



## Interactive TV Content Interface Specification (iCI)

### Abstract

This document covers the specification of the Content interface iCI and the format of the URLs needed to access a client implementing this interface.

### Version

Version	Description	Author	Date
1.6	Update to create a new menu rowtype for Menus containing rollovers	Francis Cook	29/06/05
1.5	Update to tidy up deprecated types and remove: i) Global Navigation from the menus, ii) LinkType's @style.	Francis Cook Richard Tribe Greg Mills	06/05/05
1.4	Update to the available actions – finalised candidate iCI type spec	Francis Cook Tom Rees-Herdman Richard Tribe	11/10/04
1.3	Update to table of actions specifiable in the MIME headers	Tom Rees-Herdman	12/08/04
1.2	Huge amounts Re-formatting and addition of the URL specification and content location specifications	Francis Cook	09/08/04
1.1	Update to spec and some re-formatting	Francis Cook	01/07/04
1.0	Initial Draft	Tom Rees-Herdman	

## Contents

<b>1</b>	<b>ACCESSING THE C3P CONTENT INTERFACE.....</b>	<b>4</b>
1.1	Servlet URL.....	4
1.2	Valid JIP actions.....	5
<b>2</b>	<b>CONTENT SCHEMA.....</b>	<b>6</b>
2.1	iCI.xsd.....	6
2.1.1	element AbstractItem.....	6
2.1.2	element Image.....	7
2.1.3	element SceneAttributes.....	7
2.1.4	element SceneAttributes/Segment.....	8
2.1.5	element SceneAttributes/Subsegment.....	8
2.1.6	element SceneAttributes/Priority.....	9
2.1.7	element Text.....	9
2.1.8	element Text/LineBreak.....	9
2.1.9	element Text/Style.....	10
2.1.10	element TextlinePlain.....	10
2.1.11	element TextPlain.....	10
2.1.12	element TextPlain/LineBreak.....	11
2.1.13	group SceneData.....	11
2.1.14	complexType ContentPoolType.....	12
2.1.15	complexType GlobalType.....	12
2.1.16	complexType ImageType.....	13
2.1.17	complexType ItemType.....	13
2.1.18	complexType LinkType.....	13
2.1.19	complexType MenuItemType.....	14
2.1.20	element MenuItemType/Label.....	14
2.1.21	element MenuItemType/Link.....	15
2.1.22	complexType PageType.....	15
2.1.23	complexType PopUpType.....	15
2.1.24	complexType RolloverMenuItemType.....	16
2.1.25	element RolloverMenuItemType/Label.....	16
2.1.26	element RolloverMenuItemType/Link.....	16
2.1.27	element RolloverMenuItemType/RolloverImage.....	17
2.1.28	element RolloverMenuItemType/RolloverText.....	17
2.1.29	element RolloverMenuItemType/RolloverLink.....	17
2.1.30	complexType SceneType.....	18
2.1.31	complexType TableCellType.....	18
2.1.32	complexType TableRowType.....	19
2.1.33	element TableRowType/Cell.....	19
2.1.34	complexType TableType.....	20
2.1.35	element TableType/Page.....	20
2.1.36	element TableType/Page/PageTitle.....	21
2.1.37	element TableType/Page/Row.....	21
2.1.38	complexType TextEmbeddedType.....	21
2.1.39	element TextEmbeddedType/LineBreak.....	22
2.1.40	complexType TextlinePlainType.....	22
2.1.41	complexType TextPlainType.....	23
2.1.42	element TextPlainType/LineBreak.....	23
2.1.43	complexType TextType.....	23
2.1.44	element TextType/LineBreak.....	24
2.1.45	element TextType/Style.....	24
2.1.46	complexType VideoType.....	24

2.1.47	simpleType AlignType .....	25
2.1.48	simpleType coloursEnum_Story .....	25
2.1.49	simpleType coloursEnum_Table .....	25
2.1.50	attributeGroup AlignAttrs .....	26
2.1.51	attributeGroup ColourSpecAttrs .....	26
2.1.52	attributeGroup FontStyleAttrs .....	26
2.1.53	attributeGroup ReferenceAttrs .....	27
<b>2.2</b>	<b>ContentComponents.xsd .....</b>	<b>28</b>
2.2.1	element Body .....	28
2.2.2	element Header .....	29
2.2.3	element ParentScene .....	29
2.2.4	element SiblingScenes .....	29
2.2.5	element SiblingScenes/Previous .....	30
2.2.6	element SiblingScenes/Next .....	30
2.2.7	element Story .....	31
2.2.8	element Story/Page .....	31
2.2.9	element Story/Page/PageTitle .....	32
2.2.10	element StoryTableComposite .....	32
2.2.11	element Table .....	33
2.2.12	element Title .....	33
2.2.13	complexType BodyType .....	34
2.2.14	complexType PageCompositeType .....	34
2.2.15	complexType StoryTableCompositeType .....	35
2.2.16	element StoryTableCompositeType/Page .....	35
<b>3</b>	<b>APPENDICES .....</b>	<b>37</b>
<b>3.1</b>	<b>Appendix A – References .....</b>	<b>37</b>
3.1.1	HTTP Specification: .....	37
3.1.2	MIME Specification: .....	37
<b>3.2</b>	<b>Appendix B – To do / future changes under consideration .....</b>	<b>38</b>
<b>3.3</b>	<b>Appendix C – Template lists .....</b>	<b>39</b>
3.3.1	DSat Templates .....	39
3.3.2	DTT Templates .....	39
3.3.3	DCable Templates .....	39

## Accessing the C3P Content Interface

The interface should be implemented as a servlet, and access to it should be by the URLs of the form shown below. The following tables give the allowed actions.

### Servlet URL

The URL is generally formed as follows:

```
http://<host:port>/<servlet_name>/<provider>/<tid>
```

The provider and tid are supplied by the client provider. The provider must correspond to a known provider id – this is obtained from the operators of C3P. The tid is a string that is preserved as an id for the transaction. This is provided as a mechanism to provide meaningful feedback. For e.g. if a transaction:

```
http://localhost:8080/JIP_Example/ents_t1/245ab5
```

fails, then a response for the transaction can be generated using the tid provided.

There is one special case where the URL takes a different form – the *describe* command. In this case, the Servlet is accessed using HTTP GET, and the URL takes the following form:

```
http://<host:port>/<servlet_name>/<provider>/describe
```

The Servlet will then return a basic XML representation of the contents of the service owned by the given provider; for example:

```
<Service providerId="ents_t1">
  <Scenes>
    <Scene id="sceneA"/>
    <Scene id="sceneB"/>
    <Scene id="sceneC"/>
  </Scenes>
  <Content>
    <ContentPool id="poolA">
      <PoolItem id="itemB"/>
    </ContentPool>
  </Content>
</Service>
```

In all other cases, the URL is as first described and a transaction is POST'ed to the URL. This is a standard POST as described in the HTTP Specification<sup>1</sup>. The transaction contains MIME<sup>2</sup> sections an example of which is shown below:

```
Content-Transfer-Encoding: binary
Content-Type: multipart/form-data; boundary="303roxit"
MIME-Version: 1.0
Date: Mon, 5 Jul 2004 15:33:01 UT

This is a multi-part message in MIME format.

--303roxit

Content-Disposition: form-data; name="sub_part"
Content-Length: 1792
Content-Location: add/scene/t1_sm_text
Content-Transfer-Encoding: binary
Content-Type: application/xml; charset="UTF8"
MIME-Version: 1.0
Date: Mon, 5 Jul 2004 15:33:01 UT

<?xml version="1.0" encoding="UTF-8"?>
```

<sup>1</sup> See Appendix A – References

<sup>2</sup> See Appendix A – References

```

<Scene ...
<!-- ici Content here -->
</Scene>

--303roxit
Content-Disposition: form-data; name="sub_part"
Content-Length: 1774
Content-Location: add/scene/t1_sm_text
Content-Transfer-Encoding: binary
Content-Type: application/xml; charset="UTF8"
MIME-Version: 1.0
Date: Mon, 5 Jul 2004 15:33:01 UT
...

```

The first part ( in bold ) is the start of the MIME content, and informs the receiver that the message is in many parts each separated by a marker specified by boundary. In this example this is "--303roxit". Each Scene in the transaction is then sent as a MIME chunk. It is important to note that with the exception of Content-Location all the MIME headers have their usual meanings and actions.

### Valid JIP actions

The Content-Location field in each chunk determines what is done with each chunk. The Content Location specifies an action and content type together with a template name if required. The legal syntax is as follows:

Action	Content-Location syntax
Add Scene	<b>add/scene/&lt;template&gt;</b> <i>The MIME body will contain a Scene element describing the Scene to be added.</i>
Update Scene	<b>update/scene/&lt;template&gt;</b> <i>The MIME body will contain a Scene element describing the Scene to be updated.</i>
Delete Scene	<b>delete/scene/&lt;scene_name&gt;</b> <i>Unlike add and update, a MIME body is not included for delete commands, as all necessary information can be included in the headers.</i>
Add Content Pool	<b>add/contentpool</b> <i>The MIME body will contain a ContentPool element describing the Content Pool to be added in its entirety.</i>
Update Content Pool	<b>update/contentpool</b> <i>The MIME body will contain a ContentPool element describing the Content Pool to be updated in its entirety – this will in effect replace the existing Content Pool of that name.</i>
Delete Content Pool	<b>delete/contentpool/&lt;pool_name&gt;</b> <i>As for the delete command for Scenes, no MIME body is necessary for delete commands for whole Content Pools.</i>
Add Pool Item(s)	<b>add/poolitems</b> <i>The MIME body will contain a ContentPool element which contains the individual Pool Items to be added.</i>
Update Pool Item(s)	<b>update/poolitems</b> <i>The MIME body will contain a ContentPool element which contains the individual Pool Items to be updated.</i>
Delete Pool Item(s)	<b>delete/poolitems</b> <i>The syntax of this delete command differs from that of Scenes and whole Content Pools because a MIME body is attached in which it is possible to specify more than one Pool Item. The MIME body will contain a ContentPool element which contains the individual Pool Items to be deleted</i>

## Content Schema

### *iCI.xsd*

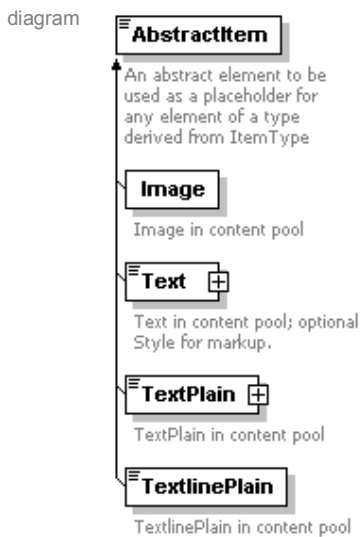
This section details the overall iCI schema from which all content components in the service are built. (This includes complexTypes & derivations and elements for re-use as Content Pool items).

### Schema *iCI.xsd*

schema location: <L:\work\c3pls\schema\iCI.xsd>  
targetNamespace: <http://www.bbc.co.uk/ContentInterface/Content>

Elements	Groups	Complex types	Simple types	Attr. groups
<a href="#">AbstractItem</a>	<a href="#">SceneData</a>	<a href="#">ContentPoolType</a>	<a href="#">AlignType</a>	<a href="#">AlignAttrs</a>
<a href="#">SceneAttributes</a>		<a href="#">GlobalType</a>	<a href="#">coloursEnum_Story</a>	<a href="#">ColourSpecAttrs</a>
<a href="#">Text</a>		<a href="#">ImageType</a>	<a href="#">coloursEnum_Table</a>	<a href="#">FontStyleAttrs</a>
<a href="#">TextlinePlain</a>		<a href="#">ItemType</a>		<a href="#">ReferenceAttrs</a>
<a href="#">TextPlain</a>		<a href="#">LinkType</a>		
		<a href="#">MenuItemType</a>		
		<a href="#">PageType</a>		
		<a href="#">PopUpType</a>		
		<a href="#">RolloverMenuItemType</a>		
		<a href="#">SceneType</a>		
		<a href="#">TableCellType</a>		
		<a href="#">TableRowType</a>		
		<a href="#">TableType</a>		
		<a href="#">TextEmbeddedType</a>		
		<a href="#">TextlinePlainType</a>		
		<a href="#">TextPlainType</a>		
		<a href="#">TextType</a>		
		<a href="#">VideoType</a>		

#### 1.1.1 element AbstractItem



namespace <http://www.bbc.co.uk/ContentInterface/Content>

type [cont:ItemType](#)

used by complexType [ContentPoolType](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
	itemId	xs:token	required			

annotation documentation An abstract element to be used as a placeholder for any element of a type derived from ItemType

```

source <xs:element name="AbstractItem" type="cont:ItemType" abstract="true">
  <xs:annotation>
    <xs:documentation>An abstract element to be used as a placeholder for any
    element of a type derived from ItemType</xs:documentation>
  </xs:annotation>
</xs:element>
    
```

### 1.1.2 element Image



namespace <http://www.bbc.co.uk/ContentInterface/Content>

type extension of [cont:ItemType](#)

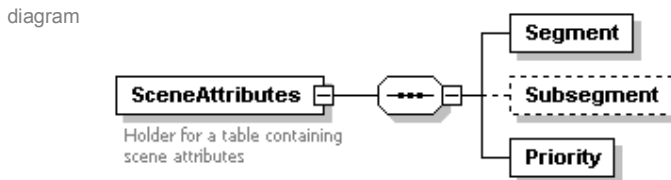
attributes	Name	Type	Use	Default	Fixed	Annotation
	itemId	xs:token	required			
	uri	xs:anyURI	required			

annotation documentation Image in content pool

```

source <xs:element name="Image" substitutionGroup="cont:AbstractItem">
  <xs:annotation>
    <xs:documentation>Image in content pool</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:annotation>
      <xs:documentation>Specifies an image - can be any kind of image, takes a
      URI to say where it is</xs:documentation>
    </xs:annotation>
    <xs:complexContent>
      <xs:extension base="cont:ItemType">
        <xs:attribute name="uri" type="xs:anyURI" use="required"/>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
</xs:element>
    
```

### 1.1.3 element SceneAttributes



namespace <http://www.bbc.co.uk/ContentInterface/Content>

children [Segment](#) [Subsegment](#) [Priority](#)

used by group [SceneData](#)

annotation documentation Holder for a table containing scene attributes

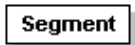
```

source <xs:element name="SceneAttributes">
  <xs:annotation>
    <xs:documentation>Holder for a table containing scene
attributes</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:sequence>
      <xs:element name="Segment">
        <xs:complexType>
          <xs:attribute name="id" type="xs:NMTOKEN" use="required"/>
        </xs:complexType>
      </xs:element>
      <xs:element name="Subsegment" minOccurs="0">
        <xs:complexType>
          <xs:attribute name="id" type="xs:NMTOKEN" use="required"/>
        </xs:complexType>
      </xs:element>
      <xs:element name="Priority">
        <xs:complexType>
          <xs:attribute name="level" type="xs:integer" use="required"/>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

### 1.1.4 element SceneAttributes/Segment

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

attributes	Name	Type	Use	Default	Fixed	Annotation
	id	xs:NMTOKEN	required			

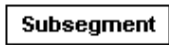
```

source <xs:element name="Segment">
  <xs:complexType>
    <xs:attribute name="id" type="xs:NMTOKEN" use="required"/>
  </xs:complexType>
</xs:element>

```

### 1.1.5 element SceneAttributes/Subsegment

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

attributes	Name	Type	Use	Default	Fixed	Annotation
	id	xs:NMTOKEN	required			

```

source <xs:element name="Subsegment" minOccurs="0">
  <xs:complexType>
    <xs:attribute name="id" type="xs:NMTOKEN" use="required"/>
  </xs:complexType>
</xs:element>

```

### 1.1.6 element SceneAttributes/Priority

diagram



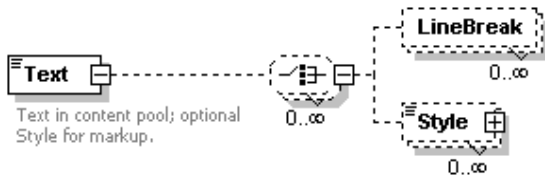
namespace <http://www.bbc.co.uk/ContentInterface/Content>

attributes	Name	Type	Use	Default	Fixed	Annotation
	level	xs:integer	required			

```
source <xs:element name="Priority">
  <xs:complexType>
    <xs:attribute name="level" type="xs:integer" use="required"/>
  </xs:complexType>
</xs:element>
```

### 1.1.7 element Text

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

type extension of [cont:ItemType](#)

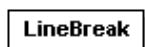
children [LineBreak](#) [Style](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
	itemId	xs:token	required			
	align	cont:AlignType	optional	left		
annotation	documentation	Text in content pool; optional Style for markup.				

```
source <xs:element name="Text" substitutionGroup="cont:AbstractItem">
  <xs:annotation>
    <xs:documentation>Text in content pool; optional Style for
    markup.</xs:documentation>
  </xs:annotation>
  <xs:complexType mixed="true">
    <xs:complexContent mixed="true">
      <xs:extension base="cont:ItemType">
        <xs:choice minOccurs="0" maxOccurs="unbounded">
          <xs:element name="LineBreak" minOccurs="0" maxOccurs="unbounded"/>
          <xs:element name="Style" type="cont:TextEmbeddedType" minOccurs="0"
          maxOccurs="unbounded"/>
        </xs:choice>
        <xs:attributeGroup ref="cont:AlignAttrs"/>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
</xs:element>
```

### 1.1.8 element Text/LineBreak

diagram

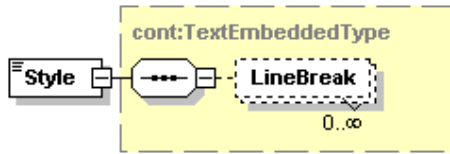


namespace <http://www.bbc.co.uk/ContentInterface/Content>

```
source <xs:element name="LineBreak" minOccurs="0" maxOccurs="unbounded"/>
```

### 1.1.9 element Text/Style

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

type [cont:TextEmbeddedType](#)

children [LineBreak](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
	align	cont:AlignType	optional	left		
	colourSpec	xs:NMTOKEN	required			

```
source <xs:element name="Style" type="cont:TextEmbeddedType" minOccurs="0" maxOccurs="unbounded"/>
```

### 1.1.10 element TextlinePlain

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

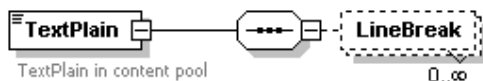
type extension of [cont:ItemType](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
	itemId	xs:token	required			
	align	cont:AlignType	optional	left		
annotation	documentation	TextlinePlain in content pool				

```
source <xs:element name="TextlinePlain" substitutionGroup="cont:AbstractItem">
  <xs:annotation>
    <xs:documentation>TextlinePlain in content pool</xs:documentation>
  </xs:annotation>
  <xs:complexType mixed="true">
    <xs:complexContent mixed="true">
      <xs:extension base="cont:ItemType">
        <xs:attributeGroup ref="cont:AlignAttrs"/>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
</xs:element>
```

### 1.1.11 element TextPlain

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

type extension of [cont:ItemType](#)

children [LineBreak](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
	itemId	xs:token	required			
	align	cont:AlignType	optional	left		

annotation documentation TextPlain in content pool

```
source <xs:element name="TextPlain" substitutionGroup="cont:AbstractItem">
  <xs:annotation>
    <xs:documentation>TextPlain in content pool</xs:documentation>
  </xs:annotation>
  <xs:complexType mixed="true">
    <xs:complexContent mixed="true">
      <xs:extension base="cont:ItemType">
        <xs:sequence>
          <xs:element name="LineBreak" minOccurs="0" maxOccurs="unbounded"/>
        </xs:sequence>
        <xs:attributeGroup ref="cont:AlignAttrs"/>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
</xs:element>
```

### 1.1.12 element TextPlain/LineBreak

diagram

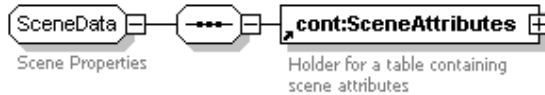


namespace http://www.bbc.co.uk/ContentInterface/Content

```
source <xs:element name="LineBreak" minOccurs="0" maxOccurs="unbounded"/>
```

### 1.1.13 group SceneData

diagram



namespace http://www.bbc.co.uk/ContentInterface/Content

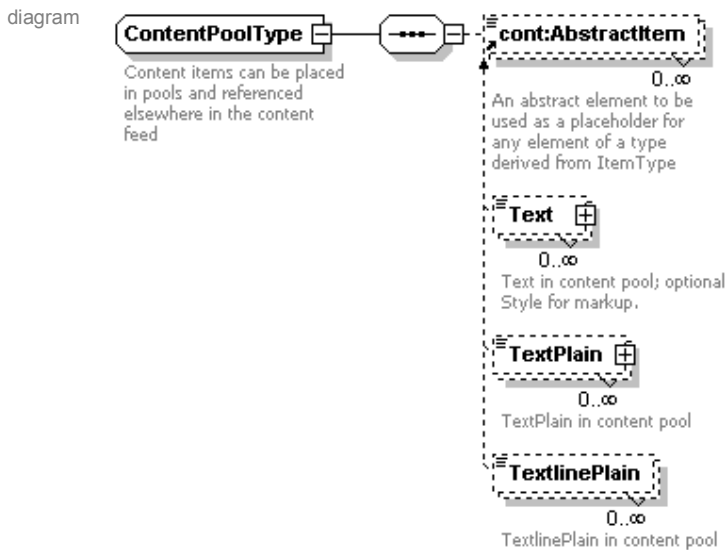
children [cont:SceneAttributes](#)

used by complexType [SceneType](#)

annotation documentation Scene Properties

```
source <xs:group name="SceneData">
  <xs:annotation>
    <xs:documentation>Scene Properties</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element ref="cont:SceneAttributes"/>
  </xs:sequence>
</xs:group>
```

### 1.1.14 complexType ContentPoolType



namespace <http://www.bbc.co.uk/ContentInterface/Content>

children [cont:AbstractItem](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
	contentPoolId	xs:token	required			
annotation	documentation	Content items can be placed in pools and referenced elsewhere in the content feed				

```

source <xs:complexType name="ContentPoolType">
  <xs:annotation>
    <xs:documentation>Content items can be placed in pools and referenced
elsewhere in the content feed</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element ref="cont:AbstractItem" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
  <xs:attribute name="contentPoolId" type="xs:token" use="required"/>
</xs:complexType>

```

### 1.1.15 complexType GlobalType



namespace <http://www.bbc.co.uk/ContentInterface/Content>

annotation documentation Global type - not defined yet

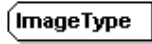
```

source <xs:complexType name="GlobalType">
  <xs:annotation>
    <xs:documentation>Global type - not defined yet</xs:documentation>
  </xs:annotation>
</xs:complexType>

```

### 1.1.16 complexType ImageType

diagram



Specifies an image - can be any kind of image, takes a URI to say where it is

namespace <http://www.bbc.co.uk/ContentInterface/Content>

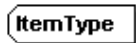
used by element [RolloverMenuItemType/RolloverImage](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
uri	reference	xs:anyURI xs:token	required			
documentation		Specifies an image - can be any kind of image, takes a URI to say where it is				

```
source <xs:complexType name="ImageType" mixed="true">
  <xs:annotation>
    <xs:documentation>Specifies an image - can be any kind of image, takes a URI
to say where it is</xs:documentation>
  </xs:annotation>
  <xs:attribute name="uri" type="xs:anyURI" use="required"/>
  <xs:attributeGroup ref="cont:ReferenceAttrs"/>
</xs:complexType>
```

### 1.1.17 complexType ItemType

diagram



Base type for content pool items

namespace <http://www.bbc.co.uk/ContentInterface/Content>

used by elements [AbstractItem](#) [Text](#) [TextlinePlain](#) [TextPlain](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
itemId		xs:token	required			
documentation		Base type for content pool items				

```
source <xs:complexType name="ItemType" mixed="true">
  <xs:annotation>
    <xs:documentation>Base type for content pool items</xs:documentation>
  </xs:annotation>
  <xs:attribute name="itemId" type="xs:token" use="required"/>
</xs:complexType>
```

### 1.1.18 complexType LinkType

diagram



A link to a scene, including whether it is internal or external

namespace <http://www.bbc.co.uk/ContentInterface/Content>

used by element [MenuItemType/Link](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
target		xs:token	required			
type		xs:token	required			
volatile		xs:boolean	optional	false		

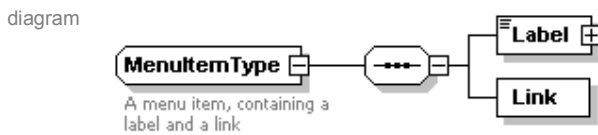
annotation documentation A link to a scene, including whether it is internal or external

```

source <xs:complexType name="LinkType">
  <xs:annotation>
    <xs:documentation>A link to a scene, including whether it is internal or
external</xs:documentation>
  </xs:annotation>
  <xs:attribute name="target" type="xs:token" use="required"/>
  <xs:simpleType>
    <xs:restriction base="xs:token">
      <xs:enumeration value="toBeDefined"/>
      <xs:enumeration value="toBeDefinedTwo"/>
      <xs:enumeration value="toBeYouGetTheIdea"/>
    </xs:restriction>
  </xs:simpleType>
  </xs:attribute>
  <xs:attribute name="type" use="required">
    <xs:simpleType>
      <xs:restriction base="xs:token">
        <xs:enumeration value="internal"/>
        <xs:enumeration value="external"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:attribute>
  <xs:attribute name="volatile" type="xs:boolean" use="optional"
default="false"/>
</xs:complexType>

```

### 1.1.19 complexType MenuItemType



namespace <http://www.bbc.co.uk/ContentInterface/Content>

children [Label](#) [Link](#)

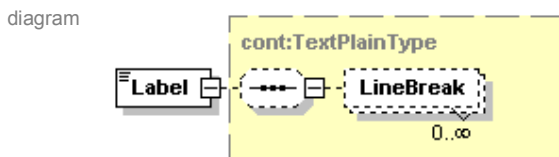
annotation documentation A menu item, containing a label and a link

```

source <xs:complexType name="MenuItemType">
  <xs:annotation>
    <xs:documentation>A menu item, containing a label and a
link</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="Label" type="cont:TextPlainType"/>
    <xs:element name="Link" type="cont:LinkType"/>
  </xs:sequence>
</xs:complexType>

```

### 1.1.20 element MenuItemType/Label

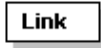


namespace <http://www.bbc.co.uk/ContentInterface/Content>

type	<a href="#">cont:TextPlainType</a>					
children	<a href="#">LineBreak</a>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	align	cont:AlignType	optional	left		
	reference	xs:token				
	contentType				TextPlain	
source	<code>&lt;xs:element name="Label" type="cont:TextPlainType"/&gt;</code>					

### 1.1.21 element MenuItemType/Link

diagram

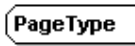


namespace <http://www.bbc.co.uk/ContentInterface/Content>

type	<a href="#">cont:LinkType</a>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	target	xs:token	required			
	style	xs:token		toBeDefined		
	type	xs:token	required			
	volatile	xs:boolean	optional	false		
source	<code>&lt;xs:element name="Link" type="cont:LinkType"/&gt;</code>					

### 1.1.22 complexType PageType

diagram



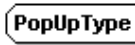
Pages can contain any type of element except scenes, pages or menus (not tied down by restriction yet)

namespace <http://www.bbc.co.uk/ContentInterface/Content>

used by	element	<a href="#">TableType/Page</a>
annotation	documentation	Pages can contain any type of element except scenes, pages or menus (not tied down by restriction yet)
source	<pre>&lt;xs:complexType name="PageType"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Pages can contain any type of element except scenes, pages or menus (not tied down by restriction yet)&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:complexType&gt;</pre>	

### 1.1.23 complexType PopUpType

diagram



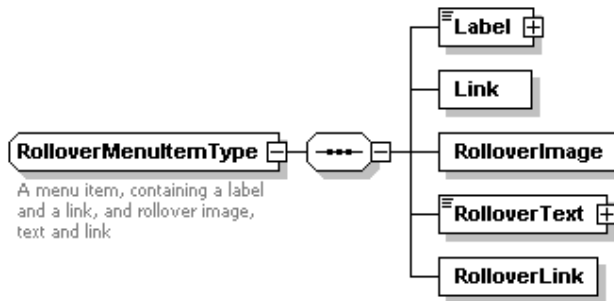
PopUp menus - not catered for yet

namespace <http://www.bbc.co.uk/ContentInterface/Content>

annotation	documentation	PopUp menus - not catered for yet
source	<pre>&lt;xs:complexType name="PopUpType"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;PopUp menus - not catered for yet&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:complexType&gt;</pre>	

### 1.1.24 complexType RolloverMenuItemType

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

children [Label](#) [Link](#) [RolloverImage](#) [RolloverText](#) [RolloverLink](#)

annotation documentation A menu item, containing a label and a link, and rollover image, text and link

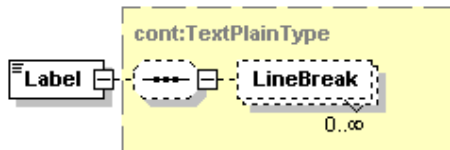
```

source <xs:complexType name="RolloverMenuItemType">
  <xs:annotation>
    <xs:documentation>A menu item, containing a label and a link, and rollover
image, text and link</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="Label" type="cont:TextPlainType"/>
    <xs:element name="Link" type="cont:LinkType"/>
    <xs:element name="RolloverImage" type="cont:ImageType"/>
    <xs:element name="RolloverText" type="cont:TextPlainType"/>
    <xs:element name="RolloverLink" type="cont:LinkType"/>
  </xs:sequence>
</xs:complexType>

```

### 1.1.25 element RolloverMenuItemType/Label

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

type [cont:TextPlainType](#)

children [LineBreak](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
	align	cont:AlignType	optional	left		
	reference	xs:token				
	contentType				TextPlain	

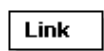
```

source <xs:element name="Label" type="cont:TextPlainType"/>

```

### 1.1.26 element RolloverMenuItemType/Link

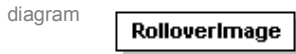
diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

type	<a href="#">cont:LinkType</a>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	target	xs:token	required			
	type	xs:token	required			
	volatile	xs:boolean	optional	false		
source	<code>&lt;xs:element name="Link" type="cont:LinkType"/&gt;</code>					

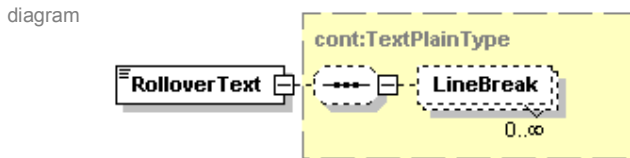
### 1.1.27 element RolloverMenuItemType/RolloverImage



namespace `http://www.bbc.co.uk/ContentInterface/Content`

type	<a href="#">cont:ImageType</a>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	uri	xs:anyURI	required			
	reference	xs:token				
source	<code>&lt;xs:element name="RolloverImage" type="cont:ImageType"/&gt;</code>					

### 1.1.28 element RolloverMenuItemType/RolloverText



namespace `http://www.bbc.co.uk/ContentInterface/Content`

type	<a href="#">cont:TextPlainType</a>					
children	<a href="#">LineBreak</a>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	align	cont:AlignType	optional	left		
	reference	xs:token				
	contentType				TextPlain	
source	<code>&lt;xs:element name="RolloverText" type="cont:TextPlainType"/&gt;</code>					

### 1.1.29 element RolloverMenuItemType/RolloverLink



namespace `http://www.bbc.co.uk/ContentInterface/Content`

type	<a href="#">cont:LinkType</a>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	target	xs:token	required			
	type	xs:token	required			
	volatile	xs:boolean	optional	false		
source	<code>&lt;xs:element name="RolloverLink" type="cont:LinkType"/&gt;</code>					

### 1.1.30 complexType SceneType

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

children [cont:SceneAttributes](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
	sceneId	xs:token	required			
annotation	documentation	Scenes can contain any type of element except other scenes (not tied down by restriction yet)				

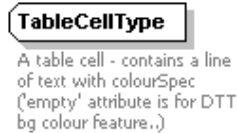
```

source <xs:complexType name="SceneType">
  <xs:annotation>
    <xs:documentation>Scenes can contain any type of element except other scenes
(not tied down by restriction yet)</xs:documentation>
  </xs:annotation>
  <xs:group ref="cont:SceneData"/>
  <xs:attribute name="sceneId" use="required">
    <xs:simpleType>
      <xs:restriction base="xs:token">
        <xs:maxLength value="255"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:attribute>
</xs:complexType>

```

### 1.1.31 complexType TableCellType

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

used by element [TableRowType/Cell](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
	align	cont:AlignType	optional	left		
	column	xs:int	required			
	colourSpec	xs:NMTOKEN	required			
	empty	xs:boolean	optional			
	reference	xs:token				
	contentType				TextlinePlain	
annotation	documentation	A table cell - contains a line of text with colourSpec ('empty' attribute is for DTT bg colour feature..)				

```

source <xs:complexType name="TableCellType" mixed="true">
  <xs:annotation>
    <xs:documentation>A table cell - contains a line of text with colourSpec
('empty' attribute is for DTT bg colour feature..)</xs:documentation>
  </xs:annotation>
  <xs:attribute name="align" type="cont:AlignType" use="optional"
default="left"/>
  <xs:attribute name="column" use="required">
    <xs:simpleType>
      <xs:restriction base="xs:int">
        <xs:minInclusive value="1"/>
        <xs:maxInclusive value="13"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:attribute>
</xs:complexType>

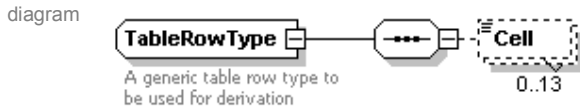
```

```

        </xs:restriction>
    </xs:simpleType>
</xs:attribute>
<xs:attribute name="colourSpec" type="xs:NMTOKEN" use="required"/>
<xs:attribute name="empty" type="xs:boolean" use="optional"/>
<xs:attributeGroup ref="cont:ReferenceAttrs"/>
<xs:attribute name="contentType" fixed="TextlinePlain"/>
</xs:complexType>

```

### 1.1.32 complexType TableRowType



namespace <http://www.bbc.co.uk/ContentInterface/Content>

children [Cell](#)

used by element [TableType/Page/Row](#)

annotation documentation A generic table row type to be used for derivation

```

source <xs:complexType name="TableRowType">
  <xs:annotation>
    <xs:documentation>A generic table row type to be used for
  derivation</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="Cell" minOccurs="0" maxOccurs="13">
      <xs:complexType mixed="true">
        <xs:complexContent mixed="true">
          <xs:extension base="cont:TableCellType"/>
        </xs:complexContent>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```

### 1.1.33 element TableRowType/Cell



namespace <http://www.bbc.co.uk/ContentInterface/Content>

type extension of [cont:TableCellType](#)

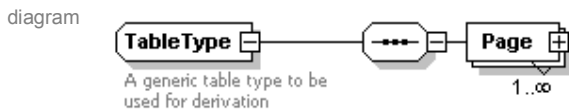
attributes	Name	Type	Use	Default	Fixed	Annotation
	align	cont:AlignType	optional	left		
	column	xs:int	required			
	colourSpec	xs:NMTOKEN	required			
	empty	xs:boolean	optional			
	reference	xs:token				
	contentType					TextlinePlain

```

source <xs:element name="Cell" minOccurs="0" maxOccurs="13">
  <xs:complexType mixed="true">
    <xs:complexContent mixed="true">
      <xs:extension base="cont:TableCellType"/>
    </xs:complexContent>
  </xs:complexType>
</xs:element>

```

### 1.1.34 complexType TableType



namespace <http://www.bbc.co.uk/ContentInterface/Content>

children [Page](#)

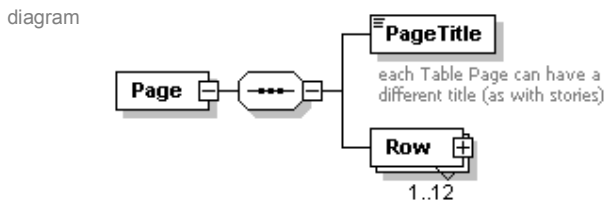
annotation documentation A generic table type to be used for derivation

```

source <xs:complexType name="TableType">
  <xs:annotation>
    <xs:documentation>A generic table type to be used for
derivation</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="Page" maxOccurs="unbounded">
      <xs:complexType>
        <xs:complexContent>
          <xs:extension base="cont:PageType">
            <xs:sequence>
              <xs:element name="PageTitle" type="cont:TextlinePlainType">
                <xs:annotation>
                  <xs:documentation>each Table Page can have a different title
(as with stories)</xs:documentation>
                </xs:annotation>
              </xs:element>
              <xs:element name="Row" type="cont:TableRowType" maxOccurs="12"/>
            </xs:sequence>
          </xs:extension>
        </xs:complexContent>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```

### 1.1.35 element TableType/Page



namespace <http://www.bbc.co.uk/ContentInterface/Content>

type extension of [cont:PageType](#)

children [PageTitle](#) [Row](#)

```

source <xs:element name="Page" maxOccurs="unbounded">
  <xs:complexType>
    <xs:complexContent>
      <xs:extension base="cont:PageType">
        <xs:sequence>
          <xs:element name="PageTitle" type="cont:TextlinePlainType">
            <xs:annotation>
              <xs:documentation>each Table Page can have a different title (as

```

```

with stories)</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="Row" type="cont:TableRowType" maxOccurs="12"/>
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
</xs:element>

```

### 1.1.36 element TableType/Page/PageTitle

diagram



each Table Page can have a different title (as with stories)

namespace <http://www.bbc.co.uk/ContentInterface/Content>

type [cont:TextlinePlainType](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
align		cont:AlignType	optional	left		
reference		xs:token				
contentType					TextlinePlain	
documentation						each Table Page can have a different title (as with stories)

source

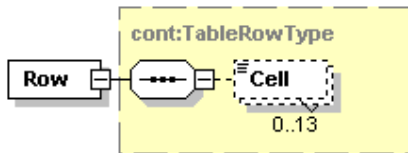
```

<xs:element name="PageTitle" type="cont:TextlinePlainType">
  <xs:annotation>
    <xs:documentation>each Table Page can have a different title (as with
stories)</xs:documentation>
  </xs:annotation>
</xs:element>

```

### 1.1.37 element TableType/Page/Row

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

type [cont:TableRowType](#)

children [Cell](#)

source

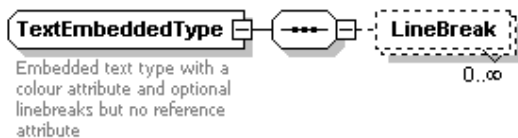
```

<xs:element name="Row" type="cont:TableRowType" maxOccurs="12"/>

```

### 1.1.38 complexType TextEmbeddedType

diagram

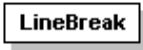


Embedded text type with a colour attribute and optional linebreaks but no reference attribute


namespace <http://www.bbc.co.uk/ContentInterface/Content>

children	<a href="#">LineBreak</a>					
used by	elements	<a href="#">Text/Style</a> <a href="#">TextType/Style</a>				
attributes	Name	Type	Use	Default	Fixed	Annotation
	align	cont:AlignType	optional	left		
annotation	colourSpec	xs:NMTOKEN	required			
	documentation	Embedded text type with a colour attribute and optional linebreaks but no reference attribute				
source	<pre>&lt;xs:complexType name="TextEmbeddedType" mixed="true"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Embedded text type with a colour attribute and optional linebreaks but no reference attribute&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:sequence&gt;     &lt;xs:element name="LineBreak" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;/xs:sequence&gt;   &lt;xs:attributeGroup ref="cont:AlignAttrs"/&gt;   &lt;xs:attribute name="colourSpec" type="xs:NMTOKEN" use="required"/&gt; &lt;/xs:complexType&gt;</pre>					

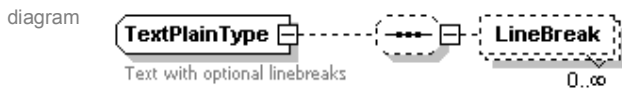
### 1.1.39 element TextEmbeddedType/LineBreak

diagram	
namespace	http://www.bbc.co.uk/ContentInterface/Content
source	<pre>&lt;xs:element name="LineBreak" minOccurs="0" maxOccurs="unbounded"/&gt;</pre>

### 1.1.40 complexType TextlinePlainType

diagram	 <p>A single line of text with no colour specified or embedding</p>					
namespace	http://www.bbc.co.uk/ContentInterface/Content					
used by	element	<a href="#">TableType/Page/PageTitle</a>				
attributes	Name	Type	Use	Default	Fixed	Annotation
	align	cont:AlignType	optional	left		
annotation	reference	xs:token				
	contentType				TextlinePlain	
documentation	A single line of text with no colour specified or embedding					
source	<pre>&lt;xs:complexType name="TextlinePlainType" mixed="true"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;A single line of text with no colour specified or embedding&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:attributeGroup ref="cont:AlignAttrs"/&gt;   &lt;xs:attributeGroup ref="cont:ReferenceAttrs"/&gt;   &lt;xs:attribute name="contentType" fixed="TextlinePlain"/&gt; &lt;/xs:complexType&gt;</pre>					

### 1.1.41 complexType TextPlainType



namespace <http://www.bbc.co.uk/ContentInterface/Content>

children [LineBreak](#)

used by element [MenuitemType/Label](#) [RolloverMenuitemType/Label](#) [RolloverMenuitemType/RolloverText](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
align		cont:AlignType	optional	left		
reference		xs:token				
contentType					TextPlain	
documentation		Text with optional linebreaks				

```

source <xs:complexType name="TextPlainType" mixed="true">
  <xs:annotation>
    <xs:documentation>Text with optional linebreaks</xs:documentation>
  </xs:annotation>
  <xs:sequence minOccurs="0">
    <xs:element name="LineBreak" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
  <xs:attributeGroup ref="cont:AlignAttrs"/>
  <xs:attributeGroup ref="cont:ReferenceAttrs"/>
  <xs:attribute name="contentType" fixed="TextPlain"/>
</xs:complexType>
    
```

### 1.1.42 element TextPlainType/LineBreak

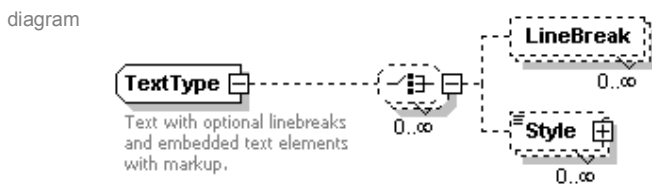


namespace <http://www.bbc.co.uk/ContentInterface/Content>

```

source <xs:element name="LineBreak" minOccurs="0" maxOccurs="unbounded"/>
    
```

### 1.1.43 complexType TextType



namespace <http://www.bbc.co.uk/ContentInterface/Content>

children [LineBreak](#) [Style](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
reference		xs:token				
contentType					Text	
documentation		Text with optional linebreaks and embedded text elements with markup.				

```

source <xs:complexType name="TextType" mixed="true">
  <xs:annotation>
    <xs:documentation>Text with optional linebreaks and embedded text elements
    with markup.</xs:documentation>
  </xs:annotation>
    
```

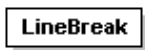
```

<xs:choice minOccurs="0" maxOccurs="unbounded">
  <xs:element name="LineBreak" minOccurs="0" maxOccurs="unbounded"/>
  <xs:element name="Style" type="cont:TextEmbeddedType" minOccurs="0"
maxOccurs="unbounded"/>
</xs:choice>
<xs:attributeGroup ref="cont:ReferenceAttrs"/>
<xs:attribute name="contentType" fixed="Text"/>
<!-- # avoid @align as we use this type in Story/Text elements which are
flattened to text strings in OML
i.e. they have no OML Text container that could be used for
alignment
      <xs:attributeGroup ref="cont:AlignAttrs"/> -->
</xs:complexType>

```

### 1.1.44 element TextType/LineBreak

diagram

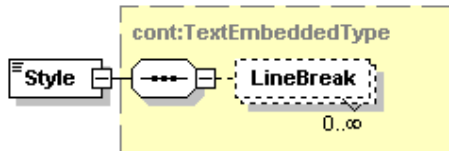


namespace <http://www.bbc.co.uk/ContentInterface/Content>

source `<xs:element name="LineBreak" minOccurs="0" maxOccurs="unbounded"/>`

### 1.1.45 element TextType/Style

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

type [cont:TextEmbeddedType](#)

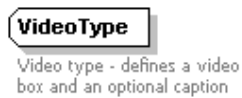
children [LineBreak](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
	align	cont:AlignType	optional	left		
	colourSpec	xs:NMTOKEN	required			

source `<xs:element name="Style" type="cont:TextEmbeddedType" minOccurs="0" maxOccurs="unbounded"/>`

### 1.1.46 complexType VideoType

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

annotation documentation Video type - defines a video box and an optional caption

```

<xs:complexType name="VideoType">
  <xs:annotation>
    <xs:documentation>Video type - defines a video box and an optional
caption</xs:documentation>
  </xs:annotation>
</xs:complexType>

```

### 1.1.47 simpleType AlignType

namespace	http://www.bbc.co.uk/ContentInterface/Content	
type	restriction of <b>xs:token</b>	
used by	attributes	<a href="#">TableCellType/@align</a> <a href="#">AlignAttrs/@align</a>
facets	enumeration	left
	enumeration	right
	enumeration	centre
annotation	documentation	Enumerated type specifying alignment
source	<pre>&lt;xs:simpleType name="AlignType"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Enumerated type specifying alignment&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:restriction base="xs:token"&gt;     &lt;xs:enumeration value="left"/&gt;     &lt;xs:enumeration value="right"/&gt;     &lt;xs:enumeration value="centre"/&gt;   &lt;/xs:restriction&gt; &lt;/xs:simpleType&gt;</pre>	

### 1.1.48 simpleType coloursEnum\_Story

namespace	http://www.bbc.co.uk/ContentInterface/Content	
type	restriction of <b>xs:NMTOKENS</b>	
facets	enumeration	Body_text_1
	enumeration	Body_text_2
	enumeration	Body_text_3
	enumeration	Body_text_4
annotation	documentation	deprecated. enum of ici colourSpec values = 4 for Stories (aka Body)
source	<pre>&lt;xs:simpleType name="coloursEnum_Story"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;deprecated. enum of ici colourSpec values = 4 for Stories     (aka Body)&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:restriction base="xs:NMTOKENS"&gt;     &lt;xs:enumeration value="Body_text_1"/&gt;     &lt;xs:enumeration value="Body_text_2"/&gt;     &lt;xs:enumeration value="Body_text_3"/&gt;     &lt;xs:enumeration value="Body_text_4"/&gt;   &lt;/xs:restriction&gt; &lt;/xs:simpleType&gt;</pre>	

### 1.1.49 simpleType coloursEnum\_Table

namespace	http://www.bbc.co.uk/ContentInterface/Content	
type	restriction of <b>xs:NMTOKENS</b>	
facets	enumeration	Table_text_1
	enumeration	Table_text_2
	enumeration	Table_text_3
	enumeration	Table_text_4
	enumeration	Table_text_5
	enumeration	Hot_text
annotation	documentation	deprecated. enum of ici colourSpec values = 5 Table + 1 Hot
source	<pre>&lt;xs:simpleType name="coloursEnum_Table"&gt;</pre>	

```

    <xs:annotation>
      <xs:documentation>deprecated. enum of ici colourSpec values = 5 Table + 1
      Hot</xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:NMTOKENS">
      <xs:enumeration value="Table_text_1"/>
      <xs:enumeration value="Table_text_2"/>
      <xs:enumeration value="Table_text_3"/>
      <xs:enumeration value="Table_text_4"/>
      <xs:enumeration value="Table_text_5"/>
      <xs:enumeration value="Hot_text"/>
    </xs:restriction>
  </xs:simpleType>

```

### 1.1.50 attributeGroup AlignAttrs

namespace <http://www.bbc.co.uk/ContentInterface/Content>

used by elements [Text](#) [TextlinePlain](#) [TextPlain](#)  
 complexTypes [TextEmbeddedType](#) [TextlinePlainType](#) [TextPlainType](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
align		cont:AlignType	optional	left		

annotation documentation Attribute implementing AlignType

source

```

<xs:attributeGroup name="AlignAttrs">
  <xs:annotation>
    <xs:documentation>Attribute implementing AlignType</xs:documentation>
  </xs:annotation>
  <xs:attribute name="align" type="cont:AlignType" use="optional"
  default="left"/>
</xs:attributeGroup>

```

### 1.1.51 attributeGroup ColourSpecAttrs

namespace <http://www.bbc.co.uk/ContentInterface/Content>

used by attributeGroup [FontStyleAttrs](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
colourSpec		xs:token	required			

annotation documentation Colour specification - may resolve to a combination of foreground, background and opacity, as determined on a per-platform basis by the relevant publishing processes

source

```

<xs:attributeGroup name="ColourSpecAttrs">
  <xs:annotation>
    <xs:documentation>Colour specification - may resolve to a combination of
    foreground, background and opacity, as determined on a per-platform basis by the
    relevant publishing processes</xs:documentation>
  </xs:annotation>
  <xs:attribute name="colourSpec" type="xs:token" use="required"/>
</xs:attributeGroup>

```

### 1.1.52 attributeGroup FontStyleAttrs

namespace <http://www.bbc.co.uk/ContentInterface/Content>

attributes	Name	Type	Use	Default	Fixed	Annotation
colourSpec		xs:token	required			

annotation documentation Font style component - deprecated as only colourSpec left

source

```

<xs:attributeGroup name="FontStyleAttrs">
  <xs:annotation>
    <xs:documentation>Font style component - deprecated as only colourSpec
    left</xs:documentation>
  </xs:annotation>

```

```

</xs:annotation>
<xs:attributeGroup ref="cont:ColourSpecAttrs"/>
<!--
      <xs:attribute name="font" type="xs:token"/>
      <xs:attribute name="fontSize" type="xs:token"/>
-->
</xs:attributeGroup>

```

### 1.1.53 attributeGroup ReferenceAttrs

namespace	http://www.bbc.co.uk/ContentInterface/Content					
used by	complexType	<a href="#">ImageType</a> <a href="#">TableCellType</a> <a href="#">TextlinePlainType</a> <a href="#">TextPlainType</a> <a href="#">TextType</a>				
attributes	Name	Type	Use	Default	Fixed	Annotation
	reference	xs:token				
annotation	documentation	Attributes specifying a reference to an item in a content pool				
source	<pre> &lt;xs:attributeGroup name="ReferenceAttrs"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Attributes specifying a reference to an item in a content pool&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:attribute name="reference" type="xs:token"/&gt; &lt;/xs:attributeGroup&gt; </pre>					

XML Schema documentation generated with [XMLSPY](http://www.altova.com/xmlspy) Schema Editor <http://www.altova.com/xmlspy>

## ContentComponents.xsd

This section details types which build on the types in iCI.xsd and elements that are for re-use in the specific ici schema for different 'templates'.

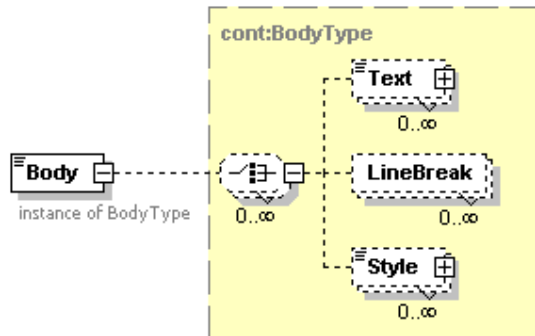
### Schema ContentComponents.xsd

schema location: <L:\work\c3pls\schema\ContentComponents.xsd>  
 targetNamespace: <http://www.bbc.co.uk/ContentInterface/Content>

- |                                     |   |
|-------------------------------------|---|
| Elements                            | Complex types                           |
| <a href="#">Body</a>                | <a href="#">BodyType</a>                |
| <a href="#">Header</a>              | <a href="#">PageCompositeType</a>       |
| <a href="#">ParentScene</a>         | <a href="#">StoryTableCompositeType</a> |
| <a href="#">SiblingScenes</a>       |   |
| <a href="#">Story</a>               |   |
| <a href="#">StoryTableComposite</a> |   |
| <a href="#">Table</a>               |   |
| <a href="#">Title</a>               |   |

#### 1.1.54 element Body

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

type [cont:BodyType](#)

children [Text](#) [LineBreak](#) [Style](#)

used by element [Story/Page](#)  
 complexType [PageCompositeType](#)

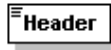
attributes	Name	Type	Use	Default	Fixed	Annotation
	align	cont:AlignType	optional	left		
	colourSpec	xs:NMTOKEN	required			
annotation	documentation	instance of BodyType				

```

source <xs:element name="Body" type="cont:BodyType">
  <xs:annotation>
    <xs:documentation>instance of BodyType</xs:documentation>
  </xs:annotation>
</xs:element>
    
```

### 1.1.55 element Header

diagram



used for tier2 branding.

namespace <http://www.bbc.co.uk/ContentInterface/Content>

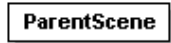
type [cont:TextlinePlainType](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
	align	cont:AlignType	optional	left		
	reference	xs:token				
	contentType				TextlinePlain	
annotation	documentation	used for tier2 branding.				

```
source <xs:element name="Header" type="cont:TextlinePlainType">
  <xs:annotation>
    <xs:documentation>used for tier2 branding.</xs:documentation>
  </xs:annotation>
</xs:element>
```

### 1.1.56 element ParentScene

diagram



Every scene requires this.

namespace <http://www.bbc.co.uk/ContentInterface/Content>

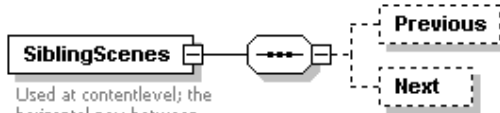
type [cont:LinkType](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
	target	xs:token	required			
	style	xs:token		toBeDefined		
	type	xs:token	required			
	volatile	xs:boolean	optional	false		
annotation	documentation	Every scene requires this.				

```
source <xs:element name="ParentScene" type="cont:LinkType">
  <xs:annotation>
    <xs:documentation>Every scene requires this.</xs:documentation>
  </xs:annotation>
</xs:element>
```

### 1.1.57 element SiblingScenes

diagram



Used at contentlevel; the horizontal nav between stories and/or tables that share a common parent menu.

these were made optional although it is also possible to set the target = the current scene to remove SibNav

namespace <http://www.bbc.co.uk/ContentInterface/Content>

children [Previous Next](#)

annotation documentation Used at contentlevel; the horizontal nav between stories and/or tables that share a common parent menu.

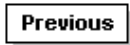
```

source <xs:element name="SiblingScenes">
  <xs:annotation>
    <xs:documentation>Used at contentlevel; the horizontal nav between stories
and/or tables that share a common parent menu.</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:sequence>
      <xs:element name="Previous" type="cont:LinkType" minOccurs="0"/>
      <xs:element name="Next" type="cont:LinkType" minOccurs="0">
        <xs:annotation>
          <xs:documentation>these were made optional although it is also possible
to set the target = the current scene to remove SibNav</xs:documentation>
        </xs:annotation>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

### 1.1.58 element SiblingScenes/Previous

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

type [cont:LinkType](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
target	target	xs:token	required			
style	style	xs:token		toBeDefined		
type	type	xs:token	required			
volatile	volatile	xs:boolean	optional	false		

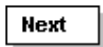
```

source <xs:element name="Previous" type="cont:LinkType" minOccurs="0"/>

```

### 1.1.59 element SiblingScenes/Next

diagram



these were made optional  
although it is also possible to  
set the target = the current  
scene to remove SibNav

namespace <http://www.bbc.co.uk/ContentInterface/Content>

type [cont:LinkType](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
target	target	xs:token	required			
style	style	xs:token		toBeDefined		
type	type	xs:token	required			
volatile	volatile	xs:boolean	optional	false		

annotation documentation these were made optional although it is also possible to set the target = the current scene to remove SibNav

```

source <xs:element name="Next" type="cont:LinkType" minOccurs="0">
  <xs:annotation>
    <xs:documentation>these were made optional although it is also possible to
set the target = the current scene to remove SibNav</xs:documentation>
  </xs:annotation>
</xs:element>

```

### 1.1.60 element Story



namespace <http://www.bbc.co.uk/ContentInterface/Content>

children [Page](#)

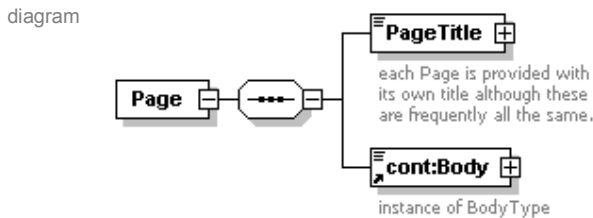
annotation documentation Container for a story

```

source <xs:element name="Story">
  <xs:annotation>
    <xs:documentation>Container for a story</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:sequence>
      <xs:element name="Page" maxOccurs="unbounded">
        <xs:complexType>
          <xs:complexContent>
            <xs:extension base="cont:PageType">
              <xs:sequence>
                <xs:element name="PageTitle" type="cont:TextPlainType">
                  <xs:annotation>
                    <xs:documentation>each Page is provided with its own title
                    although these are frequently all the same.</xs:documentation>
                  </xs:annotation>
                </xs:element>
                <xs:element ref="cont:Body"/>
              </xs:sequence>
            </xs:extension>
          </xs:complexContent>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

### 1.1.61 element Story/Page



namespace <http://www.bbc.co.uk/ContentInterface/Content>

type extension of [cont:PageType](#)

children [PageTitle](#) [cont:Body](#)

```

source <xs:element name="Page" maxOccurs="unbounded">
  <xs:complexType>
    <xs:complexContent>
      <xs:extension base="cont:PageType">
        <xs:sequence>
          <xs:element name="PageTitle" type="cont:TextPlainType">
            <xs:annotation>

```

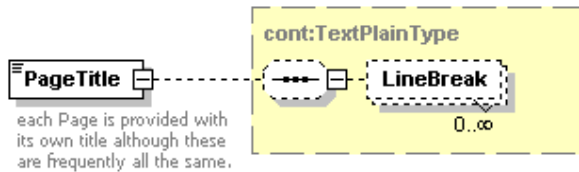
```

        <xs:documentation>each Page is provided with its own title although
these are frequently all the same.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element ref="cont:Body" />
</xs:sequence>
</xs:extension>
</xs:complexType>
</xs:complexType>
</xs:element>

```

### 1.1.62 element Story/Page/PageTitle

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

type [cont:TextPlainType](#)

children [LineBreak](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
	align	cont:AlignType	optional	left		
	reference	xs:token				
	contentType				TextPlain	
annotation	documentation	each Page is provided with its own title although these are frequently all the same.				

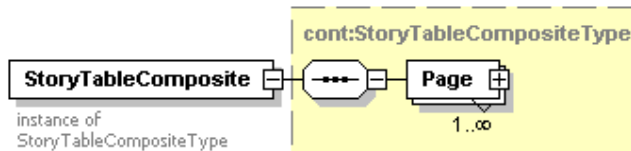
```

source <xs:element name="PageTitle" type="cont:TextPlainType">
  <xs:annotation>
    <xs:documentation>each Page is provided with its own title although these are
frequently all the same.</xs:documentation>
  </xs:annotation>
</xs:element>

```

### 1.1.63 element StoryTableComposite

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

type [cont:StoryTableCompositeType](#)

children [Page](#)

annotation documentation instance of StoryTableCompositeType

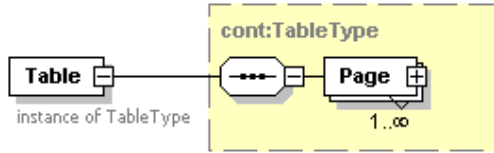
```

source <xs:element name="StoryTableComposite" type="cont:StoryTableCompositeType">
  <xs:annotation>
    <xs:documentation>instance of StoryTableCompositeType</xs:documentation>
  </xs:annotation>
</xs:element>

```

### 1.1.64 element Table

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

type [cont:TableType](#)

children [Page](#)

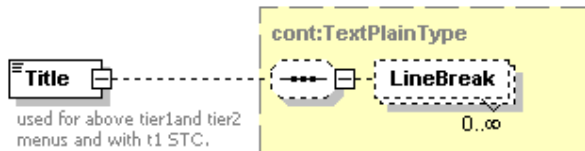
annotation documentation instance of TableType

```

source <xs:element name="Table" type="cont:TableType">
  <xs:annotation>
    <xs:documentation>instance of TableType</xs:documentation>
  </xs:annotation>
</xs:element>
    
```

### 1.1.65 element Title

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

type [cont:TextPlainType](#)

children [LineBreak](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
	align	cont:AlignType	optional	left		
	reference	xs:token				
	contentType				TextPlain	

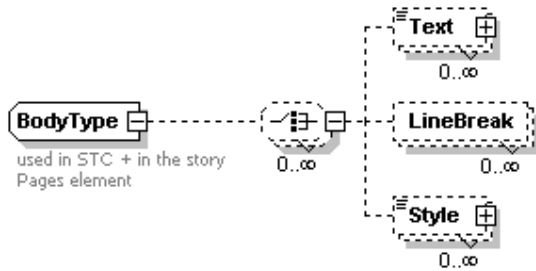
annotation documentation used for above tier1and tier2 menus and with t1 STC.

```

source <xs:element name="Title" type="cont:TextPlainType">
  <xs:annotation>
    <xs:documentation>used for above tierland tier2 menus and with t1
    STC.</xs:documentation>
  </xs:annotation>
</xs:element>
    
```

### 1.1.66 complexType BodyType

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

children [Text](#) [LineBreak](#) [Style](#)

used by element [Body](#)

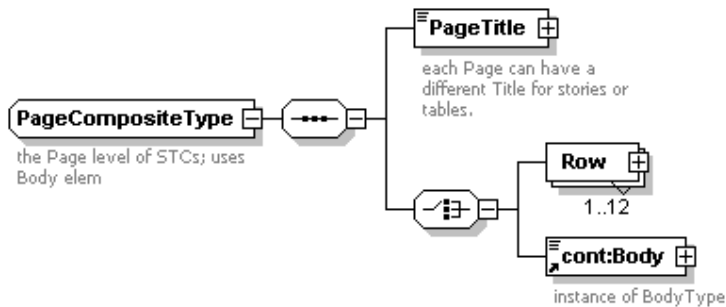
attributes	Name	Type	Use	Default	Fixed	Annotation
	align	cont:AlignType	optional	left		
	colourSpec	xs:NMTOKEN	required			
annotation	documentation	used in STC + in the story Pages element				

```

source <xs:complexType name="BodyType" mixed="true">
  <xs:annotation>
    <xs:documentation>used in STC + in the story Pages element</xs:documentation>
  </xs:annotation>
  <xs:choice minOccurs="0" maxOccurs="unbounded">
    <xs:element name="Text" type="cont:TextType" minOccurs="0"
maxOccurs="unbounded"/>
    <xs:element name="LineBreak" minOccurs="0" maxOccurs="unbounded"/>
    <xs:element name="Style" type="cont:TextEmbeddedType" minOccurs="0"
maxOccurs="unbounded"/>
  </xs:choice>
  <xs:attribute name="align" type="cont:AlignType" use="optional"
default="left"/>
  <xs:attribute name="colourSpec" type="xs:NMTOKEN" use="required"/>
</xs:complexType>
    
```

### 1.1.67 complexType PageCompositeType

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

children [PageTitle](#) [Row](#) [cont:Body](#)

used by element [StoryTableCompositeType/Page](#)

annotation documentation the Page level of STCs; uses Body elem

```

source <xs:complexType name="PageCompositeType">
    
```

```

<xs:annotation>
  <xs:documentation>the Page level of STCs; uses Body elem</xs:documentation>
</xs:annotation>
<xs:sequence>
  <xs:element name="PageTitle" type="cont:TextPlainType">
    <xs:annotation>
      <xs:documentation>each Page can have a different Title for stories or
tables.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:choice>
    <xs:element name="Row" type="cont:TableRowType" maxOccurs="12"/>
    <xs:element ref="cont:Body"/>
  </xs:choice>
</xs:sequence>
</xs:complexType>

```

### 1.1.68 complexType StoryTableCompositeType

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

children [Page](#)

used by element [StoryTableComposite](#)

annotation documentation A super content type that allows Table and Stories

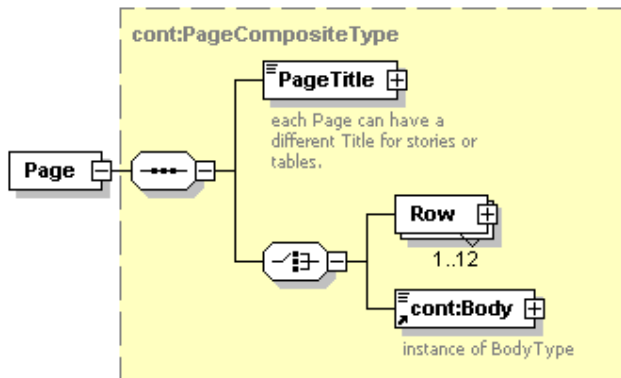
```

source <xs:complexType name="StoryTableCompositeType" mixed="false">
  <xs:annotation>
    <xs:documentation>A super content type that allows Table and
Stories</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="Page" type="cont:PageCompositeType" maxOccurs="unbounded"/>
  </xs:sequence>
</xs:complexType>

```

### 1.1.69 element StoryTableCompositeType/Page

diagram



namespace <http://www.bbc.co.uk/ContentInterface/Content>

type [cont:PageCompositeType](#)

children [PageTitle](#) [Row](#) [cont:Body](#)

## Interactive TV Content Interface Specification (iCI)

```
source <xs:element name="Page" type="cont:PageCompositeType" maxOccurs="unbounded"/>
```

XML Schema documentation generated with [XMLSPY](http://www.altova.com/xmlspy) Schema Editor <http://www.altova.com/xmlspy>

## Appendices

### **Appendix A – References**

#### **1.1.70 HTTP Specification:**

<http://www.w3.org/Protocols/rfc2616/rfc2616.html> - HTTP/1.1 Hypertext Transfer Protocol Specification

#### **1.1.71 MIME Specification:**

<http://www.ietf.org/rfc/rfc2045.txt> - Multipurpose Internet Mail Extensions (MIME) Part One: Format of Internet Message Bodies

<http://www.ietf.org/rfc/rfc2046.txt> - Multipurpose Internet Mail Extensions (MIME) Part Two: Media Types

<http://www.ietf.org/rfc/rfc2047.txt> - Multipurpose Internet Mail Extensions (MIME) Part Three: Message Header Extensions for Non-ASCII Text

<http://www.ietf.org/rfc/rfc2048.txt> - Multipurpose Internet Mail Extensions (MIME) Part Four: Registration Procedures

<http://www.ietf.org/rfc/rfc2049.txt> - Multipurpose Internet Mail Extensions (MIME) Part Five: Conformance Criteria and Examples

***Appendix B – To do / future changes under consideration***

- Add Cable templates
- Add in image support
- Consider implications of PCF on the specification

## Appendix C – Template lists

These lists are supplied in order to facilitate development of the C3P system. In future iterations they may be omitted from the Specification document to be provided in a document of their own.

### 1.1.72 DSat Templates

The following templates are supported for DSat. The editorial meanings are specified in documentation available from NM separately.

Name	Description
<b>t1_full_screen_table</b>	Table data on the in-vision part of the DSat service (tier1)
<b>t1_headlines_main</b>	Headlines menu – double height titles – max of 6 items (tier1)
<b>t1_menu_main</b>	Normal menu – single height titles – max of 10 items (tier1)
<b>t1_sm_text</b>	Story on tier1
<b>t1_STC_half_story_width</b>	Story with mixed tabular and prose content (old template ‘4’s)
<b>t2_full_screen_table</b>	Table data on the in-vision part of the DSat service (tier2)
<b>t2_headlines</b>	Headlines menu – double height titles – max of 6 items (tier2)
<b>t2_main_double_column_max12</b>	Double column menu on tier2 – max of 12 items
<b>t2_main_double_column_max18</b>	Double column menu on tier2 – max of 18 items
<b>t2_main_single_column_max6</b>	Max of 6 item menu – single height titles (tier2)
<b>t2_main_single_column_max9</b>	Max of 9 item menu – single height titles (tier2)
<b>t2_STC_half_story_width</b>	Story with mixed tabular and prose content (old template ‘4’s) on tier2
<b>t2_text_video</b>	Story on tier2

\*NB The menus do not auto-wrap, (more/previous) is supplied by the provider

### 1.1.73 DTT Templates

The following templates are supported for DTT. The editorial meanings are specified in documentation available from NM separately.

Name	Description
<b>st1f</b>	Full screen story or table
<b>st2q</b>	Story width quarter screen video
<b>mn1q</b>	Menu with single height entries
<b>mn2q</b>	Menu with double height entries

\*NB The menus do not auto-wrap, (more/previous) is supplied by the provider

### 1.1.74 DCable Templates

The following templates are supported for DCable. The editorial meanings are specified in documentation available from NM separately. No templates are as yet defined.

Name	Description