

Gigaset

Interactive Info Center

XHTML Gigaset Profile 2.0

User Agent Specification

Version 1.1.6

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1 Introduction

1.1 Purpose of the Document

The purpose of this document is to describe the implementation of the XHTML-Gigaset Profile for the Interactive Info Center in the different Gigaset systems.

1.2 Validity of the document

This document is valid for the user interface of the Interactive Info Center.

2 XHTML Reference

2.1 Overview

The XHTML-GP (XHTML Gigaset Profile) defines a subset of the standardized XHTML-MP (XHTML Mobile Profile).

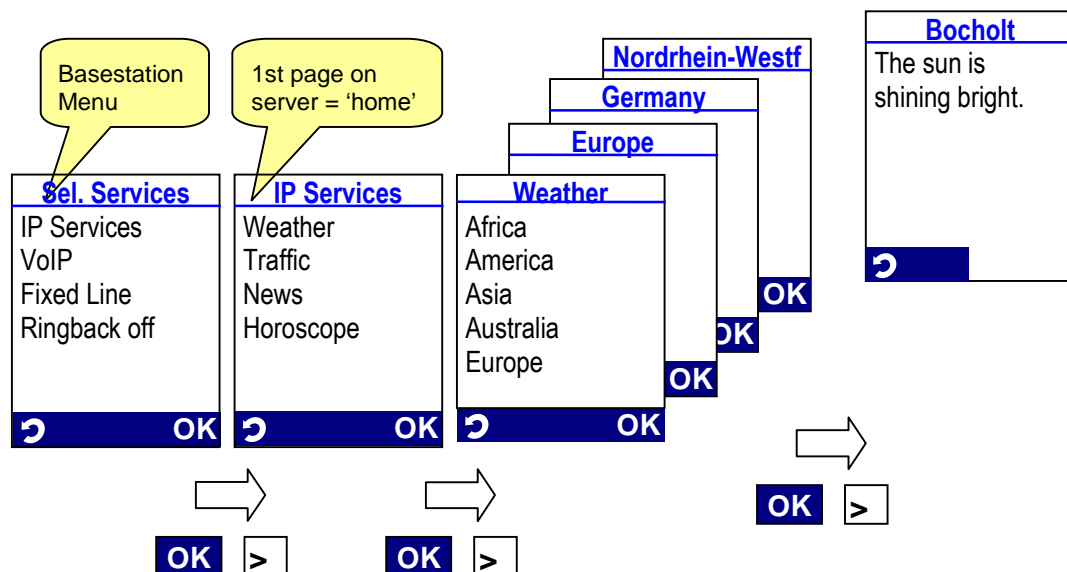
2.2 General principles

2.2.1 Basics

The general user interface principles of the device are defined by the corresponding user interface specification of the handset and the basestation. This document describes only the behavior related to the interpretation of XHTML-GP pages.

2.2.2 Navigation

Navigating forwards¹:



¹ The exact appearance of headlines, softkeys etc. is defined by the user interface specification (BOF document) of the handset and the base station

Navigating backwards:

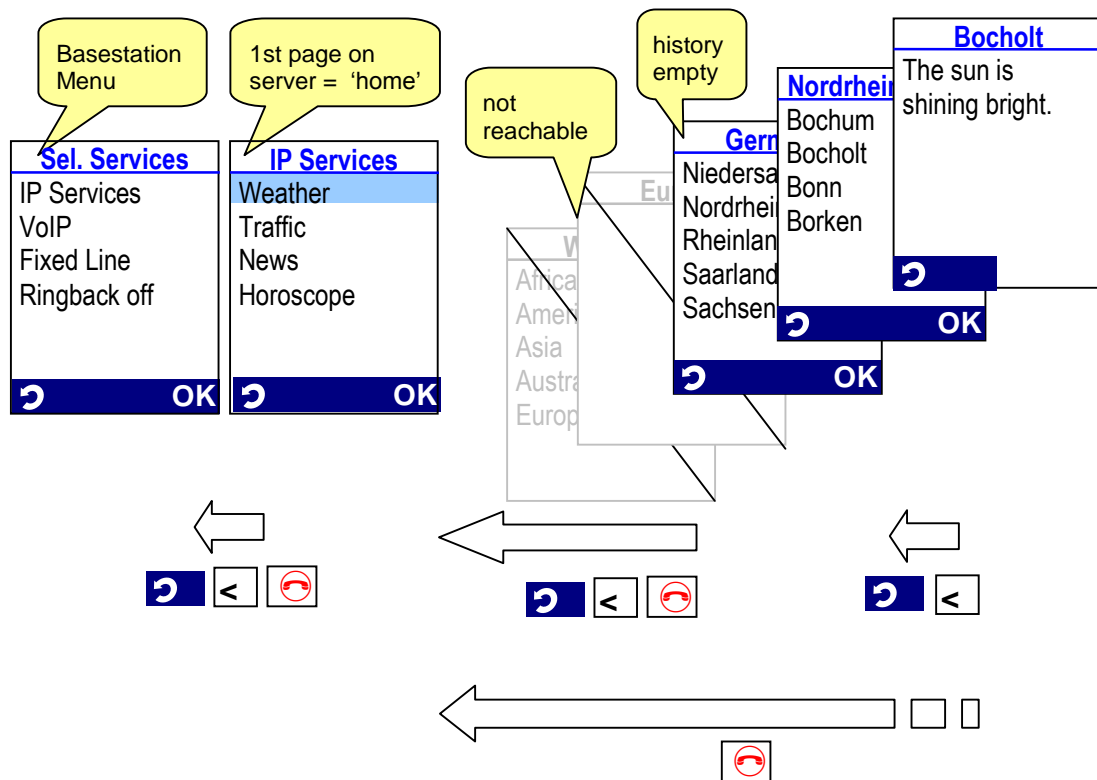
Every visited link is stored in a history list.

The End-Key always jumps to the "home page" from any link.

If a previous page is available in the history, both, the left navikey as well as the left softkey, point to the previous page.

If the previous page is not available (due to lack of memory), both, the left navikey as well as the left softkey, point to the "home page".

Example with # of history entries = 2:



2.3 Info Displays²

When the first tag inside the body is a <p> tag, the display type is set to “Information Display”. The content of this display type is scrollable without using the wrap around principle.

<title>

Due to presentation on handset display (same as menu header) only one line of text can be used, longer title text longer will be right-cut with three dots (see Example 3). The headline is always presented in the first visible display line, it is not scrollable.

If the title is empty, no headline is displayed.

Example 1

Title as headline
This page has a title that is shown as a headline. It is bold, centered and divided by a horizontal line.
Back

```
<head>
  <title>Title as headline</title>
</head>
<body>
  <p>This page has a title that is shown as...</p>
</body>
```

Example 2

This is a page that has an empty title and so no headline is displayed, no bold, not centered, no vertical line, just plain text.
Back

```
<head>
  <title></title>
</head>
<body>
  <p>This is a page that has an empty...</p>
</body>
```

Example 3

Very long headl...
Headlines that are too long for one line will be cutted at the right end, 3 dots will show this abbreviation.
Back

```
<head>
  <title>Very long headline, will be cut...</title>
</head>
<body>
  <p>Headlines that are too long for one ...</p>
</body>
```

² The exact appearance of headlines, softkeys etc. is defined by the user interface specification (BOF document) of the handset and the base station

<p>

Paragraphs start in general in a new display line. If the text is too long for the line, it will be wrapped to the next line. Blanks are trimmed left and right, so all lines start directly with characters. No extra space is added between two paragraphs.

Example 4

Long words
Long words like this supercalifragilisticexpialidocious will be wrapped, no syllable division.
[Back](#)

```
<body>
  <p>Long words like this
supercalifragilisticexpialidocious will be
wrapped, no syllable division.</p>
</body>
```

Example 5

Alignments
Left aligned is default.
Centered is also possible.
And even right aligned text works.
[Back](#)

```
<body>
<p>Left aligned is default.</p>
<p style="text-align:center">Centered is also
possible.</p>
<p style="text-align:right">And even right
aligned text works.</p>
</body>
```

Example 6

Bold
All paragraphs can be shown with a bold font.
Default setting is non bold.
[Back](#)

```
<body>
<p style="font-weight:bold">All paragraphs can be
shown with a bold font.</p>
<p>Default setting is non bold.</p>
</body>
```

Example 7

Blink
All paragraphs can blink.
Default setting is not blinking.
[Back](#)

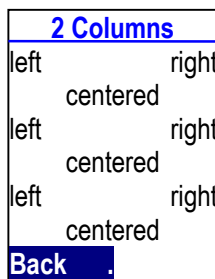
```
<body>
<p style="text-decoration:blink">All paragraphs
can blink.</p>
<p>Default setting is not blinking.</p>
</body>
```

blinking

Columns can be designed with the use of the `float` attribute. A two columns layout can be designed by using two subsequent paragraphs according to the following rules:

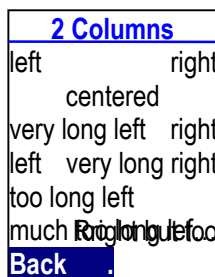
- The first paragraph contains the attribute `style="float:left"`; it will be presented left aligned in one new single line. If the text is too long for the line, it will be cut at the right end. No line break is added after this paragraph.
- The second paragraph contains the attribute `style="float:right"`; it will be presented right aligned. If the text is too long for the line, it will be cut at the right end. A line break is added after this paragraph.
- The columns have no borders, if the texts in the columns are too long, they will overlap each other (see Example 9).
- Collision avoidance: If a paragraph contains the attribute `style="float:..."`, any `style="text-align:..."` attribute is ignored.
- The values of the parameter `width` are ignored. This parameter is may be specified optionally for compatibility reasons with other browsers.

Example 8



```
<body>
  <p style="float:left; width:50%;">left</p>
  <p style="float:right; width:49%;
text-align:right">right</p>
  <p style="text-align:center">centered</p>
  ...
</body>
```

Example 9

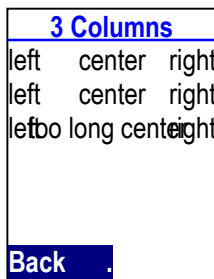


```
<body>
  ...
  <p style="float:left; width:50%;">much too long
text left</p>
  <p style="float:right; width:49%;
text-align:right">Right but too long</p>
</body>
```

A three columns layout could be designed with these rules

- The first paragraph contains the attribute `style="float:left"`; it will be presented left aligned in one new single line. If the text is too long for the line, it will be cut at the right end. No line break is added after this paragraph.
- The second paragraph, that contains the attribute `style="margin:..."`, will be presented centred. If the text is too long for the line, it will be cut at the right end. No line break is added.
- The third paragraph contains the attribute `style="float:right"`; it will be presented right aligned. If the text is too long for the line, it will be cut at the right end. A line break is added after this paragraph.
- The columns have no borders, if the texts in the columns are too long, they will overlap each other
- Collision avoidance: If a paragraph contains one of the attributes `style="float:..."` or `style="margin:..."`, any `style="text-align:..."` attribute is ignored.

Example 10



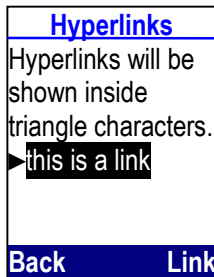
```
<body>  
  <p style="float:left; width:50%;">left</p>  
  <p style="margin:20%; text-align:center">center</p>  
  <p style="float:right; width:49%; text-align:right">right</p>  
  ...  
</body>
```

<a>

The presence of an <a> tag is indicated by a preceding triangle character with a width of 5 pixels. Selected links are presented inverted.

A link might always start in a new line if this simplifies implementation.

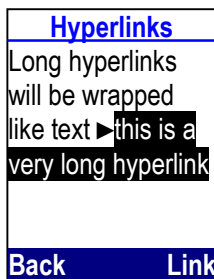
Example 11



```
<body>
  <p>Hyperlinks will be shown inside triangle
  characters.
  <a href="examples.html">this is a link</a>
</p>
</body>
```

A selected link is always presented completely, i.e. when scrolling over a link that is longer than one line, the scrolling is continued until the complete link is visible. If the link exceeds the number of available display lines, only the first part of the link is presented.

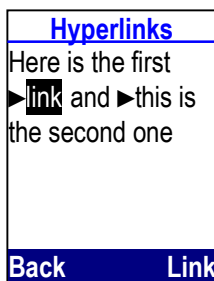
Example 12



```
<body>
  <p>Long hyperlinks will be wrapped like text
  <a href="examples.html">this is a very long
  hyperlink</a>
</p>
</body>
```

If more than one links are visible, the page content is not scrolled up/down, until the first/last visible link is selected.

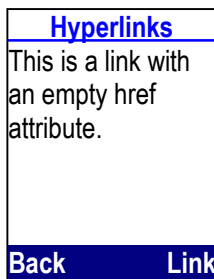
Example 13



```
<body>
  <p>Here is the first
  <a href="hyperlinks_01.html">link</a> and
  <a href="hyperlinks_02.html">this is the
  second one</a>
</p>
</body>
```

If the link contains an empty *href* attribute, then it will not be displayed as hyperlink, but as generic text (thus it cannot be selected anymore and no SK is displayed).

Example 14



```
<body>
  <p>This is a
    <a href="">link</a>
    with an empty href attribute.
  </p>
</body>
```

Telephony functions

If the `<a>` tag refers to a `wtai` URL, the page will be presented as follows:

If the link refers to the function "make call" (`wtai://wp/mc`), the user can establish a call to the number directly by pressing

- the right softkey
- the SEND key

Activating the telephony function "make call" ends the current session, i.e. the user will not return to the original page.

Example 15

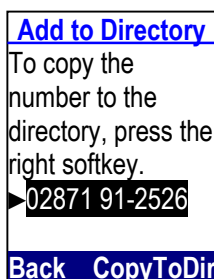


```
<body>
  <p>To make a call, just press the right softkey
    or the send key.
    <a href="wtai://wp/mc;02871912526">
      02871 91-2526</a>
  </p>
</body>
```

If the link refers to the function "add to phonebook" (`wtai://wp/ap`), the user can add the number to the addressbook of the handset by pressing the right softkey.

The user can also establish a call by pressing the SEND key.

Example 16



```
<body>
  <p>To copy the number to the directory, press
    the right softkey.
    <a href="wtai://wp/ap;02871912526">
      02871 91-2526</a>
  </p>
</body>
```

2.4 Menus and Lists³

When the first tag inside the body is a `` tag, the display type is set to "Menu Display".

``

Lists are presented as scrollable menus, where a selection bar indicates an item as selected and a horizontal bar presents the end of the list. When scrolling to the end of the list, a special tone is played. Scrolling down once more selects the first item again (wrap around).

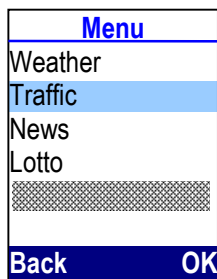
``

List elements that contain hyperlinks can be opened by the right softkey. Items without hyperlinks cannot be opened; no right softkey is available for such entries. The default appearance of the right softkey is shown below (Example 17). Depending on the type of hyperlink, the appearance of the right softkey changes (see Example 15 and Example 16).

All list elements occupy the same number of display lines. The list element that occupies the most display lines determines the number of display lines for each element in the whole list.

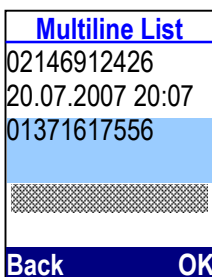
Long texts inside list elements are cut on the right side, no word wrapping.

Example 17



```
<body>
  <ul>
    <li><a href="weater.html">Weather</a></li>
    <li><a href="traffic.html">Traffic</a></li>
    <li><a href="news.html">News</a></li>
    <li><a href="lotto.html">Lotto</a></li>
  </ul>
</body>
```

Example 18



```
<body>
  <ul>
    <li><a href="...">02146912426<br/>
      20.07.2007 20:07</a></li>
    <li><a href="...">01371617556</a></li>
  </ul>
</body>
```

³ The exact appearance and the correct navigation principles are defined by the user interface specification (BOF document) of the handset and the base station

Example 19

Multiline List	
02871912526	
11.07.07	14:17
08972246231	
05965531	
10.07.07	19:16
Back	OK

```
<body>
<ul>
  <li><a href="#"><p>02146912426</p>
    <p style="float:left;width:50%;">20.07.2007</p>
    <p style="float:right;width:25%;
      text-align:right">20:07</p>
  </a></li>
  <li>...</li>
</ul></body>
```

2.5 Forms⁴

When the first tag inside the body is a `<form>` tag, the display type is set to "Multifield Editor".

`<form>`

Only one form on one page is supported.

Inside a form, the following combinations are supported:

- mix of text, editfields, and selection lists plus one submit button
- mix of text and checkboxes plus one submit button
- mix of text and one group of radiobuttons plus one submit button
- one textarea element plus one submit button
- text only plus one submit button

`<input>`

Editfields

Editfields (`type="text"` or `type="password"`) are always preceded and followed by a linebreak.

The font used in editors is always the "normal" font, even if the surrounding paragraph is defined as "bold".

Editfields of `type="password"` are interpreted as `type="text"` (the phone does not cache any inputs).

The active editfield always contains a blinking cursor.

Example 20

Edit	
Name:	James
ZIP code:	456
Back	Search

```
<body>
  <form method="get" action="edit_result.html">
    <p>Name:<input type="text" name="name"
      maxlength="32" /></p>
    <p>ZIP code:<input type="text" inputmode=
      "digits" name="zip" maxlength="5" /></p>
    <input type="submit" value="Search" />
  </form></body>
```

⁴ The exact appearance and the correct navigation principles are defined by the user interface specification (BOF document) of the handset and the base station

Checkboxes

The navikeys up and down are used to set the focus to the checkbox, the right softkey is used to change, i.e. to toggle, the value of the checkbox. The submit button is presented on the left softkey. The left navikey is still used to navigate to the previous page.

A checkbox is always presented right aligned. Long texts before a checkbox are cut at the right hand side of the display. The checkbox pictogram overlaps the text.

A checkbox is always followed by a line break.

A checkbox must not be mixed with editfields, radiobuttons or selection lists.

Checkboxes allow n-of-m-selections.

Example 21

Checkbox	
Check 1	<input checked="" type="checkbox"/>
Check 2	<input type="checkbox"/>
Check 3 with long text	<input type="checkbox"/>
Send OK	

```
<body>
  <form method="get" action="checkbox_result.html">
    <p>Check 1<input type="checkbox" name="C1"
      checked="checked"/>
      Check 2<input type="checkbox" name="C2" />
      Check 3 with long text<input type="checkbox"
name="C3"
      checked="checked"/></p>
    <input type="submit" value="Send" />
  </form>
</body>
```

Radiobuttons

Radiobuttons have the same behavior and appearance as checkboxes. Radiobuttons allow 1-of-n-selections only. Long texts before radiobuttons are cut at the right hand side of the display. The radiobutton pictogram overlaps the text.

Example 22

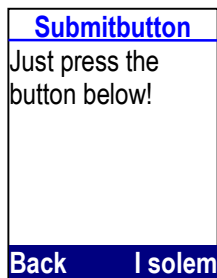
Radiobutton	
Radio 1	<input type="radio"/>
Radio 2	<input checked="" type="radio"/>
Radio 3 with long text	<input type="radio"/>
Send OK	

```
<body>
  <form method="get" action="radio_result.html">
    <p>Radio 1<input type="radio" name="r1" value="1"/>
      Radio 2<input type="radio" name="r1" value="2"
checked="checked" />
      Radio 3 with long text<input type="radio"
name="r1" value="3"/>
    </p>
    <input type="submit" value="Send" />
  </form>
</body>
```


Submit button

The submit button (`type="submit"`) is presented by the right softkey, only one submit button is supported inside a form. The maximum text length is limited to the softkey width, if the text is too long, it is cut on the right hand side. The left softkey is reserved for context sensitive usage (e.g. "backspace", "escape", etc.)

Example 23



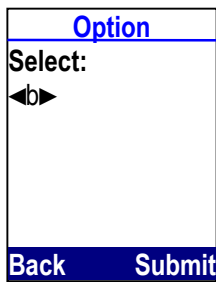
```
<body>
  <form method="get" action="submit_result.html">
    <p>Just press the button below!</p>
    <input type="submit" value=
      "I solemnly swear that I am up to no good" />
  </form>
</body>
```

<select> / <option>

The navikeys up and down are used to set the focus to the selection list, the navikeys left and right are used to select an option, i.e. to change the value of the selection list.

The selected option field is presented in a separated line inside a pair of triangles. Unselected option fields are presented without triangles.

Example 24



Option

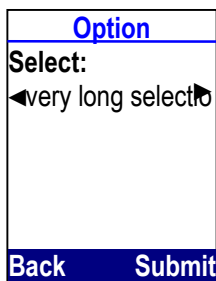
Select:
◀b▶

Back Submit

```
<body>
  <form method="get" action="select_result.html">
    <p>Select: <select name="s1">
      <option value="1">a</option>
      <option value="2" selected="selected">b</option>
      <option value="3">c</option></select></p>
    <input type="submit" value="Submit" />
  </form>
</body>
```

Long texts in option field are cut at the right hand side of the display. The closing triangle pictogram overlaps the text.

Example 25



Option

Select:
◀very long selectio▶

Back Submit

```
<body>
  <form method="get" action="select_result.html">
    <p>Select: <select name="s1">
      <option value="1">a</option>
      <option value="2" selected="selected">very long
      selection</option>
    <input type="submit" value="Submit" />
  </form>
</body>
```

<textarea>

The textarea is presented as a full screen editor, i.e. the editor is displayed over the whole display. A textarea must not be mixed with any other elements than one submit button. The submit button is presented as a menu entry in the "Options" menu, which can be activated by the right softkey.

Example 26

Textarea	
I solemnly swear that I am up to	
Back	Options

```
<body>  
  <form action="textarea.htm">  
    <textarea name="input"></textarea>  
    <input type="submit" value="Send" />  
  </form>  
</body>
```

3 HTTP reference

3.1 Digest Authentication

In case of a digest authentication (the server responds with the “401” response code providing the authentication realm and a randomly-generated, single-use value called a [nonce](#)), the following two scenarios are possible:

- the Interactive Info Center already has a credential set stored on the device

If the requesting server is known by the Interactive Info Center, it might already know a valid credential set. In this case, the authentication process is performed automatically and completely hidden from the user.

- no credential set is available on the Interactive Info Center

If the requesting server is unknown, the Interactive Info Center presents the authentication realm (typically a description of the computer or system being accessed) to the user and prompts for a user name and password. The user may decide to cancel at this point.

4 Device Capabilities

4.1 Handsets

4.1.1 Display Capabilities

The Gigaset handsets provide a graphical display and uses a proportional font, therefore the number of characters per line varies depending on the characters used. Bold characters (bold font) are of the same width as normal characters.

	Product name ¹	SL37S45C47	SL55S67	S67IP		
1	Lines	6	8	8		
2	Pixels per line	128	128	128		
3	Pixels per softkey	59	59	59		

¹ as specified in User Agent String

4.1.2 Fonts and Character sets

	Product name ¹	SL37S45C47	SL55S67	S67IP		
1	Normal Fonts	14	14	14		
2	Bold Fonts	14	14	14		
3	Character sets ISO 8859-...	-1	-1	-1		

¹ as specified in User Agent String

4.1.3 Form capabilities

	Product name ¹	SL37S45C47	SL55S67	S67IP		
1	<input type="text"> range for attribute maxlength	1..32	1..32	1..32		
2	<input type="submit"> max. no. of chars for attribute value	8	8	8		
3	Max. sum for rows 1 + 2	< 39	< 39	< 39		

¹ as specified in User Agent String

4.2 Base Stations

	Product name¹	C450IP C455IP	S670IP S675IP			
1	Maximum page length (pure text content after parsing)	640	640			
2	# of history entries	30	30			
3	Max. length of <p> tag	640	640			
4	Max. length URL	1000	1000			
5	Authentication Name length	25	25			
6	Authentication Password length	25	25			

Annex

A. Fonts

All characters are coded in UTF-8. Supported character set are listed below.

A.1. Basic Latin

Table 1: Basic Latin

Character	Width	Character	Width	Character	Width
	5	@	9	`	6
!	6	A	7	a	7
“	5	B	7	b	7
#	7	C	7	c	7
\$	7	D	7	d	7
%	10	E	6	e	7
&	10	F	6	f	6
'	5	G	7	g	7
(5	H	7	h	7
)	5	I	3	i	4
*	7	J	6	j	5
+	7	K	8	k	7
,	5	L	6	l	3
-	7	M	10	m	11
.	5	N	8	n	7
/	7	O	7	o	7
0	7	P	7	p	7
1	7	Q	7	q	7
2	7	R	7	r	6
3	7	S	7	s	7
4	7	T	9	t	6
5	7	U	7	u	7
6	7	V	8	v	8
7	7	W	10	w	10
8	7	X	8	x	7
9	7	Y	8	y	7
:	5	Z	7	z	6
;	5	[5	{	6
<	5	\	7		4
=	7]	5	}	6
>	5	^	7	~	7
?	7	_	6		

A.2. Latin 1 Supplement

Table 2: Latin 1 Supplement / upper range of ISO 8859-1

Character	Width	Character	Width	Character	Width
		À	7	à	7
ı	6	Á	7	á	7
ç	6	Â	7	â	7
£	7	Ã	7	ã	7
¤	7	Ä	7	ä	7
¥	8	Å	7	å	7
ı	3	Æ	11	æ	12
§	7	Ç	7	ç	7
¨	7	È	6	è	7
©	10	É	6	é	7
ª	6	Ê	6	ê	7
«	7	Ë	6	ë	7
¬	6	Ì	3	ì	4
	7	Í	3	í	4
®	10	Î	3	î	4
¯	5	Ï	3	ï	4
°	6	Ð	7	ð	7
±	7	Ñ	8	ñ	7
²	6	Ò	7	ò	7
³	6	Ó	7	ó	7
´	7	Ô	7	ô	7
µ	7	Õ	7	õ	7
¶	10	Ö	7	ö	7
·	4	×	8	÷	7
¸	4	Ø	8	ø	7
¹	6	Ù	7	ù	7
º	7	Ú	7	ú	7
»	7	Û	7	û	7
¼	8	Ü	7	ü	7
½	8	Ý	8	ý	7
¾	8	ß	7	ß	7
¿	7	ß	7	ÿ	7

A.3. Special Characters

Table 3: Special Characters

Character	Width	Character	Width	Character	Width
€	8				

B. Bibliography

[1] <http://www.w3.org/TR/xhtml2>