

# CCTV COST GUIDELINES

## 1 INTRODUCTION

This document sets out the costs that must be taken into account with any proposal for a CCTV scheme.

The actual figures indicated in the end schedule should be taken as a guideline only. There are many variables that will affect the actual cost of an individual scheme, depending on the selected design and size.

## 2 TYPES OF COSTS

There are three types of costs involved and all need to be considered and identified before the scheme is approved.

### 2.1 Installation costs

This first group of costs are those incurred during the installation of the scheme.

- a. Cameras: cost will vary depending on its specification;
  - Is it static, or a pan, tilt, & zoom model?
  - Its features, the power of a zoom lens, its robustness (eg ballistic proof or not), it's ability to operate in low light levels, any infra-red facility, and whether captures black and white or coloured images..

Always ensure that the camera purchased is capable of meeting your operational requirements eg: does it need to operate at night, at what distance does it need to be able to identify an individual, is colour important, such as identifying cars in a car park and don't forget the lens wipers if it is operating outside and in the rain!

- b. Mounting: will depend if the camera is mounted on a wall or a pole, plus any anti-vandal measures that need to be put in place or measures to protect an individuals right of privacy.
- c. Recording equipment: is the camera being linked into an existing system or requires new equipment? New recorders are now digital, so there is hardware and software to consider. There also needs to be secure storage of the recording and recorded material.
- d. Transmission: these are the costs involved in getting the images from the camera to the recording equipment. These vary greatly over the distance being travelled and the means of transmission selected. Here is a summary of the main options.

- Fibre cabling: this produces the best images but if the distances are large then becomes too expensive to put in new ducts and fibres. For on site monitoring and recording the wiring will simply have to link the cameras back to the recording location. If larger distances are involved this will require a road or pavement being dug up. Bristol does have the advantage of the BNET system, if the scheme can be linked into this then the images can travel much further inexpensively. The other option is renting cabling off a telecommunication company; often this is the only option but does entail a connection fee, plus an annual payment.
  - Wireless / microwave options. This requires line of sight from the cameras to the location of the recording. It does enable images to travel distances, and is a cheaper option than ducting.
  - ISDN / ADSL / SDSL / Broadband. With digital recording use of computer networks becomes a realistic option and is much cheaper than laying new fibres. The quality of the ISDN is not good and this is not recommended. Broadband offers more opportunity. Another option for schemes on Council premises that require nighttimes monitoring is to use the IT network when the office is closed to get images back to a Council Control Room.
- e. Installation costs of the contractors who carry out the work.
- f. Consultancy fees. Designing and Installing a CCTV scheme is a specialist skill that requires knowledge of the various technologies and options available, together with an understanding of the legal requirements. A consultant, whether in house or external, should be involved at some stage, whether to review proposals, or design and oversee the installation of the whole scheme.

## **2.2 Running costs**

Provision needs to be made for these costs on an annual basis. It is recommended that these are secured for a minimum of five years before the scheme is approved.

- a. Maintenance costs. Cameras need to be kept in a good working condition and able to meet the purposes of the scheme. A maintenance contract should be in place providing a regular six monthly clean and health check of the cameras, plus a call out and repair option. The Control Room equipment will also need maintenance and repair. Depending on the method of transmission this may also require maintenance.
- b. Monitoring costs. If the scheme requires a rapid police response to incidents then there will be some form of monitoring required. This is the most expensive element, especially if 24 x 7 monitoring is required.

Always ensure that the monitoring arrangements meet the purposes of the scheme e.g. are there particular times that the monitoring can be limited to? There will also need to be a provision for staff training to ensure they operate to required standards.

- c. Management costs. A scheme requires on going management to ensure legal requirements are being met, there is a form of reporting and accountability to its customers, and liaison with the police. It will also need to be audited and evaluated regularly. If there are monitoring staff or contractors they will need to be managed.
- d. Control Room running costs. Where a Control Room is being used it will have its own running costs that will need to be covered or contributed to e.g. heat, light, power, telephones, transmission rentals, radio licenses, replacement tapes, DVDs, etc.

### 2.3 Upgrade and replacement

Unless it is planned that a scheme has a short and limited life span, all schemes will have to upgrade and replace cameras and monitoring equipment at some point. A general guide is approximately every 5 years. All schemes should consider and plan how they will fund these replacements. They are capital costs so external grants may be obtained at the time of replacement, although if left to reliance on this there is a risk no funds may be available at the time required.

## 3 SCHEDULE OF GUIDELINE COSTS

Important. The following should be taken as a guideline only. Each scheme will need to calculate their actual costs for the securing of funds. These costs are at the high end of the scale, but CCTV is expensive.

<b>COST TYPE</b>	<b>GUIDELINE COST</b>	<b>COMMENTS</b>	<b>Further breakdown</b>
<b>Installation Costs</b>	£10 – 20 000 per camera	The big variable is the transmission costs, which is unknown until each scheme is designed.	£80 per meter for laying fibre optic cables in public highway (most expensive option)
			Static camera approx £1000
			Pan, Zoom & Tilt camera approx £3500
			Pole mounting £1500

<b>Running Costs</b>			
Maintenance costs	12.5% of monitoring costs	This s a formula purely for guidance. Maintenance costs are likely to be low when the scheme is first commissioned and increase s it gets older.	
Monitoring Costs	£1500 - £2500 per camera	This is for 24x7 monitoring, and includes a contribution to Control Room Costs.	
Management Costs	10% of monitoring costs	This is a formula for guidance , based on experiences in existing Control Rooms	
<b>Upgrade and replacement</b>	Similar to installation	The infrastructure is likely to be in place, but the equipment costs will be similar to initial purchase costs.	