# General

This Technical Reference explains the use of the Standards & Conformance Department NMRA Template to create documents. It is based on that template itself. Many fields are automatically filled in from the document properties.

# Standards & Conformance Department Documents

The NMRA Executive Handbook[[1]](#endnote-1) (EHB) is the guiding document for the operation of the NMRA. The Standards & Conformance Department section outlines the responsibilities of the Standards & Conformance Department and documents the department is responsible for.

## Document Types

The Standards & Conformance Department maintains many types of documents; the most visible are the NMRA Standards (S) and Recommended Practices (RP), which define the requirements for NMRA Conformance.

|  |  |  |
| --- | --- | --- |
| **Type** | **Description** | **Public** |
| Standard (S) | Define mandatory requirements for NMRA Conformance. | Yes |
| Recommended Practice (RP) | Define optional requirements for NMRA Conformance. | Yes |
| Technical Note (TN) | Clarify the thought process behind the contents of Standards and Recommended Practices. | Yes |
| Technical Information (TI) | Contain supplemental information that may be of interest. TI documents are the equivalent of the NMRA Data Sheets (maintained by the Education Department). | Yes |
| Technical Procedure (TP) | Test plans which contain the procedures and checklists for determining if a particular product conforms to the Standards and Recommended Practices. | Yes |
| Technical Equipment | Describe the theory and construction of Conformance and Inspection test equipment. | Yes |
| Technical Reference (TR) | For the use of the Standards & Conformance Department and general membership, and contain formulas and department procedures. Historically, many TR’s were published in the NMRA Bulletin and are somewhat public. | No |

## Document Numbering Conventions

| **Type** | **Numbering Convention** |
| --- | --- |
| Standard (S) | S-n |
| Recommended Practice (RP) | RP-n |
| Technical Note (TN) | TN-n |
| Technical Information (TI) | TI-n |
| Technical Procedure (TP) | TP-n |
| Technical Equipment | TE-n-yyyy |
| Technical Reference (TR) | TR-n-yyyy |

## Document Phases

A document must undergo several phases during its development.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Phase** | **S** | **RP** | **TN** | **TP** | **TI** | **TE** | **TR** |
| Draft | X | X | X | X | X | X | X |
| Department Chair Approval | X | X | X | X | X | X | X |
| Published for Comment | X | X |  |  |  |  |  |
| Proposed | X | X |  |  |  |  |  |
| Board of Directors Approval | X | X |  |  |  |  |  |

## File Naming Conventions

Each document is named by its Document Number followed by the document title. The term “Draft” should not be in the filename. If the document is a draft, then the “Draft” suffix shall only be added to the document property field for “Title”, see section 3 below.

Upon publication, a date suffix may optionally be added to the filename. This may aid archival tracking and publishing of specific revisions of a given document to the NMRA website.

# Setting the Document Properties

Filling in the document properties will ensure the headers and footers contain the correct information. In Microsoft Word 2010, the document properties can be found under the **File** tab. Choose the **Info** section on the left toolbar. On the bottom of the right hand pain, choose the option **Show All Properties**. Update the following document properties:

| **Property** | **Values (Using This Document as an Example)** |
| --- | --- |
| Title | TR-1-2020 Draft[[2]](#footnote-1) |
| Subject | S & C Documents and Formatting |
| Company | © 2020[[3]](#footnote-2) National Model Railroad Association, Inc. |
| Manager | Carl Smeigh |
| Author | Stuart Baker |

After changing the document properties, the references inline to the document may not automatically update. A trick to force all the document property fields to update is to go into print preview. In Microsoft Word 2010, choose the **File** tab and click **Print** on the left toolbar. Going back to the **Home** tab will reveal that all of the document properties fields have been updated.

# Document Contents

Each document should have a short introductory paragraph describing the contents and related documents, i.e. other Standards, Recommended Practices, Technical Notes, etc…

Each top-level document heading should be identical between Standards, Recommended Practices, Technical Notes, etc… to aid in cross-referencing documents.

## Standards Content

The NMRA EHBi describes Standards as:

NMRA Standards Shall be limited to only those things that are critical to the satisfactory operation (function) and interchange of equipment between layouts, and for which no satisfactory alternative is available.

It further describes the following criteria for inclusion:

* That it will include all dimensional and other requirements to effect interchange and satisfactory performance.
* That it will exclude all not so required.
* That it be accurate and clearly stated.

## Recommended Practice Content

The NMRA EHB describes Recommended Practices as follows:

Recommended Practices shall define and SPECIFY the dimensional and configuration requirements and/or symbols pertaining to model railroad construction, equipment, and supplies to facilitate improve performance and interchange of components within uints.

It further states:

Recommended Practices shall conform to and supplement appropriate standards.

## Technical Note Content

The Standards and Conformance Department describes Tech Technical Notes as companion documents to Standards & RPs to communicate complex reasoning and departmental thoughts on particular parts of Standard and RP sections.

# Document History

|  |  |
| --- | --- |
| **Date** | **Description** |
| Aug 24, 2020 | First revision. |

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NMRA’s development of NMRA Standards documents involves the review of documents in English only. In the event that an NMRA Standards document is translated, only the English version published by NMRA is the approved NMRA Standards document.

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1. NMRA Executive Handbook, Section Q1.1, Rev 10/29/2010 [↑](#endnote-ref-1)
2. The text “Draft” is only present when the document is in draft format. If the document is an approved document, omit the “Draft” text suffix. [↑](#footnote-ref-1)
3. If the document is newly created, only one year will be present. If the document is being updated in a subsequent year beyond the year the document was created, then both the creation and the last updated years are present: © 2020 – 2021. [↑](#footnote-ref-2)