized as low priority
- 7% are categorized as deferred

Breakdown of 399 non-closed defects by proposed Resolution Priority

Defects by Resolution Priority



A summary of the breakdown **after** re-prioritization is:

- Priority 1:
  - Only 43% (of the previously categorized 207 defects) are at Priority 1
  - 55% of the total 399 are at Priority 1
- Priority 2:
  - 39% (of the previously categorized 207 defects) are at Priority 2
  - 30% of the total 399 are at Priority 2
- Priority 3:
  - 9% (of the previously categorized 207 defects) are at Priority 2
  - 15% of the total 399 are categorized as Priority 3



## Defect Management – Defect Prioritization (cont.)

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### Key takeaways:

- 30% of the non-closed defects are outstanding from 2013
- A large percentage of defects (75%) was tagged as top priority in the existing non-closed defect universe. This leads to dilution of the concept of “top priority” and makes it challenging to arrive at a realistic, achievable, defect resolution plan
- Going forward, existing definitions of Severity and Priority should be re-evaluated to refine the definitions and usage of these fields during defect reporting, logging, triage, and prioritization

### Attached are the prioritization results:

- Below is an embedded excel file that should be reviewed in its entirety for the detailed results of the defect prioritization effort
- Given the volume of defect content, this document is being included in electronic format only



Microsoft Excel  
Worksheet

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## **Test Management**

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## Test Management – Overview

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- Testing is an integral part of the Software Development Life Cycle (SDLC) because it validates the ability of components and the system to meet business requirements. Testing verifies that the system works as designed and drives the identification and management of defects in software quality towards resolution. Testing advises stakeholders, clients, and project team members as to the software quality
- For a system implementation to be effective, quality must be built in from the beginning and across the entire SDLC ranging from unit test during development to User Acceptance Test (UAT) and post-deployment validation in production. An organized, well documented, and structured testing process creates transparency and accountability for quality at each step of the SDLC
- The testing assessment spanned current testing processes and tools across the testing phases to provide assessment results and go-forward considerations. The assessment was conducted across the dimensions of governance, process, tools, and metrics for the testing phases of unit test, integration test, system test, user acceptance test and production smoke test, and across the testing types of performance test, automation test, security testing, and ADA testing
- Deloitte's observations, impacts, and considerations for the Test Management area are presented on the following slides



## Test Management – Summary Observations

Test Management	
Component	Summary Observation
Test team by phase, where the team is well-defined with roles and responsibilities, including a Test Manager, Testers, Business SMEs, and Development/Product Support	Not present Overall Test Manager, Test Leads for each phase and the right complement of test resources not in place
Thorough testing in each phase prior to UAT and production smoke test	Partially present Testing occurs directly in production and for the first time in UAT or production for complex functionality and components such as batch jobs and notices
Adequate testing training that ramps up the testing staff on critical business functions	Partially present Training occurs on an as-needed basis or not at all, and often, business SMEs pick up testing due to limited functional knowledge outside that group
Well-defined test strategy and approach	Partially present Does not exist for some phases (such as unit test or integration test). May exist for phases such as UAT but is not documented. Often created ad hoc and as-needed and not maintained or tracked against
Detailed test plan outlining key components of a test phase	Partially present Not documented and may exist informally; often created just in time but not maintained or tracked against
Clear, achievable test schedule maintained and updated to factor in dependencies and delays	Not present Pre-defined schedule does not exist. Delays in earlier test phases or deployment delays to UAT not factored in to adjust the UAT schedule, causing impacts to the available time for testing in UAT
Documented test scenarios and test cases	Partially present Not updated for ongoing functionality. High-level and usable by a small group only; cannot be leveraged effectively by IT Testers and other stakeholders



## Test Management – Summary Observations (cont.)

Test Management	
Component	Summary Observation
Documented test case traceability matrix	Partially present Only one point-in-time, outdated version. Not maintained for ongoing changes in requirements and test cases
Clear, specific, well-documented, pre-approved entrance and exit criteria	Not present Acceptance and certification of functionality is done on a qualitative basis by business SMEs and documented entrance and exit criteria not present
Well-defined test data	Partially present Insufficient, often invalidated by multiple testers using the same data set, and created manually for the most part
Re-usable and repeatable test data creation and automation testing	Partially present Limited means to effectively create large volumes of data
Robust test environment to support end-to-end testing	Not present Does not exist for UAT; interfaces, batches, notices cannot be tested in the UAT environment
Formalized and documented smoke testing	Partially present Occurs to a limited extent
State-owned and managed performance testing	Not present Only 3 runs of performance test to-date, conducted by a third party
Robust, repeatable regression testing	Partially present All regression testing owned by vendor and done primarily in system test. Limited to no regression test in UAT
Testing of components such as interfaces, batches, notices, and reports	Partially present Limited, can test only in system test and not in UAT



## Test Management – Summary Observations (cont.)

Test Management	
Component	Summary Observation
Testing tools usage for test case creation and maintenance, test execution, Performance testing, Security Testing, ADA Testing	Partially present Limited, de-centralized, not coordinated and fully leveraged
Testing Dashboard and Metrics	Not present Executive and detailed dashboards for test metrics not present



## Test Management – Detailed Observations

ID	Observation	Impact	Considerations
56	State (and specifically MN.IT) supervision of unit, integration, and system test phases is limited. Each phase in the lower environments is owned and managed by a different stakeholder with a lack of consistent processes across the board	Limited visibility and transparency to testing in the lower environments may lead to unclear entry and exit criteria and may result in more defects identified in later stages of the project, which may result in more time, cost, and resources expended for resolution at that stage	Designate a MN.IT Test Manager who is accountable for testing (including test cases, results, defect management, testing communications, stakeholder involvement, entry and exit criteria) across all test phases (unit, integration, system, UAT, production). Develop plan to coordinate testing in lower regions and do not wait to UAT. Create a team of MN.IT test leads, wherein the leads report up to the Test Manager and each lead is aligned with and accountable for one test phase each (unit, system, integration, UAT, production, regression). For instance, for UAT, there will be a test team and test lead that report up to the Test Manager (more details to follow in the chart). Make provisions in the contract to allow vendor teams to share unit and integration test details with the State
57	The User Acceptance Test (UAT) team is lacking the full complement of the right mix of resources, knowledge base, and stakeholders for testing	Can impact the quality and effectiveness of testing and overall confidence in approving the release to production. Can also limit the ability to confirm if the release functionality meets business requirements or not, which has the likelihood of impacting end user access to functionality	Designate a MN.IT Test Lead, who reports to the overall MN.IT Test Manager, and is accountable for UAT. Involve stakeholders from MN.IT, DHS, MNsure, and the vendor teams in UAT to augment the knowledge base and provide clarifications as to the build content. Establish a team and stakeholder structure with clear expectations around roles and responsibilities



## Test Management – Detailed Observations (cont.)

ID	Observation	Impact	Considerations
58	UAT is conducted during a limited test window and on an unpredictable schedule with insufficient knowledge as to the contents of the release, thereby resulting in incomplete testing. The contents of the release are not clearly documented via release notes, and documentation around MNSure functionality is limited or entirely lacking in instances. Documentation is also not kept updated to reflect updates to functionality	Lack of documentations limits the testing team's ability to write thorough test cases targeted to test critical functionality, which thereby limits testing effectiveness. Limited testing may lead to the release being prematurely promoted to production, causing delayed identification of defects and regression items, and increased time, cost, and resources to resolve issues found in production	Establish a consistent schedule and plan for releases to UAT, outlining the timeline, expectations, and criteria for UAT kick-off. Plan for adequate buffer in the schedule to factor in unknowns. Outline clearly and specifically the contents of releases to UAT via release notes or other such documentation. Proactively communicate schedule changes to the UAT stakeholder group. Create and maintain documentation around MNSure functionality via up-to-date requirements and design documents
59	There are instances where testing of complex functionality occurs directly and for the first time in production	Lack of testing of specific functionality prior to production poses a risk of regression, where existing functionality is impaired, or the intended new functionality deployed to production does not work. This can result in impacting access to production and in severe circumstances, even impact production availability or uptime	Setup adequate resources (environment setup, data, people, time in the schedule) to initiate business user testing early on and in advance of UAT and more comprehensive testing during UAT to avoid the situation of testing in production



## Test Management – Detailed Observations (cont.)

ID	Observation	Impact	Considerations
60	The UAT phase has incomplete and inconsistent testing processes, specifically around test case scope and creation, test execution, reporting and review of results, defect identification, tracking, and resolution, established entry and exit criteria, and stakeholder representation and communications	Diminishes the effectiveness and intent of the UAT phase and can lead to delayed identification of defects at a later stage or directly in production, resulting in increased time, cost, and resources for defect resolution and increasing the risk of impacting end user experience and access to critical functionality	Establish and implement process for the areas outlined below: <ul style="list-style-type: none"><li>▪ Test cases: scope, creation, review, traceability, sign-off, and maintenance to reflect new functionality</li><li>▪ Test execution: data creation, execution, tracking and reporting of results</li><li>▪ Defect management: Identification, reporting, tracking, communication, and resolution of defects</li><li>▪ Established entry and exit criteria</li><li>▪ Stakeholder involvement in UAT and timely communication of decisions and outcomes</li></ul>
61	UAT is limited in its effectiveness as a result of environment constraints such as the inability to test end-to-end scenarios, components such as interfaces, notices, reports, and batches, and time based scenarios that need time advancement	This results in testing some functionality for the first time in production and identifying and resolving issues at that point, which may result in expending more time, cost, and resources, and delaying the access of planned functionality to the end user	Prioritize the setup of a UAT environment to allow for the testing of critical components such as interfaces, notices, reports, and batches. Build focused test teams knowledgeable in testing each component including stakeholders from MN.IT, MNSure, DHS, and the vendors. Prioritize the addition of system functionality to advance the time clock



## Test Management – Detailed Observations (cont.)

ID	Observation	Impact	Considerations
62	UAT is limited in its effectiveness as a result of data constraints such as limited test data, lack of a means to automate data creation, and lack of masked production data to replicate and retest production issues	Limited testing leads to more issues identified in production, resulting in expending more time, cost, and resources for resolution. Lack of masked production data in a secondary environment limits the ability to replicate and resolve critical production defects that may continue to linger in production longer than they should and impact the end user's access to functionality	Identify and allocate test resources to the UAT team for supporting data management (creation and automation). Setup a secondary environment with masked production data, or alternatively, refresh this data periodically into UAT, and provide access to this data to vendors, testers, and the business users, to allow for production issues to be replicated and resolved
63	Detailed security testing has been conducted, however, code corrective actions suggested to some of the vendor groups have not been prioritized and implemented to date	If identified code issues and gaps are resolved timely, then the effectiveness of security testing can improve. Depending on the type of gaps outstanding, those may result in security non-compliance and render the product vulnerable to security threats	Prioritize the remediation of security gaps with the vendors. Identify the list of all pending gaps by vendor and create a resolution plan in concert with the Security team and MN.IT
64	ADA testing is still ongoing; the State is working with a third party vendor to assess any gaps in accessibility and disability compliance of the product and ADA testing	Unless the current plan with the third party vendor is followed closely, any potential gaps in accessibility and disability compliance may not be remediated in a timely manner	Suggest active monitoring, tracking, and reporting of status against the plan, timely review of the assessment, and prioritization of resolution for any identified gaps



## Test Management – Detailed Observations (cont.)

ID	Observation	Impact	Considerations
65	<p>The performance test efforts undertaken by the State with SOASTA have uncovered performance issues and gaps, many of which are yet to be resolved. These issues range from site capacity limitations, HTTP errors once the capacity is reached, lower than expected response times, throughput, bandwidth, and server stability, and connection reset and other errors</p>	<p>System performance may directly translate to end user experience and access, and the user's ability to effectively use the MNsure website. Resolution of lingering performance issues can result in improving end user access and the number of successful enrollments</p>	<p>Identify a MN.IT owner for performance testing, through its life cycle from testing to issue resolution and fix migration to production. Identify and designate a performance team within MN.IT to track and monitor progress with each vendor via the issue resolution plan. Identify critical performance attributes and establish clear requirements for each attribute. Work with SOASTA to understand the current state against these attributes. Prioritize and create a resolution plan with the vendors for the performance issues and gaps identified to date and new gaps against the established baseline. Rerun performance tests with SOASTA at periodic intervals monitor progress against the baseline</p>



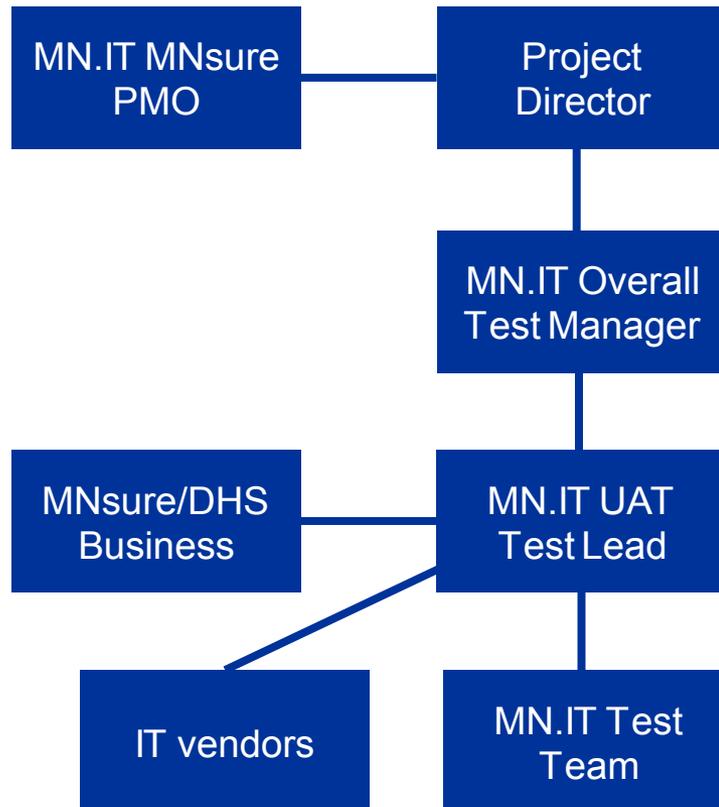
## Test Management – Detailed Observations (cont.)

ID	Observation	Impact	Considerations
66	Testing tools currently used for test execution (MS Excel) and defect management (JIRA) can be setup and leveraged more effectively. Testing tools are currently not integrated or available to all stakeholders	Effective usage of tools may enable better tracking of test case traceability to requirements, test case results, and defect management. This may result in more transparency, accountability, and accurate reporting of the outcomes of testing	In the near-term, analyze and leverage existing tools effectively. This entails activities such as setup, providing user access to stakeholders, creating and communication training guides for correct usage, ongoing tracking and monitoring of data, ongoing review of the results and tracking to expected outcomes. In the long-term, assess integrated test and defect management tools that provide strong out-of-the-box capabilities that can be leveraged on a project of this scale and size
67	Status dashboard and metrics for test management are not being created, maintained, and distributed	May limit the transparency and visibility around the status of testing which could limit the ability to drive to successful outcomes and hinder the full effectiveness of the testing process	Define and publish on a weekly basis a detailed test status report that outlines the scope of testing, traceability to requirements, test execution results, test case first pass rate, defect density, resolution plan, and plan as to additional test cycles, if any. Define the frequency, content, and audience for an executive summary dashboard of test results. Identify the stakeholders who will receive dashboard and drive outcomes and resolution



## User Acceptance Test (UAT) Management – Proposed Structure

The MN.IT Test Lead is responsible for User Acceptance Test (UAT) and manages the Test Team and testing involvement with the business entities and vendor groups. As referenced in ID 56 on slide 74, the structure below can be used for testing beyond UAT. The MN.IT UAT Test Lead reports up to the MN.IT Overall Test Manager whose responsibility extends beyond UAT. The Overall Test Manager is ultimately accountable for UAT. The Test Manager reports to the overall MNsure Project Director





# Test Management Team – Proposed User Acceptance Testing (UAT) Framework

## Role for the MNSure Project

Addresses all aspects and activities of UAT from test case and test data management, test execution, test status reporting and tracking, defect reporting and tracking, to regression testing and certifying code readiness for production. The team is led by a UAT Lead who is responsible for this phase and who reports up to the overall Test Manager who is ultimately accountable for UAT

## Members Roles and Representation

- **MN.IT:** Provides the Test Manager who is accountable for UAT, a UAT Lead who is responsible for day to day activities in UAT, and testers experienced in testing processes and tools. Provides UAT environment support and maintenance
- **MNSure and DHS:** Provide SMEs for subject matter clarifications and Q&A; and review/sign-off of test cases. Provide business representation for UAT sign-off/approval.
- **Vendors:** Provide development leads for Q&A and triage of defects or issues identified during UAT

## Key Responsibilities

- UAT Planning and Management
- Test case management
- Test data management
- Test execution
- UAT Environment management
- UAT Status Reporting and Tracking
- Defect Reporting and Tracking
- Discussing/approving entry and exit criteria
- Stakeholder communication
- Gate/Approval of code migration to production

## Key Relationships

- **Project Management Team:** Understand the status and progress of UAT relative to the release schedule
- **MNSure and DHS:** Understand the UAT plan in advance to anticipate and plan resource needs and representation across all key business areas
- **Vendors:** Need to provide triage support and Q&A for issues identified during UAT

## Key Decisions

- Confirm that entry criteria are met to start UAT
- Approve the scope and content of test cases
- Review and approve test case results
- Agree on defect reporting guidelines, severity, and priority of defects identified in UAT
- Approve functionality conformance to requirements
- Approve and certify code readiness for production



## Test Management – Test Plan Outline

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- The following slide illustrates a representative test plan outline, with key components to be included in the plan, for User Acceptance Test (UAT)
- The creation and effective implementation of plans similar to this for other test phases – unit test, integration test, system test – and other test types such as performance test, ADA test, and regression test are likely to result in structure and coordination for those test phases and types



# Test Management – UAT Plan Outline

ID	Activity	Description
1	Purpose and Scope	The purpose provides an introduction to the test plan and outlines the intent and components of the plan. The scope highlights the high-level functional requirements or functional areas that the test plan applies to.
2	Test Objectives	This section will outline the motivating factors and expected outcomes of testing, the aspects that are in scope, and an overview of planned tests with what's included and what's not.
3	Test Strategy	The Test Strategy establishes the foundation for all testing activities. It covers testing policies and processes to support the various test levels and cycles. The Test Strategy will provide flexible, consistent delivery of testing services to drive improved quality, lower cost and increase speed of delivery across the system.
4	Test Approach	The Test Approach is created after the Test Strategy has been approved. It outlines the scope of the overall testing effort, the test levels required for the project, the test team organization, the estimated effort needed to plan and execute, the issue resolution process and the roles/responsibilities of the team involved. The Test Approach is the predecessor to the detailed Test Plan.
5	Detailed Test Plan	The Test Plan includes: the scope of the testing effort, roles and responsibilities of all team members providing support, the schedule and time frame for scenario development and testing, and a detailed overview of all activities involved in the system testing process. The Test Plan will identify the standards and metrics against which test activities are planned and measured.
6	Test Scenario, Test Cases, and Test Case Traceability Matrix	Includes detailed definition of the test scenarios, review, and approval, and traceability of the test cases to requirements.
7	Entry and Exit Criteria	The Test Entry Criteria help determine if the execution of a particular Test Plan can begin. All criteria within the Testing Approach must be met or documented. Exceptions must be mutually agreed upon before testing can begin. The Test Exit Criteria will be used to determine if the execution of the Test Plan is complete and intended objectives are met. The criteria must be clearly documented upfront.
8	Test Data Requirements	Outlines all aspects of test data management, including the types of data, how frequently data should be refreshed, mechanisms to create and use data, any automated tools for creating data, and the resources and ownership of data management.
9	Test Environmental Needs	Includes the environment name and technical details, for the source and target systems as well as any tools used for testing. Environment sizing and the intended number of testing iterations (assuming the target environment will be refreshed/cleared in between iterations) will be critical expectations to document. Access to the environment(s) should also be defined.
10	Staffing, Roles and Responsibilities, Training Needs	This section outlines the required resources to address the test effort, main roles and responsibilities of these resources, along with expected knowledge base and skill sets. The section also discusses how to approach training for the testing roles on the project.
11	Test Schedule	This section will include the key schedule milestones, the test schedule for detailed planning and iterations (execution cycles), number of iterations, characteristics of each iteration (for example: size of load, timeframe, data variations), and the expected timeframe for each. Depending on the solution, it may be advisable to begin with a subset of production data that represents the 'basic' or most common business scenarios, and then perform iterations on more focused scenarios individually.
12	Testing Dashboard and Metrics	Reports should be defined to be created regularly to track, manage, and communicate the progress and status of testing. These reports include summary and detailed information of test scripts executed and defects discovered during testing. The reports are generated based on the data elements in the Test Management Tool, which provides for customization of the attributes as needed.
13	Testing Risks, Dependencies, Assumptions, and Constraints	This section will identify potential risks, mitigation and contingency for each risk, and its likelihood. Any assumptions or dependencies likely to impact the test plan, test executions, or outcomes of testing should also be outlined here, with an escalation and mitigation plan.

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## **Release Management**

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## Release Management – Overview

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- Release management activities include planning releases, scheduling releases, monitoring releases status, overseeing vendor resources, aligning releases to business expectations, and ensuring release quality
- Currently release management for the MNSure project is present however opportunities exist to improve release management
- Release Management is closely integrated with testing and development and determines that code is deployed in the right environment at the right time. The release manager coordinates release activities with change management, testing management, and defect management to align activities across the project
- The components that were assessed for release management include release plans, calendars, roles and responsibilities, prioritizations, release estimates, deployment standards and tools including release management checklists
- Summary Observations from the assessment, and additional detailed observations, impacts, and considerations for the Release Management area are presented on following slides

## Release Management – Summary Observations

Release Management	
Component	Summary Observation
Release Plan that details the software release to all environments, identifies release strategy, logistics, tasks, recovery and disaster plans, rollback plans, and pre and post-implementation activities	Partially present Some details are contained in individual documents
Integrated Release Calendar that provides a view of all activities such as development and testing and details release dependencies such as vendor product dependencies	Partially present A schedule has been developed, but it is missing the integrated view
Compliance/standards champion present in the release management team with the ability to understand the requirements associated with the standards and able to verify that the standards are appropriately implemented and adhered to in the application	Not present Individuals are driving requirements to completion, however the no cross-organization role has been defined with expectations
Roles and Responsibilities of Release Management Organization that defines the organization structure and the role, responsibility, and activities	Not present Individuals are performing roles, however the roles have not been defined with expectations
Release Notes that list all items delivered within a particular release for both business and technical audiences	Partially present Technical details are included based upon vendor input, however the business focus of release notes is limited
Prioritization Matrix that identifies importance of defects, enhancements, and is used to develop budgets for releases	Not present Prioritization occurs through informal processes and no priorities are documented associated to defects and requirements
Release Checklist a deployment tool that encourages the deployment process is followed and may have environment specific features	Partially present Checklists are being used for migrations, however information sharing between environments is limited, processes are not documented, and checklists are not used to drive continuous improvement



## Release Management – Detailed Observations

ID	Observation	Impact	Considerations
68	A release management plan along with associated roadmap does not exist	Makes it difficult to manage the overall release management process including release planning and estimation, release governance including prioritization of the requirements can lead to difficulty in planning and executing releases and have appropriate requirements met within the allocated budget	MN.IT should develop a release management plan along with a roadmap, the release management plan includes release planning, release governance, process documentation, and documentation standards
69	There is a lack of an overall release manager across all environments, there is no one on point for maintaining an overall release calendar and no single point of contact to drive deployments to each environment and encourage expected processes are being followed consistently for each environment	Results in quality and deployment issues such as missed deployment windows, rework, incomplete regression testing, and missed requirements. This also results in different approaches being followed in each environment which can lead to confusion and inconsistent processes	Define the role of release manager and provide the release manager the authority to lead release management end-to-end to promote quality and improvement in release management execution. Develop consistent standards and processes for release management across all environments
70	Due to multiple entities involved in release management, there is a lack of clarity around roles and responsibilities and a consolidated view thereof	Can lead to confusion as to who is responsible and results in quality issues. Can also lead to missed deployment windows and rework along with budget being spent on unsuccessful deployments	Define specific and clear roles and responsibilities to improve the structure for release management
71	An overall approach or strategy associated to driving requirements relative to standards is lacking. Individual business owners are identified to drive requirements and implementation of functionality specific to their products	Prevents a holistic view of how guidelines and standards are met and can lead to missed requirements	MN.IT should define and incorporate a role for a cross-organization compliance/standards champion into the release management team. That person should have the ability to understand the requirements associated with the standards and be able to verify that the standards are appropriately implemented and adhered to in the application



## Release Management – Detailed Observations (cont.)

ID	Observation	Impact	Considerations
72	Deployment processes have not been documented and are only partially implemented	Results in inefficient deployment processes being executed and environment discrepancies delaying the deployment of releases; this can lead to deployment dates being missed and lead to resources working on the same deployment multiple times, thereby wasting deployment resources and possibly impacting the schedule of future releases	Develop a list of deployment processes including deployment checklists for each vendor and environment, implement environment standards and documentation standards such as standardized release notes and standardized change controls, and find opportunities to streamline deployment through automated tools such as ClearQuest or other MN.IT tools thereby reducing the resources needed for deployments
73	Defect fixes, new code, and product upgrades are not actively managed and prioritized by the State	Lower priority items may be fixed prior to higher priority items and budget may be spent on fixing items that may not be a priority. More complex, higher priority items remain unresolved, impacting availability of functionality and overall product quality	Implement an estimation and prioritization process associated to defects that uses standardized tools such as JIRA and ClearQuest so that high priority defects can be estimated and scheduled for release. Ensure collaborative process is established between Release, Defect, and Test Managers
74	Mapping the dependencies between the various vendors in terms of software versions needed in order to meet the release schedule has not occurred	Leads to unsupported combinations of vendor packages, thereby increasing risk and possibly requiring additional testing or not meeting functional requirements for the end user	The State should map the dependencies between the various vendors in terms of software versions needed in order to meet the release schedule and determine if there are unsupported combinations of vendor packages and determine associated mitigations
75	Release testing by the State is primarily done in the User Acceptance Testing Environment	Leads to identifying defects reactively delaying releases and requiring additional budget to resolve defects	The State should test prior to the User Acceptance Testing Environment and be responsible for regression testing. This helps confirm timeliness and quality around deployment and testing, and prevent defects from being identified in the User Acceptance Environment Testing for the first time



## Release Management – Detailed Observations (cont.)

ID	Observation	Impact	Considerations
76	Full requirements traceability does not exist due to the original requirements from Maximus not being utilized; 2700 requirements were documented at varying levels of detail	Due to this lack of rigor, requirements for implementation have been missed leading to additional spending to remediate gaps downstream	Conduct a fit gap analysis of the current application factoring in any assumptions and gaps around underlying technologies and pre-existing functionality, determine the associated gaps and develop a plan to address the gaps
77	The current approach to documenting requirements is not standardized, at times a blank whiteboard is used versus a fit gap analysis for the vendor applications	Leads to designing processes that do not coincide with functionality of the vendor applications and may result in wasted coding effort or having to rework the requirements. Assumptions are also made around what exists out-of-the-box and what functionality needs to be built	The State should document the requirements gathering process taking into consideration the underlying technologies and pre-existing functionality
78	Vendors have expressed concern about the lack of business ownership of requirements and the overall release management process including deployment management and support of business processes such as prioritization	Results in conflicting priorities and rework due to confusion about the requirements and their priority, this can lead to missed requirements or work being done on lower priority requirements requiring additional budget to address the higher priority requirements	The State should develop a matrix and implement a process that indicates who is responsible for owning business requirements and setting priorities



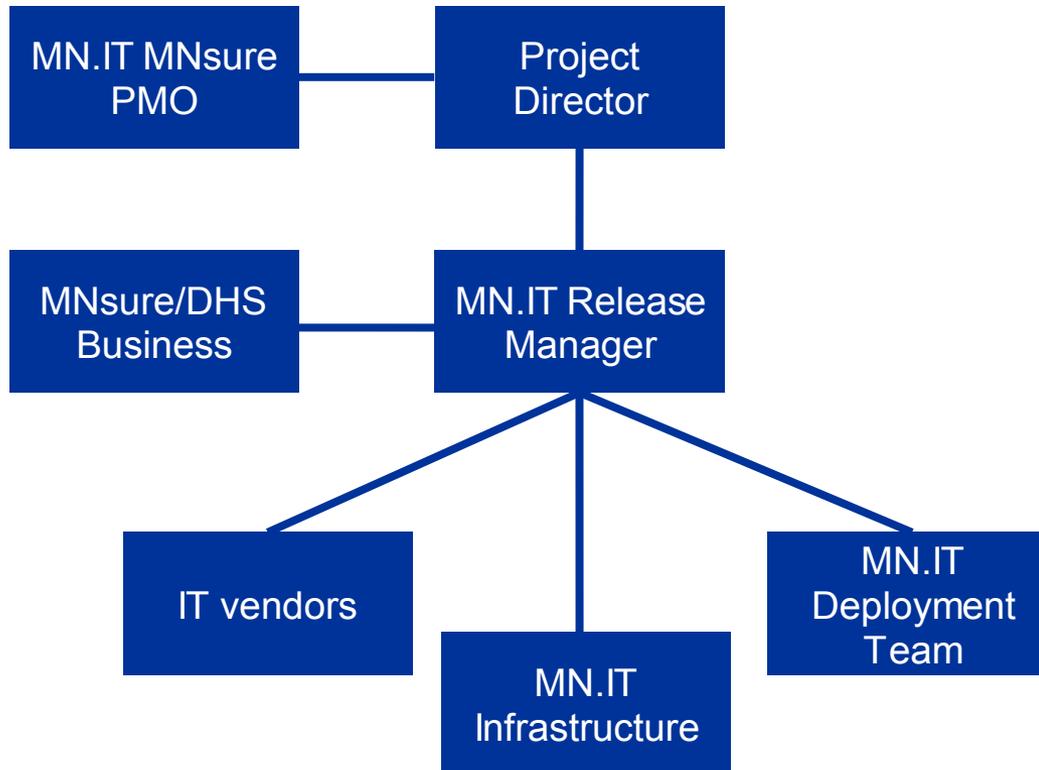
## Release Management – Detailed Observations (cont.)

ID	Observation	Impact	Considerations
79	Release notes are focused on the software (vendor specific) and do not effectively highlight the business changes that are being deployed for the MNsure application	Stakeholders do not have exposure to all the change requests that have been implemented thereby making it difficult to understand what is delivered in each release and communicate changes outward and making it more difficult to test and validate the deployment effectively	Release notes should be improved to serve both the needs of the business and to provide a consolidated view of the release. This allows the business to better structure their UAT and execute communication plans for users of the application, and enable the technical teams to better understand all the components that are being deployed and any inter-dependencies between components
80	Tactical planning has occurred for release management but an integrated calendar view is lacking	Makes it challenging to understand delivery schedules and dependencies associated to releases, makes it more difficult to plan for deployments and testing, and may be more challenging to identify code and version conflicts of the various vendor packages	The State should develop an integrated calendar view of future releases along with all dependencies
81	No prioritization process associated to requirements exists, and there is a lack of formalized process associated to business requirements. Release schedules are developed, but priorities change and then schedules are adjusted	Results in confusion about delivery and can lead to missed requirements, requiring additional budget to address missed requirements	The State should develop a prioritization matrix associated to requirements and formalize requirements definition processes and release schedules so that high priority items are addressed



## Release Management – Proposed Structure

*The MN.IT Release Manager reports to the Project Director and is responsible for managing vendor deployments as well as the MN.IT Deployment Team, the MN.IT Release Manager provides status to MNSure and DHS business stakeholders and to the PMO, the MN.IT Release Manager is responsible for obtaining deployment approval in each environment and coordinating environment changes with MN.IT Infrastructure Team*





# Release Management – Proposed Release Management Team Framework

## Role for the MNSure Project

Release Management addresses all aspects of deployment and release management including the development of the release management strategy and plan, the governance of business requirements, prioritization, and definition of the roles and responsibilities for the deployment and release teams

### Members Roles and Representation

- **MN.IT:** MN.IT provides the Release Manager who executes the Release Management Plan and develops the Integrated Release Calendar
- **MNSure:** Provides business SMEs by functional areas and who are responsible for approving the Prioritization Matrix and the Release Roadmap
- **DHS:** DHS to represent the interests of other State programs that are affected by Release Management
- **Vendors:** Project Managers from each of the IT Vendors are recommended to attend the meeting and present their requested changes as appropriate and discuss any dependencies

### Key Responsibilities

- Develop Release Management Plan
- Complete Prioritization Matrix
- Create the deployment and release checklist
- Establish consistent deployment and release processes in each environment
- Manage Integrated Release Calendar
- Develop Release Roadmap
- Implement Documentation Standards
- Execute production and UAT deployments

### Key Relationships

- **Counties/ Providers/Brokers/Navigators:** Several groups work directly with MNSure customers and have a need to know the plan and business impacts of deployments
- **MNSure and DHS Stakeholders:** Need to understand the deployment and overall release schedule to allocate resources for testing and support
- **Vendors:** Need to understand the implications of deployments

### Key Decisions

- Approve product upgrade deployments
- Approve the content for defect fixes and code upgrades
- Certify environment readiness before start of a deployment
- Certify and approve completed deployments and release for testing

### Meeting Cadence

- As needed per workplan



## Release Management – Plan Outline

ID	Activity	Description
1	Purpose and Scope	The purpose provides an introduction to the release plan and outlines the intent and components of the plan. The scope highlights the high-level functional requirements that are required to be implemented as part of release management
2	Current State Inventory	As part of creating a release management plan, an initial step is to conduct a current state inventory of release management processes, tools, and stakeholders
3	Release Strategy	This section provides an overview of the strategy for future MNSure releases. The strategy includes understanding of any concurrent project deployments to be included within the release, identification of any components or sub-systems that are impacted, and the nature of impact. For MNSure, the release strategy incorporates the overall orchestration of resources, tasks, and environments required to perform a successful release
4	Release Logistics	This section documents the logistics for this release in terms of technology infrastructure, network, application, third party software and resource needs. The logistics included here provide an overview of the process and components needed to orchestrate a successful release into production or non-production environments
5	Release Estimation	This section defines the estimating actions that need to be completed for a successful production or non-production release
6	Release Classification	Releases will be managed by the Release Manager and grouped into Release Types such as Major, Minor, and Emergency. Individual process steps may vary by release type
7	Roll Back Planning	It may become necessary to revert to the pre-release state, if possible. Detailed steps should be developed for Rollback. These are taken in the event that a contingency occurs during or after release that cannot be appropriately mitigated
8	Release Go-No Go Criteria	The purpose of the Release Go-No Go Criteria Checklist is to evaluate the readiness of going live with the new system. The criteria should be used to help aid the decision of whether or not to move a release into the production environment
9	Release Notes	The Software Release Notes is the quality record that lists the items delivered within a particular release. The document includes general information about the release, compatible products in the release, upgrades from previous releases, new features introduced in the release and known limitations, bugs, and workarounds
10	Prioritization Process	As part of the prioritization process, stakeholders need to prioritize defects, enhancements, and develop overall budgets for releases. Prioritization correlates with release classification. The overall process for prioritization integrates with the release management process and the overall governance structure
11	Roles and Responsibilities	This section identifies the roles for performing the release and deployment activities and describes the responsibilities of identified roles
12	Release Processes	All release management processes will be documented in each environment as part of developing the release management plan

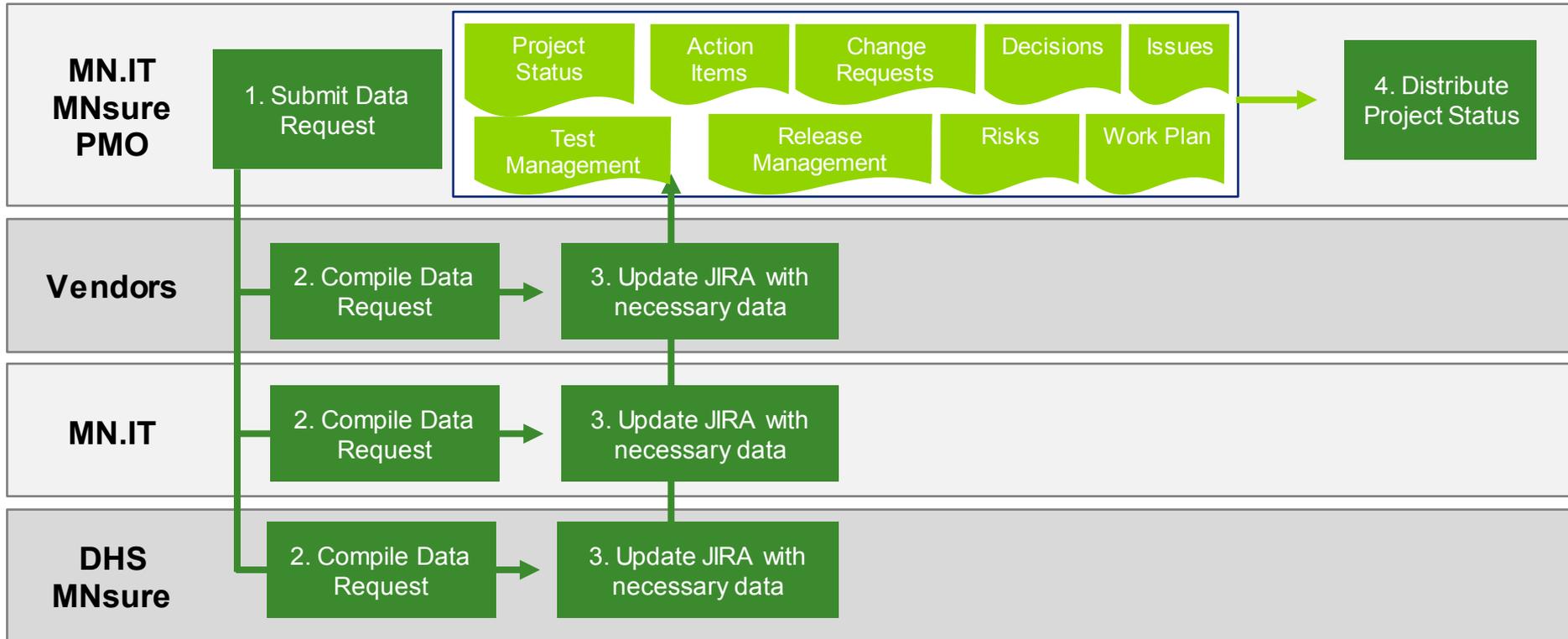
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**Appendix A:  
Project Management  
Processes**

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# Proposed Project Status Reporting Process

The MN.IT MNSure PMO will be in charge of triggering the status report data request process on a weekly basis. Under this structure, they are responsible for compiling, synthesizing, and developing the weekly project status reports which, following the Project Director's approval, are distributed. Status report distribution list includes State executives and leaders, governance groups, vendor partners, and external stakeholders



## Legend



# Project Status Reporting: Executive Summary <dd-mmm-yyyy – dd-mmm-yyyy>

## Project Status Summary

Overall Project Status	Y	Scope	Resources	Schedule	Quality	Budget
	-	Y	R	G	Y	G
		=		+	-	+

sample data

Project Status Summary	
------------------------	--

## Items Needing Leadership Attention

Request ID	Description	Priority/Severity	Target Resolution Date

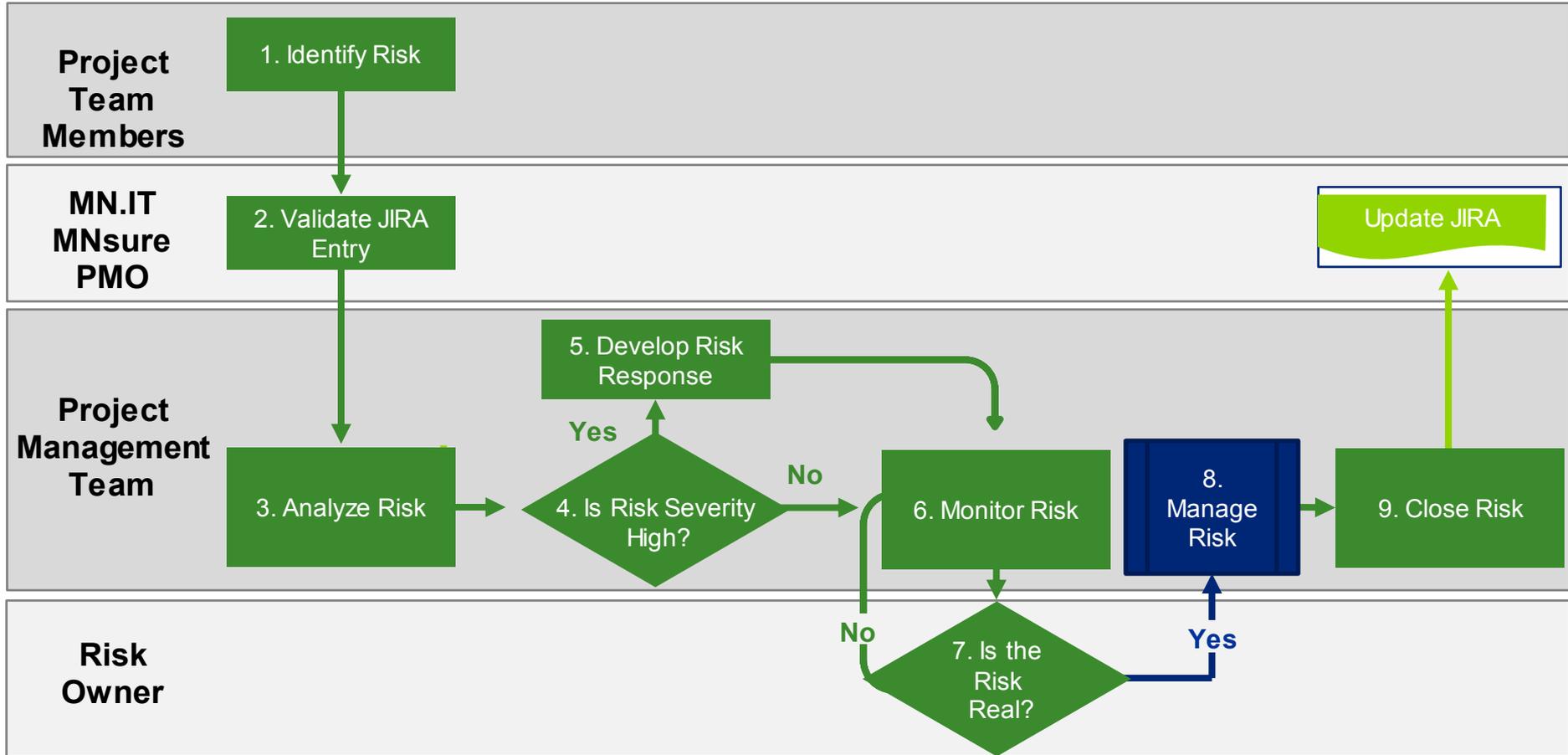
## Upcoming Deliverable and Key Milestone Status

Deliverable / Milestone Name	Progress	Baseline Finish Date	Planned/Actual Finish Date	Status	Comments
				C	
				G	
				Y	
				R	
				NS	

<b>Deliverable Status and Milestone Summary Legend</b>	NS	Not started	C	Completed	G	On track	Y	<1 week behind schedule	R	>1 week behind schedule
<b>Project Trends</b>	+	Trending Up (Improving)			=	Flat Trend (Steady)			-	Trending Down (Declining)

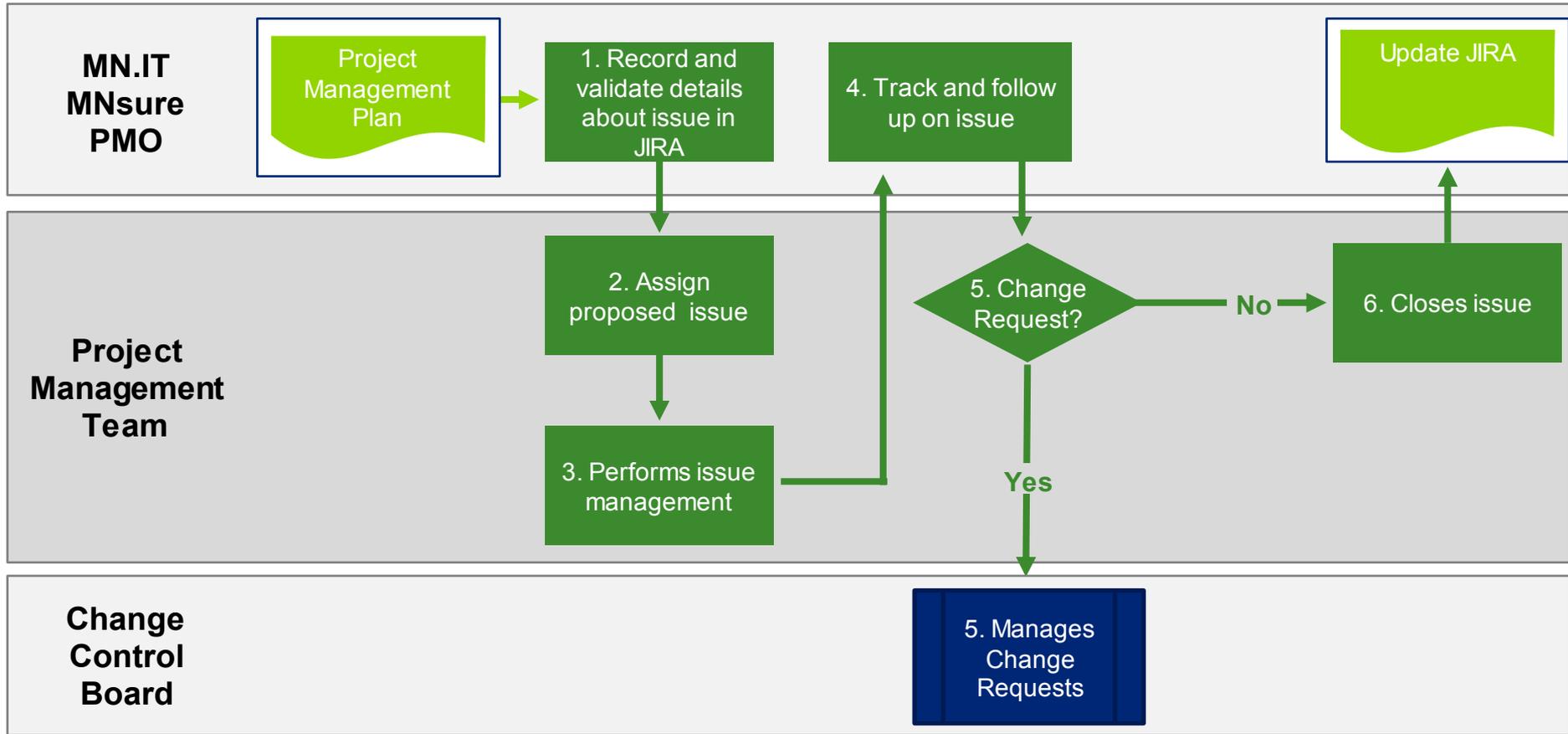
# Proposed Risk Management Process

*Project Management Team assesses the severity of the risk and manages the risk once a mitigation strategy is determined*



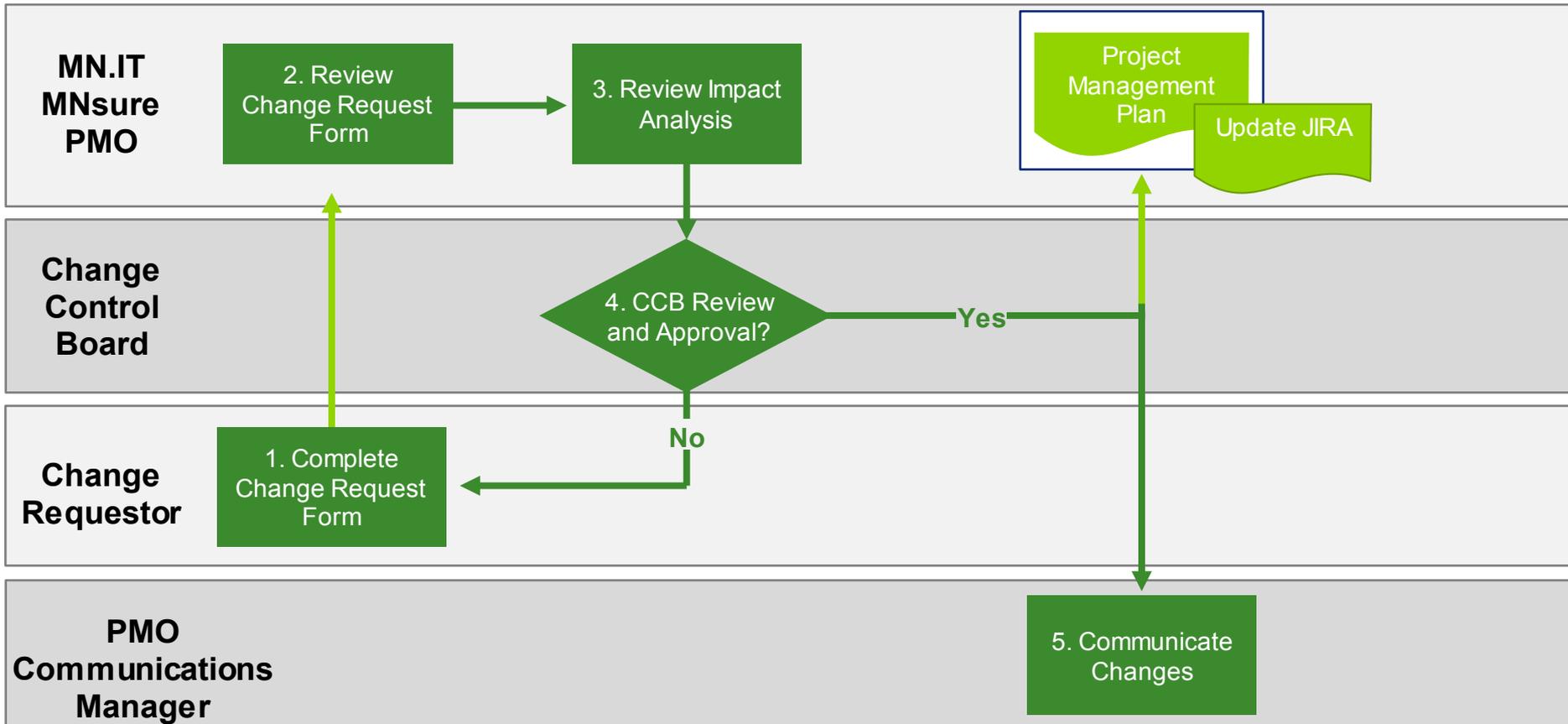
# Proposed Issue Management Process

The objective of this process is to manage the issues identified in the project, which includes identifying, prioritizing, assigning, monitoring, and closing issues through all project phases. Issues are managed on an ongoing basis and reviewed on a monthly basis. JIRA is the tool used for issue management

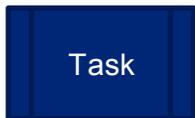


# Proposed Change Requests Process

The objective of this process is to identify, manage, and facilitate change control decisions on change requests to client contract terms and/or project deliverables that have been signed off and placed under change control. Change requests are managed on an ongoing basis and the change control board will meet on a weekly basis. JIRA is the tool used for change control



## Legend



# Proposed Change Request Template

The Change Request template will be used by stakeholders to initiate a Change Request. The template will be submitted to the MN.IT MNSure PMO and will be used to record, track, and manage change requests throughout the life of the project. The PMO will keep JIRA up to date based on any Change Request forms received. Once the Change Control Board makes a decision on a specific Change Request the PMO will update JIRA to reflect it

## 1.1 Change Request Summary Information

Change Request Summary Information			
Change #*		Status *	
Priority *			
Created By *		Created On*	
Assigned To *		Type*	
Identified On *		Sub Type	
Due Date *			
Change Request Description*:			
Change Request Details			
Release			
Team			
Phase			
Thread / Discipline			
Stakeholder			
Change Request Justification			
Justification of the change request*:			
Change Request Impact Analysis			
Dependencies*:	Effort Impact*:	Financial Impact* ( \$):	
Schedule Impact*:	Size Impact*:		
Impact Summary* :			
Notes :			
Reference Materials:			

## 1.2 Change Request Decision Summary

Change Request Decision	
Control Board Level (e.g., Level 1 (project), Level 2 (Ops. Committee), Level 3 (Steering Committee))	
CCB Decision (Approved for Implementation, Deferred, Escalated, Rejected, Cancelled):	
Decision Comments	

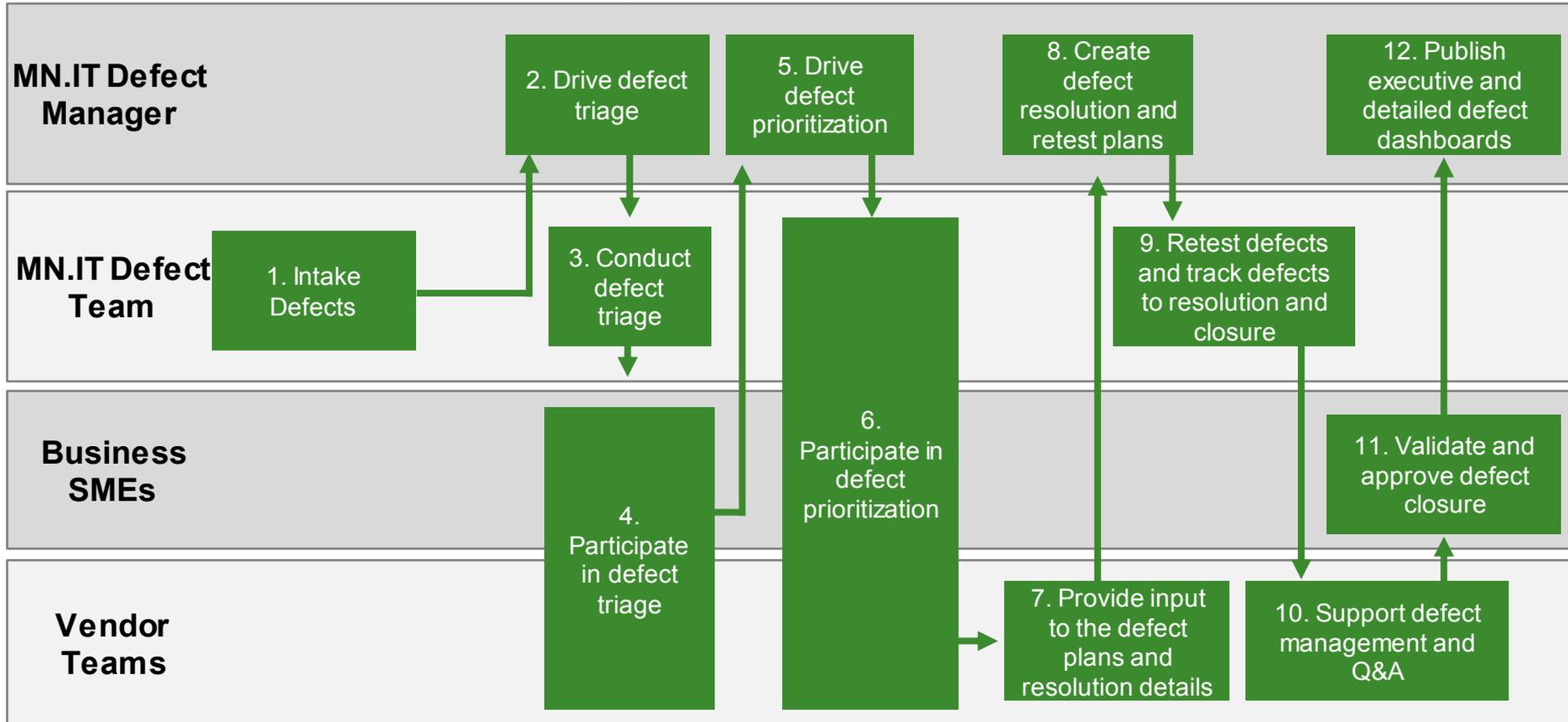
Change Request Decision Signatures	
<Client Project Manager or appropriate client CCB representative>*:	
Date (dd-mmm-yyyy):	
<Project Manager>*:	
Date (dd-mmm-yyyy):	

## 1.3 Approved Change Request Implementation Summary

Approved Change Request Implementation Status Information	
Implemented on*:	
Release Implemented:	
Implementation Details:	
Notes :	
Reference Materials:	

# Proposed Defect Management Process

The objective of the defect management process is to enable timely communication of defects through appropriate channels in an effort to quickly triage and resolve issues as they are detected throughout the project lifecycle. Defect management occurs on an ongoing basis. JIRA is the tool used for defect management

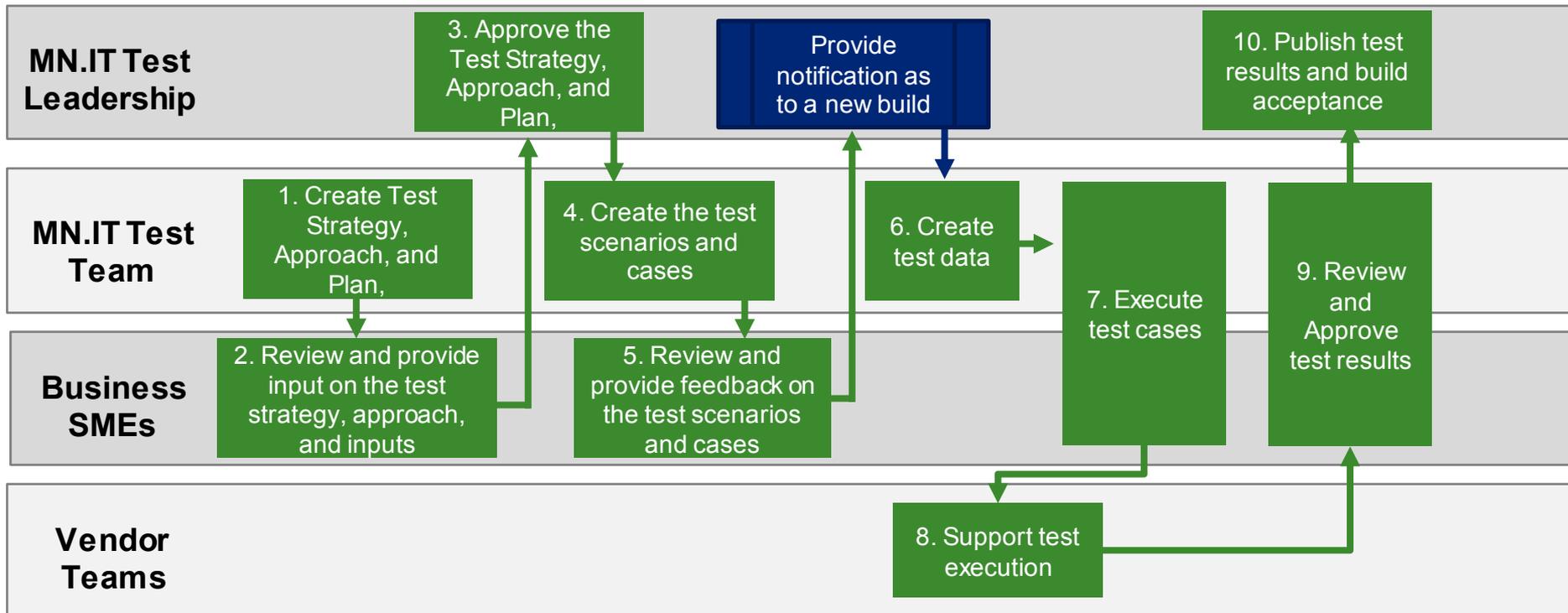


## Legend



# Proposed User Acceptance Test (UAT) Process

The objective of the UAT process is to develop the User Acceptance Test (UAT) Plan to validate that the system meets business requirements. UAT is managed on an ongoing basis and MS Excel is used as the primary tool for test case creation, execution, and maintenance

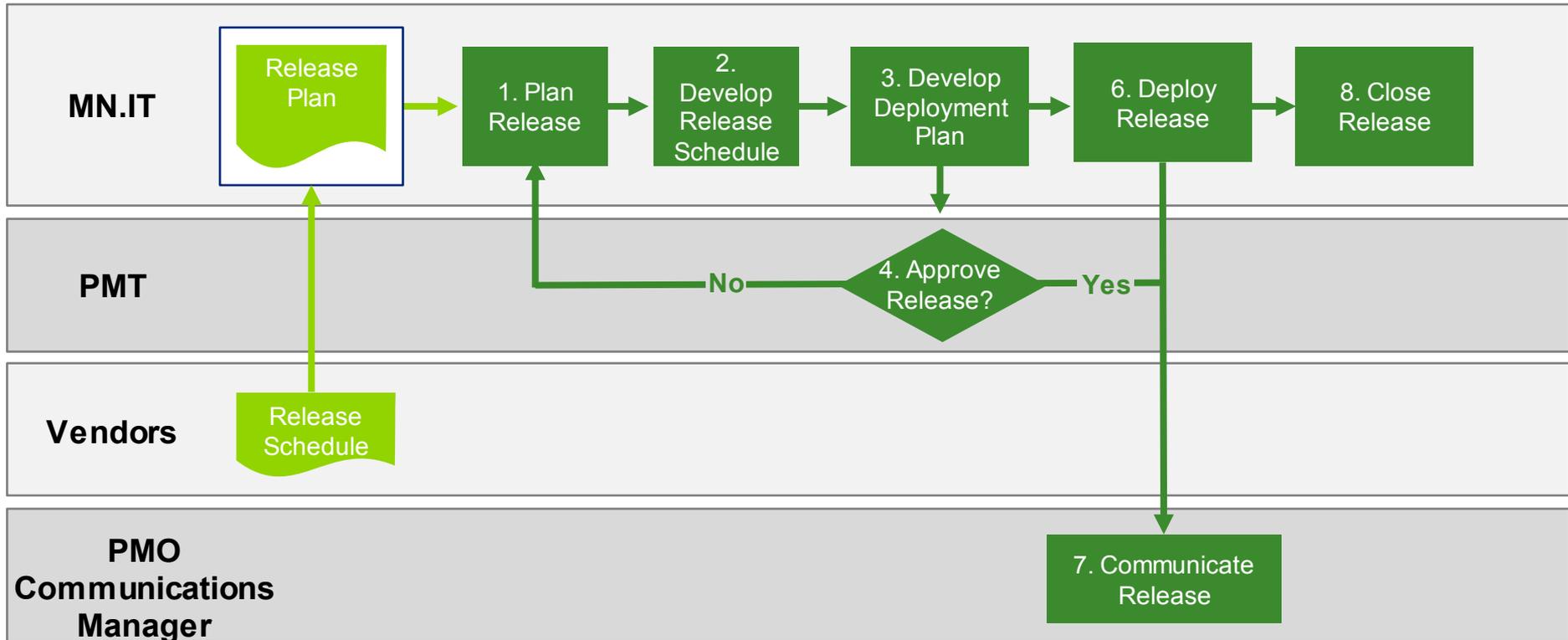


## Legend



# Proposed Release Management Process Flow

The objective of this process is to manage the migration of software changes developed and deployed in the form of packages released to the production system. The process is managed on an ongoing basis. ClearQuest and JIRA are the tools used for release management.



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**Appendix B:**  
**Roles and Responsibilities**

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# Roles and Responsibilities – Status reporting, vendor management, work plan, and requirements RACI Matrix

The RACI matrix identifies the governing groups, agencies and stakeholders involved in governance that are responsible, accountable, consulted and informed

MNsure Project Activities	MN.IT	DHS	MNsure	IT Vendors	MN.IT MNsure PMO
Compile and Verify Raw Metrics Data	C	C	C	C	A, R
Populate Project Status Reports	C	C	C	C	A, R
Analyze Metrics and Complete Report	C	C	C	C	A, R
Distribute project status report to appropriate internal and external stakeholders	C	C	C	C	A, R
Status reporting	C	C	C	C	A, R
Vendor management	A	C	C	I	R
Work plan management	A	C	C	C	R
Work plan - updates and maintenance	I	I	C	A	R
Develop Requirements	R	A	I	C	I

Legend		
R	Who is Responsible?	The person or entity assigned to do the work
A	Who is Accountable?	The person or entity that makes the final decision
C	Who is Consulted?	The person or entity assigned that must be consulted before a decision or action is taken
I	Who is Informed?	The person or entity that must be informed that a decision or action has been taken



## Roles and Responsibilities – Risk Management RACI Matrix

The RACI matrix identifies the governing groups, agencies and stakeholders involved in governance that are responsible, accountable, consulted and informed

MNsure Project Activities	Project Management Team	Project Team	MN.IT MNsure PMO
Identify and analyze risk	C	A	R
Determine risk severity	A	C	R
Develop risk response for high level risk	A	C	R
Monitor risk	A	C	R
Manage risk	A	C	R
Close risk	A	C	R
Incorporate risk information into weekly status report	A	C	R

Legend		
R	Who is Responsible?	The person or entity assigned to do the work
A	Who is Accountable?	The person or entity that makes the final decision
C	Who is Consulted?	The person or entity assigned that must be consulted before a decision or action is taken
I	Who is Informed?	The person or entity that must be informed that a decision or action has been taken



## Roles and Responsibilities – Issue Management RACI Matrix

The RACI matrix identifies the governing groups, agencies and stakeholders involved in governance that are responsible, accountable, consulted and informed

MNsure Project Activities	Project Management Team	MN.IT MNsure PMO	CCB
Record and validate issue	A	R	C
Assign and prioritize issue	A	R	C
Perform issue management	A	R	C
Track and follow-up on issue	R	A	C
Determine if issue requires a change request	A	R	C
Close issue	A	R	C
Document closed issue	A	R	C
Incorporate issue information into weekly status report	A	R	C

Legend		
R	Who is Responsible?	The person or entity assigned to do the work
A	Who is Accountable?	The person or entity that makes the final decision
C	Who is Consulted?	The person or entity assigned that must be consulted before a decision or action is taken
I	Who is Informed?	The person or entity that must be informed that a decision or action has been taken



## Roles and Responsibilities – Change control RACI Matrix

The RACI matrix identifies the governing groups, agencies and stakeholders involved in governance that are responsible, accountable, consulted and informed

MNsure Project Activities	Change Requestor	MN.IT MNsure PMO	CCB	PMO Communications Manager
Complete change request form	R	A	C	I
Review change request and perform impact analysis	C	R	A	I
Accept or reject change request	C	R	A	I
Draft change request communication	C	R	C	A
Approve and send change request communication	C	I	A	R
Maintain change requests in JIRA	C	R	A	I
Incorporate change request information into weekly status report	A	R	C	I

Legend		
R	Who is Responsible?	The person or entity assigned to do the work
A	Who is Accountable?	The person or entity that makes the final decision
C	Who is Consulted?	The person or entity assigned that must be consulted before a decision or action is taken
I	Who is Informed?	The person or entity that must be informed that a decision or action has been taken



## Roles and Responsibilities – Defect management RACI Matrix

The RACI matrix identifies the governing groups, agencies and stakeholders involved in governance that are responsible, accountable, consulted and informed.

MNsure Project Activities	MN.IT Defect Manager	MN.IT Defect Team	Business SMEs	IT Vendors
Drive defect triage calls	A	R	I	C
Conduct defect triage	R	A	I	C
Participate in defect triage	R	A	C	C
Prioritize defect	A	R	I	C
Provide input to the defect plans and resolution details	C	R	I	A
Create defect resolution and retest plans	A	R	I	C
Retest defects and track defects to resolution and closure	R	A	I	C
Support defect management and Q&A	C	R	I	A
Validate and approve defect closure	C	I	A	R
Publish executive and detailed defect dashboards	A	R	I	C
Incorporate defect information into weekly status report	R	A	I	C

Legend		
R	Who is Responsible?	The person or entity assigned to do the work
A	Who is Accountable?	The person or entity that makes the final decision
C	Who is Consulted?	The person or entity assigned that must be consulted before a decision or action is taken
I	Who is Informed?	The person or entity that must be informed that a decision or action has been taken



## Roles and Responsibilities – Testing management RACI Matrix

The RACI matrix identifies the governing groups, agencies and stakeholders involved in governance that are responsible, accountable, consulted and informed.

MNsure Project Activities	MN.IT Test Leadership	MN.IT Test Team	Business SMEs	IT Vendors
Write and execute UAT Scenario	A	C	I	R
Oversee UAT process	R	A	I	C
Test reports for prioritization and decision making	A	R	I	I
Perform load and performance testing	A	C	I	R
Produce UAT reporting and dashboards	R	A	I	C
Create Test Strategy, Approach, and Plan	R	A	I	C
Review and provide input on the test strategy, approach, and inputs	C	R	A	C
Approve the Test Strategy, Approach, and Plan	A	C	R	C
Create the test scenarios and cases	R	A	I	C
Approve the test scenarios and cases	C	R	A	C
Create test data	R	A	I	C
Execute test cases	R	A	I	C
Support Q&A for test execution	C	R	I	A
Review and approve test results	C	R	A	C
Publish test results and build acceptance	A	R	I	C

Legend		
R	Who is Responsible?	The person or entity assigned to do the work
A	Who is Accountable?	The person or entity that makes the final decision
C	Who is Consulted?	The person or entity assigned that must be consulted before a decision or action is taken
I	Who is Informed?	The person or entity that must be informed that a decision or action has been taken



## Roles and Responsibilities – Release management RACI Matrix

The RACI matrix identifies the governing groups, agencies and stakeholders involved in governance that are responsible, accountable, consulted and informed

MNsure Project Activities	MN.IT	Project Management Team	IT Vendors	PMO Communication Team
Plan release	R	A	C	I
Develop release schedule and deployment plan	R	A	C	I
Review and approve release	R	A	C	I
Deploy release	A	R	C	I
Develop release notes	R	A	C	I
Draft release communications	C	R	C	A
Approve and send release communications	C	A	C	R
Close release	I	R	C	A
Document closed release in release management plan	R	A	C	I
Incorporate release information into weekly status report	R	A	C	I

Legend		
R	Who is Responsible?	The person or entity assigned to do the work
A	Who is Accountable?	The person or entity that makes the final decision
C	Who is Consulted?	The person or entity assigned that must be consulted before a decision or action is taken
I	Who is Informed?	The person or entity that must be informed that a decision or action has been taken

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**Appendix C:  
Interviews Conducted**

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## Interviews Conducted

No.	Organization	Interview Subject	Interview Date
1	MN.IT	Testing	May 1, 2014
2	MN.IT	Governance	May 2, 2014
3	MNsure	Deployment Process	May 2, 2014
4	MNsure	Governance	May 5, 2014
5	MNsure	Governance	May 6, 2014
6	MN.IT	Testing	May 6, 2014
7	MN.IT	Federal Hub Discussion	May 7, 2014
8	MN.IT	Testing	May 7, 2014
9	DHS	Governance	May 7, 2014
10	DHS	Governance	May 7, 2014
11	MNsure	Governance	May 7, 2014
12	MN.IT, IV&V	Testing	May 7, 2014
13	DHS	Conversion Strategy	May 7, 2014
14	EngagePoint	Release Management	May 7, 2014
15	MN.IT	Governance	May 7, 2014
16	DHS	Governance	May 7, 2014
17	MNsure	Governance	May 7, 2014

## Interviews Conducted (cont.)

No.	Organization	Interview Subject	Interview Date
18	MNsure	Carrier Communication	May 8, 2014
19	MN.IT	Testing	May 8, 2014
20	DHS	Governance	May 8, 2014
21	DHS	Governance	May 8, 2014
22	DHS	Governance	May 8, 2014
23	Connecture	Release Management	May 8, 2014
24	Connecture	Testing	May 9, 2014
25	MN.IT	Testing	May 9, 2014
26	Counties	Governance, communication	May 9, 2014
27	EngagePoint	Governance	May 12, 2014
28	IBM/Cúram	Release Management	May 12, 2014
29	MN.IT	Testing	May 12, 2014
30	Board of Directors	Governance	May 12, 2014
31	DHS, MN.IT	Testing	May 12, 2014
32	Carriers	Governance	May 13, 2014
33	MNsure	Testing	May 13, 2014

## Interviews Conducted (cont.)

No.	Organization	Interview Subject	Interview Date
34	EngagePoint	Testing	May 13, 2014
35	IBM/Cúram	Governance, communication	May 13, 2014
36	DHS	Testing	May 13, 2014
37	PwC	Governance	May 13, 2014
38	DHS, MN.IT, MNsure	Testing	May 13, 2014
39	EngagePoint	Testing	May 13, 2014
40	Navigators	Governance	May 13, 2014
41	IV&V	Governance	May 14, 2014
42	DHS	Testing	May 14, 2014
43	MN.IT	Testing	May 14, 2014
44	DHS, MN.IT	Governance	May 15, 2014
45	Connecture	Governance	May 15, 2014
46	MN.IT	Governance	May 20, 2014
47	MN.IT	Governance	May 21, 2014
48	MNsure	Brokers	June 3, 2014

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