BBC eTV Formats January 2004

Contents

- I. Introduction
 - Welcome
 - Definitions
 - Production Notes
 - ⇒ Digital Cable
 - ⇒ Delivery Dates
 - \Rightarrow Design and Navigation
 - ⇒ Delivery Formats
- 2. Section One: Current Formats
- 3. Section Two: Past Formats
- 4. Frequently Asked Questions

Introduction Welcome **Definitions Production Notes** ⇒ Digital Cable ⇒ Delivery Dates ⇒ Design and Navigation ⇒ Delivery Formats

Introduction: Welcome

The Story So Far

Interactive TV from the BBC has gone from strength to strength. It has proved its ability to draw audiences offering choice and control (Fame Academy, Wimbledon); to extend the life and range of favourite shows (Chelsea Flower Show, CBeebies games); and to enable participation, communication and the growth of community (Test The Nation, Sports Personality of the Year, The Big Read, FA Cup).

The Challenge

The challenge is now twofold: to move interactive TV into the mainstream while continuing to innovate.

Audience Benefits

The next phase of interactive TV will draw heavily on audience insights – what we have learnt about what works and what does not.

The BBC leads technical innovation in the field and will continue to do so - but technical innovation in itself is not enough. The BBC also wants to see fresh, genuinely innovative ideas which make use of existing technology to deliver real audience benefits.

This book is designed to help producers come up with those ideas. It describes the very wide range of existing enhanced TV formats and in the Current Formats section you will find formats which are proven vehicles for delivering successful eTV services. The majority of new commissions will be based on these formats.

TV Commissioning

Commissioning for Interactive TV Programmes has moved from New Media and is now established in Television under Emma Somerville, the Head of Interactive TV Programmes. As a result strategy for Interactive TV commissioning closely reflects both the genre and the channel strategies for television programming.

What We're Looking For

We want to see innovative, high impact ideas and proposals which maximise viewer participation.

In every case the audience is central. Bring us ideas which use interactivity to broaden the appeal and bring us ideas which continue to build the two-way relationship with interactive TV's growing heartland – exciting – engaging – entertaining – and, above all, surprising.

Fundamentally, it's about making better TV.

Introduction: Definitions

What is this book?

This is a catalogue of BBC eTV Formats which have already been used to deliver services. It is intended to support producers in bidding for eTV commissions. At the beginning you will find some notes on production and at the end answers to frequently asked questions.

The main body of the catalogue is split into 2 sections: Current Formats and Past Formats.

Section 1: Current Formats:

The majority of new commissions will make use of the formats in this section.

It includes the latest version of ModCon which is a highly versatile production system offering the ability to create formats by combining elements from a suite of available functionality.

The other formats in this section are less flexible but are able to deliver features not offered by ModCon.

Section 2: Past Formats:

These are all formats which the BBC has used to deliver services over the last few years. The functionality available in many of these formats has already been – or is currently being – integrated into the latest version of ModCon and other Current Formats. However, the original formats are recorded here to promote thinking about the possibilities offered by interactive TV services.

Platforms

Bear in mind that all commissioned eTV projects have to provide a service for each of the three major digital platforms. As a result of the platforms' widely divergent capacities and capabilities the available eTV formats for each platform may differ. The BBC aims to deliver an identical service on all 3 platforms, but we also aim to create the best services possible. The platforms are colour-coded:

Digital Satellite (DSat)

Digital Terrestrial (DTT)

Digital Cable (DCable)

What is eTV?

In the BBC we define enhanced television (eTV) as a service which directly enhances a particular TV programme or event.

What are eTV Formats?

In the world of linear TV, the term 'format' describes a TV programme that includes pre-defined elements. In much the same way, the term 'eTV format' describes an enhanced TV service with pre-defined elements.

Introduction: Production Notes

Digital Cable

Historically, Digital Cable offered interactive TV services which differed markedly from those available on the other two platforms. In the first instance the only service available was the Interactive Text Service¹ (also known as a 'walled garden').

BBC First to Video

As a result of pioneering work by the BBC it is now possible to replicate many of our direct channel-associated programme enhancements and video-based multistream services on the DCable platform. In future, where eTV projects include these services on DSat the BBC aspires to develop a version of that service on the DCable platform.

However, these services will not be available for all eTV projects on DCable. Where they are available they may only be technically possible on one of the two main cable franchises: NTL and Telewest. The feasibility of a comparable eTV service on DCable will be established at commission and expressed in the Delivery Contract.

Design and Navigation

All eTV projects belong to the larger BBC world on each platform and are governed by a number of general rules and guidelines. It is important that the ways in which viewers access and leave eTV services or navigate between services are consistent on the platform. In addition a number of other Design conventions have been established for BBC eTV.

Full details for DSat and DTT are available in the BBC Interactive TV Style Guide.

Details for DCable are available in the Interactive TV Style Guide DCable Supplement.

Delivery Dates and Production Schedules

Assets and Delivery

Assets for interactive TV services will often need to be delivered significantly in advance of transmission dates. They will be required for testing purposes but will also have to fit in with resource scheduling for other services. As a result actual delivery details are subject to discussion post commission and will form part of the Delivery Contract.

Obviously some assets cannot be delivered several weeks before TX – for example, live video – but even in these cases, representative video is still required to build and test the service.

Assets and Design

In every case enhanced TV has longer lead-times between service completion and TX than linear TV. Crucially, interactive TV designers need some design features like branding, key graphics and location of graphics on-screen to be finalised long before their equivalents in linear TV production.

The commissioning of an eTV service may mean a significant re-think of the linear TV production schedule.

Interactive Text Service

DCable subscribers with Telewest and NTL have access to an interactive text service, displayed via their set top box using Liberate software. Although this service is based on web technology, it is not true Internet. DCable viewers have access to a limited range of sites that are approved by the platform owners and which are optimised for television display and navigation.

Introduction: Production Notes cont

Assets Formats

Platform	Asset	Delivery Format
DSat	Video	Pre-recorded Digibeta or live Aspect ratio: dependent on eTV service
	Audio	Live or pre-recorded
	Graphics	Bitmaps Backgrounds: MPEG i-Frames Stills: MPEG i-Frames/ JPEGs
DTT	Video	Pre-recorded Digibeta or live Aspect ratio: dependent on eTV service
	Audio	Live or pre-recorded
	Graphics	PNGs Backgrounds/stills: MPEG i-Frames
DCable	Video	Pre-recorded Digibeta or live Aspect ratio: dependent on eTV service
	Audio	Live or pre-recorded
	Graphics	PNGs, GIFs or JPEGs Backgrounds: GIFs Stills: JPEGs



The majority of new commissions will use the formats in this section.

The Current Formats range has been designed for ease of re-use.

All these formats require little technical development work.

They include the latest version of ModCon - a highly versatile production system offering the ability to create very varied services by combining elements from a suite of available functionality.

The other formats in this section are individually less flexible but are able to deliver features not offered by ModCon.

- ⇒ MODCON
- ⇒ GENERIC OVERLAY QUIZ
- ⇒ 2 STREAM QUIZ
- ⇒ 3 STREAM MOSAIC
- ⇒ DONATION
- ⇒ GAMES (CBeebies)

At the end of this section you will find the simplest level of enhanced TV the BBC offers:

⇒ PROGRAMME SUPPORT

MODCON FOUR DSat, DTT and DCable

ModCon is not an eTV format.

The term is short for Modular Configurable application. In fact it refers to several software applications which have all been built in a modular fashion and are capable of delivering services to the three main platforms.

Production System

The easiest way to think of ModCon is as a **production system** which allows the creation of eTV formats for particular eTV projects.

ModCon delivers a range of functionality which can be switched on and off in a modular fashion. New services can configure ModCon by selecting functionality, changing content (text, graphics, video and audio) and changing the position of content and functional elements within certain prescribed limits.²

It is important to understand that ModCon does not offer a free for all, pick and mix approach. Instead it is designed to offer maximum flexibility while ensuring that the formats created are effective in terms of look and feel (graphic design), user-journey (navigation) and user-experience (functionality). The appropriate ModCon elements for a particular eTV project will be established at commission and expressed in the Delivery Contract.

ModCon 4

The next few pages describe in some detail what the latest version of the ModCon system - ModCon 4 can offer. ModCon 4 comprises all previous functionality plus new features

2

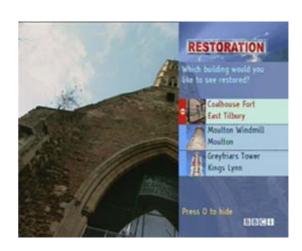
MODCON FOUR

Examples of what ModCon can deliver













MODCON FOUR

MODCON FOUR allows a service to combine elements from a pre-defined group of features:

Functional Features

sidebar overlay	overlay timeout	minimise/hide
welcome scene	menu/sub-menus	straight to content
blue key dropdown menu	number buttons	audio-switching
I to 6 additional video streams	quarter-screen video	video-toggling
text content	return path messaging	return path voting

I. SIDEBAR OVERLAY

- the viewer can be presented with a right sidebar overlay on full screen video.
- the overlay can timeout after a specified time
- the viewer can minimise the overlay in order to view video full screen

2. QUARTER-SCREEN

- ModCon can also deliver a service presented around guarter-screen video.
- the viewer can use the Red Key to go from quarter-screen to full screen video.
- the viewer can minimise the service in order to view video full screen

3. DROPDOWN MENU/NUMBER BUTTONS

- ModCon can deliver a small dropdown menu on full screen video accessed from the Blue Key
- Up to 9 number buttons can also appear over full screen video and access content directly
- One of the number buttons can be an 'audio-switcher' providing a slim horizontal dropdown menu navigable with right and left arrow keys and providing access to alternative audio tracks
- the viewer can minimise the service in order to view video full screen hiding the menu and/or buttons

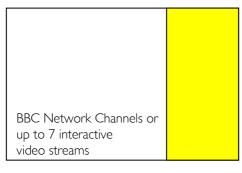
VIDEO

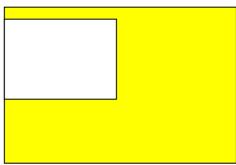
ModCon can be displayed over BBC network channels or over from 1 to 7 interactive video streams (platform dependent).

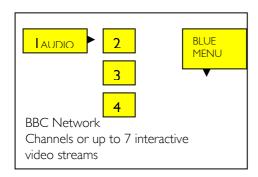
CONTENT: The service can include:

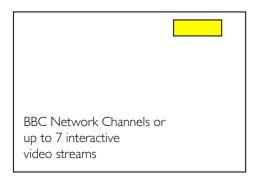
- welcome/main menu page (can be dropped if only I item of functionality)
- sub-menus
- text content
- voting via the return path for DSat (voting text info is provided for DTT and DCable)
- messaging via the return path for DSat (message boards to read for DTT and DCable)
- Help text and/or Terms and Conditions
- alternative audio streams
- alternative video streams

MODCON FOUR









1. Side Bar Overlay

ModCon can display a service in a Side Bar Overlay. All content (text, video, vote etc) will then be selectable from menus displayed within the sidebar. All non-video content will appear in the sidebar.

2. Quarter-screen

A service can also be delivered as a ¼ screen video display. The choice of ¼ screen or sidebar overlay once made will remain consistent across the whole service. Here menus and text content will appear wrapped around the video.

3. New Number Buttons and Dropdown Menus

Instead of a sidebar overlay menu ModCon can now deliver a service via a dropdown menu accessed by pressing the Blue Key.

It can also offer up to 9 'buttons' selectable via number keys I-9. Each number button can access any content (text, video, vote) directly.

Quarter-screen: Where a Blue Key dropdown menu or Number buttons are used - any text or graphical content selected will be displayed around quarter-screen video.

Audio-switcher: One of the number buttons can access an 'audio-switcher'. This offers alternative audio via a slim dropdown menu with horizontal options navigable with the right and left arrow keys.

The Blue key menu and the Number select buttons can all be moved to different locations on screen.

Minimise

In each of the above options the service can be minimised i.e. at a single key press it will disappear from the screen leaving full-screen video and an icon top right.

MODCON FOUR

Welcome /Main Menu/Sub-Menus

On launching the service the first thing the viewer will see is a welcome message/main menu. The text and branding will be configurable to reflect the eTV project. If the service uses a sidebar overlay the welcome message will appear in the overlay. A quarter-screen service will display it wrapped around quarter-screen video.

A service using a Blue Key dropdown menu or Number Buttons will present a welcome message in a banner at the bottom of the screen which will disappear after a few seconds.

If the service has only a single piece of functionality the Welcome/Main Menu section can be removed and the first thing the viewer will see is the first scene of the functionality.

The Main Menu can consist of up to 6 items, menu item titles will be configurable. This top-level menu will reflect the modules of functionality chosen for the eTV project. A number of sub-menus can also be

Text Content

Any text content can occupy up to 3 menu items in the Main Menu. From this menu the viewer will either go into a fixed 6 item menu with each item leading to 2 text pages or go straight to up to 10 text pages.

Voting

On DTT and DCable this functionality is a text page with alternative contact information (SMS etc) to enable the viewer to register their opinion with the production team.

On DSAT this functionality utilises the return path. The vote can be enabled and disabled during broadcast. When disabled the vote section will still exist in the main menu but will take the viewer to a configurable text page.

There are two versions of vote, these function identically but are represented differently on screen.

- The first is 2 lines of text available for the question and multiple-choice answer of up to 10 text options.
- The second is 3 lines of text available for the question and multiple-choice answer or up to 4 options illustrated with text and graphics

Messaging

On DTT and DCable this functionality is a Message Board of up to 10 pages of text. By pressing SELECT viewers can see alternative contact information such as telephone or SMS numbers on a text page.

On DSAT this functionality utilises the return path.

- Sending Messages DSat viewers can enter a message, their name and their location via their remote control and send this to the production team via the return path.
- Message Board The message board displays messages received by the production team

MODCON FOUR

Video

The number of video streams available is platform dependent – on DSat a maximum of 7 streams – on DTT a maximum of 2 additional streams (plus the relevant BBC network channel).

Where the service is presented as quarter screen video – pressing Red allows the viewer to view the video in full screen.

Video Toggling Option

Where more than one video stream is included in the service viewers can move between video streams simply by pressing the Select (or OK) Key.

Audio

The number of audio streams available is platform dependent – on DSat a maximum of 5 streams – on DTT a maximum of 2 streams.

Audio-switcher

Where audio-switching is used in a service it is accessible from one of the Number Buttons. Selecting the correct Number Button will present the viewer with a horizontal drop-down menu where the alternative audio streams are navigable using the right and left arrow keys.

Number Buttons

A service can be created using between 1 and 9 Number Buttons. The buttons can give direct access to any content – video, text, vote etc.

Number Buttons can be combined with Blue Key dropdown menu – but not with the sidebar overlay or quarter screen main menus. (Where Number Buttons access text-based content – the content will appear in quarter-screen presentation).

One of the Number Buttons can be used as an audio-switcher (see above).

Blue Key Menu

A service can be created using a dropdown menu accessible from the Blue Key and presented over full screen video. This menu can include any content item (video, text, vote etc).

Blue Key Menu cannot be combined with Main Menus in a sidebar overlay or quarter screen presentation. However, the Blue Key Menu is designed to be used in combination with Number Buttons. (Where the Blue Key Menu accesses text-based content – the content will appear in quarter-screen presentation).

Help Text, Terms & Conditions

Help text reflects the functionality chosen. Terms & Conditions sections can be edited on a project by project basis, to accommodate call charges for use of the return path etc.

Content Input

The MOSS content input system allows content, including design assets, to be entered and configured.

Section I: Current Formats – Generic Overlay Quiz

GENERIC OVERLAY QUIZ DSat and DTT

The Generic Overlay Quiz builds on the success of the **Test The Nation format**. It has been designed to provide a simple and easily re-usable multiple choice quiz.

This format allows viewers to play along with a linear TV quiz/test where the questions form part of the TV programme. The service is displayed as an overlay on a BBC Network channel.

When the service is launched instructions (or Help Text) appear in a text box on screen which times out after a few seconds.

Questions are synchronised to the linear programme and have to be answered within a time limit. Viewers use the colour keys on their remote control to select from up to 4 multiple choice answers.

Scores The overall score is calculated at the end and displayed on screen alongside an appropriate comment. The format can then display two further score calculations:

- A breakdown of the score for each section of the quiz
- A grading for the score up to 10 levels available.





OPTIONAL ADDITIONAL VIDEO STREAM FEATURE:

This format can also be configured with the multiple choice overlay graphics displayed as an overlay on **a** single additional video stream (i.e. not a BBC Network channel). This could allow interactive projects which proposed a multiple-choice quiz as a post-show experience.

Section I: Current Formats – 2 Stream Ouiz

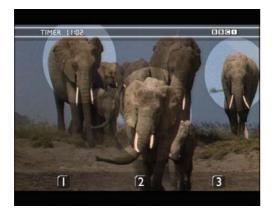
2 STREAM QUIZ

DSat and DTT

Mammals – Human Senses - Rome

This format allows viewers to play a video quiz. There are 2 video streams – one represents the 'wrong' stream whilst the other represents the 'right' stream. At key junctures the viewer is asked to answer a multiple choice question by selecting with their number keys. Depending on their answer the video stream either continues in view or seamlessly switches to the second stream.

The viewer is not aware of the transition only of the content offered to them in the current stream.



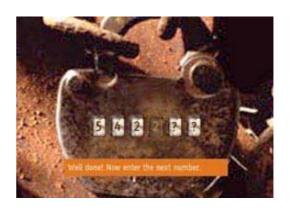


OPTIONAL CLUE/CODE FEATURE

Pyramid

This allows extra functionality to be added. If the question is answered correctly the viewer sees a 'clue' in the form of a number. At the end of the challenge they use the remote control to enter all their acquired numbers – against the clock. If they are successful they access a clip of 'hidden' video not accessible to those who fail.





Section 1: Current Formats – 3 Stream Mosaic

3 STREAM MOSAIC DSat and DCable

The Saturday Show – World Athletics

This format allows viewers to use a mosaic menu and the up, down and Select keys on their remote control to choose between 3 full-screen video streams – the main linear programme and 2 alternative streams.

The mosaic menu shows video in each of the thumbnail choices on the mosaic and allows viewers to highlight their menu choice and hear the associated audio before selecting.



OPTIONAL QUARTER SCREEN FEATURE:

The Commonwealth Games

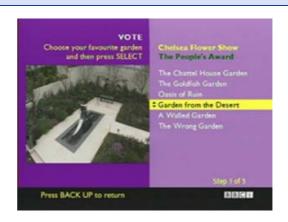
This allows viewers to access pages of text or other data while the video stream they are watching (or the stream that was highlighted in the mosaic menu) remains in quarter-screen. Quarter-screen features are available from a pop-up menu on the blue key.

OPTIONAL RETURN PATH FEATURES: Votes/Messages

Chelsea Flower Show

When watching in quarter-screen on DSat viewers can send communications back to the broadcaster. These could be Votes or Messages. They can also read messages left by others.





Section 1: Current Formats - Donation

DONATION DSat

Sport Relief

This format makes use of the Return Path.

It allows viewers to access pages of information and a form into which they can enter credit card details and so donate money via the Set Top Box modem. The TV channel they are watching remains in quarter-screen.





OPTIONAL VOTE FEATURE: A voting section can also be included.

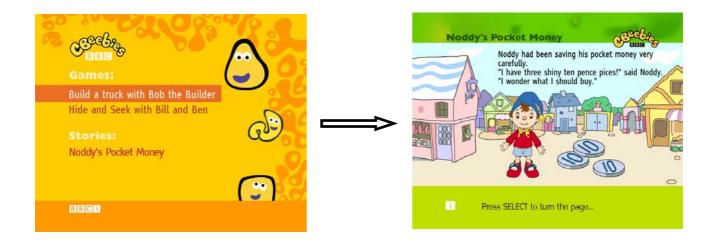


GAMES DSat and DTT

CBeebies

Some of the following games are only available on DSat. There are also a number of similar games available in the 'walled garden' services on DCable.

The entry format to CBeebies games takes the viewer to a full-screen homepage with menu options. In the case of CBeebies viewers can then choose from a selection of simple games and story pages.



CATCH GAME DSat

Angelmouse

This format is a three level **CATCH GAME** – the viewer uses the red and blue keys to move a 'catcher' graphic left and right along the bottom of the screen to catch 'falling object' graphics. Key presses are accompanied by short bursts of sound.



I	Slow speed objects falling – catch 5
2	Medium speed objects falling – catch 10
3	Fast speed objects falling – more than one fall at once Catch as many as you can in a minute

MATCH GAME DSat

Postman Pat - Storymakers

This is a three level MATCH GAME where 4 'match' graphics are associated with colour keys at the bottom of the screen and have to be matched with a central 'target' graphic. Key presses are accompanied by short bursts of sound.



I	There are only 4 items to match, one of each colour.
2	There are 10 items to match.
3	The game has a time limit – match as many as you can within the time. Your score is displayed on-screen.

FOLLOW THE SEQUENCE GAME DSat

Yoho Ahoy – Bits and Bobs

This is a three level FOLLOW THE SEQUENCE GAME.

The viewer sees the game 'playing a tune' by changing the appearance of 4 'note' graphics associated with colour keys at the bottom of the screen. The viewer has to repeat the sequence. Key presses are accompanied by short bursts of sound.



1	Just for fun – the pleasure in making the graphics (characters), change (pop-up) and make noises (speak).
2	The game ends when the player has remembered a sequence of four. If the player makes a mistake the game resets and starts again.
3	The game ends when the player makes a mistake in a sequence. The final score is displayed on-screen.

CREATIVITY GAME DSat

Bob The Builder - Smarteenies

This is a three level CREATIVITY GAME.

A series of screens display a variety of 'kit parts' which together can build a model. In each screen 4 'kit parts' graphics are colour-coded to associate them with colour keys. The viewer uses the colour keys to select one of the kit parts from each screen to customise the final model. Key presses are accompanied by short bursts of sound.



I	Just for fun. Make whatever model you like.
2	A finished model is displayed on-screen as a small graphic. The player has to match the parts of the finished model.
3	A finished model is shown and then removed. The player has to remember and rebuild.

ODD ONE OUT GAME DSat and DTT

Bob The Builder - Step Inside

This is a three level **ODD ONE OUT GAME** where 3 identical graphics and 1 'odd one out' graphic are ranged along the screen above colour key icons. The viewer presses the colour key associated with the 'odd one out'. Key presses are accompanied by short bursts of sound. (This format is available on DTT without sound).



I	No time limit. No limit on the number of attempts to choose the odd one out. Game ends when player has 5 correct answers.
2	Each selection is timed and the player is allowed only one attempt. After 10 questions the game ends and the score is displayed.
3	Like level 2, but shorter time limit.

FRUIT MACHINE GAME DSat and DTT

Noddy - Fireman Sam

This is a three level **FRUIT MACHINE GAME**. A series of graphic images are segmented into thirds – the application randomly rotates the different segments to mix up the images. An extension of the game locates one complete image next to the mixed up segments. Key presses are accompanied by short bursts of sound. (This format is available on DTT without sound).



I	Just for fun. The images rotate whenever any colour key is pressed.
2	A complete image appears. The segmented images rotate. The player has to press any colour key to stop the images at the right moment.
3	Same as Level 2 but the rotation is faster.

MEMORY GAME DSat and DTT

Bill and Ben - Tweenies

This is a MEMORY GAME. 4 identical 'hiding place' graphics are associated with colour keys at the bottom of the screen and a central 'target' graphic appears above them. By pressing colour keys the viewer reveals the hidden objects behind each 'hiding place' to match the central 'target'. Key presses are accompanied by short bursts of sound.

(This format is available on DTT without sound).



PAINTING GAME DSat and DTT

Balamory - Tweenies

This is a three level **PAINTING GAME**.. The player can use the colour keys and the number keys to 'colour in' selected areas of the picture.



I	The Colour keys only are operational.
2	Colour keys and number keys can be used for a wider range of colours.
3	Colour keys and number keys give a wide range of colours. The paintbrush can be moved to point at different areas to paint using the arrow keys.

Section 1: Current Formats - Programme Support

PROGRAMME SUPPORT DSat, DTT and DCable

'The Bridge' 24/7 Service

When viewers press Red or Text whilst watching a programme they are presented with a right-hand sidebar overlay known as 'The Bridge'. All BBC interactive TV services are accessed from here: eTV (or Interactive Programmes) and 24/7 information services (news, weather, sport etc.).

If the programme has no fully fledged eTV service, the first options on the Bridge menu will be take them to programme support content.

The viewer can then access text-only factsheets about the programme or a return path messaging option. The return path messaging option can also deliver simple votes or competitions.





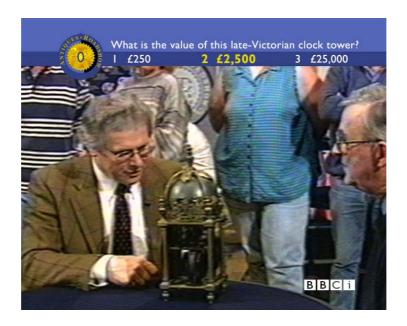


Section 2: Past Formats These are all formats which the BBC has used to deliver services over the last few years. The functionality available in many of these formats has already been - or is currently being - integrated into the latest version of ModCon and other Current Formats. However, the original formats are recorded here to promote thinking about the possibilities offered by interactive TV services. The formats in this section are split into: \Rightarrow Formats identical on DSat and DTT Formats for DSat only Formats for DTT only

Below you can see the range of formats which been identical on both the DSat and DTT platforms along with screenshots of specific eTV services they have delivered.

Antiques Road Show

This format allowed viewers to take part in a multiple-choice quiz displayed as a banner running along the top of the TV picture. The viewer could select an answer by using the Number Keys on their remote control. Questions were synchronised to the linear TV programme and had to be answered within a time limit. The score was updated as the programme progressed.



Test the Nation I, II and III

This format allowed viewers to play along with a linear TV quiz/test. Instructions appeared in text boxes at the bottom of the screen. Viewers used the colour keys on their remote control to select from multiple choice answers. Questions were synchronised to the linear programme and had to be answered within a time limit. At the end of the show their score was calculated and displayed on screen.

NB This format is now delivered by the Generic Quiz (see Current Formats section). However, the Registration option is not yet available.





OPTIONAL REGISTRATION FEATURE:

At the beginning of Test The Nation I viewers had to select their age range, as this made up part of the IQ calculation.

Below you can see the range of formats which have been used on the DSat platform along with screenshots of specific eTV services they have delivered. Those that also delivered to DTT are described in the previous section.

Walking With Beasts - Top of the Pops - Chicken Run Extra

This format allowed viewers to use the coloured fast text keys on their remote control unit to choose between 4 video streams – the main linear programme and 3 alternative streams.



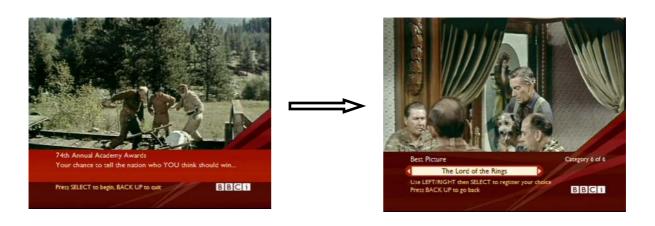


OPTIONAL AUDIO FEATURE: allowed viewers to switch to an alternative audio accompaniment

The People's Oscars - Monarchy Debate - The Morning Show - TOTP Awards

This format makes use of the Return Path.

It allowed viewers to take part in a vote displayed as a banner running along the bottom of the TV picture. Viewers were then presented with several categories on which to vote. In each category they chose to make a selection from the options offered or skipped the category. They submitted their selection(s) via the Set Top Box modem. The BBC then compiled the results.





Painting the Weather

This format allowed viewers to access a single additional video stream from the main linear programme. Help text appeared as a banner running along the bottom of the TV picture on the side-stream. It disappeared after 5 seconds leaving only a logo. The single stream was used in a variety of ways. (A very similar format was also available on DTT – without the optional extras which DSat offered. On DTT the text content could be changed - on DSat text content was fixed).







OPTIONAL RETURN PATH VOTING FEATURE:

Great Britons

This allowed viewers to take part in a vote displayed as a banner running along the bottom of the single additional video stream. Viewers were presented with several categories on which to vote. In each category they chose to make a selection from the options offered or skipped the category.



OPTIONAL AUDIO-SWITCHER FEATURE:

Welsh Rugby

The single additional video stream appears with a small bar in the top right-hand corner of the screen. Pressing the blue key presents a single-line drop down menu over the video stream. It allows viewers to choose between up to 5 audio streams using the right, left and Select keys.



Diners

This format allowed viewers to choose between 4 full-screen video streams.

The welcome screen displayed still images of the available video streams, which let the viewers see the available content. The viewer selected a stream using the colour keys on their remote control.

Having selected a video stream, the viewer could:

- watch the video full-screen
- view text content related to that video stream while the video remained visible in a reduced area of the screen.

NB The welcome screen in this format is **not** the same as the mosaic menu described in Current Formats. Here the welcome screen used still images while the mosaic menu shows video in each of the thumbnail choices. The welcome screen used colour keys for selection while the mosaic menu allows viewers to use the up and down keys to highlight a menu choice and hear the associated audio before selecting.





Smile - 'Nev'

This is a MAZE GAME played over a broadcast programme. The programme remains visible on the top left hand side of the screen.

A 'player' graphic appears in a maze constructed from a series of open and closed 'gates'. The 'player' graphic moves randomly. The viewer can open and close the gates in different configurations by pressing colour keys. The viewer must learn the two possible configurations offered by each colour key to guide the 'player' graphic out of the maze. Once one maze is completed the viewer moves on to the next maze. There are 4 mazes in total.



FA Cup - Six Nations - Interactive Football

This format presented viewers with a transparent banner at the top of the TV screen. They used the colour keys to access other material:

- Pressing the red key presented a small drop down menu. It allowed viewers to choose between up to 5 audio streams using the right, left and Select keys.
- Pressing the green or yellow keys allowed the viewer to select alternative video streams
- Pressing the blue key accessed a small drop down menu offering very short text information



OPTIONAL VIDEO STREAM FEATURE: if a viewer selected an alternative video stream via the green key (eg match highlights) they could be presented with a 'picture in picture' scene comprising 2 video images. A dominant video image (eg highlights) and a subordinate video image (eg live match). They used the Select key to switch between the two pictures.



FA Cup – Six Nations – Interactive Football cont.

OPTIONAL QUARTERSCREEN FEATURE: Additional text information can be made available in quarter-screen. The quarter-screen feature is accessed from choices on an extended menu on the blue key. The menu appears as a drop-down when the interactive bar is available and as a pop-up at other times.



OPTIONAL RETURN PATH FEATURES:

Both Voting and Messaging features were available to this format. The Voting area and the areas for reading and writing messages were accessed from the extended menu on the blue key. The content displayed in quarter-screen.



Fame Academy 2002

This format allowed the viewers to use a sidebar on the right-hand side of the screen to choose from a menu. Using the up, down and Select keys they could choose to view one of 4 video streams. They also had access to text information. The text presented in the right-hand sidebar.



OPTIONAL RETURN PATH FEATURE: Voting functionality was also available. The Voting options and charging information were displayed in the right-hand sidebar.



Fame Academy 2002 cont.

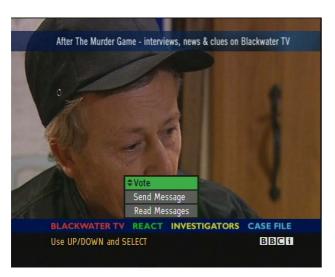
OPTIONAL VIDEO STREAM FEATURE: if a viewer has selected one of the video stream options they can be presented with a 'picture in picture' scene comprising 2 video images. A dominant video image (eg Fame Academy live) and a subordinate video image (eg BBC ONE live). They can use the Select key to go full-screen on one of the streams.

OPTIONAL AUDIO STREAM FEATURE: if a viewer has selected the 'picture in picture' stream above they can use the up and down arrow keys to switch between the audio of the two featured 'picture in picture' video streams.



The Murder Game

This format allowed viewers to use the coloured fast text keys and a set of animated pop up menus to access several video streams. From the same pop up menus they could also access full screen text and graphics. Voting and messaging options were available as a banner of text along the bottom of the screen overlaying whichever video stream had been selected.





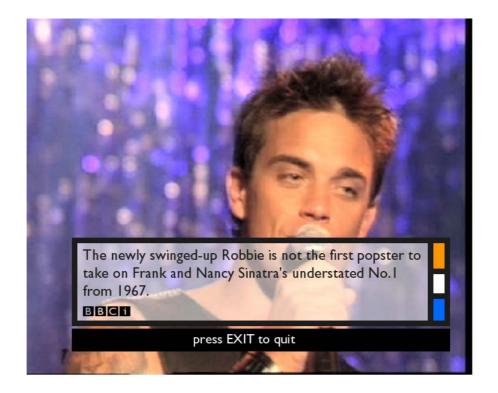




Below you can see the range of formats which have been used on the DTT platform along with screenshots of specific eTV services they have delivered. Those that also delivered to DSat are described in a previous section.

Top of the Pops

This format allowed viewers to access text information in a translucent bar at the bottom of the TV picture. The information was synchronised to the linear programme.



Wimbledon 2001

This format allowed viewers to access pages of information including text and graphics while the TV channel they are watching remains in quarter-screen. They used a pop-up menu on the green key to change the channel they were watching in the quarter-screen. They used the red key to make the channel they were watching go full-screen.



Walking With Beasts

This format combines those used for Wimbledon and TOTP. It allowed viewers to access text information in a translucent bar at the bottom of the TV picture. The information was synchronised to the linear programme. It also offered access to further text and graphics while the TV channel they were watching remains in quarter-screen. While watching the quarter-screen TV they used a pop-up menu on the green key to change the TV channel in the quarter-screen. They could also use the red key to go full-screen.





World Cup - Wimbledon 2002 - Interactive Football

This format was the first multistream video eTV format on DTT.

It allowed viewers to access a small drop-down menu in the upper-right hand corner of the TV screen. Viewers could then use the up, down and Select keys on their remote control units to choose between 4 (or more) video streams.

The video streams available were made up of 2 additional interactive streams and any of the broadcast linear channels it would be appropriate to include (for example where BBC ONE and BBC TWO were broadcasting coverage of different matches in a sporting event at the same time you could include both linear channels in the drop-down menu).





OPTIONAL QUARTERSCREEN FEATURE: Additional text information can be made available in quarter-screen. The quarter-screen feature is accessed from choices on the extended drop-down menu.



The Saturday Show

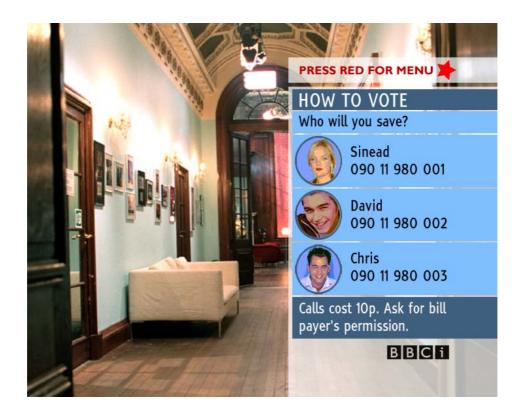
This format allows viewers to take part in a simple quiz displayed as a banner running along the bottom of the TV picture. The viewer chose one of two answers using the right, left and Select keys. After all the questions had been answered the score was calculated and displayed on screen.



Fame Academy

This format allowed viewers to use a sidebar on the right-hand side of the screen to choose from a menu. Using the up, down and Select keys they could choose to view one of 2 additional video streams. They also have access to text information. The text is presented in the right-hand sidebar.

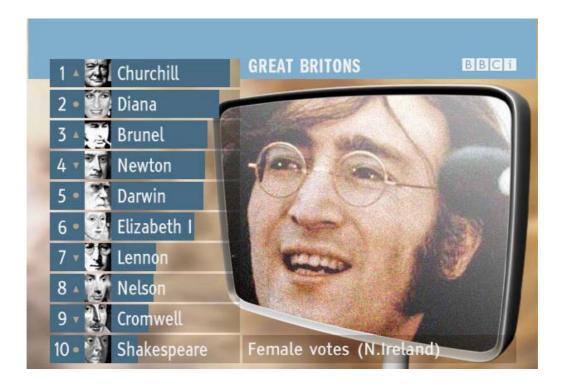
(The text and graphics below give information about phone numbers for voting. NB - DTT has no usable return path and so no direct interactive voting services.)

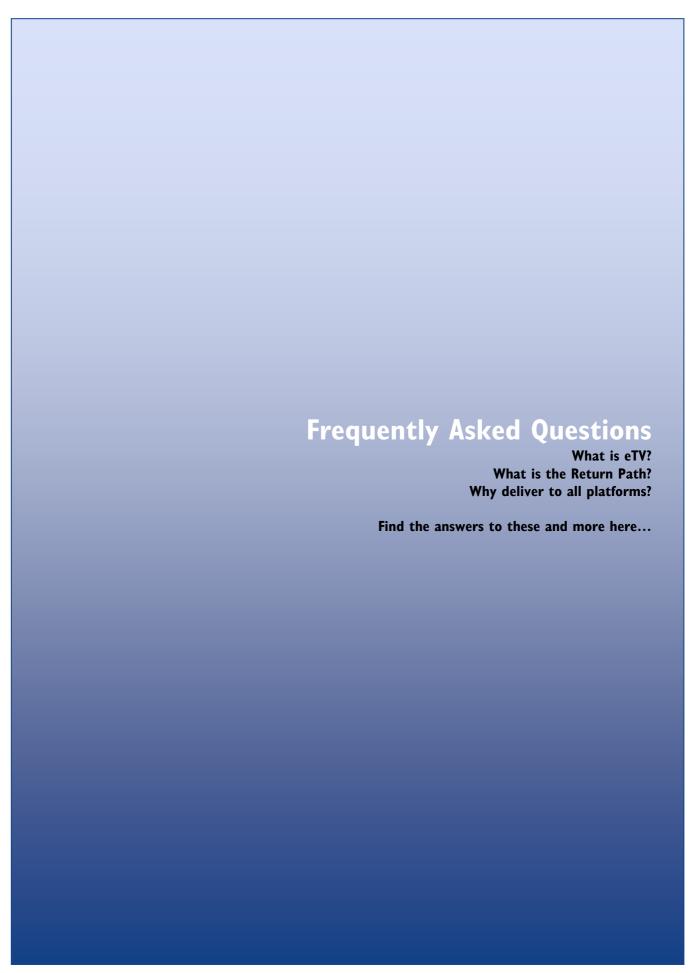


Great Britons

This format allows viewers to access a single additional video stream from the main linear programme. Help text appeared as a banner running along the bottom of the TV picture on the side-stream. It disappeared after 5 seconds leaving only a logo. The single stream could be used in a variety of ways.

(A very similar format was available on DSat – with some optional extras which DTT cannot offer. However, on DTT the text content can be changed, whilst on DSat text content is fixed).





Frequently Asked Questions

What is interactive TV?

In the field of Interactive Television there is widespread debate about terminology. In the BBC we currently work to this broad definition:

Interactive TV is an umbrella term.

It describes the content and services (in addition to linear TV and radio channels) which are available for digital viewers to navigate through on their TV screen.

In practice, at the moment, this means giving the viewer control over some video, audio, graphical and text elements or allowing them to use simple games and quizzes or send simple communications back to the broadcaster.

Inevitably, the elements that constitute interactive TV are constantly evolving.

What is eTV?

In the BBC we define enhanced television (eTV) as a service which directly enhances a particular TV programme or event.

eTV covers an enormous range of options from multistream video services to a simple graphics banner allowing a viewer to vote on a topic within a programme. At its very simplest it can be a page of additional text information within 'the Bridge' – the permanently available banner entry point for all BBC interactive TV services.

Interactive TV also offers the possibility of permanent or '24/7' 'stand alone' services which are not directly related to TV programming. These include permanently available information services like weather, news headlines, sports news, entertainment news etc. They may be text or video-based. They may include other non-programme-related material like the GCSE support service Bitesize.

What is an eTV format?

An eTV format offers an enhanced TV service with pre-defined elements: in particular in terms of look and feel (graphic design), user-journey (navigation) and user-experience (functionality).

Technically, in order for an eTV service to work, a complete end-to-end chain has to be established. So, an eTV format is supported by an infrastructure comprising:

- an interactive TV software application
- the means to introduce content to the application
- the means to play out the service to appropriate receivers (set top boxes)

Frequently Asked Questions

What is ModCon?

ModCon is not an eTV format. The term is short for Modular Configurable application. In fact it refers to several software applications which have all been built in a modular fashion and are capable of delivering services to the three main platforms.

The easiest way to think of ModCon is as a **production system** which allows the creation of eTV formats for particular eTV projects.

So, for example you could select a single video stream for a service using ModCon. Or you could choose to have a single video stream with a side banner overlay containing text. Or perhaps you want to build a service which has 6 video streams to choose from, switchable audio and a dropdown menu with voting options. All these can be achieved using ModCon with minimal technical effort.

ModCon delivers a range of functionality which can be switched on and off in a modular fashion. New services can configure ModCon by selecting functionality, changing content (text, graphics, video and audio) and changing the position of content and functional elements within certain prescribed limits.³

It is important to understand that ModCon does not offer a free for all, pick and mix approach. Instead it is designed to offer maximum flexibility while ensuring that the formats created are effective in terms of look and feel (graphic design), user-journey (navigation) and user-experience (functionality). The appropriate ModCon elements for a particular eTV project will be established at commission and expressed in the Delivery Contract.

ModCon is allowing services to be delivered to air more quickly with greater flexibility and easier content input.

Why deliver across all digital TV platforms?

The BBC adopts the position of being 'platform neutral' with regard to digital TV. This position is arrived at as a result of both our universal service obligation and commercial policy.

Universal Service Obligation

- Unless the BBC appears on all digital TV platforms, we cannot guarantee universal digital coverage
- As each TV license payer has paid the same amount, none of them should be unreasonably denied access to all of the services for which they have paid

Commercial Policy

Platform neutrality is to be encouraged in order to avoid:

- Endorsement of a particular outside organisation
- The implication that particular commercial products need to be purchased to access public service programming

Producers should remember therefore that, wherever possible, they need to provide an eTV service for each of the three main platforms.

3

ModCon is configured – i.e. functionality chosen, content entered and managed via MOSS.

Frequently Asked Questions

Why not deliver the same service on all digital TV platforms?

The capacities and capabilities of the different digital TV platforms are widely divergent. These differences are dependent on the platform's technology, its stage of development and the strategy of the platform owners. Thus an eTV service for a given programme may be different on each platform.

BBC Interactive TV is committed to producing the best possible service in every circumstance and so will maximise the potential of each platform. However, there are a growing number of services which are largely platform independent. Wherever possible we will deliver the best identical service we can to all three platforms.

It should be remembered that the eTV formats for each platform are completely independent of each other. So, for example, although Wimbledon 2001 used particular formats on DSat, DTT and DCable, another TV programme could choose a different combination of formats across the platforms.

What is the Return Path?

The Return Path is the way that information generated by the viewer can be sent back to the broadcaster. It is also known as the Back Channel. At the moment it enables the viewer to send relatively simple communications to the broadcaster via interactive TV services.

There are many ways in which viewers of interactive TV services could use the Return Path:

- to send in comments on a show or a topic
- to submit credit card details for a donation or to make a purchase
- to vote for a Pop Idol or even who knows a government.

The different digital TV platforms offer varying degrees of access to a Return Path:

- On Digital Satellite, the interactive TV software application forces the Set Top Box modem to make
 a phone call. The application then connects and sends the information. Whoever is responsible for
 the phone bill has to pay the call charges.
- On Digital Cable there is an always on, permanent Return Path, so the Set Top Box is already connected. Information can be sent through instantly. However, the cable companies levy a per usage charge.
- Currently there is no usable Return Path on Digital Terrestrial TV.