

Bristol City Council Solution Requirements for replacement Content Management Solution and supporting solutions (draft)

Introduction

The solutions requirements defined here are the product of the analysis of business requirements. Feedback has been taken from several avenues including meeting with the business users.

Each requirement has been classed as being:

Mandatory	Minimum functionality covered by the solution.
Desirable	Beneficial functionality
Optional	Useful non-critical functionality
Future	Functionality may be required in 2 years time.
TBA	To be advised, further information required.
Information	Information to provide context for requirements

1. System Requirements

The system requirements are general high level descriptors that give an overview of the main capabilities that the solution should be able to deliver.

Requirements

1.1	The Website will be viewed using generally available web browsers	Mandatory
1.2	The CMS will be administered using web browsers that are supported by BCC	Mandatory
1.3	Accessible HTML must be used for the internet.	Mandatory
1.4	The website will be viewable by the 95th percentile of web browser users.	Mandatory
1.5	Software that requires additional permissions to load into the browser is not allowed	Mandatory
1.6	After launch, BCC will administer the templates and content.	Mandatory
1.7	An initial 40 authors must be supported	Information
1.8	Standard formatting languages will be used across all sites	Mandatory
1.9	The website will run as a server-side scripting language	Optional
1.10	The website will run with client-side scripted functionality	Optional
1.11	All server code must be deployed	Mandatory
1.12	Integration with a document management system.	Optional
1.13	Single use cookies can be used to allow the website to run effectively	Desirable
1.14	Permanent cookies can be used to allow the website to run effectively	Desirable
1.15	The content editing Interface should be branded to the new specified Website look and feel	Optional

2. Technical Architecture

BCC has a mixed software environment, over time it has evolved and now uses services derived from many sources. The solution should therefore be support these technical architectures.

Requirements

2.1	Development, staging and live environments shall be separately hosted either by hardware or software.	Mandatory
2.2	Microsoft	Optional
2.3	Java	Desirable
2.4	Web Services	Mandatory

3. System Reliability and Monitoring

A managed hosting service is envisaged for the service and will require the option for resilient services to be deployed against a managed hosting SLA.

Requirements

3.1	SNMP traps to be generated by the application	Mandatory
3.2	Ability to resume service within a specified time frame should a problem be experienced on the CMS server.	Mandatory
3.3	The CMS shall be able to support a high-availability model, should dynamic publication be used for content distribution.	Mandatory
3.4	The Solution will provide a mechanism to redirect users to an emergency site in the event of the solution failing.	Mandatory

4. Accessibility

Accessibility level AAA would be desirable, dependent on the associated costs. AA is now considered a legal minimum and is thus Mandatory

Requirements

4.1	AA Accessibility – WCAG 2.0	Mandatory
4.2	AAA Accessibility – WCAG 2.0	Desirable
4.3	External verification of accessibility by a third party accreditation body.	Optional
4.4	The solution will validate content for basic accessibility options prior to publication	Mandatory
4.5	The CMS will provide an accessible interface	Mandatory

5. Internationalisation

Bristol City Council covers a range of community languages and so must support alternative character sets, Kanji Chinese and other non-Roman letters.

Requirements

5.1	Support for additional language sets to allow editing and publication in other languages.	Desirable
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6. Personalisation - Cookies and Navigation Structure

Throughout the initial documentation, there has been a constant requirement expressed for an element of personalisation to be provided.

The use of cookies suggested within this document is only intended as a mechanism to increase the usability of the Internet to user.

Proposed functionality related to the use of cookies covers, but is not limited to:

- Configuration to view a version of the website geared towards the user's preference.
- List of useful phone numbers / contact details.
- List of useful links.

Requirements

6.1	The user to be able to select a view of the website from pre-defined options	Mandatory
6.2	The choice of this view will be held in a cookie (persistent-based or session-based)	Mandatory
6.3	All further navigation, and information, will be tailored towards this view.	Mandatory
6.4	Search results will be able to be tailored towards this choice of view	Optional
6.5	CMS administration of this view model should be easy to maintain	Mandatory

7. Multi-Channel Deployment

The solution is required that allows content to be deployed to many sources from a central repository, so that content can be republished and re-used in many different ways.

Requirements

7.1	Content shall be managed in a central CMS repository and published on a number of channels.	Mandatory
7.2	Content repository shall support international standards.	Mandatory
7.3	The author shall be able to choose the channel that the article should appear on.	Mandatory
7.4	The website will be migrated first, with a further rollout of the solution to cover intranet and extranet channels.	Information
7.5	The scope of the CMS content deployment covers the following channels:	
7.6	bristol.gov.uk	Mandatory
7.7	Future Extranet sites	Mandatory
7.8	All micro-sites	Mandatory
7.9	Email content for a CMS sent using HTML and Text emails	Mandatory
7.10	Delivery to PDAs, Blackberry, PocketPC, etc	Mandatory
7.11	SMS delivery	Optional
7.12	Print channel	Optional
7.13	Separate articles within Print channel	Optional
7.14	XML feed out of the CMS	Mandatory
7.15	XML feed into the CMS	Mandatory
7.16	Kiosks at CSPs	Mandatory
7.17	SQL (Oracle and SQL Server)	Optional
7.18	Delivery over 3G channel	Optional
7.19	External portals	Mandatory
7.20	Content can be published to a 3rd-party through syndication (RSS)	Mandatory
7.21	Web Services (e.g. alert mechanism)	Optional

8. The Website Channel

These requirements cover only the website itself. These are very generic and cover only the deployment of web content.

Requirements

8.1	The initial website implementation will replace the main council website and incorporate the CYPS website	Mandatory
8.2	Internet Explorer 6 is the minimum browser specification used to view the Website on a desktop computer.	Mandatory
8.3	Emails shall be used to inform users as to new content that is on the website.	Mandatory
8.4	Breadcrumbs must be available	Mandatory
8.5	CMS will create breadcrumb trail	Mandatory
8.6	External secure access to the CMS	Mandatory
8.7	Non desktop-style PCs to be supported.	Desirable

9. Content Creation and Publishing

Creation of content

The mechanism for creating content is undecided – i.e. MS Word interface or via a forms-based data entry mechanism.

BCC is experienced in using StarOffice for general office duties. Content tends to be mounted onto Bristol.gov.uk using an integral editor from the APLAWS environment for filling in content areas. A complete business process is unavailable at this time.

The controlled use of MS Word or StarOffice templates in content authoring should not be relied upon for the data entry of content into the CMS.

The option for maintaining content within the CMS is desirable at this stage, and there may be a mixture of methods depending on the level of skill of the person maintaining the content.

Requirements

9.1	Content can be authored through a web interface	Mandatory
9.2	Attachments must be uploaded and stored in a repository	Mandatory
9.3	The editor must cover all basic HTML tags including simple table editing	Mandatory
9.4	Metadata must be enforced.	Mandatory
9.5	All links must be easy to create o both BCC content and third party content	Mandatory
9.6	Links must be automatically checked for valid pages as a result of a click	Mandatory.
9.7	Each channel must have a clear marking when content is be edited	Mandatory
9.8	Content to be easily marked as relating to other articles, and must relationships must be easily controlled.	Mandatory
9.9	CMS User must be able to click a link to edit the page immediately	Mandatory
9.10	CMS Users should be able to view a page on the site and click a button to edit the content in place.	Desirable
9.11	Content to be applied to templates which have consistent font/colour/size definitions pre-defined.	Mandatory
9.12	Content to be spell-checked	Mandatory
9.13	Users may be able to edit and proof content within an desktop word processor	Desirable
9.14	Use Word or StarOffice templates	Desirable
9.15	Content styles created in word processor maintained	Desirable
9.16	The ability to correct the formatting within the word document	Desirable
9.17	Allow content to be published with un-approved links removed	Desirable
9.18	Incorporation of images from an image library.	Desirable
9.19	Document reuse – whole and partial (i.e. for press releases, where different sections may be used for different channels)	Desirable
9.20	Clean up incorrect HTML tags automatically	Mandatory
9.21	Links to be displayed as text	Mandatory
9.22	Content to be maintainable through a WebDav interface (providing an file system interface for managing documents, suitable for some users)	Optional
9.23	Ensure digital rights are respected and allow authors to create different types of content within an article	Mandatory
9.24	Mapping of Document properties to Article metadata	Mandatory
9.25	Restrict use of uncontrolled dynamic HTML in content areas	Mandatory

10. Use of Metadata

Metadata allows search engines and other content discovery mechanisms to categorise and index the content. In addition, the UK Government has a controlled “vocabulary” that allows interchange of information between organisations.

Requirements

10.1	E-GMS 3.1 / Local Government taxonomy compliance	Mandatory
10.2	Metadata to be enforced, where applicable	Mandatory
10.3	Automatic suggestion of classification of content based upon published location	Optional
10.4	Metadata values to be maintained in a list of values to allow controlled vocabulary	Optional
10.5	Easy addition of new values to metadata list of values during content entry for selected fields	Optional
10.6	Default values can be taken from the authors profile (name, directorate, etc.)	Desirable
10.7	Metadata values can be expanded with 3rd party authorship	Desirable
10.8	Metadata to be enhanced for certain sections, to cater for more structured content (i.e. Council Initiatives).	Desirable

10.9	Synonyms also to be specified	Desirable
10.10	Taxonomy and Taxonomy Hierarchies to be maintained within the CMS	Optional
10.11	Access for editing taxonomies must be controlled	Mandatory

11. Content Placement

The CMS will allow BCC to provide editorial control over articles that are placed upon the home page and other sections of the site. This will help to produce content that changes regularly.

Requirements

11.1	What's new – by each directorate and content area	Mandatory
11.2	Top-10 lists compiled by authors	Desirable
11.3	Authors are able to add content for display on the front page of the website easily	Desirable.
11.4	Ability to mark items in relation to Freedom of information Act requirements	Desirable
11.5	Allow for draft and issued content	Mandatory
11.6	Create automatic daily lists	Desirable
11.7	Ensure that all content has date and time of publication	Mandatory
11.8	Allow for embargoing of content	Mandatory
11.9	Easy relation of articles, to improve click-through to related information.	Mandatory
11.10	Automatic archiving (Last week, Jan, Feb, etc.)	Mandatory
11.11	Placement of 'current' items moving previous versions into other areas	Mandatory
11.12	Top-10 pages (dynamic)	Desirable
11.13	Ordering of items can be under editorial control	Mandatory
11.14	Document management requirement to print articles (and PDFs') with watermarks.	Desirable

12. Configuration Management

These are features that the CMS must have to allow for effective use by Authors, this includes how the administration of the website can be achieved as well.

Requirements

12.1	Check-in and check-out content items	Mandatory
12.2	View list of items checked-out by all authors	Mandatory
12.3	Rollback, at least to the last change.	Mandatory
12.4	Backups of channels to be performed nightly.	Mandatory
12.5	Ability to audit the content and documents published on the Website on a given date.	Mandatory
12.6	Multi-author changes.	Desirable
12.7	Word to PDF conversion should require both assets to be managed within the CMS, so that the original MS Word document is not lost	Desirable
12.8	Provide a report on content changes performed within a given time period.	Desirable
12.9	Authors to be able to view content by 'Review Date' metadata value to allow a process for them to re-examine if content has to be updated.	Mandatory
12.10	Multiple authors to be able to maintain content in the same area, for example, to produce a central glossary section	Desirable
12.11	Content updates to allow comparison with previous version of the page.	Optional

13. Approval of Content and Workflow

These list how content can be approved and how workflow can be designed and content attached to workflows.

Requirements

13.1	Workflow actions shall be communicated using Email, the email to contain a link to complete any actions.	Desirable
13.2	Workflow shall interact with BPMS solution through a defined mechanism	Mandatory

13.3	The workflow process shall be variable depending on the content. Certain types of content may be in different workflow.	Mandatory
13.4	The CMS should apply the relevant workflow dependent of type of content.	Desirable
13.5	The author shall be responsible for selecting the workflow to use for approval and publishing where not the standard workflow for that content type.	Mandatory
13.6	Content approval workflows must comprise of but not limited to :	
13.7	Author and one editor for approval and publishing	Mandatory
13.8	Author with no additional approval for publishing	Mandatory
13.9	Content created with serial levels of approval	Mandatory
13.10	Content created with approval panel consensus	Mandatory
13.11	Deadlines for content creation and approval can be managed effectively	Mandatory
13.12	Users shall be able to escalate workflow decisions should approvers be unavailable to perform the approval step	Mandatory
13.13	The workflow policy should cater for when approvers are sick or on holiday	Mandatory
13.14	Workflow should cater for the simultaneous approval of content for multiple channels	Mandatory

14. Publication of Content

It is a design aim that the Website is delivered through a portal site. This is as opposed to the delivery of content from a database on a 'live' website. The reasons behind this design aim are:

Minimal hardware investment as the 'live' website site will need to be sized to support the concurrent access of over many users.

Minimal content management licence investment, as otherwise a staging area and production version of the licence are required.

Reduction of system risk should access to the Portal be for time-critical business use.

Requirements

14.1	Content shall be published automatically at the end of work flows.	Mandatory
14.2	Users shall be able to subscribe to changes to pages and be informed when they change	Mandatory
14.3	The website content should be published statically	Desirable
14.4	Large selections of Content should be publishable at a future given date/time.	Mandatory
14.5	Content shall be simultaneously published across all channels	Mandatory
14.6	Content authors shall be notified when content they are responsible for is nearing its expiry date	Mandatory
14.7	The active date of articles can be displayed against the published article, with an indication as to if the article is out of date.	Mandatory
14.8	Content to be bookmark-able – friendly URLs	Mandatory
14.9	Administrators should be able to define friendly URLs	Mandatory
14.10	The solution will ensure, as far as is possible, that content cache provides the latest version of content	Mandatory

15. Maintenance of a Site Map Requirements

The site map is a well used navigation tool on the current website, the solution needs to provide this facility

Requirements

15.1	The Site map should be generated by the CMS	Mandatory
15.2	The Site map will be published for the different views of data.	Mandatory
15.3	The Primary, Secondary and Tertiary levels of navigation items should be modelled in the sitemap.	Mandatory
15.4	The sitemap should be compatible with Google SiteMap XML	Desirable

16. User Authentication and Role Definition Requirements

The CMS must allow authentication either by users logging in through a web form or automatically through integration with the current desktop login system.

Requirements

16.1	Login is not needed for the website	Mandatory
16.2	Administration and Authoring validation sources:	
	Network level (current) - Novell	Mandatory
	Network level (future) – LDAP	Desirable
16.3	Secure authorship by non-BCC employees	Desirable
16.4	BCC Internet browser authentication:	
	Network level – Novell	Desirable
	Anonymous user	Mandatory
16.5	Security through Access Control Lists, which describe who does, and does not have access to a given file or document.	Mandatory
16.6	Authentication for the administration and authoring interface for the CMS shall be the Network level authentication layer.	Desirable

17. User Management Requirements

BCC must be able to be set specific functions within the CMS either by group or individual users

Requirements

17.1	Directorate	Optional
17.2	Functional area (press reports)	Optional
17.3	Bespoke area	Optional
17.4	Content Item (i.e. change text, not the picture)	Optional
17.5	Page deletion (to archive not delete)	Optional
17.6	Channels	Optional
17.7	Central and devolved administration	Optional
17.8	Articles may be authored by partner companies	Future
17.9	Devolved sub-administration tasks, defined by BCC for areas of the site	Mandatory
17.10	Content areas shall be able to be changed between content authors (people leaving, and moving within the organisation)	Mandatory

18. Secure Areas

A number of areas in the organisation that require secure areas are required on the website to hold content for only a few selected users to see..

Central governance of the information held in these areas will be required to stop the website being used as a file system.

Requirements

18.1	Secure areas to be supported	Desirable
18.2	Security to also apply to staff using the CMS	Desirable
18.3	LDAP Security groups to be supported mechanism for Static delivery.	Desirable

19. Real-Time Information and Syndication

The CMS must be able to retrieve real time information and display it so that it can show the latest information without user intervention. BCC also needs to be able to distribute this information to third-party organisations.

Requirements

19.1	Access to information for a given location	Future
19.2	Solution to include the distribution of information with a filtering mechanism	Future

20. Template Maintenance

The CMS must be able to support versions of templates, specific configuration and attachments must be of specific type. These templates must be able to be re-used with minimal intervention.

Requirements

20.1	The management of template changes between environments shall be controlled.	Mandatory
20.2	Templates shall be able to be created within a structured language.	Mandatory
20.3	Areas of the site can be configured to have large non controlled areas for content	Desirable
20.4	Areas of the site can be configured for only specific content formats	Mandatory
20.5	Data type of attachments to be controlled	Mandatory
20.6	Template creation must be achieved through use of non-proprietary technology, e.g. HTML, FreeMarker etc.	Mandatory

21. Work-flow Management

The system will have built in work flow. The work flow will be able to be configured for different business areas and content types. It should be a non technical task to configure and administer workflows.

Requirements

21.1	Work-flow configuration shall be flexible to allow different content areas, directorates and channels to use different authorisation and work-flow definitions.	Mandatory
21.2	Work-flow configurations and permissions across all channels shall be managed centrally.	Mandatory
21.3	Work-flow shall interface with BPMS or support a BPEL equivalence	Desirable

22. Personalisation and Dynamic Delivery

The solution must be able to allow users to have personalisation and control over links. Additionally the content must also be available without personalisation.

Requirements

22.1	The channels shall be deliverable through static delivery, so that content is available if personalisation service fails.	Future
22.2	Directorate home pages shall be maintainable for individual directorates.	Mandatory
22.3	Allows the user to configure their own links from the home page. Each page will include a tool "Add to my Links". The function will cover functionality to add, delete, modify and re-order links.	Desirable
22.4	List of important or frequently used phone numbers or contacts to be maintained	Optional
22.5	User configuration of their internet homepage to define the content they wish to see and have quick links to (similar to MyYahoo).	Future
22.6	Per-User personalisation.	Mandatory
22.7	Users must be able to create themselves accounts on the portal	Mandatory
22.8	All existing transactional services must be available through new solution.	Mandatory

23. Migration of Content into the CMS

Content must be moved from the old solution to the new solution. Whilst this is thought to be a manual job, an automated solution should also be available. Rework of the navigation and content must be considered outside of this solution.

Requirements

23.1	Bulk migration of site content	Mandatory
23.2	Bulk migration of associated documents	Mandatory
23.3	Bulk migration of content from HTML-based static template sites	Desirable
23.4	Migration of a site, as is, into the CMS. (Need to know what work is then required to properly re-structure the site)	Desirable
23.5	Import of XML-based content	Optional

24. Subscriptions and Alerts

The Website shall have many areas that people are interested in. Users may not be aware of new information on the website if they don't visit "what's new" sections and may rely solely on these emails to keep up-to-date with current information.

The registration mechanism can be implemented in many ways

- Dynamic delivery, based on user's logon
- Cookie to highlight on the home page when new information is available

Requirements

24.1	Alert users to changes in content on a webpage. (e.g. news, statement, press release etc.)	Mandatory
24.2	Users to subscribe to receive newsletters via email.	Mandatory
24.3	Newsletters and regular emails to be optional and people to opt-in or out of email delivery	Mandatory
24.4	Alerts to be email-based	Mandatory
24.5	Alerts to be website -based	Mandatory
24.6	Content to be published from the CMS as an URL	Mandatory
24.7	User to be able to switch off alerts	Mandatory

25. Document Library

The solution will provide a document library, these documents may be digital or physical. The solution will allow items to be classified for easy retrieval. BCC issues large number of documents per year and the solution must manage these easily.

Requirements

25.1	Unique and shared metadata fields to be used to define document items	Mandatory
25.2	Search to include searching a taxonomy hierarchy	Mandatory
25.3	Users to perform transactions to request loans of books, videos, CDs	Future
25.4	A synopsis of the document should be provided and used when displaying the document to the user.	Desirable
25.5	Provide a mechanism to view where a document has been used regardless of publication channel.	Desirable
25.6	Versioning of documents must be supported	Desirable
25.7	Documents must be able to be used in multiple locations	Mandatory

26. Image Library

The solution must provide an Image Library so that quality and digital rights of the images can be managed centrally.

Requirements

26.1	Searchable database of all pictures in BCC	Mandatory
26.2	Press Office sending out press release to contacts with a URL of the picture made	Future

	available on the Internet site so the recipient can download the photo.	
26.3	Online display of images for authors to select from.	Mandatory
26.4	CD-Rom production and delivery of high-quality photographs	Desirable
26.5	Tracking of who has used what photographs should new photography be available.	Optional
26.6	Many departments to be able to submit photos to the Image library.	Desirable
26.7	Workflow must be supported for inclusion of new images into the library	Desirable
26.8	The Image Library must support a simple editing facility to allow use of images in different contexts	Optional

27. News and Content Facilities

It is best practice for websites to display the information about an article and provide a contact function against each page.

As people read articles they may find it useful to inform other employees of the article. A facility should be used to send an email to a colleague the containing the URL to the article.

Sending the URL is important as it promotes the access of information from the central Content repository instead of its proliferating the content within emails.

Requirements

27.1	Date Published.	Mandatory
27.2	Author	Mandatory
27.3	Content Owner	Mandatory
27.4	Email facility to contact the article owner, providing immediate and easy feedback.	Mandatory
27.5	Phone details for the article owner	Optional

28. Calendars

Calendars are used within the website for organisational and directorate events. Users can register to go to an event by providing their email address, allowing details of the meeting to be sent to individuals, number of attendees to be managed, amendment notices to be delivered and a summary of the event emailed to attendees.

Events can relate to department or location. The user can toggle between his/her own chosen announcements and all BCC announcements. This functionality will be delivered through the content management system

This functionality is also useful to also make staff aware of the social and leisure activities provided by BCC with the promotion of special events, locations of interest, and events where employees have concessions.

Requirements

28.1	Entry of events to be maintained by the organisation.	Desirable
28.2	Event information to be searchable from the website search function	Desirable
28.3	Listing of events by type, directorate, date (Day and Week and Month)	Desirable
28.4	Event types can be filtered out of the list presented	Desirable
28.5	Staff request for attendance to be submitted	Desirable
28.6	Email confirmation to be sent to attendee	Desirable
28.7	Emails to be sent to attendees informing them of changes	Desirable
28.8	List of attendees to be printed by event organiser	Optional

29. On-line Forms

BCC is moving towards citizen and organisational users using self-service transactions through a Transformation Project. Forms are available on-line and via MS Word and PDF documents currently.

Various technology options now exist to provide electronic forms functionality:

HTML Forms

On-line forms where information can be sent via email or processed on the server.

PDF Forms

PDF version 1.7 included support for on-line forms and has been extended over the later releases for the creation of accessible forms using a tagged PDF file.

PDF forms can include familiar elements, such as, radio buttons, check boxes, drop down boxes and text boxes. On-line forms can then be submitted for sever-side management using, for example, CGI scripts, XML or via open database connectivity (ODBC) connections into databases.

Requirements for this section need to be further defined in conjunction with Transformation and the wider organisation.

User Interaction and Suggestions

Email is used within the organisation for resolving internal queries and issues through reply-to-sender and reply-to-all-recipient emails. This mechanism clogs up email mailboxes and silos information into the hands of a few.

There is currently a BCC-wide mechanism for citizens to raise suggestions to improve service to customers or to improve external processes at present, this does currently links

The issue of authentication of information from the CSP's has to be addressed, as anonymous comments can open the mechanism to abuse, and useful suggestions should lead to citizens being recognised, requiring their details to be known.

In some cases, it may be useful to have anonymous comments being submitted. The facility should be provided for both cases.

Whenever suggestions have been required from citizens, there should also be a published summary of the feedback raised and the according actions taken.

Requirements

29.1	Users to be able to provide a description of their suggestion, the area within BCC it concerns, and what they see as being the benefit	Mandatory
29.2	Contact details to be provided, if required.	Mandatory
29.3	Anonymous suggestions can be raised, if required.	Mandatory
29.4	Suggestions can be emailed to a mailbox	Mandatory
29.5	Suggestions to be automatically linked back to content area	Mandatory
29.6	Simple forms must be able to be created by non-technical authors	Desirable
29.7	Contact mechanisms for forms must be selectable by non-technical authors	Desirable
29.8	Moderated user generated content to be published in defined content areas	Optional
29.9	All form content should link to a Customer Relationship Management system	Future

30. Online Polls

BCC requires the ability to publish and manage online polls and user responses as part of democratic engagement. A poll could request a feedback rating (1-5), a Yes/No response or a multiple-choice question. These can be controlled by CMS users and will not require any additional software or programming to be published.

Requirements

30.1	Poll generation must be integrated into the solution and allow Authors to publish polls without external resource requirements.	Mandatory
30.2	Anonymous poll responses to be allowed	Mandatory
30.3	Filtering of poll requests from the same IP address to avoid click fraud.	Desirable
30.4	Online reporting of poll results back to users	Desirable
30.5	Senior manager provided with poll results in a graphical or textual manner	Mandatory

31. Online Collaboration

As part of the democratic engagement process, BCC wishes to enable to collaboration through discussions and sharing of information with users, both internal and external.

Requirements

31.1	Group owners should be able to administer all users and moderate content.	Desirable
31.2	Communities to be access by all users	Desirable
31.3	Communities to be made accessible by only a subset of users – invited in by the forum owner.	Desirable
31.4	Senior member to monitor usefulness of specific community and resolution of issues	Desirable
31.5	Support for multiple:	
	Forums	Desirable
	Blogs	Desirable
	Wikis	Desirable
31.6	On-the-fly Discussion Group creation	Desirable
31.7	Documents to be allowed within the forum	Desirable

32. Audio and Video Streaming

An additional method for delivering the messages would be to stream important presentations and speeches. This can be of externally facing events or can be of a Executive member speaking on a topic. A video of the speech would be an effective additional communication mechanism. The transcript of the speech held on the Internet can also be used by the Channels team to facilitate the response to queries.

Requirements

32.1	BSL Videos	Mandatory
32.2	Press Conferences	Desirable
32.3	Internal Adverts	Desirable
32.4	TV programs concerning BCC	Desirable
32.5	Health and safety	Desirable
32.6	Training material (e.g. CBTs)	Desirable
32.7	Search of Speechs	Future
32.8	Support for dynamic linking of video to existing content	Mandatory
32.9	Ability to stream video, with encoding to automatically match the available bandwidth.	Mandatory
32.10	Stream a presentation alongside the associated PowerPoint slide.	Mandatory
32.11	Subtitles of the presentation to be shown	Optional
32.12	Hold transcripts of speeches	Desirable

33. Tracking

The current web site does not perform any user tracking. The current page architecture is hard to interpret using tracking packages. Use of tracking can improve reporting and site navigation, content and design.

Requirements

33.1	Website usage shall be tracked using a statistics product	Mandatory
33.2	Usage should be able to be tracked across all areas of the website.	Mandatory
33.3	The behaviour of users responding to the Email channel shall be tracked. When, and if emails are opened, if links to the Website are followed, etc.	Desirable
33.4	Web statistics information to be published online, for content publishers to monitor.	Mandatory
33.5	Popular Search terms to be assessed	Mandatory
33.6	Multivariate testing	Future

34. Search

The search solution is to provide a speedy and correct response across all content published from the solution. Reporting on user's search behaviour can add value to content and help BCC to improve the customer journey.

Requirements

34.1	The search solution will provide a web page interface	Mandatory
34.2	The search solution will index all web content within the portal	Mandatory
34.3	The search solution will index external content from RSS feeds	Mandatory
34.4	Search solution will index unstructured content	Desirable
34.5	Search results will be available as XML file for use in other applications	Mandatory
34.6	The search engine will allow for complete customisation of the interface	Desirable
34.7	Advanced search options must be configurable and expandable to cover all indexed data fields	Desirable
34.8	The search solution must report on search engine usage.	Mandatory
34.9	The search engine must provide support for corrections of spelling mistakes, i.e. 'Did you Mean?'	Mandatory
34.10	The search solution must provide for keyword search results i.e. Sponsored Links	Mandatory
34.11	The search engine will be able to integrate to other data sources within the BCC infrastructure	Future

35. Support and development

BCC require that professional support arrangements are available for the solution for the lifetime of the project – five years. There also needs to be a substantial development community that allows the council to procure future developments from a range of suppliers.

Requirements

35.1	The solution must have support available from the software vendor	Mandatory
35.2	The deployed solution must be supported by a number of suppliers	Mandatory
35.3	The solution must be able to be developed by an established user community	Mandatory
35.4	Solution must be able to developed with more than a single supplier	Mandatory