DRM - A perspective from a broadcaster
What is the BBC?
BBC Vision

Our purpose is to enrich people’s lives with programmes and services that inform, educate and entertain.

BBC Crest: ‘Nation Shall Speak Peace Unto Nation’
Is a **content producer**
TV - analogue, digital, interactive, text
Radio - short wave, network radio and DAB
On-line - bbc.co.uk

.........and a **broadcaster**
Analogue TV, network radio and World Service
Digital TV and Radio
On-line pages and streaming
PDAs, phones etc

........ and looks for **alternative revenues**
BBC Resources (options being explored)
BBC Worldwide (BBC owned)
BBC Broadcast (sold 2005)
BBC Technology (sold to Siemens 2004)
Current Priorities
Building Public Value

The BBC's founders believed broadcasting could make the world a better place.

A new kind of cultural institution would be created - open and dynamic, as comfortable with the popular and everyday as with traditional high culture, yet committed to the highest ideals - excellence, integrity, impartiality and creativity.

In all these ways, the BBC would build public value.
A time of change

**Consumer** - Move to Digital Broadcasting
New Platforms for viewers
Adding interactive elements to TV Transmission
Time of continuous change (HD, surround, widescreen, online)

**BBC** - Move to Digital Broadcasting
Moving production base to digital techniques
Moving resource base to digital
Introduced new problems (choice vs quality)
Creation of BBC Ventures Group – commercial companies
Upgrading BBC facilities
BBC in a Digital Age

The UK entering 2\textsuperscript{nd} phase of Digital Revolution.

However, the \textit{digital transformation} of Britain can only happen if new technology is \textit{available} and \textit{affordable} to all.

The role of the BBC is to \textit{serve} all of Britain to avoid digital exclusion.
Strategic Themes

Serve audiences everywhere
Maximise creativity
Deliver Value and benefit

Digital production and delivery
Asset management culture
Flexible and agile technology
Digital Media Initiative

“Our aspiration is to fully prepare the BBC for its move to the on-demand digital world by…”

Capturing accurate data and building up information throughout the life of an asset from the earliest possibly opportunity

Enabling the movement and sharing of audio and visual material across all platforms both inside and outside the BBC

Streamlining processes and maximising the accessibility, use and exploitation of assets owned and controlled by the BBC for the
Consumer Environment
Growth of Consumer Electronics (CE) Sales in $Billion

N.B. *Forecast **Estimate
Source: Consumer Electronics Association
Future world of CE

Consumer marketplace in **constant flux** - there will be a constant renewal of the ‘receiving platforms’ available to end-user

Concept of **continual renewal** now established with consumers (as seen in mobile phones)

Broadcasters who fail to understand this will **lose out or disappear** in the next decade
Disintermediation

*function* - noun

*etymology* - from the investor's bypassing of the intermediate institution: the diversion of savings from accounts with low fixed interest rates to direct investment in high-yielding instruments

1. In finance, withdrawal of funds from intermediary financial institutions, such as banks and savings and loan associations, in order to invest them directly.

2. Generally, removing the middleman or intermediary.
BBC & Standards Based DRM
Where are we at the moment within the BBC?

What issues does this present to us and our audiences?

What could technology do to resolve these issues?

Is it viable to expect a standards based solution to DRM?
Why is DRM important?

Ownership: We do not own the ‘blanket’ rights for all of the content we produce or transmit.

Legality: We are legally obliged to enforce the territorial, duration and platform aspects of the rights we purchase.

Commercial Income: In addition to our public service operation, we have an international commercial business to consider.

However, as a publicly funded organisation funded through a license fee, we must ensure that DRM does not impact or inhibit the services we provide to our audiences.
## Where we are today....

<table>
<thead>
<tr>
<th>Watermark’ (Branding)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Linear Broadcasting</td>
<td></td>
</tr>
<tr>
<td>• On-demand/catch up TV</td>
<td></td>
</tr>
<tr>
<td>• PVR Recordable</td>
<td></td>
</tr>
<tr>
<td>• Streamed content</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>License</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Downloadable archive clips</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Broadband PVR</td>
<td></td>
</tr>
<tr>
<td>• Downloadable Mobile content</td>
<td></td>
</tr>
<tr>
<td>• Downloadable archive shows</td>
<td></td>
</tr>
</tbody>
</table>
So where are the issues?

Expectation management!

As portability becomes key, the issues get worse

End-to-end ‘lock in’ is rarely desirable

Restricted usage models are already causing friction amongst consumers

Technical cost of servicing all combinations are significant
Standards benefit all
Technology should be used to make things simpler, not more complex!

Standards bodies in our industry are key to resolving this issue and have successfully dealt with these types of issues in the past.

A common standard would enable media organisations to service a wide range of devices and platforms without parallel infrastructures.

Within time, the consumer will not tolerate some of the restrictive practices we’re seeing today.
Is it viable?

Technically yes, but it probably will not really start to happen for another 3-5 years.

Cost of the initial and ongoing investment in the end-to-end production and broadcast infrastructure is prohibitive at present.

Best chance of early success may be the open source community.

Key manufacturers are unlikely to agree on a common approach.

Legal rights model for on-demand content is still very much up in the air in most countries.