The witnesses agreed to provide further information on costs associated with the regulations, including: the cost of relocating BBC productions to England to record dramatic scenes in which actors were smoking; the cost arising from productions deciding not to locate in Wales as a result of the lack of an exemption in the legislation; and more detail on the cost of simulating smoking using CGI technology.

In response to the Sub Committee’s request for further detail on aspects of cost, we have set out below what we hope are useful examples, including actual and estimated costs.

1. The cost of relocating BBC productions to England to record dramatic scenes in which actors were smoking

As a result of the additional questions received and our evidence session at the Assembly, we have investigated further instances of cross-border filming.

Our review has highlighted the complex nature of decisions around filming locations and has shown that decisions often change between the planning phase and the actual filming itself, sometimes very late on.

As a period production, Upstairs Downstairs (series 2) is the most relevant BBC Cymru Wales drama to consider. The final cut of the series has been reviewed scene-by-scene to identify those scenes where smoking was clearly shown on screen. A full review of the production paperwork has also identified additional instances where filmed scenes had to be shot across the border due, in part, to the ban on smoking in public places in Wales. It has also identified instances where scenes originally planned for Bristol were switched to Cardiff due to the fluid nature of the decision-making process around the choice of location, revised costings and other factors.

Therefore we can now provide you with additional and revised details of two scenes that transferred across the border, due to the availability of suitable locations and also due to the smoking ban in Wales. They
are the scenes depicting a German bar, and a cinema audience. Both were shot in Bristol.

With reference to our previous evidence, the exterior of the boxing ring was shot in England but our review of production records has shown that the team managed to relocate the interior boxing scene to the Cardiff Coal Exchange despite initial plans to film in Bristol.

We would also highlight that the ‘Royal Albert Hall scene’ was shot in Bristol. Again, the smoking ban played a part in this decision although it was not the primary driver of the choice of location.

Looking at the series in its entirety, *Upstairs Downstairs* production records show that in addition to studio shooting at Roath Lock, we shot 11 days on location in Bristol and 35 days on location in Wales and Leamington Spa.

The three scenes which specifically required smoking – detailed above - were shot across five days, with additional filming costs totalling approximately £18k, plus a further £13k for lost filming time due to travel. We estimate that £14.5k was spent on the additional local English crew rather than Welsh crew who could have been employed had we shot those scenes in Wales.

Despite the costs of shifting production to England, we estimate that we saved approximately £10k compared to the cost of special effects that would have been incurred for providing smoking effects.

2. **The cost arising from productions deciding not to locate in Wales as a result of the lack of an exemption in the legislation**

As stated previously, smoking is only one consideration when deciding where to base a production. Choosing a filming location is a highly complex decision that must take account of a range of factors.

Compelling period dramas which have been made for BBC Four are often produced on a relatively tight drama production budget of around £500-600k per hour.

As an illustration, BBC Four drama *Room at the Top* was filmed in England and set at a time when smoking was commonplace. Although Wales was not at any time considered as a base for this production, it is easy to see how a similar production might be influenced by the smoking ban. A producer who considered Wales as a base for a similar production would be conscious that every penny counts on a restricted budget and this might tip the balance against Wales.

Our understanding of the proposed UK tax break, which was referred to in evidence, is that it aims to attract and retain production in the UK, and as currently drafted it would apply to drama valued at £1m per
hour and above. This budget level will often apply to large-scale period productions which prove popular with audiences.

A six hour series could cost around £6m – direct economic value that we would like to see coming to Wales – but we can envisage that existing legislation might be seen as problematic for period drama, set in a period when smoking was commonplace.

The economic impact of losing such work could be significant. According to an independent report recently commissioned by the BBC, which assessed the economic impact of production, every £1 of licence fee spent is worth £2 to the local economy. Further details can be found here: http://www.bbc.co.uk/blogs/aboutthebbc/posts/The-BBCs-economic-impact

3. More detail on the cost of simulating smoking using CGI technology

It is worth reiterating that we would always look at alternatives to real smoking before deciding to use lit cigarettes in a drama production. However, it is important to appreciate that the cost of these alternatives can be also prohibitive.

One alternative used in the past is computer generated imagery (CGI). Costs will inevitably vary depending on the scale of the job, but estimates gathered from a large visual effects company give an indication of how this works.

In evidence, reference was made to a scene in Doctor Who where Winston Churchill was seen smoking a special effects cigar. CGI can be used to enhance shots but unfortunately we do not have detailed records for this scene. However, the visual effects supplier we spoke to is regularly used for BBC Cymru Wales drama - working to the high quality specifications of our production values. The cost of 30 x 6 second shots with two cast smoking in close-up was estimated at up to £55k.

To offer further understanding of this cost, this amount of animation and effects work is determined by the complexity of each shot and the amount of movement in each frame – a level of extra cost that would be difficult to justify for most drama budgets. As a producer of drama, we would also have to extend post production schedules to accommodate CGI work of any type and there would be an incurred cost for this.

The other alternative often referred to is the use of prop cigarettes. As we described in oral evidence, they can be unconvincing – particularly in close-up. To attempt to make them appear more realistic, an expert
needs to dismantle, reconfigure and reassemble the prop cigarette, which is a delicate and time-consuming process.

Prop cigarettes or cigars could cost about £1500 - £2500 a day depending on the number of takes and the number of cast smoking.

For series 2 of *Upstairs Downstairs*, we have estimated that approximately £24,000 was spent on creating the visual effect of smoking.

There is also an important additional hidden cost with faked prop cigarettes which is the amount of time lost to reset the prop cigarettes.

We did not keep a record of the time lost for series 2 of *Upstairs Downstairs*. But, working on the assumption that other makeup or lighting resets or checks would coincide with about half of the prop cigarette resets, we estimate that across the series, lost shooting time would be about the equivalent of one shooting day.

The cost of a shoot day on a period drama could range between £25k-£30k.

So combining the above costs relating to the use of prop cigarettes - and err towards the lower estimates - the total would be around £50k across the shoot period. To be clear, that is the combined costs of prop construction costs and lost shoot time.