



Dear

To assist the **Contract of the Detica**, as discussed, and further to the recent press coverage of Virgin Media's trial of the Detica CView[™] technology (CView), we are writing to provide an overview of the CView trial and an explanation of how it will work.

Background

By way of background, the Digital Economy Bill includes measures designed to realise material reductions in the level of illicit file sharing on ISP's networks, and provides for government intervention in the event that these reductions are not achieved in the short to medium term. However, to date, measuring the extent of illicit file sharing has involved rough estimations based on consumer surveys and speculation. The purpose of the CView trial is to enable Virgin Media more accurately to measure the level of illicit file sharing activity over its network. This will help gauge the effectiveness of actions taken (including the launch of Virgin Media's planned new music service) to reduce the practice of illicit file sharing.

Before providing an overview of how CView works, we would first like to set out the relevant terms and conditions in Virgin Media's customer contracts which provide for this, as follows:

B5(i) "We reserve the right to monitor and control data volume and/or types of traffic transmitted via the interactive services on your Virgin TV and/or Internet access."

G(2): "...you are providing your consent to use your personal information together with other information for the purposes of providing you with the services... [and] profiling your usage..."

Where CView sits on the VM network

The CView device itself will reside within a secure environment on Virgin Media's network, operating without any human involvement. No traffic data or identity information is ever made available to a human being, while all data are processed by an entirely closed and automated "lights out" system with no human intervention. Appropriate hardware, software and process controls are in place to prevent intentional or accidental breaches of privacy, for example, preventing access to the live system when data is being processed.

How CView works

A high level overview describing the steps involved in the CView trial is shown in *Figure 1*, below.



Figure 1 – High level overview of CView analysis and processing steps

The four stages of analysis and processing as shown in *Figure 1* are:

- 1. A customer uses their ISP connection to obtain a file over a file sharing protocol.
 - CView will check specific traffic only when it suspects illicit file sharing might have occurred, because of the protocol used.
 - The CView trial will only identify data for limited types of traffic passing over Virgin Media's network, namely music files shared using certain protocols (currently, this includes BitTorrent, eDonkey and some implementations of Gnutella).
 - A mirror copy of traffic data is passed to the CView device, ensuring that customer traffic is not affected.
- 2. CView analyses a copy of the traffic for illicit file sharing activity.
 - The output of the CView device will contain the following information: anonymised IP address (the IP address is replaced by a unique, anonymised identifier); file size; the unique identifier of the download (which can be read to determine information such as the track name and artist); and the date and time the transfer was initiated.
 - No content data, for example URLs, will be recorded.
- 3. All information that could identify a customer is removed from collected data.
 - All records collected from the network will have their IP addresses anonymised using a pseudo-random algorithm and a temporary randomised key such that no link back to an individual can be made, even in conjunction with other Virgin Media or Detica systems.
 - The mirrored copy of the traffic data is never retained on the disk of the CView device, and is only temporarily stored in the memory buffer before being replaced by subsequent traffic data (i.e. the traffic data is deleted in less than a millisecond). The anonymised output data is retained on disk in encrypted form only until completion of the scheduled data transfer process, which occurs every day, when it is deleted from the CView device.

4. A set of aggregated metrics are produced to measure the level of illicit file sharing activity on the Virgin Media network.

To be clear, the CView device has not yet been deployed on Virgin Media's network. However, once deployed, CView will only offer a non-intrusive solution to enhance the understanding of aggregate customer behaviour; it will not be used for any other purpose. In particular, none of the traffic data collected could ever be used to identify or be attributed back to a customer and, consequently, cannot be used to take any action against a customer.

Whilst we appreciate the above gives an overview of how CView operates, we will, of course, be happy to answer any questions regarding the CView trial on our forthcoming call.

Yours sincerely

(Virgin Media) / (Detica)