



# The side issue that could mean it all for mobile video

**There has been a huge shift in the mobile TV market over the last couple of years. In fact, the whole definition of mobile TV is itself shifting as TV is seen essentially as a subset of video as a whole. And for mobile video there's a lot more to debate**

The last few years have seen mobile TV being bogged down by whether a broadcast network will prevail over a telecoms network as the dominant platform in which to deliver video content. And then there has been the issue of what broadcast standard will air or be available by subscription.

This has trivialised the debate somewhat. Mobile video has wholly different dynamics and brings into play more fundamental issues that are somewhat more interesting such as do people actually want to watch TV or TV content? There's a subtle difference here. Mobile TV, how it is understood generally, is a rolling broadcast of content in a linear form; mobile video is the experiencing of content on a mobile device and where the content can be delivered by a number of sources in a number of ways, as and when demanded by the viewer.

And it can certainly arrive by means and methods independent of a broadcast network or a telecoms network. In fact mobile video content can be acquired (and purchased) and experienced just like online music. Consider the iPod as a key device: media

players such as that are just as capable of showing video content – such as TV shows, or movies, or special mobile-specific programmes – as they are playing music. Also, the fact that video can be downloaded to a computer and then loaded on to a Users thus don't have to pay to be able to stay connected to a network that may or may not be showing the content they want to experience. They just acquire what content they want, at the time they want, by whatever means that they want. Such flexibility will likely mean that they end up experiencing more content.

#### Content optimisation

One company that has certainly grasped the potential opportunity offered by mobile video and the non-linear consumption of content is Converse. The Israeli company's chief technology officer Daphna Steinmetz says that linear broadcasting concepts, such as broadcast mobile TV using the DVB-H standard, are not the 'optimised' way to consume TV on the go. She says, "DVB-H has not succeeded in the market as well as other

technologies such as MBMS. People are adopting a life style that is more and more on the go, with more and more travel and they [still] want to consume their favourite content. And this concept of favourite is a very subjective thing.

"The other aspect of service is to deliver [content] to a phone in a cost-effective way so that the user will be able to pay for it even if they are young and not able to earn a lot. So the delivery to the phone should be cost-efficient. Many users are not too keen to get their content in real time unless it is football or news content less."

And it is this latter point which is the nub of the Converse proposition for mobile video. The service works by downloading content off peak time to the mobile device. This offers a number of advantages. First of all the rendering of the video material is appreciably higher than receiving a streamed or broadcast signal and the issue of losing material because of network problems is rendered obsolete.

Even with the latest high-speed networks, using a network for sending over video information is inefficient, argues Steinmetz who offers this analysis. "[Even] over HSDPA you need just under a minute to download content for over 20 minutes of viewing. [Side-loading] means that the network will be utilised in a better way so the operators have a good reason



that they will pay less for than for real time streaming."

#### 'One Web, one content'

The proposition works for Converse by tapping into the dynamic that if there is only 'one Web', then there is only 'one content' environment. Explains Steinmetz, "We believe that – in spite of all the investment such as in DVB-H etc. – services did not take off because people tried to build specific content for mobile. Currently we think that there is just one Web, and that also there is one content environment and so we try to take [known] content and optimise it for the phone. We do not expect content vendors to create [content] specifically for the phone. Sometimes the editing might be different – in a football match you can really focus on the ball more and because in small screen it is very difficult to present the whole pitch. It is

better to give a small environment around the ball rather than [show] the whole field but this can be edited afterwards.”

The aim for Converse is thus to develop business relationships with the providers of the standard content that TV channels and other media owners produce and not create specific content for the mobile platform per se.

#### Video portal

Content is downloaded from the Converse Mobile Video Portal which lets operators provide a range of content and services through a branded operator video portal.

It enables 3G users to browse the available video selection, make a choice and watch clearly displayed video content. The combination of audio and visual elements is claimed to bring the portal experience to life. Users can select live video content such as traffic flows and sporting events, favourite TV programs, music videos, comedy clips and more. Converse is confident that its portal contributes to the 3G experience and that the wide variety of video content enables every user to find something they want, increasing high-value traffic and generating additional revenue.

Fundamentally, the Converse Mobile Video Portal is based on the Converse InSight Open Services Environment for communication and entertainment services which is modular and can be tailored to an operator's specific needs. The Mobile Video Portal is standards-based, compatible with 3G.324M protocol as well as with H.323/SIP protocols allowing video handling over 3G networks. The Mobile Video Portal includes a video access gateway, a video server responsible for video media handling, a video streaming server; a content management system that can also serve other Converse or third-party content services.

But how is this done in practice? Steinmetz believes that her company has a singular idea to offer to customers, using a high quality rendering engine and a unique algorithm that converts the original content in order to deliver a satisfying experience. But before downloading the episodes that users want to experience on their phones, there needs to be a software client established on each handset. Steinmetz explains what's under the hood and why, "We need a client on the phone in order because we need a high quality player. We really [do] want to see high quality TV not just widget quality on phone because it's annoying when [the picture] is small. Streaming becomes a non-issue: we just have a download to the phone. HSDPA etc is not [practical] to do in real time and [with Converse] technology buffering is a non-issue because it is done offline. Part of the service [relates to] provisioning, such as how you specify the preferred content that you want and [how] this is done over the Web."

Currently the platform works only on Symbian based phones – probably not that much of a limitation when one thinks of just how many of them there are out

there and constantly being produced by the likes of Nokia – but there are also plans to support non-Symbian products. Google's Android will be supported on a virtual phone basis. Windows Mobile is also being discussed but on a realistic basis, Steinmetz reveals. "Windows mobile is the friendliest platform for operators but penetration is not huge and we [create] products for the mass market and not just for a niche. Everything is doable but we need to find good opportunities with the customer; a telecoms operator would be interested in such devices as a target platform."

#### High quality play out

But there are also technology challenges that the company recognises that it will have to address going forward. For example, finding the right mobile format for near-HD TV that will play out in really good quality. Adds Steinmetz, "it's not just the format but also the rendering [that lets you] be able to play content [well]. We have spent a lot of time [developing] the personalisation engine so that it would be easy to prepare content that is personal and convenient and not to tire the user with content that is irrelevant. Part [of

the challenge] was to find a user experience that would make the user more comfortable to provision more and more programmes and really consume the service."

And there are some interesting future plans. One of the key development areas is in the field of location-oriented programming. People may well prefer content that is more relevant to the area in which they at. This should not be too difficult says Steinmetz, "for mobile operators it's relatively easy to do; they can match the content and the location because they know where we are. And since Web 3.0 is just around the corner we are taking about semantic content. For example if I want to view something about fashion etc then [the service] suggests [I should watch] not only Fashion TV but also What Not to Wear etc in the same syntax."

We should expect to see Converse demonstrating such products at Mobile World Congress in 2009. The company is geared to innovation and admits that by having this culture some of the results are not what was first expected. With its side-loaded content proposition though, the fruits of the innovation are plain to see.

