Contents

Indexing per Chicago Manual of Style	1
Examples	1
Levels of index entries	2
Syntax of index entries	2
Formatting	
Alphabetization	
Other advice (not Chicago)	3
Composing an Index	4
Process	4
Mistakes to avoid	4
Indexing with Microsoft Word	4
Overview	

Levels of index entries in the XE field	
code	6
Cross-reference	6
Alphabetizing	6
Special characters in index entry text	7
Place index entry (XE) field codes	7
XE field code switches	8
Concordance file	9
Place index	10
INDEX field code switches	11
Styling index entries	12
Process	

Indexing per Chicago Manual of Style

An index is composed of entries in alphabetical order. The entries have either a page number of a cross-reference to another entry. Entries can have sub-entries to provide supplementary descriptive and/or relational information.

The entries form an alternate organization of the document's content (the primary organization being the table of contents). Technical documents tend to have a hierarchically elaborated table of contents, while texts like histories tend to have a short, shallow table of contents. Both kinds of documents can benefit from an index.

Examples

All the following examples use the indented style, which is the best choice for technical documents.

Examples of single main heading:

Burr, Aaron, 372–4 meat, 16, 25, 39 *Pride and Prejudice*, 33 smoke, 201 tree. *See under* wood World War I. *See* warfare

Examples of subentries:

smoke color. *See* combustion constituents, 26 damage, 14 spiritual ceremonies, used in, 36 *See also* firewood

Examples of sub-subentries:

bamboo, 72-81

```
digestible energy, 94–6, 222 inorganic constituents: minerals, 81, 83–5 silica (see silica levels in bamboo) total ash, 73, 79, 91 methods used, 72–3
```

Levels of index entries

Index entries:

- Level 1: main heading
- Level 2: subentry (or subheading)
- Level 3: sub-subentry

Syntax of index entries

```
Index entry syntax:
entry, locator[, locator[, locator]]
entry. cross-reference
```

Some recommend separating the entry from the first locator with two spaces.

Locator:

- One page number
- Page number range as inclusive numbers

Cross-reference:

- See reference to a main heading; prescriptive cross-reference
- *See under* reference to a subentry; suggestive cross-reference
- See also . . . (used by itself as a subentry); suggestive cross-reference

Prescriptive cross-references are used to control antonyms, synonyms, pseudonyms, slang, and corporate or personal names having significant variants other than the form chosen as the main heading. They are also used to point from generic terms to specific terms when there is no information indexed under the generic term. Examples:

CBS. See Columbia Broadcasting System
Commonwealth of Virginia. See Virginia
Vinci, Leonardo da. See Leonardo da Vinci
Xuan, Le. See Nhu, Madame Ngo Dinh
Arouet, François Marie. See Voltaire
Blair, Eric. See Orwell, George
shysters. See lawyers
smack. See heroin
lipids. See animal fats; natural waxes; vegetable oils

Suggestive cross-references point users to one or more headings that specify information related to the information specified in the heading from which the cross-reference is being made.

Revision: 8/17/2010 Page 2 of 15

A general cross-reference may be used if there are too many headings to be listed individually. General cross-references refer users to a class of terms without naming any member of the class. Both see and see also references may be generalized. For example:

```
Europe. See also names of specific countries mountain ranges, ... rivers, ...
```

Inclusive numbers use either the full form of number (e.g., 236–237) or only the changed part (e.g., 108–9, 24–36). The second form is preferred. In the number range, the two numbers are separated by an en dash.

Only proper names are capitalized in index entries.

Page numbers may be bolded or italicized to indicate illustrations or particularly important passages.

Formatting

There are two paragraph formats for index entries:

- Main heading is flush left, all subentries follow in the same paragraph (run-in) with a hanging indent. This is commonly called flush-and-hang.
- Main heading is flush left, all subentries are indented one to a line (each subentry may need more than line).

Indents are about 1 em in width.

Index entries are presented in a two column format.

Alphabetization

Index entries are alphabetized. There are two schemes:

- Letter-by-letter
- Word-by-word

While main headings are always alphabetized, there may be valid reasons for not alphabetizing subentries: Other ordering schemes include chronological, evolutionary, page number ordering, chronological-numeric ordering (e.g., First Empire, Second Empire, . . .), classified ordering, and grouped ordering. Use non-alphabetical ordering only if it is clearly more beneficial to readers than alphabetical ordering.

Alphabetic groups may be separated and have a heading like "A," "B,", and "C."

The See also cross reference is the last subentry under a main heading.

Other advice (not *Chicago*)

Don't simply reference every page on which a particular word appears—this is not useful. Instead, list the topics found in the manual and the best place to go for information on that topic. You may have many places the topic is mentioned, but refer the reader to only one or two places.

Avoid more than one page reference for an entry. If you do include several page references, bold the one the reader should try first.

Revision: 8/17/2010 Page 3 of 15

Don't list a series of sub-entries all with the same page number.

Avoid using page ranges for two pages.

Composing an Index

Composing an index is an art form. The end result must provide a different view of the subject matter than presented by the table of contents and one that enhances the reader's access to meaningful information. Index entries can use words or phrases that do not necessarily appear in the text. The structure of index entries can provide context and meaning.

Effective indexing involves identifying concepts and translating them into a controlled vocabulary. Entries can reflect both (1) the author's approach to information and perspectives and (2) the reader's approach to the subject matter.

An index is an exercise in distillation.

Process

Indexing is a creative process interlinking concepts and constructing a logical hierarchy, sometimes with many levels.

- 1. Identify the reading audience.
- 2. Analyze the document text.
- 3. Identify metatopic(s).
- 4. Gather information.
- 5. Develop access pathways into the text.
- 6. Design vocabulary and phrasing to support the index structure.
- 7. Establish consistency which infers predictability.
- 8. Edit index to ensure its accuracy, consistency, and usability. Focus is on structure and coherence.

Mistakes to avoid

- An index is not a list of keywords.
- The repetition of almost all page numbers from the main heading to its subentries is a poor indexing technique.
- Long strings of undifferentiated page numbers provide no structure.
- Typographical inconsistencies in spacing, punctuation, capitalization, or spelling reduce accuracy.

Indexing with Microsoft Word

Word populates an index from index entry fields placed throughout the document. The index itself is a field. Index entry fields can be placed manually one at a time and/or automatically by using a concordance file. The page numbers in the index can be regenerated as needed in the same way as for any field, most obviously the TOC field. Before generating the index, make sure

¹ Some web pages call this compiling.

that the document is paginated correctly by hiding field codes and hidden text. The result of the index field is created after the index entry fields are collected, sorted alphabetically, and duplicate entries from the same page combined; the formatting of the index and its entries is controlled by field switches and paragraph styles.

Overview

Source of index entries:

XE fields (including what is in Tracked Changes, so be careful)

Location of index:

- At end of the source document
- Or in a separate document, which uses RD field codes to identify source documents
- The index is automatically placed between two section breaks; these are not visible when the field code is visible

Index entry contents using Word's vocabulary (as opposed to typography books):

- Main entry
- Subentry (optional)
- Third-level entry (optional)

Location of index entry fields:

- Fields for index entries having page numbers should be placed immediately after the subject (word, phrase, symbol, or image).
- Do not place an index entry field in a footnote. Instead place the field before the word that precedes the location of the footnote reference.
- Fields for index entries having page numbers based on a bookmark can be placed anywhere, but most conveniently at the end of the document (as in the Index chapter but before the index field).
- Fields for index entries having cross-references can be placed anywhere, but most conveniently at the end of the document (as in the Index chapter but before the index field).

Formatting of individual index entries:

- Each level of index entry has its own style: Index 1 is applied to the main entries, Index 2 is applied to the sub-entries, and Index 3 is applied to the third-level entries.
- Style Index Heading is applied to the index headings.
- The See phrase in cross-references can be italicized.
- Page number ranges use the full form of the numbers (e.g., 236–237). The only way to have Word produce a page number range in an index entry is to apply a bookmark to the range of document text and reference the bookmark in the XE field code with the \r switch.
- Page numbers for individual entries can be bold and/or italic; this can serve to emphasize certain entries.

Scope—an index can be scoped in several ways:

- By bookmark: only the portion of the document marked by a given bookmark is included in the index.
- By type: only XE fields flagged with a given type are included in the index.
- By range of letters: only entries beginning with a letter that falls into a given range (for example, a-c) are included in the index.

Revision: 8/17/2010 Page 5 of 15

Layout and composition of the index are controlled by field switches. See that section for details.

Levels of index entries in the XE field code

As an index entry can have 1, 2, or 3 levels, so can the XE field code:

One level: { XE "cats" }
Two levels: { XE "cats:food" }
Three levels: { XE "cats:food:raw" }

Actually Word allows up to 9 levels, but 3 is the maximum commonly used by indexers.

Cross-reference

Word handles the "See" form well. When using the Mark Index Entry dialog box, the *See* is automatically italicized. The generated entry in the index has a period and a space preceding the *See*.

There are other forms that need special handling to achieve the "proper" result. See the following table of examples.

Level	Final Index Entry	XE Field Code
1	entry. See reference	"entry" \t " <i>See</i> reference"
1	entry. See under reference	"entry" \t "See under reference"
2	entry. See reference	"level 1 entry:entry" \t "See reference"
2	See also reference.	"level 1 entry:See also reference" \t ""
3	entry (see reference).	"level 1 entry:entry (see reference)" \t ""
3	entry (see under reference).	"level 1 entry:entry (see under reference)" \t ""
3	entry. (see under reference)	"level 1 entry:entry" \t "(see under reference)"

Word will automatically separate an index entry from a reference with a period and space. In order to avoid the period and surround the reference with parentheses (as is appropriate for third level entries), you have to put the reference as entry text and make the \t switch empty.

Unfortunately the last four forms in the above table have an extraneous period (presented here in red in protest) that is not prescribed by the *Chicago Manual of Style* (which specifies no punctuation). This seems to be a function of the \t switch which in other instances causes a period to separate the index entry from the cross-reference. The choice Word seems to be offering us is (1) a page number separated by a comma or (2) a cross-reference separated by a period. Given that we do not want a page number, we are stuck with the period. The last form is recommended as better than the penultimate form, because the period after the entry seems less onerous than if it were after the reference. [Dontcha just love Word? Why didn't they give us another switch to control the separator?]

Alphabetizing

Word's sorting algorithm is simplistic and can have less than satisfactory results. It is primarily an ASCII sort in which case and font are ignored. It is possible to override Word's sort order for individual entries by including the text as you want it sorted.

Revision: 8/17/2010 Page 6 of 15

Syntax:

```
Only main heading { XE "mainheading; text to force sort" }

Second level { XE "main; text to force sort: subentry; text to force sort" }

Third level { XE "main; sort text: sub; sort text: sub-subentry; text to force sort" }

Examples:
Built-in sort { XE "Alfonso IV" }

Override sort { XE "Alfonso IV; Alfonso 4" }

Built-in sort { XE "French government: First Empire" }

Override sort { XE "French government: First Empire; 1 empire" }
```

The ASCII order can be found at: http://www.cogz.com/help/ascii_order_chart.htm

Word places symbols, such as @, at the beginning of the index. If you selected an index format that includes headings for alphabetic groups, the symbols are grouped under the # (number sign) heading.

In order to force the *See also* cross-reference to the position of last subentry under its main heading, use an index entry field like: { XE "main: See also reference; ZZ" }

Special characters in index entry text

If you need to include a colon in an index entry text, "escape" it by preceding it with a backslash (like "Luke 9/:21").

If you want to use a symbol, such as @, in the index entry text, type ";#" (semicolon followed by the number sign) immediately following the symbol.

Place index entry (XE) field codes

The XE field has a hidden text format, which means it is invisible under normal conditions.

Place XE field codes with the Mark Index Entry dialog box, which can be opened with [Alt+Shift+X]. You could also insert each field code manually with menu <u>Insert, Field</u> or [Ctrl+F9].

When pasting text into an XE field code, be careful of the text formatting as it can affect the results of the index.

When the index entry must reference a range of pages, first insert a bookmark for the paragraphs, then name the bookmark in the XE field.

Revision: 8/17/2010 Page 7 of 15



To include a third-level entry, type the subentry text followed by a colon (:) and then type the text of the third-level entry.

Refer to the table in the Cross-reference section. When you need to create an entry with a cross-reference and an empty \t switch, type the reference in the Subentry field, select the Cross-reference option button, and clear the reference field.

You can remove XE field codes that are extraneous. You can edit the field codes to adjust the text of the index entry. To remove all XE field codes:

```
Dim fld As Field
For each fld in ActiveDocument.Fields
If fld.Type = wdFieldIndexEntry Then fld.Delete
Next
```

XE field code switches

Switch	Use
\b	Applies bold formatting to the entry's page number. The field { XE "Highlighting text" \b } displays the entry as "Highlighting text, 23" in the index. The switch removes bold formatting if the index style for the entry is bold.
\f "type"	Used to scope indexes. Defines an index entry <i>type</i> which can be used to assign index entries to one of several indexes. Allows you to create multiple indexes based on the same set of XE fields, with each index containing only one <i>type</i> of index entry. This is used in conjunction with the Index field's \f switch.
	Example: The index entry for the field $\{ XE "Selecting Text" \ f "a" \} $ is included only in an index inserted by the field $\{ INDEX \ f "a" \}.$
\i	Makes the entry's page number italic. The field { XE "Finding text" \i } displays the entry as "Finding text, 23" in the index. The switch removes the italic formatting if the index style for the entry is italic.

Switch	Use
\r bookmark	Inserts as the entry's page number the range of pages marked by the specified bookmark. The field { XE "Selecting text" \r SelectingText } displays the entry as "Selecting text, 20–25" in the index.
\t "text"	Inserts the text in place of a page number. Enclose the text in quotation marks. The field { XE "Highlighting" \t "See Selecting" } displays the entry "Highlighting. See Selecting" in the index.
\y	Specifies that the subsequent text defines the Yomi (first phonetic character for sorting indexes) for the index entry. Note: This switch can be used only if you have at least one East Asian language enabled.

Concordance file

A concordance file is used to automatically create index entry fields in the document to be indexed. It is especially useful for indexing more than one document.

However, the results of a concordance file are almost identical to the results of a text search. If using one gives you many page numbers per index entry, you should probably not use it.

A concordance file is a list of words to include in an index. The file consists of a two column table. In column one is the text you want Word to search for and "mark" as an index entry (i.e., insert an XE field code). The second column is the text of the index entry. A subentry is indicated by main entry text followed by a colon and the subentry text; e.g., main:sub.

Examples:

Concordance Right Column	XE field code
blog	{ XE "blog" } note the bracketing of the text with vertical double quotes
cat:food	{ XE "cat:food" }
blog \t "See WordPress"	{ XE "blog \t "See WordPress"" } this syntax won't work, different double quote marks
blog" \t "See WordPress	{ XE "blog" \t "See WordPress" } this syntax doesn't work, even though it looks like it should

There are a number of "features" to keep in mind when working with a concordance file:

- Only the first occurrence of an entry in each paragraph is "marked."
- The process of using a concordance file is case sensitive, so you may need more than one row to handle separate instances of lowercase, uppercase, and title case text.
- Does not match words with apostrophes.
- Does not match properly on phrases with multiple double quote marks.
- Cannot be used for cross-references. In fact, it is totally inappropriate because the
 concordance file is meant to create multiple XE fields, one per match on the left column text
 while only one is necessary for a cross-reference (in fact, more than one will cause duplicate
 entries in the index).
- You can apply text formatting like bold, italic, or underline to the text in the second column.

- You can have more than one row with the same left column value, but different right column values. This lets you create two different XE fields for the same source text.
- It may be that the file matches on a string, not a whole word. This was reported happening to "words" like K.1, K.12, and K.127: the occurrence of "K.127" in the document got three XE fields, one each for the three words. It may be that the period in the word caused a problem.

In order to match all the to-be-indexed words, implied and explicit, be sure to have rows for the left column word variations: title case, lowercase, singular, plural, current tense, past tense, etc.

Desk check the file carefully before using it. Be sure a colon separates level entries (and not a semicolon).

Apply the concordance file before you place the index: On the Index dialog box use the [AutoMark] button to start a wizard to select the file and apply it. If no XE fields are created, there will be a message to that effect, otherwise you will see nothing, however in the status bar is a message like "714 index entries marked." You place the index separately.

Macro to apply concordance file, as recorded:

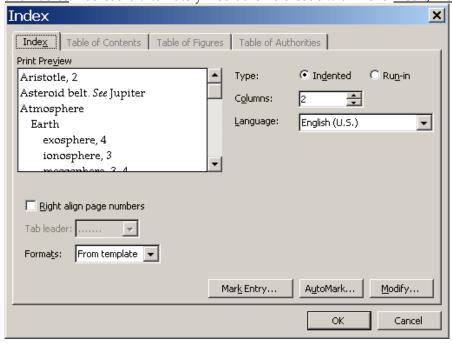
```
ActiveWindow.ActivePane.View.ShowAll = True

ActiveDocument.Indexes.AutoMarkEntries ConcordanceFileName:= _

"C:\Data\CMS\Index Concordance.doc"
```

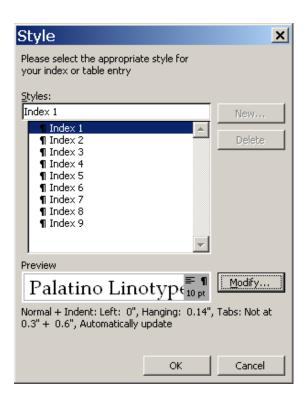
Place index

Place INDEX field code with the Index dialog box opened with menu <u>Insert, Reference, Index and Tables</u>. You could alternately insert the field code with menu <u>Insert, Field</u>.



The built-in formats vary by the use of index headings and the font of the index entries. The [Mark Entry] control opens the Mark Index Entry dialog box. The [Modify] control opens a Style dialog box which you can use to change the style formats.

Revision: 8/17/2010 Page 10 of 15



INDEX field code switches

Switch	Use
\b bookmark	Used to scope indexes. Builds an index for the portion of the document marked by the specified bookmark. The field { INDEX \b Select } builds an index for the portion of the document marked by the bookmark "Select."
\c columns	Creates an index with more than one column on a page. The default value is 1, the maximum value is 4.
\d "separators"	Used with the \s switch, specifies the characters (up to five) that separate sequence numbers and page numbers. The field { INDEX \s chapter \d ":" } displays page numbers in the format "2:14." Enclose the characters in quotation marks. A hyphen (-) is used if you omit the \d switch. Word-wrapping is better served if you use a non-breaking hyphen.
\e "separators"	Specifies the characters (up to five) that <u>separate an index entry and its page number</u> . The { INDEX \e "; " } field displays a result such as "Inserting text; 3" in the index. Enclose the characters in quotation marks. A comma and space (,) are used if you omit the \e switch. Use a tab character by inserting it with [Shift+Tab]; be sure to set the tab in the Index style.
\f "type"	Used to scope indexes, especially when more than one index is used. Creates an index composed only of index entries with the specified type. The index generated by { INDEX \f "a" } includes only entries marked with XE fields having type "a": such as { XE "Selecting Text" \f "a" }. If the INDEX field does not have this switch, all the XEs are included regardless of any type they may have.
\g "separators"	Specifies the characters (up to five) that <u>separate a range of pages</u> . Enclose the characters in quotation marks. The default is an en dash (–). The field { INDEX \g " to " } displays page ranges as "Finding text, 3 to 4"; this is well suited when using the \s switch and separating sequence number from page number with a hyphen.

Page 11 of 15

Revision: 8/17/2010

Switch	Use
\h ''heading"	Places headings between alphabetic groups of entries. The field { INDEX \h " $-A-$ " } displays the appropriate letter before each alphabetic group in the index. Enclose the text in quotation marks. To insert a blank line between groups, use empty quotation marks: \h "". The heading is formatted with the Index Heading style.
\k "separators"	Specifies the characters that <u>separate an index entry and its cross-reference</u> . The { INDEX \k ": " } field displays a result such as "Inserting text: See Editing" in the index. Enclose the characters in quotation marks. A period and space (.) are used if you omit the \k switch.
\1 "separators"	Specifies the characters that <u>separate multiple-page references</u> . The default characters are a comma and a space (,). You can use up to five characters, which must be enclosed in quotation marks. The field { INDEX $\1$ " or " } displays entries such as "Inserting text, 23 or 45 or 66" in the index.
\p range	Used to scope indexes. Compiles an index for the specified letters. The field { INDEX \p a-m } generates an index for only the letters A through M. To include entries that begin with characters other than letters, use an exclamation point (!). The index generated by { INDEX \p !-t } includes any special characters, as well as the letters A through T.
\r	Runs subentries into the same line as the main entry. Colons (:) separate main entries from subentries; semicolons (;) separate subentries. The field { INDEX \r } displays entries such as "Text: inserting 5, 9; selecting 2; deleting 15". When this switch is not used, subentries are indented.
\s	When followed by a sequence name (SEQ field), includes the sequence value with the page number. Use the \d switch to specify a separator character other than the default, which is a hyphen (-). Note: when using SEQ values with page numbers, it may look better to separate a range of numbers with a word, for example: 9-2 to 9-6.
\y	Enables the use of Yomi text for index entries.
\z	Defines the language ID that Microsoft Word uses to generate the index. When omitted the language is English.

Reasons not to use chapter numbers in page numbering (\s switch):

There is no chapter number for footnotes.

Styling index entries

By default, entries in the index have styles like Index 1, Index 2, and Index 3. If you want to correct paragraph formatting in the finished index, the best way to do so is by editing the styles, then regenerating the index. The most likely formats to change are the left indention and the hanging indent.

If word wrapping is done incorrectly, edit the associated XE field to use non-breaking spaces and hyphens.

Process

Index design process

1. List candidate terms. Don't labor over this.

- 2. Start a 2-column design table with index entries in the left column and, in the right column, the source term (word, phrase, section, symbol, figure) whose page number is in the index entry.
- 3. Begin populating the table with candidate terms focusing on the actual index entries. It is not necessary to record the values in the right column at the beginning. Reach for an alternate view of the document's contents.
- 4. Review the table for internal consistency. For a cross-reference, is there an index entry for the *see* term? If there is more than one index entry for the same subject, does one have a *see* (*under*) cross-reference?
- 5. Compare the table against the list of candidate terms to ensure all desired terms are in the table.
- 6. Review the index entries for completeness. You may want to compare the document table of contents, key chapters, and figures to the index design.
- 7. Review the index entries to ensure each has at least one source term.
- 8. Review the index entries for conformance to the syntax (of *Chicago Manual of Style*).
- 9. Design the layout and styles.

Index development process

You may have index entries for one or more of the following types:

- a. Text strings with page numbers. Field codes for these may be handled by a concordance file (not recommended). If a concordance file is not used, field codes for these must be entered manually at the location where the subject exists.
- b. Sections with page numbers. Field codes for these must be entered manually at the location where the subject exists and refer to bookmarks, which must be created first.
- c. Images or symbols with page numbers. Field codes for these must be entered manually at the location where the subject exists.
- d. Cross-references. Field codes for these must be entered manually at the end of the document.

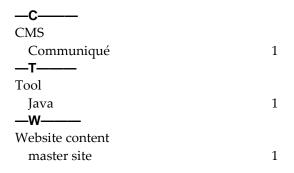
The index development process is iterative so that you can verify each element of the index before finalizing it. At each step compare the index against the design document, correct all errors, regenerate the index, and verify it again. When you verify the index, note where page ranges would look better than a consecutive series of page numbers; these are handled with bookmarks like the (b) entries.

- 1. Insert the INDEX field in the document and save it.
- 2. Create the XE fields for the (d) entries. These should be placed at the end of the document but before the actual index. You might place a few at a time in order to make sure what you are doing is correct. Verify the index entries: generate the index, print it, and compare it against the design. If there are errors, correct and reverify. Save the document.
- 3. Create the XE fields for the (a) entries. You can place each one manually or use a concordance file (not recommended).
 - The following steps apply to the use of a concordance file (CF).
 - 3.1 Sort the CF table by (1) right column and (2) left column. Compare this against the design table for completeness and accuracy.

Revision: 8/17/2010 Page 13 of 15

- 3.2. Iteratively apply the CF to the text document, generate the index, print and review the index against the design. DO NOT SAVE the document unless you are working with a copy or can recreate it.
- 3.3 Make changes to either or both of the CF and the document in order to correct errors in the index.
- 3.4 Repeat steps 3.2–3.3 until you are satisfied with the index. Save the document.
- 4. Create the XE field codes for the (b) entries.
 - 4.1 In the document insert bookmarks to correspond with the sections that will be reflected in the index. Save the document.
 - 4.2 Create the XE field codes. Verify them by generating the index and comparing it to the design. Save the document.
- 5. Create the XE field codes for the (c) entries. Verify them and save the document.

An example follows. Note that the index is bracketed by section breaks.



Revision: 8/17/2010 Page 14 of 15

Revision: 8/17/2010 C:\Data\Jobs and Job Search\Nokia 2008\CMS Operations Guide\Index Reference.doc Page 15 of 15