TITLE (SHOWN ON TOP OF RIGHT PAGES)

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A BragIt production

Chapter (shown on top of left pages)

1.1 The first level section element

The second level section element 1.1.1

The HeadingBlock element. It contains this side head and regular paragraphs Text width is 11.5 cm, with a 5.5 cm side head field to the left (+0.5 cm margin) for chapter numbers, subheadings, small graphics etcetera. The paragraph to the left is a so called *side head*. The element HeadingBlock is a container that contains that side head and paragraphs in this column. The current element is *Para*, which in turn uses the Body paragraph format. The formatting of Body is context dependent, but when used as a regular paragraph, it has Fixed Line Spacing; Tabs 7 mm Left and 11.5cm Right with '. 'Leader; Max 2 Adjacent Hyphenations, Shortest Word 8, Shortest Prefix 3, Shortest Suffix 3, US English; Widow 3. Font is 10/ 12pt Warnock Pro Light.

ParaContinue: Can be used for a "book-like" formatting where Para is only used for "first body paragraph" in each block. To use the 11.5 cm tab, enter 2 tabs,

QuotePara: (9.5 pt) For quotaions etcetera ...qwertyuio qwertyuio qwertyuio qwertyuio qwertyuiopå qwertyuiop qwertyuiop qwertyuiop.

HeadingBlock, where the attribute HeadingBlockStyle is set to Plain head

HeadingBlock can be set to use either plain heads or side heads by an attribute in the HeadingBlock or in the Chapter element. Default is side head. Avoid mixing these styles in the same section.

HeadingRunInPara Sometimes a run-in head is useful. The HeadingRunInPara element can contain its head, a Para and ParaContinue, but nothing else.

EquationPara:
$$\begin{bmatrix} r_1 \\ r_2 \end{bmatrix} = \begin{bmatrix} c_{11} & c_{12} \\ c_{21} & c_{22} \end{bmatrix} \cdot \begin{bmatrix} t_1 \\ t_2 \end{bmatrix}$$
 which also can be written: $\mathbf{r} = \mathbf{C} \cdot \mathbf{t}$ (1)

$$\sum_{i=1}^{\infty} e^{f_i} \int x_i^2$$

There are also text range elements: EquationFunction and EquationVariable which specify Century Schoolbook 9pt Regular and Italics respectively. The same formats are used by Equation Fonts set in the Equation palette¹. There is also a matching EquationSymbol element: $\alpha\beta\chi\delta$ (Unicode range, see *Ref Pages*).

CodeBlock: Contains monospaced² Para(s). At 8.5pt Courier Std, it fits 69 characters (excluding the new-line character) in each line. This line is a new Para. Tabs are set each cm. By default, Paras in CodeBlock are kept on the same page.

Cross-references Dash and Slash

The items after the colon are four cross-references—a figure, a table, an equation and a reference, using Xlabel NumOnly and E-num reference formats: Figure 1, Table 1, Equation (1), reference [1]. The '—' used above is an em-dash (ctrl Q shift (1) between two thin spaces (Esc space T). There is a variable Dash for that sequence. (Insert by: ctrl 0, then d then return.) Similarly, the variable Slash is a mathematical slash between two thin spaces, which will not break lines. Useful for physical quantities like mA/K.

^{1.} These are for *medium* size equations. Example of a *small* shrink-wrapped equation: $\sum e^{t_i}$. It is 1 pt smaller than the medium one, except $\sum \int$ being only 10 pt.

For fixed pitch (number of characters per inch). Useful for code and program listings etcetera.

1.2 Lists

There are two types of lists, and they can also be nested. In addition, each list type has an attribute Type that can change its appearance. They are all Left Aligned; Widow 4, and use of the 11.5cm right aligned tab requires two tabs. By default, list items are kept together on the page, but an attribute can change that.

1.2.1 ListUnordered

- *ListUnordered*: The default Regular list type. Each bullet item is a *ListItem*, which can contain paragraphs, lists or simply just text.
- *ListItem*: Next list item in the unordered list. This list item contains a nested unordered list, as follows:
 - o The ListUnOrdered again, but nested as a child to its ancestor list item. The list could just as well be ListOrdered, i.e a numbered list.
 - Next list item in the nested list.
 - The ListUnOrdered again, but nested as a child to its ancestor list item.
 - Next list item.
- A normal list item at the topmost level.

This is a continuation of the list item (a new paragraph, but still within the list item). It is inserted simply by a Para at the end of the list item.

- ◆ The ListUnOrdered again, but with the attribute Major. Useful for a more "prominent" display of a list.
 - The ListUnOrdered again (one item), but nested inside its ancestor.
- ◆ Next major list item.

It is possible to start a "minor" list directly, like the following:

- o ListUnordered, using the attribute Minor.
- o Next list item.

Finally, ListUnordered can have the attribute Plain or Plain No First Indent as follows:

Plain formats just as a regular list, but without any symbol.

\$ Use Plain No First Indent for custom symbols, or price lists etc EUR 59

1.2.2 ListOrdered

- 1. *ListOrdered*: The default ordered list. It is like an unordered regular list, but numbered 123. If the attribute Type = is set to -123- instead of the default 123, it will be numbered (1), (2), (3).
- Next list item.
- **A** The ListOrdered again, but with attribute Type = ABC and Weight = Strong. Weight can also be set to Emphasis.
- **B** Next list item. And below is a nested unordered list:
 - (a) The ListOrdered again, nested and with Type = -abc- and Weight = Emphasis
 - (b) Next list item.
- **I** The ListOrdered again, but with attribute Type = VII and Weight = Strong.
- II Next list item. Below a nested ordered list:
 - i The ListOrdered again, but with attribute Type = vii and Weight = Emphasis.
 - ii Next list item.
- [1] ListOfReferences: Obviously for the reference list. In this case, the list is wrapped into the FramedBlock element, which illustrates how any block of paragraphs or lists can be wrapped into that element, which provides frames above/below.
- [2] Next list item in the ListOfReferences element.

 Qwertyuio qwertyuio qwertyuio qwertyuiopå qwertyuiop qwerty.

Here, the ListOfReferences is wrapped in a FramedBlock just to illustrate how that element can "frame" its content by lines above/below.



1.3 Notes and warnings

NOTE

This is the *Note* element. The bold text to the left and the lines are all automatically inserted. Due to a bug in FrameMaker, you may have to zoom in so as to avoid text being blanked while you write, or you can do a refresh by ctrl-L.



Same *Note* element, but with the attribute Type set to Tip.

ATTENTION!

Same *Note* element, but with the attribute Type set to Attention.



Same Note element, but with the attribute Type set to Warning.



Same *Note* element, but with the attribute Type set to Electric Hazard.

1.4 Figures

Figures should either have no caption and be placed in the side-head area, using the element Graphic-Anchored, or they should use one of Figure-Anchored-Caption or Figure-Float-Caption, which both carry the figure in a table and its caption in the table title, as shown below:

Add a "Run-into" Graphic to the FigureCell. For annotations in the fig, use *character* formats: FigAnnotation (FigAnnotationSmall). This text is in an unstuctured text frame.



Figure 1 Use a container element called *Figure-Anchored-Caption* or a table element called *Figure-Float-Caption*. In the FigureCell element, add the Graphic element, and make sure to set its Anchored Frame to Run into Paragraph. This caption is 8.5/10.5 pt Myriad Pro, with 110% spacing. The leading text (*Figure 1* or *Figure 1-1* depending on the Book/Document) is autonumbered.

You can add a continuation to the caption by simply adding a Para. Make screen shots about 140-150 ppi, either GIF or 24-bit PNG. (8-bit PNG will make versions of FrameMaker < 9.0 import all its colours as colour definitions, which will clutter the list. To get rid of such colour definitions, remove the 8-bit PNG image and save the document as MIF, and then open the MIF-file).

Figure annotations use *character* formats rather than elements, since it's not a structured flow.

Anchored vs Float

The difference between Figure-Anchored-Caption and Figure-Float-Caption is:

Anchored will insert an empty anchoring paragraph for the figure, which can have a Pagination attribute controlling whether it should be kept with the previous paragraph or be placed at the top of the next column/page.

Float will insert the table directly, but its anchor will be attached to the preceding paragraph. The table format must be one that is set to Float, which means that it will be placed somewhere after the insertion point where it fits the page—if it does not fit on the current page, it will "float" to the next page/column while the rest of the current page will be filled with paragraphs (or other content) that logically is placed after the figure in the structure view.

Note that the horizontal position of a Float table follows the paragraph it is anchored to, which means that if the preceding paragraph spans columns and side heads, the table will also do that. To change from an existing Anchored to Float figure, and vice versa, follow procedures similar to the ones presented in Section 1.5.

A graphic frame

A simple Graphic element can always be inserted where text normally goes, like this paragraph where the actual frame is placed outside of column. It is anchored to this paragraph, and the position is set by using the menu item Special > Anchored Frame... It can also be inline: A graphic frame

1.5 Tables

Plain table without TableTitle, where All lines are "Thin" = 0.5 pt:

CellBody paragraph format ⁱ	CellBody is 8.5 pt Myriad Pro
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i. The paragraph used is controlled by the table format, unless changed by an attribute.

The table called *List*, which e.g can be used for a distribution list:

ReceiverInformation CopyMr AMs B (8.5 pt Myriad Pro)Ms CMr D

The following is *Table-Anchored*, with its SpaceAbove attribute set to Large:

Table 1 StandardTitled table i

CellHeading ⁱⁱ		
CellBody ⁱⁱ	CellBody ⁱⁱⁱ CellBody ^{iv}	

- i. At the end of the title line, there is an element with the variable Table Sheet, which will add a text like "(Sheet 1 of 2)" if the table continues on the next page, and it adds a corresponding text on those continuations.
- ii. The paragraph formats are normally controlled by the table format, but an attribute can be set to let the element definition control the formats (body cells based on CellBody) or be based on Body. In addition, there are attributes you can set to control the text alignment.
- iii. The outer lines are "Medium" = 1 pt.
- iv. The thinnest lines are "Very Thin" = 0.25 pt. (The row lines.)

The same table can also be set with Table-Float. For the meaning of Anchored vs Float, see Section 1.4. To change from an existing Anchored to Float table, and vice versa, follow these procedures:

Combining a side head and a table requires the table to be Table-Anchored

> Convert according to these procedures

Float → Anchored:	Wrap Table-Float into Table-Anchored. Select Table-Float again and change it to Table. Finally, click in the actual table and change its table format to one that is set to Start Anywhere and has Space Above -2 pt.
Anchored → Float:	Select Table-Anchored and unwrap it. Select Table and change it to TableFloat. Finally, click in the actual table and change its table format to one that is set to Start Float, and with a suitable Space Above.

Table-Anchored element, but where the table format BigUntitled is chosen:

CellHeading ⁱ	CellHeading	ii				
CellBody	CellBody	CellBody	CellBody	CellBody	CellBody	CellBody
(Paragraph based on Body (which is Warnock Pro Light)) ⁱⁱⁱ						

- i. The uppermost line is "Very Thick" = 4pt.
- ii. This table does not have any automatic title.
- iii. If you modify the formatting of a cell, such as changing the font or using another paragraph tag, and you later import element definitions again while removing format overrides, the formatting in the cell will revert to the one defined by the table format. To avoid this, create a new table format, or you can instead use the attribute ParagraphFormat to switch between From Table Definition (default), From Element Definition (uses CellBody) or Based on Body.



1.6 Text ranges

Use these text range elements for said purposes:

- String³: fixed width font for strings, characters, code, terminal commands
- SpecialString: can have an attribute CharacterFormat set to any of: Message, Symbol, Dingbats, Custom1 to Custom4. Message is suitable for messages issued by or entered into a system. For Custom1 to Custom4, you can assign any format to a Character Format called Custom1 to Custom4, such as a font for Greek.
- Item³: for items, labels, buttons/keys, entities, file names
- *Designation*: for *new* concepts, terms, designations, phrases, entities
- *Phrase*; for titles, events and known phrases or entities
- Emphasis: for a weak emphasis (typically italic)
- *Strong*: for strong emphasis (typically, but not necessarily, bold or similar)
- Bold: is always bold. Useful in mathematics for matrices and similar
- Important: will just colour text (typically dark red)
- SMALLCAPS
- Equation Function & Equation Variable, also in combination as: sin(x)
- Hypertext http://bragit.com: for hypertext URLs

Elements, formats and features of this document use many character formats accessible from the *Character Catalog*. However, do *not* apply those character formats directly to a structured flow, since, if you do, they will be removed when elements are imported while removing overrides! However, you can apply them to non-structured text frames and graphics—the most important being annotations in a figure, see examples in Figure 1.

1.7 PDF generation

When generating PDF, certain precautions must be taken due to a bug in versions of FrameMaker below 9.0: In the Links section of Format > Document > PDF Setup..., select Create Named Destinations.... However, this will bloat the file, so make it small again by resaving the PDF in Acrobat by Advanced > PDF Optimizer... while enabling Remove unreferenced named destinations under Clean Up.

1.8 Books, chapters, documents

The Book and Document elements are intended to be topmost in the complete document: *Book* is intended for multifile books, whereas *Document* is intended for a single-file structure. The two elements number figures and tables differently, and the page numbering will be different.

1.8.1 Multifile Book

Book is the highest-level element in the book file. It may contain the following elements: FrontMatter, Component, TableOfContents, Preface, one or more Chapter or SingleChapter, Appendix, Index, EndMatter. Each of these elements may be the *Highest Level Element* in a file. The file Chapter.fm has formats making it suitable for: Preface, Chapter, SingleChapter, Appendix.

Chapter numbering The file for FrontMatter should have chapter numbering set to Numeric 0 (Format > Document > Numbering... > Chapter), and the files for TableOfContents and Preface should have chapter numbering set to Use Same Number As Previous File. All Chapter files should have chapter numbering set to

^{3.} The guideline for distinguishing between String and Item should be: *String* emphasizes a sequence of characters, such as a code or entering characters in a text field, whereas an *Item* is an atomic unit, such as a menu item. File names may be treated either as String or Item depending on context and emphasis.

Continue Numbering from Previous File in Book. The first Appendix file should have chapter numbering set to ALPHABETIC (N) at 1, while the following Appendix files should use Continue Numbering from Previous File in Book (same setting as Chapter files).

Page numbering The first file after TableOfContents must have the page numbering set to start Numeric 1 (Format > Document > Numbering... > Page).

All this numbering can also be set in the book file by right-clicking the file.

Preface, Chapter, SingleChapter and Appendix use the same formats and layout Apart from the above special settings, the files for Preface, Chapter (or SingleChapter) and Appendix all have exactly the same formats and layout as a regular chapter (same character, paragraph and table formats, same element definitions, same variables and cross-reference formats, and even the same master pages and reference pages). The Document Properties, however, are generally *not* the same.

The file for FrontMatter has the same element definitions and formats, but it has additional paragraph formats. The files for TableOfContents (TOC.fm), CE.fm and BackCover.fm are *not* structured and have no element catalogue.

Cross-references in the master pages of most files point to the title and document number in FrontMatter.fm, so do *not* rename FrontMatter.fm, and do *not* move individual files in or out of the folder, and do *not* import Page Layouts from files outside this folder!

Numbering inside Chapter A Book that uses the Chapter element will have numbered chapters and up to three levels of numbered sections under the chapter. In addition, you can use HeadingBlock and HeadingRunIn, which are not numbered. Tables and Figures will be chapter-numbered according to "Table 1-1", "Figure 1-1". Preface will not be numbered. Appendix will be numbered as Chapter, but with ABC instead of the regular chapter numbers.

Numbering inside SingleChapter A Book that uses the SingleChapter element *may* number the three levels of sections under it, but not the SingleChapter itself. Tables and Figures will be simple-numbered: "Table 1", "Figure 1".

1.8.2 Single-file Document

Normally, Document is the highest-level element in the single file. (But you may start any flow with SingleChapter, with or without a Head.) Document starts with the FrontMatter element. The file Chapter.fm does not have any formats for some elements defined in FrontMatter, such as Title, TagLine, Author or DocTag, but the file Doc.fm has Title, TagLine and Author.

Numbering inside Chapter A Document that uses the Chapter element will have numbered chapters and up to three levels of numbered sections under the chapter. In addition, you can use the HeadingBlock and the HeadingRunIn, which are not numbered. Tables and Figures will be simple-numbered: "Table 1", "Figure 1". Preface will not be numbered. Appendix will be numbered as Chapter, but with ABC instead of the regular chapter numbers.

Numbering inside SingleChapter A Document that uses the SingleChapter element *may* number the three levels of sections under it (an attribute choice), but not the SingleChapter itself. Tables and Figures will be simple-numbered: "Table 1", "Figure 1".

1.9 *Tips*

If the page looks "corrupted", refresh the screen by pressing Ctrl-L. If formatting doesn't seem to follow the rules of the elements, correct it by doing: Formats > Import > Element Definitions... and set a check mark for removing format rule overrides. (Or use the shortcut provided by the Structure Tools plug-in (Esc Q W).)