

APPENDIX B - Requirements

The requirements listed below cover both functional and non-functional requirements found in the Revisor's pilot project for the MARSS system. The requirements listed cover ALL phases of the project. Further refinement and validation of these requirements will be done at the beginning of the formal project implementation. At which time each requirement will be formally categorized into the appropriate phase of project implementation.

Functional Requirements

Use Case	Req	Name	Phase	Use Case or Requirement Description
U000	0	Cross-Cutting Features	1,2,3	A number of desired features apply generally to many or all use cases, as identified below.
U000	R001		1	The user will be allowed to opt out of required data entry throughout the system.
U000	R002		1	If the user opts out of a constraint, the user will be provided with a configured alert as to which associated notifications or data changes will be disabled (e.g. a notification when a temporary grant of authority is approaching expiration will be disabled if statutory authority is not entered).
U000	R003		1	The system will provide general validation checks for dates.
U000	R004		1	The system will provide spell check validation checks.
U000	R005		2	The system will apply date calculation rules accounting for calendar days, working days, non-holiday days, and leap years.
U000	R006		3	The system will support viewing of all screens via a mobil device, with all displays optimized for mobile viewing. This includes being able to use a mobile device to view reports and to input data.
U000	R007		1	A user will be able to flag rulemaking events, rulemaking record items and documents as non-public. Non-public events, items and documents will NEVER display to a public user.
U000	R008		2	The system will support workflow configuration, supporting the actions taken in a rulemaking proceeding which may or may not include the upload of rulemaking record items.
U000	R009		1	The system will provide a personal dashboard with tasks and information relevant to the particular user, configurable by the user, e.g. adding reports to a personal list.
U000	R010		2	An admin user will be able to leverage, programmatically, real-time events sent to the Xtend system from the MARSS system.

U000	R011		1	An agency user will be able to delete events, items and documents which the agency user or someone within the agency user's group has entered prior to the formal adoption of a rule revision . After formal adoption of a rule revision, records will be locked for the rule proceeding for any agency user, but a Revisor Admin would have the rights to delete records.
U001		Create Rulemaking Proceeding	1	The user will be able to create a rulemaking proceeding - provided they have the permissions to do so.
U001	R001		1	A revisor ID will be assigned to a rulemaking proceeding in any status provided that it is the initial entry. The Revisor ID will be produced sequentially in the format of R-#####.
U001	R002		1	The system will enforce that all data required for a rule proceeding has been provided and validated before allowing creation of the proceeding record.
U001	R003		1	The user will be able to select the applicable rulemaking proceeding type {General with Hearing, General without Hearing, Expedited, Exempt...} for a rulemaking proceeding.
U001	R004		1	The user will enter a rulemaking revision description, the statutory authority and effective dates of this authority (no end date for permanent).
U001	R005		1	The user will be able to supply as much of the meta data about a rulemaking proceeding as they choose at creation time. The same features for updating a rulemaking proceeding apply.
U001	R006		1	More than one user from different agencies might need permissions for the same rulemaking proceeding for instances where the ownership is shared across agencies.
U001	R007		1	An agency user will be able to get a user-friendly/clean URL permalink from the system's webpage that is specific to the rulemaking proceeding to add to an agency website.
U001	R008		1	User entered citations to Revisor documents (Statutes, Laws, Rules) should link to the cited documents located on the Revisor of Statutes website (citation algorithm available from Revisor's Office).
U002		Update Rulemaking Proceeding Record	1,2	The user will be able to update a rulemaking proceeding extending from the creation of a rulemaking proceeding or from a view whereby the specific rulemaking proceeding can be selected for edit.
U002	R001		1	The user will be able to update all data associated with a rulemaking proceeding that is not limited by permissions.
U002	R002		1	The user will be able to cancel a hearing date and enter a cancellation date.
U002	R003		1	The user will be able to update keywords or topics associated with a particular rulemaking proceeding that may later be used as search criteria. Keywords may be selected or entered. Topics may only be selected.

U002	R004		2	The data entered for rulemaking record items may aggregate up to the rulemaking proceeding, such as an aggregate number of requests for hearing uploaded on different dates. Derived data will be displayed with a rulemaking proceeding.
U002	R005		2	The user will be able to select the committee(s) with jurisdiction for a particular rulemaking proceeding.
U002	R006		2	The user will be able to enter or select the corresponding contacts for a committee and their emails for the purpose of notifications.
U002	R007		2	The system will provide the committee representatives previously entered for an agency as a list of values from which the agency user can select or disregard and then enter a new contact(s) and/or email(s).
U002	R008		2	If an agency user submits a new email for an existing committee contact, the user will be prompted to specify whether to just add the email or to also delete a previously associated email for the contact.
U002	R009		1	The user will be able to add rulemaking events to a rulemaking proceeding.
U002	R010		2	When selecting a rulemaking event, if the rulemaking event has a deadline calculation associated with it, the system will auto-populate the deadline date for the user which the user can change.
U002	R011		1	The user will be able to edit the deadline dates regardless of whether they were auto-populated or user-entered.
U002	R012		1	The user will be able to add rule provisions to the rulemaking proceeding in addition to the list automatically received from the Revisor Xtend System.
U002	R013		1	The user will be able to assign detail on a rulemaking provision event as: new, amended or repealed by adding it if it does not already exist or by editing the existing value.
U002	R014		1	The user will be able to remove any rule provisions listed as affected by the rule making proceeding. This includes rule provisions that were supplied by the Revisor Xtend System.
U002	R015		1	The user will be able to enter the OAH Docket number.
U002	R016		1	The user will be able to enter an agency contact for a rulemaking proceeding, with first name, last name, title, phone and email.
U002	R017		1	If the rulemaking provision effective dates are permanent, The user will be able to enter an effective date for the rulemaking provision as well as a compliance date if the compliance date is different than the effective date.
U002	R018		1	If the rulemaking provision effective dates are temporary, The user will be able to enter both an expiration date and an effective date for the rulemaking provision as well as a compliance date if the compliance date is different than the effective date.

U002	R019		1	The user will be able to to apply default values that are then editable for the entry of effective date, expiration date and a compliance date at the rulemaking proceeding level that then populate all associated dates of the same type at the rulemaking provision level. The user can then update the dates of any rulemaking provision selectively.
U002	R020		1	The user will be able to change a rulemaking proceeding to a proposed status earlier in the process than the automated triggers established, and if changed, the user will be alerted to any notifications or system events that will fire based on a rulemaking proceeding being in the "proposed" status, such as a notification to the Governor of a change in status. The user will be able to opt out of these automated notifications or system events.
U002	R021		1	The user will be prompted to enter a hearing date and hearing location if a rulemaking proceeding type selection auto-populates a hearing to be required, or if the user indicates that a hearing is required, or if a request for hearing threshold is met through the entry of the number of valid hearing requests triggering the hearing to be required.
U002	R022		2	The system will calculate whether a hearing date is scheduled 60 days or more after the date of a "Publish Request for Comments" event. If the calculated number of days is less than 60, the user will be provided with an alert of this fact, which will persist as a display with this data as long as the fact remains true.
U002	R023		1	Support for notifications sent to legislative staff and other required agencies and committees will be provided.
U003		View Standard Rulemaking Events	1	The user will be presented with a list of standard rulemaking events associated with the rulemaking proceeding type selected.
U003	R001		1	Based on the user's selection of a rulemaking proceeding type, the user will be presented with a list of standard rulemaking events with associated rulemaking record items, other rulemaking events associated with the rulemaking event, projected deadlines where possible for rulemaking events, roles with permissions for each rulemaking event, and an indication of whether an electronic signature will be required.
U004		Update Rulemaking Events	2	The user will be able to update the list of rulemaking events planned for a specific rulemaking proceeding.
U004	R001		2	The user will be able to update the list of rulemaking events and associated rulemaking record items for a specific rulemaking proceeding without affecting the standard list displayed for other users creating a rulemaking proceeding.
U004	R002		2	The user will be allowed to adjust the projected completion dates for each rulemaking event.
U004	R003		2	The user will be allowed to update which planned rulemaking events are associated with other rulemaking events.

U004	R004		2	The user will be presented with the role(s) with permissions for a specific rulemaking event but will not be allowed to update the associated role(s).
U004	R005		2	The user will be presented with default designations of the need for an electronic signature and the role(s) with signatory authority for a specific rulemaking record item associated with a rulemaking event and be allowed to adjust the designation but not the role(s).
U004	R006		2	The user will be able to select for a publicly viewable schedule the planned rulemaking events with associated data for the specific rulemaking proceeding. Items not selected will be viewable by users with permissions to view.
U004	R007		2	Upon entry of a rulemaking event, the user may be presented with a suggested associated rulemaking event type and, if applicable, a deadline based on a business rule for a rulemaking event type. For example, the event type of "Issue a Response" after a rulemaking event of "Receive Comments" is entered. The user may choose to add and/or adjust the suggested event type with corresponding data and associations, including electronic signature requirements.
U005		Update My Rulemaking Events	1,2	The user will be able to update planned or actual events associated with a rulemaking proceeding.
U005	R001		1	The user will be able to create actual standard or non-standard rulemaking events with associated respective standard or non-standard rulemaking record items even when the event was not previously identified as a planned event.
U005	R002		2	The user will be able to update a planned rulemaking event as an actual event with actual dates, other data, and associated events and document uploads.
U005	R003		2	Upon entry of a rulemaking event of "Publish Request for Comments," an alert will display for the user that a hearing cannot occur before 60 days after the publication date of the request for comments.
U005	R004		2	The user will be able to provide an electronic signature for a rulemaking record item requiring a signature from the user's role.
U006		Download IRC Approved Template for Rulemaking Record Item	2	The user will be able to download one or many IRC Approved Templates for a rulemaking record item.
U006	R001		2	The system will present The user with the IRC approved template(s) appropriate for a rulemaking record item for the user to select for download and use and to later upload in a completed state as a rulemaking record item.
U006	R002		2	Downloaded templates will be pre-populated with known data at the point of download, e.g. Agency name or Rulemaking Proceeding Revisor ID.

U007		Create Rulemaking Record Item	1	The user will be able to create a rulemaking record item for a rulemaking event
U007	R001		1	The user will be able to create a rulemaking record item for a rulemaking event. More than one rulemaking record item might apply to a rulemaking event and more than one rulemaking event might relate to the same rulemaking record item.
U007	R002		1	The user will be able to enter specific data corresponding to a particular rulemaking record item, for example, an upload of a set of requests for a hearing will have a corresponding data input for the valid number of requests for a hearing.
U008		Update Rulemaking Record Item	1	The user will be able to update a rulemaking record item.
U008	R001		1	The user will be able to update all rulemaking record item data within permissions.
U009		Upload Rulemaking Record Item Document Version	1,3	The user will be able to upload rulemaking record item "documents." (Documents is generally used for documents, audio files, video files or any other formats.)
U009	R001		1	The user will be able to upload a version of a rulemaking record document such as an updated version, alternative ADA version, State Register version or a redacted version, and associate the document with one or more rulemaking record items (the logical description of the document(s)).
U009	R002		1	Upon uploading a replacement version for any rulemaking record item, the user will be prompted to select whether the replacement is a correction, triggering a logical delete of the replaced item, or a replacement leaving the last version as an accessible historical record.
U009	R003		3	The system will provide file format conversion of an uploaded document to another desired format or a choice of file formats for rulemaking record items drafted in the system upon download.
U010		Assign Topics	1	The user will be able to assign topics to a particular rulemaking proceeding or rulemaking record item.
U010	R001		1	The user will be able to select or enter topics for a particular rulemaking proceeding or rulemaking event or rulemaking record item.
U011		Assign Keywords / Tags	1	The user will be able to assign or enter keywords/tags for a particular rulemaking proceeding or rulemaking record item.
U011	R001		1	The user will be able to select keywords/tags for a particular rulemaking proceeding or rulemaking event or rulemaking record item.
U012		Assign Rulemaking Event or Item to Reviewer	2	The user will be able to assign rulemaking events or rulemaking record items to a user within the allowable role constraints.
U012	R001		2	A user will be able to select a reviewer for a particular rulemaking event or rulemaking record item, establishing an assignment based on the configured roles for an agency.

U013		View Rulemaking Information	1	The user will be able to view rulemaking proceeding information in various forms within assigned permissions.
U013	R001		1	The user will be able to view rulemaking proceeding information via a number of prepared queries and canned reports as well as via the user's ability to customize queries and reports and to apply search criteria (see variations below).
U013	R002		1	The user will be able to download or export reports/queries in a variety of printer-friendly formats. (PDF, Word)
U013	R003		1	The system will support the export of information into specific formats which include Excel, PDF, Word, and CSV.
U014		View Report	1	The user will be able to view a variety of canned reports.
U014	R001		1	Reports will be created for, but not limited to, legislative staff, agencies and the public. Specifics on reports is TBD.
U015		Search for Records or Topics or Keywords/Tags	1	The user will be able to search rulemaking proceeding records by a variety of search parameters and filters, including topics and keyword/tags and Revisor ID. More than one search parameter might be chosen at one time, further filtering the results.
U015	R001		1	A user will be able to input search terms or phrases that will be combined with other search criteria that are matched to metadata for rulemaking proceedings, rulemaking events, rulemaking record items, and/or documents.
U016		View Search Result Set	1,2	The user will be able to view a result set from a query and be able to step through any keywords/tags selected.
U016	R001		1	Upon submitting keyword search criteria, the result set will be aggregated up to a list of rulemaking proceedings where the terms or phrases have matched for any of the levels, but the user will also be presented with a navigable series of highlighted results within the documents that they can step through.
U016	R002		2	A user will be able to save the result set of a query.
U016	R003		2	A user will be able to select sort by and group by parameters for a result set, and change these parameters.
U017		View Specific Rulemaking Proceeding	1	The user will be able to view a particular rulemaking proceeding record either by searching for a particular Revisor ID or by selecting a rulemaking proceeding record from another view's result set.
U017	R001		1	The user will be able to view history for a particular rulemaking proceeding record, such as all previous rulemaking proceeding versions or maintained rulemaking record item history.
U017	R002		1	The user will be able to conduct faceted searches (i.e. searching within a specific result set) for a topic or keyword or more than one topic or keyword or an intact phrase.
U018		View My Saved Rulemaking Info	2	The user will be able to save and return to a dynamic view of rulemaking proceeding records of personal interest through interaction with various filters and then saving the desired query results.

U018	R001		2	A logged in user will be able to name and save the query behind a desired result set of rulemaking proceeding records in order to run the query and obtain dynamic results at a later time.
U018	R002		2	If the user attempts to save the query behind a desired result set of rulemaking proceeding records and is not logged in, the user will be prompted to input his or her credentials to save the query without having to re-specify and rerun the displayed query in focus.
U019		Log In	2	The user will be able to provide and manage login credentials (username and password).
U019	R001		2	The user will be able to present credentials (username and password) in order to log into the system.
U019	R002		2	The user will be able to recover a forgotten password, such as through the establishment of a hint and/or validation questions.
U019	R003		2	The user will be able to change his or her password.
U020		Authenticate User	1	The system will authenticate the credentials entered by the user (see nonfunctional security requirements).
U020	R001		1	The system will authenticate the user based on the submitted username and password.
U021		Authorize User	1	The system will determine and control the user's permissions throughout the user's active session.
U021	R001		1	The system will ensure an authenticated user can only perform functions for which his or her role has assigned permissions, such as entering rulemaking events for a particular agency or accessing an unredacted version of a document.
U021	R002		1	The system will ensure that an unauthenticated user can only perform public functions available to any user.
U022		Manage System Trigger Configurations	2	An admin user will be able to configure scheduled, on-event or on-demand actions based on data or temporal triggers
U022	R001		2	The system will allow an admin user to use temporal and/or data trigger(s) that will transfer data via a desired interface protocol to and from the systems of such entities as the Secretary of State, State Archives, Courts, Legislative Committees, or Agencies.
U022	R002		2	An admin user will be able adjust and test code generated by the system trigger configuration.
U022	R003		2	The system will allow an administrative user to configure whether a configured trigger and action is fully automated or whether user approval is needed to launch the action.
U023		Establish User Account	1	An admin user or a user will be able to establish an account.
U023	R001		1	An admin user or a user, through a self-help feature, will be able to establish an account.
U024		Provision User with Permissions	1	An admin user will be able to manage user accounts and permissions.
U024	R001		1	The admin user will be able to create, delete (logically) and suspend an account for a user.

U024	R002		1	A temporary username and password will be provided to the user upon account creation, which can be changed by the user.
U024	R003		1	The administrator user will be able to create an account via copying another account as a starting template.
U024	R004		1	The admin user will be able to assign a user or a group to a role, and a user to a group.
U024	R005		1	The user will be forced to change a temporary password upon its use.
U024	R006		1	The system will manage expirations of passwords and force the user to change a password at an interval determined by the admin.
U024	R007		1	The user's account will lock after a certain number of failed attempts, as determined by the admin.
U024	R008		1	The admin can configure whether a user can log in after an account is locked if after a certain amount of time, or if an admin is required to unlock.
U024	R009		1	The admin user will be able to assign functional permissions with create, read, update and delete rights specific to a user role.
U024	R010		1	The admin user will be able to assign permissions to a role based on data classifications (such as an unredacted rulemaking record item) with create, read, update and delete rights.
U025		Self-Provision Account	2	The user will be able to create an account in order to perform public functions that rely on knowing the user's identity, such as the ability to save queries and to sign up for notifications.
U025	R001		2	A potential user will be able to use a self-service feature to create an account and obtain user credentials to enable limited capabilities, such as saving a query.
U026		Manage Opt Out Alerts	1	An admin user will be able to configure the language included in alerts displayed for opt outs.
U026	R001		1	An admin user will be able to configure messages that will pop up when an agency opts out of a constraint or required data.
U026	R002		1	The user will be able to define a pop-up display for rule revision status that will define the status choices, such as "a draft proposed rulemaking proceeding is deemed ready by the Agency to be part of a public rulemaking proceeding record and available for first comments but not yet ready for formal public review and comment."
U027		Manage Report Offerings	1	An admin user will be able to configure canned reports, as well as other report configurations.
U027	R001		1	Canned reports will be configurable by an admin user using a report configuration feature available to general users and then making these pre-configured reports available to users in a canned report list.
U027	R002		1	An admin will be able to configure sort by algorithms for data elements with complex structures, such as alpha-numeric Statutory citations that might have more than one sort order behavior within a string.

U028		Manage Pop-Up Info	1	An admin user will be able to configure informational pop-ups for fields.
U028	R001		1	An admin user will be able to configure messages that will pop up next to fields throughout the user interface.
U029		Establish Notifications	1	An admin user or a user will be able to establish configured notifications.
U029	R001		1	An admin user through an admin interface or a user through a self-help interface will be able to establish configured notifications.
U030		Sign up for Notifications	2	The user will be able to sign up for notifications.
U030	R001		2	A user will be able to sign up for notifications based on available options presented via a self-help interface. A user will have a variety of options such as signing up through email notifications, RSS feeds, or text message notifications.
U031		Manage Notification Configurations	2	The user will be able to to manage notification configurations for particular recipients.
U031	R001		2	An admin user will be able to configure notifications to persons or groups through associated roles based on data or temporal triggers as well as configure notifications for which users can sign up.
U031	R002		2	The system will provide a user interface for an admin user to select data or temporal trigger(s) for notifications and the groups to which the notifications should be sent with the ability to customize and test the code to be used dynamically at runtime.
U032		Manage Domain Value Lists	1	An admin user will be able to manage domain value lists.
U032	R001		1	All domain value lists will be configurable by an IRC-approved admin with the ability to instruct the system to either migrate old values to new values, leave historical values intact, merge more than one old value into a new value, or split a value into more than one new values).
U033		Manage Standard Rulemaking Events & Items	2	An IRC-approved administrator will be able to manage standard rulemaking events and rulemaking record items for a particular rulemaking proceeding type.
U033	R001		2	An admin user will be able to create, update or delete standard rulemaking events and rulemaking record items for a particular rulemaking proceeding type.
U033	R002		2	An admin user will be able to associate standard rulemaking events to other rulemaking events.
U033	R003		2	An admin user will be able to establish formulas for projecting deadlines where possible for rulemaking events, such as 30 days after another type of rulemaking event is entered.
U033	R004		2	An admin user will be able assign roles with associated permissions to specific rulemaking event-rulemaking record item pairing.
U033	R005		2	An admin user will be able to indicate whether an electronic signature will be required for a particular rulemaking record item.

U034		Upload IRC Approved Template for Rulemaking Record Item	2	An IRC-approved administrator will be able to upload IRC-approved templates for particular rulemaking record items to then be made available for download by agency users.
U034	R001		2	An admin user will be able to upload templates specific to a particular rulemaking record item.
U034	R002		2	An admin user will be able to input and change data about a template, such as instructions, effective date, deprecation date, or discontinued date.
U035		Manage Topics	1	An Admin will be able to manage topics used by users to categorize rulemaking proceedings.
U035	R001		1	An admin user will be able to manage topics used by users to categorize rulemaking proceedings using an IRC determined taxonomy.
U036		Optimize Search Engine Results	1	An Admin will be able to optimize search engine behavior.
U036	R001		1	An Admin will be able to optimize search engine behavior to achieve the desired search engine results, such as tweaking the order of display or rank of some search terms over others. Some keywords/tags are user-inputted and assigned to a particular rulemaking proceeding or rulemaking event or rulemaking record item.
U037		Programmatically Manipulate Data	1	An admin will have access and permissions to programmatically manipulate data.
U037	R001		1	An admin will have access and permissions to programmatically manipulate data to handle instances such as agency name changes or agency splits.

Non-Functional Requirments

NF001	R001	Availability	1	The system shall be made available for state entities (Revisor’s, Agencies, Legislature, etc.) 24/7 with the most critical times being the 12 hour period M-F from 6 AM to 6 PM.
NF001	R002		1	Public and Office of Administrative Hearing access to the system shall also be 24/7
NF001	R003		1	System maintenance shall be scheduled outside of the M-F from 6 AM to 6 PM timeframe.
NF002	R001	Flexibility	1	The system shall allow for flexibility in workflows and documents required as changes in law can occur at any time with various lengths of time to conform.
NF002	R002		1	The system shall allow for the ability to change layouts of reports, styling of materials, and general descriptions and headings is required. Preferably by Revisor administrative staff.
NF002	R003		1	Ability to assign Revisor’s office look and feel via configurable UI where no code changes are required.
NF003	R001	System Support	1	Technical support for the system will be available Monday – Friday from 6am – 6pm Central Time.

NF004	R001	Hardware Maintenance and Reliability	1	Hardware failures will not cause more than 4 hours of downtime.
NF005	R001	Software Maintenance and Reliability	1	The software solution must be viable for at least 10 years
NF005	R002		1	Custom developed components must be maintainable and expandable by Revisor Staff
NF005	R003		1	Critical bug fixes will be fixed in 24 hours
NF005	R004		1	Vendors are expected to test their own software before releasing to Revisor's Office Development Team. We will not Beta test Vendor software in our production environment.
NF005	R005		1	System must pass compliance with the Americans with Disabilities act testing. At a minimum the testing areas must ensure changes to the system will not prevent access to the permanent records or prevent legislature from gaining the oversight of the rulemaking process.
NF005	R006		1	System must be unit and regression tested in-house. Unit and regression testing must be done in an automated fashion.
NF005	R007		1	System must be integration tested in-house
NF005	R008		1	Contract must have software escrow agreement provisions. These provisions require the licensor to deposit with a third party the source code with periodic updates in the event that the licensor is unwilling or unable to support the software.
NF006	R001	Intellectual Property	1	All documents and data stored in the system are the exclusive property of the State of Minnesota.
NF007	R001	System Support	1	Self-service assistance via a web page is desirable.
NF008	R001	Disaster Recovery	1	Time for full recovery of data is 24 hours or less.
NF008	R002		1	Time for full recovery of servers is 24 hours or less.
NF009	R001	Data Migration	1	16.724 GB of Beta System documents and data will be migrated into MARSS.
NF009	R002		1	SONARs from the LRL will be migrated into MARSS.
NF009	R003		1	Beta System documents and data will be accessible from MARSS on the 1st day of operation.
NF009	R004		1	14.1 GB of additional data may be added to the Beta System dataset in MARSS after MARSS is operational.
NF009	R005		1	The Beta System data will be flagged in a way to identify it as such. That is, the system can identify: a) Beta System dataset b) Beta System data entered using MARSS, to augment the Beta system dataset c) MARSS data
NF010	R001	Capacity	1	2.904 GB of new MARSS documents and data is estimated for the first year of operation.
NF010	R002		1	The system must be able to increase data capacity as needed.
NF010	R003		1	Retention of documents in the rulemaking record (RMR) is permanent i.e., forever.

NF011	R001	Data Integrity	1	Documents shall be verifiable as authentic. This process may follow the same standards as the Revisor's Office has set forth for compliance with Minnesota Statute Chapter 3E .
NF011	R002		2	Digital signatures will be supported as part of the MARSS project.
NF011	R003		2	Digital signatures may be applied by authorized users from their own devices. These users may be physically located anywhere in the state of Minnesota.
NF011	R004		1	Audit trail for changes to rulemaking record items. Metadata will be collected and stored upon every change to official items in the rulemaking record. This change tracking metadata will be accessible by authorized personnel.
NF011	R005		1	Monthly, the Revisor's Office will obtain a complete database copy of all data stored off-site. The copy will be delivered in a vendor-neutral format, or a format acceptable to the Revisor's Office.
NF012	R001	Data Import	1	Only authorized users can add data or documents to MARSS.
NF012	R002		1	Data being sent to MARSS by authorized users will be encrypted.
NF012	R003		1	At the time new data or documents are added to MARSS, the system will perform automated validation of the data to detect errors or inconsistencies.
NF012	R004		1	Supported file formats for rulemaking record (RMR) documents are[1]: a) PDF/UA (ISO 14289-1-compliant) b) PDF/A (ISO 19005-compliant) c) PDF (highest quality available, with features such as searchable text, embedded fonts, lossless compression, high resolution images, device-independent specification of color, space, content tagging; includes document formats such as PDF/X). d) PDF files containing hidden OCR text. e) PDF files containing only raster or vector data. This is the least desirable format. To support MARSS's text search functions, an OCR program will be used to create and add text to the PDF. The OCR program may misspell words, so it is preferable that the document creator deliver a text PDF.
NF012	R005		1	If a raster or vector PDF is imported into MARSS, the system will use an OCR program to create and add text to a new copy of the PDF. MARSS will store both the original raster PDF and the second PDF containing OCR text.
NF012	R006		1	Supported file formats for supporting (non-RMR) documents are: a) Documents b) Audio - MP# and c) Video MP4
NF012	R007		1	MARSS needs to support capturing pages out of the State Register. The captured pages will be stored as PDF files.
NF012	R008		1	The system will confirm to the authenticated user that the data import was successful or unsuccessful.
NF012	R009		1	Immediately following successful data import, the data will be searchable and retrievable by all users – authenticated and public
NF013	R001	Sensitive Data	1	Data stored in the MARSS system will be protected in accordance with Minnesota Statutes Chapter 13 and Minnesota Rules Chapter 1205.

NF013	R002		1	Private and confidential data about individuals shall only be accessible to people with the required permissions: either the agencies who created the information or the Courts. Examples of sensitive data include: a)o Personal addresses (protected under the MN Safe at Home Act) b) Defamatory Comments c) Trade Secrets
NF013	R003		1	MARSS will allow agencies to load both: the sensitive document and a redacted, public version.
NF013	R004		1	Protecting sensitive data is the responsibility of the document creator (i.e., an agency responsibility).
NF013	R005		1	MARSS UIs will: Remind authenticated users to handle sensitive data appropriately "It is the responsibility of the party or their attorney to determine if the document contains not public, confidential or sensitive information"
NF013	R006		1	Sensitive data will be encrypted in the data repository. Encryption by application software may be considered.
NF013	R007		1	Only a subset of authorized users can obtain keyword search results on sensitive documents. Public users will not receive search results identifying or displaying sensitive documents.
NF014	R001	Data Export/Delivery	1	Data being sent from MARSS to any destination will be encrypted.
NF014	R002		2	The ability to deliver data "feeds" to subscribers is desirable.
NF015	R001	Records Retention	1	Completed rule making records are permanent in nature. They MUST be preserved forever.
NF015	R002		1	Retention schedule for abandoned rules can be decided by the Agencies. Agencies are allowed to keep their own records retention requirements for non-adopted rules.
NF016	R001	Preservation	1	The Minnesota Historical Society will receive and maintain a digital copy of all rulemaking records.
NF016	R002		1	Only authorized users can: a) Delete data and documents, b) Delete sensitive documents
NF017	R001	Security	1	The system will accommodate a minimum of 300 authorized concurrent users.
NF017	R002		1	When a user is removed from the list of authorized users, all metadata about the user remains in the system, permanently. A user's authorization may expire, but their account information will remain in the system permanently.
NF018	R001	Authentication	1	Only Revisor staff can create or delete authorized users.
NF018	R002		1	Authentication must comply the latest MN.IT Enterprise Identity and Access Management Standard.
NF018	R003		1	If practical, the system will use the identity management solution implemented by MN.IT.
NF018	R004		1	As required by statutes, the public shall have access to all documents in the rulemaking record. If documents in the record have been redacted, the public will only have access to the redacted document and a reason for the redaction.
NF019	R001	Authorization and Permissions	1	Only Revisor staff control the assignment, and deletion of permissions for authorized users.

NF019	R002		1	Agency personnel shall have access to create and modify all records assigned to their agency.
NF019	R003		1	Document level permissions shall be supported.
NF019	R004		1	Role-based authorization is preferable.
NF020	R001	Performance for the Authenticated User	1	The response time for loading a documents into MARSS should not exceed 15 seconds.
NF020	R002		1	Response time performance will not degrade (become slower) as the total amount of data in the system increases.
NF020	R003		1	A minimum of 70 agencies have rulemaking authority.
NF021	R001	Performance for the Public, Non-Authenticated User	1	The system must support 200 concurrent, public users.
NF021	R002		1	The system must support 50,000 page views in 8 hours, on business days.
NF021	R003		1	Searches that return 300 documents should present results to the user in less than 5 seconds.
NF021	R004		1	Searches against metadata only should return results to the user in less than 3 seconds.
NF021	R005		1	Response time performance will not degrade (become slower) as the total amount of data in the system increases.
NF021	R006		1	Load intensive web pages that take longer than 3 seconds to complete should provide feedback to the user indicating that processing is occurring (e.g., a spinning hour glass)
NF021	R007		1	MARSS will support audio playback of two hour, MP3 files
NF021	R008		2	MARSS will support video playback of two hour, MP4 files
NF022	R001	Web Support	1	Supported Browsers are: a) Internet Explorer 7+ b) Google Chrome c) Mozilla Firefox d) Safari
NF022	R002		1	User interfaces shall adhere to the MN.IT Accessibility Standard.
NF022	R003		1	Web pages must be displayable on mobile devices.
NF022	R004		1	All URLS shall be designed as permanent URLs.
NF022	R005		2	Searches defined by a public user (using a MARSS form) can be saved by the user for future reuse; emailing to someone else.
NF022	R006		1	Creating accessible documents remains the responsibility the office creating each document.
NF022	R007		1	User interfaces will be evaluated by the following:
NF022	R008		1	Data entry screens and searching screens should be assistive. They must support tabbing for entry fields.
NF022	R009		1	Data entry screens and searching screens must have a spell check feature.
NF022	R010		1	Data entry screens and searching screens must provide users with selection boxes for things like topics, actions and other common meta data whenever possible.
NF022	R011		2	For date entry fields, the system will use equations to compute a probable date.
NF022	R012		2	The date entry field will be pre-populated with the probably date.
NF022	R013		1	The user may change the default date

NF022	R014		1	Date entries will have calendars for selecting dates.
NF023	R001	Programatic Interfaces	2	MARSS will provide a web service so Revisor software applications can dynamically READ MARSS data.
NF032	R002		1	MARSS will not provide an externally accessible web service to programmatically WRITE MARSS data.
NF023	R003		2	Using a predefined list of recipients, MARSS can programmatically send a notification to each recipient. Notifications will be sent using a TBD protocol (e.g. email, text, etc.).