



## Video portals: An overview

D2see is the specialist video-to-mobile managed service provider. We work with content providers and new media publishers to enable them to deliver and commercialise video content onto mobiles. Our Oxygen platform streams pre-recorded and live content to and from the mobile phone, and includes a suite of applications for rapid service development, including interactive video portals, video dating, video blogging and live 2-way video chat services.

D2see offers a fully-managed service, with a risk-reward business model based on per minute usage charges or revenue share.

### The 3G opportunity

Today there are over 8 million 3G handsets in the UK alone. With monthly growth rates around 10% the time has never been better to capitalise on the market opportunity offered by this new and dynamic sector.

As well as increased handset penetration, these 3G users are showing a strong appetite to consume rich media services. In the first quarter of 2006 video usage exceeded ringtone downloads amongst the 3G user base for the first time.

Now is the ideal time to launch direct-to-consumer (D2C) video services.

### D2see

The Barley Mow Centre  
10 Barley Mow Passage  
Chiswick  
London W4 4PH  
United Kingdom

T +44 20 8819 5710 (UK)  
T +34 93 3801290 (Spain)  
F +44 20 8819 5711

sales@d2see.com

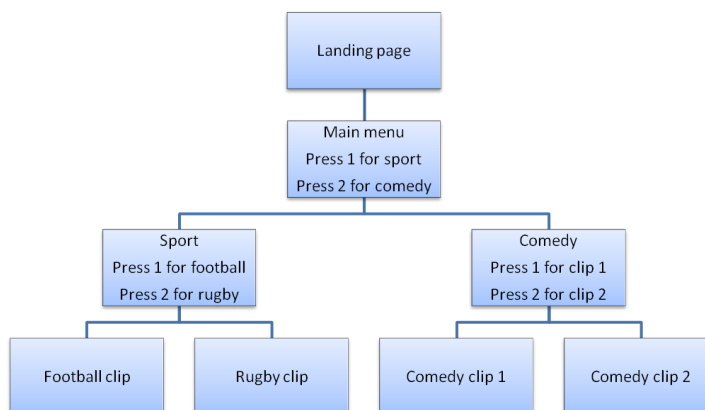
### Oxygen video portal application

A video portal is the video equivalent of an Interactive Voice Response (IVR) voice service: a video service comprising a number of video clips selected by DTMF phone key presses.

Typically, a video service is assigned to a video shortcode. All the 3G user has to do is to dial the 5 digit shortcode and press the video call button that exists on all 3G phones. After a couple of seconds the call is connected to the 'landing page' - a video clip introduction to the service.

A video portal contains individual video files or clips—both content and menu files are video clips. These clips are uploaded, transcoded and stored on the D2see Oxygen platform. In addition to pre-recorded content, a video portal can also include live feeds from, for example, a TV or other live content source.

### Example of video portal menu structure



### Structuring navigation

A video portal can contain a few content and menu clips through to hundreds – these can be structured in the portal in two ways:

1. 'Tree' menu—each clip is accessed from a specific menu. This approach is excellent for categorised content - consumers can access specific video content. The downside of this is that the menu files may require updating at the same time as updating individual content files—a factor for regularly updated portals.
2. 'Carousel' menu— content clips are placed sequentially with a consistent navigation approach, meaning that the menu clips do not have to be changed when individual content clips are changed. For example: 1 for the previous clip, 2 to play current clip and 3 for the next clip. This is ideal for frequently changing content, and can be combined with 'tree' menus.

Unlike video delivered over an IP stream, playback is instantaneous (ie. no buffering) once a menu selection has been made.

Navigation, by common practice, includes \* to signify returning one level higher in the menu, and # to return to the main menu.

## Creating and editing video portals

Using the Oxygen Designer service creation tool, it's easy to build and modify a portal. Typically, D2see works with a customer to build the first video portal, and then hands over ongoing editing and updating to the customer, including training on Designer –an easy-to-use web based GUI tool which is used to upload video clips and structure the service.

For regularly-changing portals, future updates can be created in advance and scheduled to replace an existing service at a predetermined time. Oxygen Designer has been produced for non-technical staff to create, edit and manage a video portal.

## Optimising quality

D2see has much experience in optimising quality for delivery over 3G mobiles. Unlike current generation internet broadband services, 3G bandwidth is limited and latency is relatively high, so care needs to be taken in optimising the content.

Big, bold, high impact content works much better than subtle, atmospheric 'big screen' content. When editing for mobile, care needs to be taken to ensure that the small screen is filled by relevant content - limiting the amount of distant, wide-view shots.

Taking note of the capabilities of mobile codecs, the video can be fast moving or complex, not both. A panning shot of a car speeding by does not render well onto mobile. If the video is fast-moving, a simple background should be used - for example the quality of football is great when the camera angle is high, and therefore the background is plain green grass.

Above all, upload content to the Oxygen platform should be in original or near-original quality. The Oxygen platform transcodes the content for mobile - multiple transcodes have a significant detrimental effect on the quality.

Audio can of course be used, either for mood music, or for additional navigational guidance. Content providers used to working with WAP can inadvertently forget the added richness that audio can bring to a service.

(Please refer to D2see document 'Video Guidelines' for a technical overview on video and audio quality.)

## Management reporting

D2see customers are given a user name and password to log into their section of the Oxygen customer portal—powerful and detailed reports enable call traffic to be analysed. At both service level, and at an individual clip level, reports are automatically generated showing number of calls, and average call durations over a configurable time period. Data is available in near real time. Custom searches at the MSISDN level can also be performed, facilitating end-user care.

## Shortcodes and age verification

In the UK, services designated for 18+ users need to operate on the 69xxx and 89xxx shortcode ranges. The D2see Oxygen platform, with direct age verification connections to the mobile operators, complies with the requirements for age verification of users. On video portals with a mixture of universal and 18 rated content, age verification can be performed mid-call, ensuring only age-verified users can access 18 rated content.

## SMS services

SMS, for messaging and supplementary billing, can be structured into the business logic of a video portal and D2see is integrated with a number of SMS aggregators. All SMS transactions are recorded in the customer portal - providing a single sign on to view all video and SMS traffic.



**Video call 66700 for a demo or speak to us now to launch your 3G video portal now!**