



P25 CAP 508 Accessibility Requirements

Best Practices Webinar

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Science and Technology Directorate



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Agenda

1. What is 508 Compliance and why is it important?
2. How 508 Compliance affects STR and SDoC documents for the DHS.gov website
3. How to best set-up and format STR and SDoC documents in Microsoft Word
4. Required elements for the DHS Web Team
5. Open Q&A



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What is Section 508?

- Section 508 is a federal law that is part of the Rehabilitation Act of 1973.
- It requires all Information and Communications Technology (ICT) to be accessible and usable
- The scope of ICT is enormous: software, websites, apps, e-learning, documents, telephones, hardware, kiosks...
- For you, our P25 CAP Vendors and Suppliers, it means that all public-facing documents that is to be published and accessible to the public on DHS.gov must be accessible.



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Why is Section 508 Important?

- Provide access to and use of Government information and systems that is comparable for disabled and nondisabled people alike.
- Eliminate barriers to information technology.
- Make new opportunities available for people with disabilities.
- Encourage development of technologies that will help achieve these goals.
- Section 508 leverages the purchasing power of the Federal Government, by influencing its purchasing decisions regarding Electronic and Information Technology (EIT) products and services, towards those which comply with Section 508 legislation.



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Overview of Document Requirements

When sending these documents to us for inclusion on the DHS Science and Technology First Responders microsite, we are requiring you to send us the following files and elements:

- Microsoft Word version of STR
- Microsite Word version of SDoC without signature page
- PDF version of SDoC with signature page



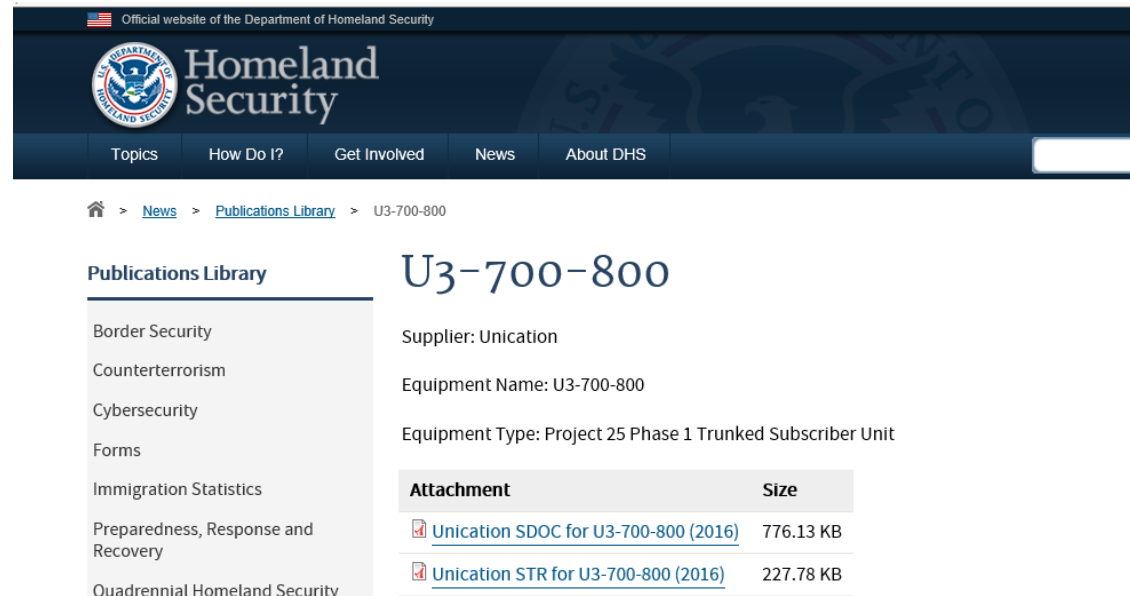
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Overview of Document Requirements

Continued

- The file name for each document should be easy to understand and contain hyphens or underscores.
 - E.g.: **P25-CAP-Company-Name-STR-Product-Name**
- Public facing title for each file, which is displayed on DHS.gov.
 - E.g.: Unication SDOC for U3-700-800 (2016)
 - E.g.: Unication STR for U3-700-800 (2016)




The screenshot shows the official website of the Department of Homeland Security. The header includes the DHS logo and the text "Homeland Security". Below the header is a navigation menu with links for "Topics", "How Do I?", "Get Involved", "News", and "About DHS". The main content area displays the breadcrumb path: "Home > News > Publications Library > U3-700-800". The "Publications Library" section is active, showing a list of categories: "Border Security", "Counterterrorism", "Cybersecurity", "Forms", "Immigration Statistics", "Preparedness, Response and Recovery", and "Quadrennial Homeland Security". The "U3-700-800" page is displayed, showing the "Supplier: Unication", "Equipment Name: U3-700-800", and "Equipment Type: Project 25 Phase 1 Trunked Subscriber Unit". Below this information is a table with two columns: "Attachment" and "Size".

Attachment	Size
Unication SDOC for U3-700-800 (2016)	776.13 KB
Unication STR for U3-700-800 (2016)	227.78 KB



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P25 CAP Supplier's Declaration of Compliance (SDoC) and
Summary Test Report (STR)

CREATING ACCESSIBLE MICROSOFT WORD DOCUMENTS

Assistive Technology (AT)

- Assistive Technology or AT, is adaptive equipment that people with disabilities commonly use for information and communication access.
- Individuals with disabilities may include, but are not limited to: blind or low vision, deaf or hard of hearing, physical disability, and speech disability.
- These individuals use Assistive Technology, such as screen readers, screen magnifiers, voice recognition software, alternative keyboards, switches, scanning software, etc. to access electronic information and technology.
 - Visit <https://www.w3.org/WAI/perspectives/>
 - Visit <https://www.w3.org/WAI/intro/people-use-web/stories>



Comparable Access

- As you create your documents, it might be helpful to think about the concept of comparable access.
- When you adhere to the accessibility requirements, you are creating a document that allows individuals with disabilities
 1. To access the important information that you are creating, AND
 2. To gain access to information in a comparable way as their non-disabled peers.
- Federal employees with disabilities have access to and use of information and data that is comparable to the access and use by Federal employees who are not individuals with disabilities.
- Individuals with disabilities, who are members of the public seeking information or services from a Federal agency, have access to and use of information and data that is comparable to that provided to the public who are not individuals with disabilities.



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General Limitations of MS Word

- Applying Editing Restrictions (Security)
 - Documents that are restricted from editing are inherently inaccessible to screen reader users.
 - Restriction is allowed only when there is no password protection, or if all potential readers are supplied with the password.
- Forms
 - A common use for the restricted editing mode is to allow for the filling of form fields. In this mode, the document's content is protected, with the exception of form fields. Readers, including screen reader users, can only access the data areas.
- Objects Not Inline (Floating Objects)
 - For images and tables to be read by a screen reader in MS Word, they must be placed inline with the text. An inline element reads like it is the next piece of text in the content.



General Limitations of MS Word

Continued

- Text Boxes
 - Text boxes are never read by screen reader technologies, even if they are placed 'inline'.
- Complex Tables
 - Complex tables are inherently inaccessible in MS Word, because there is no way to define cell roles—such as data cell versus heading, or heading spanning one column versus heading spanning n columns. There is also no way to define the links between merged and split cells with their associated headers. Consequently, screen reader users have no means to identify what headers are associated with a given data cell. Therefore, if complex tables are absolutely necessary, the document must be created in / converted to an accessible format (e.g., PDF).



Document Structure

- Document structure is like a document roadmap. It tells the user how the content is organized and what is important.
- Headings are used to break-up content and make finding information easier.
- Assistive Technology (AT) CANNOT infer meaning from just formatting (such as bold or underlined text).
- Styles create a structure that AT can quickly access.

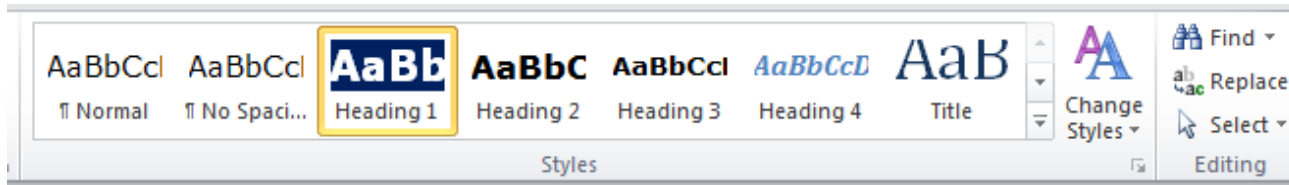


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Use Styles to Create Headings

- Go to **Home>Styles** and use styles when creating Headings in your document.

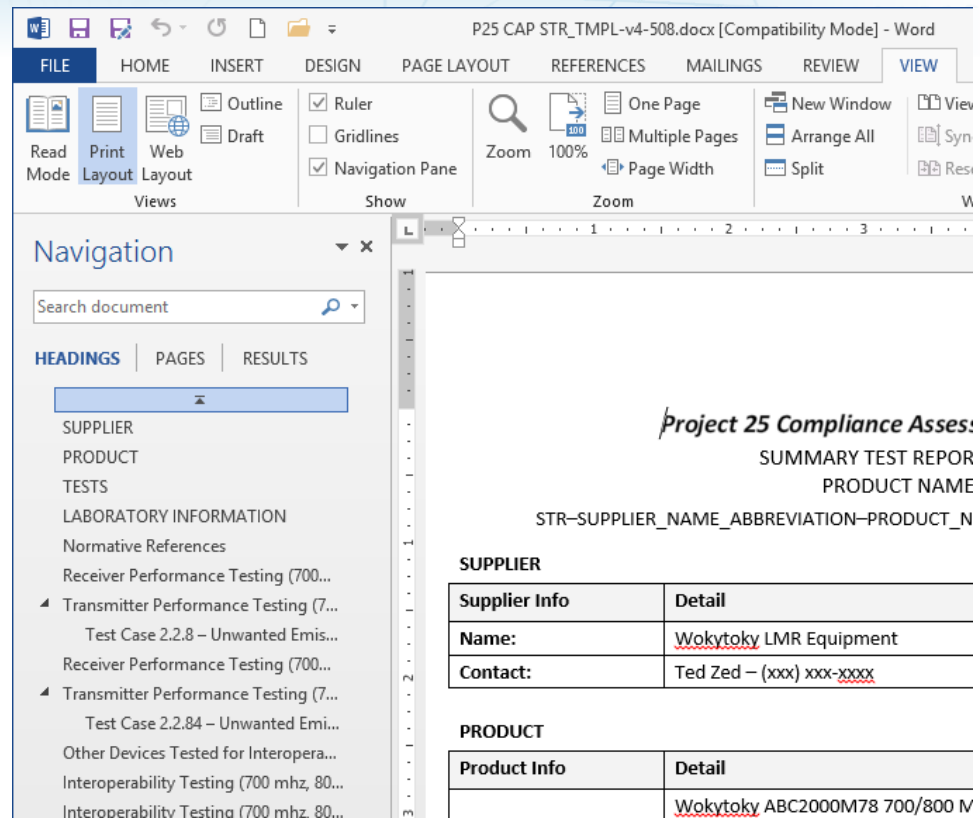


- To use Styles, you can either:
 - Click on the style you want and then type your heading, OR
 - Type your heading and then click on the style you want to use.



Headings – Check Your Work

- Open the **Navigation Pane (Ctrl + F)**. Check that all of your headings appear in the navigation pane and match the visual outline of your document.



The screenshot shows Microsoft Word with the Navigation Pane open on the left. The pane is titled "Navigation" and has a search box. Below the search box are three tabs: "HEADINGS", "PAGES", and "RESULTS". The "HEADINGS" tab is selected, showing a list of headings from the document. The document content on the right includes a title "Project 25 Compliance Asses:", a subtitle "SUMMARY TEST REPORT", and a header "STR-SUPPLIER_NAME_ABBREVIATION-PRODUCT_N". Below this is a section titled "SUPPLIER" with a table of "Supplier Info" and "Detail". The table contains the following information:

Supplier Info	Detail
Name:	<u>Wokytoky</u> LMR Equipment
Contact:	Ted Zed – (xxx) xxx-xxxx

Below the "SUPPLIER" section is a section titled "PRODUCT" with a table of "Product Info" and "Detail". The table contains the following information:

Product Info	Detail
	<u>Wokytoky</u> ABC2000M78 700/800 M

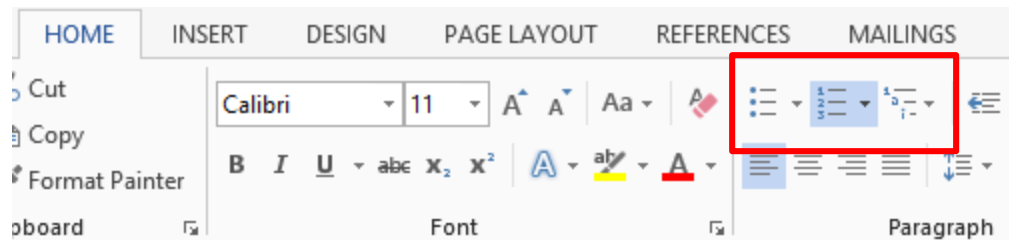


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Use Built-in Features To Create Lists

- Lists are used to break-up and simplify content.
- Screen readers cannot infer meaning from just formatting (if you Tab and use a dash as a bullet).
- Using built-in list features creates a structure that screen readers can identify.
- Go to **Home>Paragraph** and use **Bullets, Numbering or Multilevel List** features when putting lists in your document.



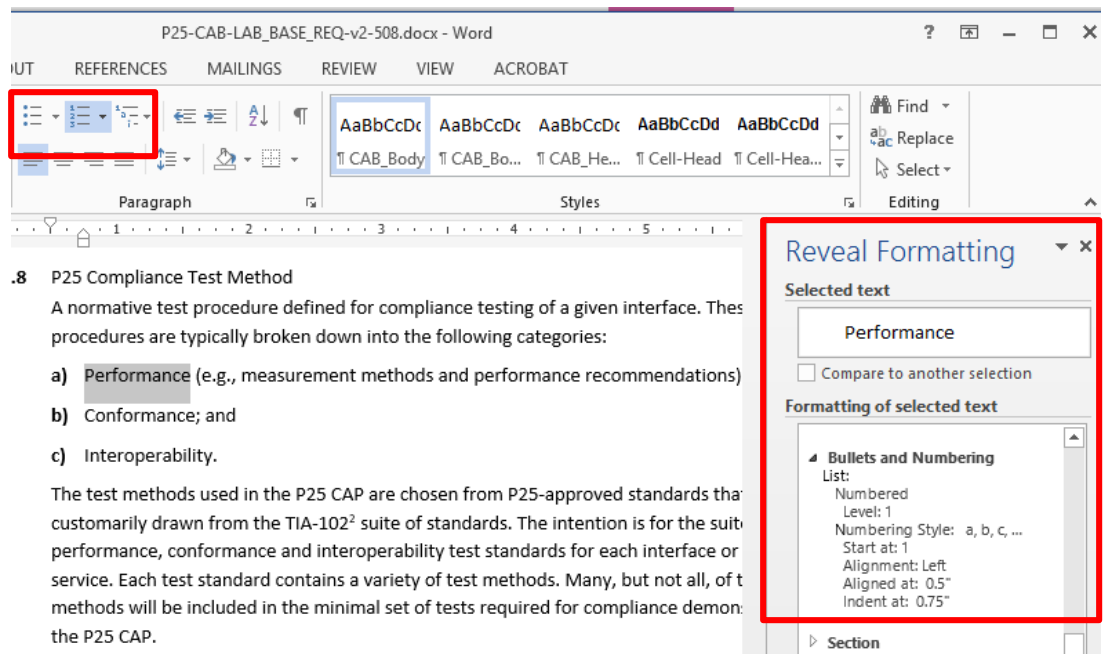
Lists - Check Your Work

To check your work, you:

1. Click on a list item.
2. Check that one of the built-in list features is highlighted.

OR

Open the **Reveal Formatting Pane** (**Shift + F1**) and ensure a list option is showing under **Bullets and Numbering**.



The screenshot shows a Microsoft Word document titled "P25-CAB-LAB_BASE_REQ-v2-508.docx - Word". The ribbon is set to "REVIEW". A red box highlights the "Bullets and Numbering" group in the Paragraph section of the ribbon. The document content shows a bulleted list item: ".8 P25 Compliance Test Method". A red box highlights the "Reveal Formatting" pane on the right side of the screen. The pane shows the "Selected text" as "Performance" and the "Formatting of selected text" as "Bullets and Numbering" with a list style of "List", "Level: 1", "Numbering Style: a, b, c, ...", "Start at: 1", "Alignment: Left", "Aligned at: 0.5\"", and "Indent at: 0.75\".



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Use Built-in Features to Create Data Tables

Data tables are those tables where the information in a cell requires information from a row and/or column header to adequately describe the cell's content.

- You cannot make images of tables accessible.
- Keep data tables simple (use one row of column headers and **No merged or split cells**).
- Identify the **header row**.
- Place data **tables in-line** so that AT can access the content.
- Avoid empty cells when possible



Complex Data Tables

- Complex data tables have more than one row and/or column headers, and/or merged or split cells that must be associated to make sense.
- If you need to create complex data tables, then you must convert the document to an accessible format.
- Complex data tables cannot be made accessible in MS Word

Test Case	Description	DEF3500P78 Portable	CWX7300P Portable	AV100P Portable	TA3000M Mobile	FS2000P Portable
2.2.1	Matching NAC Operation and SU Unaddressed Voice Call					
2.2.1.4.1	Test Case 1 – Unaddressed Voice Call	P	P	P	P	P
2.2.2	Matching NAC Operation and SU Routine Group Voice Call					
2.2.2.4.1	Test Case 1 – Routine Group Voice Call	P	P	P	P	P
2.2.3	Monitor Mode – SU Group Voice Call					
2.2.3.4.1	Test Case 1 – Receiving Group Call	P	P	P	P	P
2.2.8	Accept Any NAC in Normal and Selective Squelch Mode – SU Group Voice Call					
2.2.8.4.1	Test Case 1 – Receiving Group Call with Receive NAC \$F7E under Normal and Selective Squelch Modes	P	P	P	P	P



Tables – Labeling

- If tables are used, where appropriate, they should be described and labeled.

Table 1. Other Devices Tested with U3-700-800

Manufacturer	Product Name, Definition, & Unique ID	Installed Options
Tait Ltd.	Tait P25 Infrastructure	TBAK2 (762-870 MHz)
Cassidian Comm. Inc.	TBAK2 (762-870 Mhz)	V11_07 (V2.06), V11_08 (V2.07)
Motorola	Astro 25	Smart Zone 7.13
Harris Corp.	VIDA Premier SR10A.a MASTR V	Firmware R14B04.01



Duplicate Vital Information in Headers, Footers and Watermarks

- Screen readers do not automatically read information in headers/footers and watermarks.
- Therefore, vital information (such as **Respond by X Date**, **CONFIDENTIAL**, or **Do Not Distribute**) must also be duplicated at or near the start of the main content area.

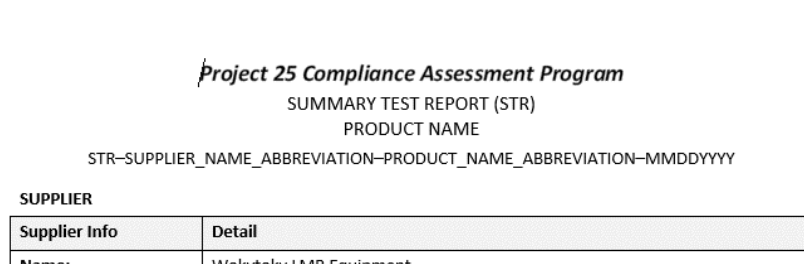


Figure 1. First page of a document. Vital information **IS NOT** in the header.

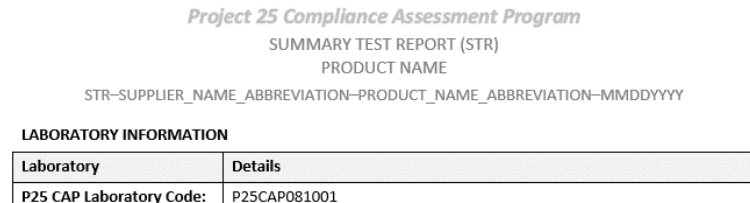


Figure 2. Subsequent pages of document. Vital information **IS** in the header.



Scanning a Document

Scanner Settings:

1. Use at least **300 dpi** (dots per inch).
2. Set scanner for **grayscale** scanning and **text and images**.
 - If your document is scanned using a setting other than grayscale, the resulting PDF will be color indexed, and Acrobat might interpret the text as image objects rather than text.
 - If this occurs, a graphics program must be used to change the image to grayscale and this will add to the amount of time it will take to get your documents online.



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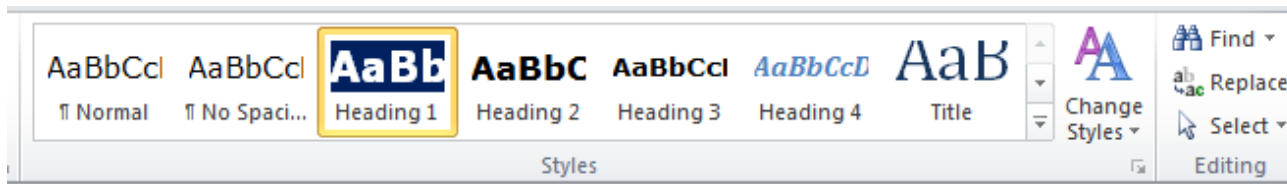


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How to Create Accessible Headings

- Go to Home tab > Styles pane and use styles when creating Headings in your document.

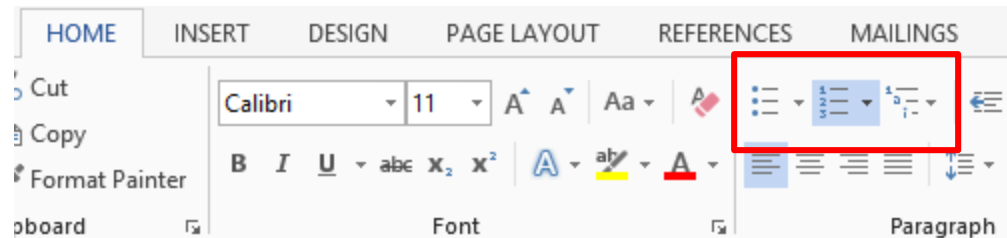


- To use Styles, you can either:
 - Click on the style you want and then type your heading, OR
 - Type your heading and then click on the style you want to use.
- Headings – Check Your Work
 - Open the Navigation Pane (Ctrl + F). Check that all of your headings appear in the navigation pane and match the visual outline of your document.



Use Built-in Features To Create Lists

- Go to Home > Paragraph pane and use Bullets, Numbering or Multilevel List features when putting lists in your document.

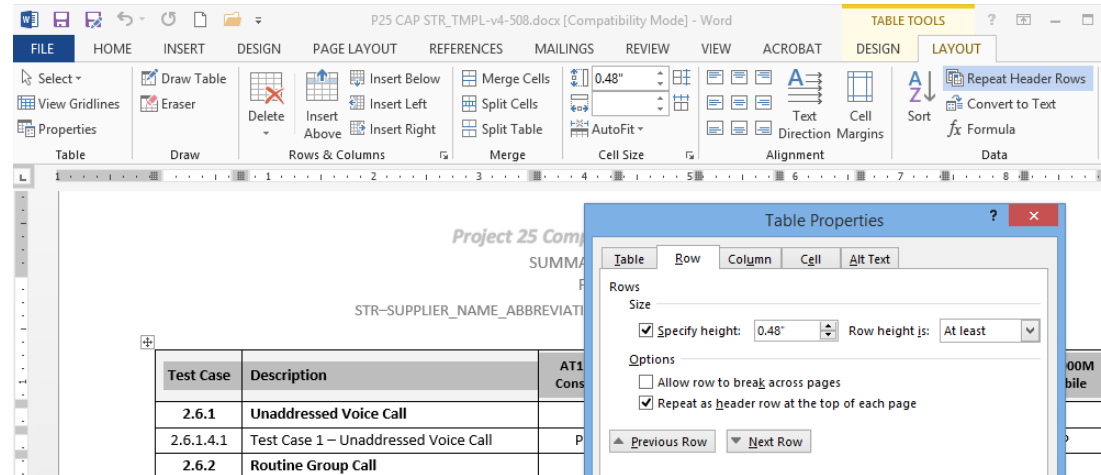
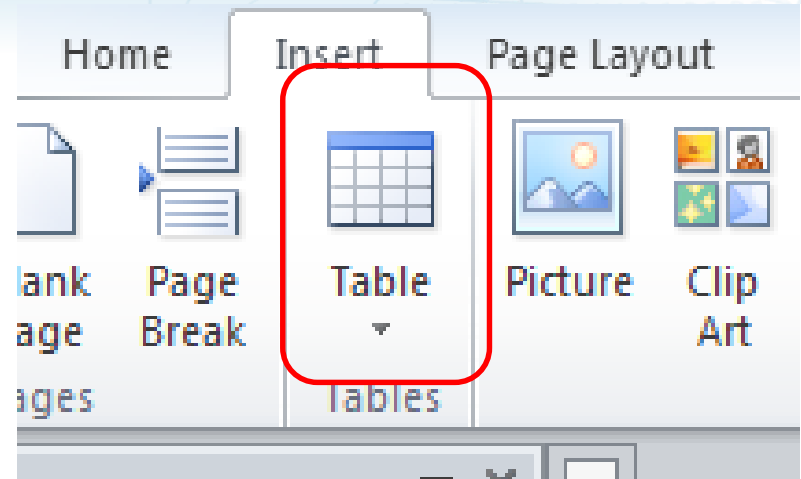


- To check your work, you:
 - Click on a list item.
 - Check that one of the built-in list features is highlighted **OR**
- Open the Reveal Formatting Pane (Shift + F1) and ensure a list option is showing under Bullets and Numbering.



Create Accessible Data Tables

1. Go to **Insert > Tables**
2. Insert the number of columns and rows you need for your data table.
3. **Do not merge or split cells.**
4. Only type headers into the first row and identify the header row.
5. Select the first row > **Table Tools Layout** tab on the Ribbon > **“Repeat as header row”** button.



Duplicate Vital Information in Headers, Footers and Watermarks

1. Type in your vital document information at the top of the first page of your document. In this example, I took the general information from the STR template.
2. Select the text
3. Copy the text by right clicking on the highlighted text or by hitting Ctrl + C on your keyboard.
4. Next, find and click in a good place to enter in a page break, at the bottom of the first page of your document.
5. Go to the “Page Layout” tab



Duplicate Vital Information in Headers, Footers and Watermarks

Continued

6. On the Page Setup pane, click on the “Breaks” drop down menu.
7. Under “Section Breaks” click “Next Page”
8. Go to the new page and double click in the Header area
9. Paste in vital information, we just copied from the first page of your document, by typing Ctrl + P on your keyboard.
10. Delete any extra spaces that may show up after your information



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Additional Resources

- If you have further questions, please contact us at P25CAP@hq.dhs.gov.
- In addition, the recording of this webinar will be posted on the main P25 CAP page at <https://www.dhs.gov/science-and-technology/p25-cap>.
- [Section 508.gov](#)
- [508 Standards](#)
- [Access Board](#)
- [Best Practices Library](#)
- [Section 508 Training](#)



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Tips and Reminders

- Use the “**Keep Text Only**” paste option if plugging your information into the P25 CAP templates.
- Use Microsoft Word’s built-in features
- Identify header rows of tables
- Do not place vital information in the header on the first page
- We are here to help. Email us at P25CAP@hq.dhs.gov with any questions.



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OPEN Q&A



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Question 1

What is a simple table?

Answer 1: A simple table uses one row of column headers and **no merged or split cells.**



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Question 2

Is there a normal font type and size for table titles and table cells?

Answer 2: Arial or Calibri are typically used in tables.



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Question 3

What is the minimum font size for a table cell?

Answer 3: Recommend not to go below 10 pt.



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Question 4

What is the minimum table row height with the minimum table font?

Answer 4: There is no minimum row height.



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Question 5

Can a Word template that maximizes table columns for an STR be provided?

Answer 5: Yes, just send a request to P25CAP@hq.dhs.gov.



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Question 6

What if the STR requires more columns than the maximum number per page?

Answer 6: There are a few options.

1. Adjust cell margins and/or column widths to fit the maximum amount of text into a cell.
2. Make the page landscape.
3. Divide up your information and repeat it in multiple tables



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Question 7

Can I turn table column titles 90 degrees in order to make the columns narrower?

Answer 7: Vertical text is not accessible. It does not follow the logical order, which is top to bottom and left to right. It can create numerous problems for AT.



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Question 8

Is there a Word Header style required for each table title if a table needs to be added?

Answer 8:



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Question 9

Should authors of SDOCs and STRs be utilizing the Word 'navigation pane' (selected in View) as the document is drafted and expect to see readable content in that pane?

Answer 9: It is a good habit to have the navigation pane open so you can check that all of your headings appear in the navigation pane and match the visual outline of your document..



Question 10

What is the minimum font size for footnotes?

Answer 10: Do not go below 10pt. That should be the default size of footnotes.



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Question 11

Can I add company logos to the SDOC or STR?

Answer 11: No. Names can be on the documents but no logos. That is straight from legal.



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Question 12

What is alt-text and is it used anywhere in SDOCs or STRs? (signatures?)?

Answer 12: Alt-text, or alternative text, provides a textual alternative to non-text content in documents. We will add alt- text to your signature after we receive your scanned signature page.



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Question 13

Why is the header of page one different than the header on the succeeding pages?

Answer 13: Screen readers do not automatically read information in headers/footers and watermarks. Therefore, vital information (such as Respond by X Date, CONFIDENTIAL, or Do Not Distribute) must also be duplicated at or near the start of the main content area.



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Question 14

What is the average turnaround time for the review of a STR/SDoC pair?

Answer 14: It depends on what we have in the queue, if we have to work through corrections on the original submission, and how much 508 adjudication has to be done. However, on average, I would expect 2-3 weeks.



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