



The future of Broadcasting

# Global Internet Video Webcasting & Streaming

Your questions answered



This information is designed to introduce you to the web broadcasting & Streaming services we provide. If you are thinking of using this dynamic service, we recommend you also hand a copy to your IT manager or venue's technical team.

*Commonly asked questions:*

## **What is video webcasting / broadcasting & Streaming?**

A video **webcast** is an alternative way to transmit a TV-like programme to viewers over the Internet *as it happens*.

**Streaming** is playing the programme over the internet *after the event*

## **First Sight Media offer:**

A complete LIVE webcasting solution to clients wanting to deliver a local, National or Global message on the internet.

An ALMOST LIVE solution whereby your event can be recorded, uploaded and streamed on-line on the same day via the internet. This option is considerably more cost effective as a webcasting technician and equipment is not required.

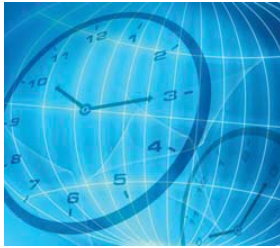
Both the above options require only a simple link from your web site to our servers, or you may wish to host the file yourself.

## **What's involved in a Webcast?**

In simple terms, for a live webcast, we bring cameras, sound and webcasting transmission equipment to a venue where you are hosting an event, function or meeting that you want to transmit to an audience over the internet. We connect the equipment into that venue's Internet connection. You publicise the webcast to your Intended audience in advance of the live broadcast.

After transmission you can choose to have the webcast left on the Internet for a length of time so that people who were unable to view it live can watch it at their leisure.





### **How long can the webcast or streamed video be?**

As long as you like. However bear in mind that people watching online tend to favour shorter length video compared to sitting in front of a TV or Cinema screen. We recommend a webcast or streamed video should last approx 1 hour, but many equally work well at 30 minutes.

Where a day long conference or exhibition is being webcast we would recommend webcasting selected chunks of the day and making these available as a collection of short run webcasts – allowing viewers to watch the bits they wish rather than having to work through a long single webcast. These are only recommendations. If you wanted to broadcast a solid day's event, this is perfectly feasible.



### **Can we mix in our own graphics?**

Yes. PowerPoint graphics can be vision mixed into the live Webcast or video to be streamed We recommend, where possible, that the PowerPoint presentation is looked at by our web team first to advise if any of the slides may not communicate well on a webcast display.

Remember, webcasts & streamed video may be viewed by some viewers in a small window (viewers can control how big or small the picture appears on their computer screen) so tiny writing and busy slides do not usually work.



### **Can you overlay titles and theme music, similar to television programmes?**

Yes. We can supply equipment to put up live titles – either at the base of the screen or half or full page graphic overlays – which can be customised to say what you want to your audience. This can be very useful to help identify section breaks, names of personnel appearing and 'what's still to come' messages to the Internet audience watching.



### **How big is a webcast or streamed picture on a computer? I heard that it's a tiny window and you can't see much.**

You can make a picture as big or as small as you like. However there are limitations that can affect the size. We recommend transmitting at 384 x 288 pixels. In reality, on modern PC displays running at 1024 x 768, this means the webcast or streamed video is about 1/6th of the display size. However, the on-screen player that is displaying the picture to the viewer can be switched into 2 x or full screen mode, meaning the webcast or streaming can be made to fill the entire computer screen. Then the viewer can sit back, away from the computer desk, and watch the monitor as they would television. We often find this is a better experience than sitting at a desk. You can even put a programme into a projector and project it onto a large screen in a hall or large room if you have lots of viewers.



### **How much space online will the programme take up?**

First Sight Media offer the service of storing the 'watch on demand' file on the Internet for you so that you don't have to do anything yourself once the live filming ends.

The size of this file is a simple calculation of the quality rating x length of transmission. Taking the example of a 300kbps quality webcast lasting one hour, the file would occupy approximately 135Mbytes of space. We recommend that the file be stored on a proper streaming server, although some webcasts will work fine on a regular webserver, if you prefer.



### **Do we need to provide extra power, lighting etc?**

The equipment to transmit the webcast draws very little power from standard 13A sockets. Extra lighting will only be required if the TV cameras need it, say if the venue is quite dark. These issues are discussed at the point of a venue booking. Often we can provide simple additional TV lighting where appropriate.

## **More Advanced Webcasting Solutions**

### **Presenters**

We can provide professional presenters to introduce or help present your webcast if you have not made provision for this. A presenter can give your webcast a more professional feel, improving your image and message to your client base.



### **Live two-way interaction**

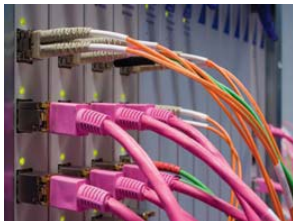
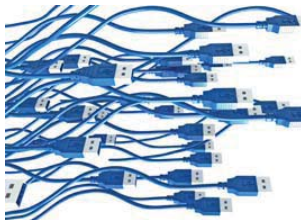
You may wish viewers to interact with a live webcast by submitting questions and comments via email or Instant Messaging back to the transmission location. The questions could be presented to the speakers appearing in the webcast to answer or comment, and the questions that viewers make can be displayed on the screens of all viewers allowing everyone to speak to everyone else.



### **Can we include recorded material ?**

In the recording we can easily insert pre-recorded material from Video tape or DVD that has been pre-prepared into the live feed, in the same way that Live broadcast TV does. This pre-recorded material can be relayed simultaneously to a big screen in the live venue allowing anyone at the venue to see the material at the same time as the Internet audience. This is ideal where a client is to present a corporate video or interviews with staff, clients or colleagues, adding value to a presentation.





## **Bandwidth Charging for Webcasting & Streaming**

Bandwidth can be charged for in different ways, depending upon circumstance and amount used. Please discuss with our sales team the options of charging methods to cover bandwidth costs. Sometimes bandwidth is included, or a fixed amount is included in the fee, with any additional bandwidth consumed invoiced additionally later on.

An example – one of the packages First Sight Media offer includes 10GB of bandwidth in the initial fee. The above example would therefore incur only an additional 3.5GB extra charging. Although prices fluctuate, the cost of 1GB of bandwidth is often in low pounds per GB, resulting, in this example case, in an additional invoice of low tens of pounds.

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Hopefully we have answered many of your queries. If you have more specific questions or would like to discuss a project and enquire about costings, please see the end of this document for our contact details.

## **Technical Requirements**

PLEASE ASK YOUR TECHNICAL TEAM TO READ THIS SECTION  
Min Technical Requirements for the venue

### **INTERNET CONNECTION TYPE**

Ideally we need a venue to be able to provide a broadband connection to the Internet. This can be;

- ADSL (colloquially called 'Broadband' in High Street talk)
- SDSL - Leased Line (MegaStream, Fibre etc)
- Bonded ISDN lines - by special arrangement

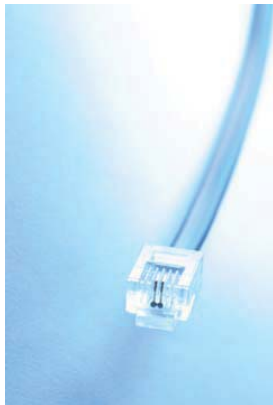
### **CONNECTION SPEED**

Live Webcasting is reliant upon the Upload speed of the Internet connection. Nearly all ADSL connections are described by their Download speed – typically 2, 4, or 8 Mbps. ADSL, by definition, means the upload speed is not the same as the download speed. Original ADSL (512kbps lines) had a 256kbps upload speed. This is too low for reliable and good quality Video webcasting. Nearly all ADSL lines have been automatically upgraded however by Service Providers for clients at no extra charge. Often this means that ADSL starts at 2Mbps download and the upload often has been increased to 448kbps.

For reliable high quality video webcasting we would strongly recommend a minimum of 448kbps upload speed connection.

### **INTERFACING**

Most often a venue will have a computer network that connects all their computers together and links into the broadband internet connection. In most cases we can plug into this network to upload the live webcast with minimum or no reconfiguration of the network.



We can also, where appropriate, bypass the computer network and plug straight into the Internet Router for direct connection to the Internet. This has the side effect of taking the venue's computer network off the Internet for the duration of the live webcast. We only recommend this procedure in specialised circumstances.

On nearly all occasions however, we do need to liaise with the venue's IT manager or Technical Support person, in order to acquire log in details to permit our webcasting equipment to work with the venue's Internet connection. In some cases the IT technician will need to configure the outbound firewall, but in other cases no reconfiguration is necessary.

As a result, we may request a site visit and trial speed test with the IT manager present to assess viability of using the connection for a live webcast in advance of the production day. In some cases, a phone call with an IT Manager may suffice in advance giving us enough confidence we can connect without hitch for the first time on the day of production.

### **Bandwidth Usage**

The average bandwidth usage of a webcast Bandwidth is the 'amount of Internet information' that is generated by webcasting live. Its most often measured in GB – GigaBytes, or Gb, Gigabits.

The actual figures of bandwidth used are not as important to a client as the financial cost of the bandwidth is.

The factors affecting bandwidth are

- The quality rating selected for the uploaded video and audio. A typical combined setting would be 300kbps
- The length of the live webcast in minutes, for example 60 (1 hour)
- The number of people who choose to log in and watch the webcast
- The length of time each of those visitors remain logged in for in minutes

To cite an example, a 1 hour video webcast at the quality rating indicated above would generate the following amount of bandwidth if 100 people logged in and each of them watched the whole 1 hour

- Quality Rating : 300kbps
- 1 hour of the webcast at this quality : 1,080,000 kbits, 1,080 Mbits or 1.08Gbits
- 100 people watching for 1 hour each = 100 hours
- Total Bandwidth = 100 \* 1.08Gbits = 1080Gbits, or 13.5GB (GigaBytes).



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To discuss a webcasting event or to arrange a quotation please call Paul Hooper on 0800 072 8753

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