

# Creative Content in a European Digital Single Market:

# Challenges for the Future A DG INFSO and DG MARKT Reflection Document

## Contribution on behalf of EUROCOPYA

#### Presentation of EUROCOPYA

EUROCOPYA is the European Association of Audiovisual & Film Producers' collective management societies. EUROCOPYA's statutory members are: EGEDA (Spain), FILMKOPI (Denmark), F.R.F. VIDEO (Sweden), GEDIPE (Portugal), G.W.F.F. (Germany), PROCIBEL (Belgium), PROCIREP (France), SEKAM VIDEO (Netherlands), SUISSIMAGE (Switzerland), V.A.M. (Austria), and ZAPA (Poland).

European Audiovisual & Film producers are remunerated through exclusive rights and - more marginally - through collectively collected remuneration rights (mainly cable retransmission rights & private copy levies). EUROCOPYA expresses the view of the various European audiovisual & film producers whose rights are administered by their respective national collecting societies, founding members of the association.

#### Introduction

EUROCOPYA would like to thank the European Commission (DG INFSO and DG MARKT) for putting out a reflection document that gives a fuller picture of the issues raised by the exercise of intellectual property rights for the development of Europe's digital economy.

Consumers must reap the full benefits of transition from the analog to the digital economy. Keen to inform the thinking on this, EUROCOPYA (together with FERA & EUROCINEMA) provided a study on the development of the supply of video on demand in Europe<sup>1</sup> - a study now carried out on an ongoing basis by the public authorities

<sup>&</sup>lt;sup>1</sup> "The development of video on demand in Europe", NPA Conseil, May 2006

(European Audiovisual Observatory) which reveals that VOD is making steady headway in Europe.

To its credit, the Commission's reflection document clearly distinguishes the different cultural industries concerned with creative content online, and identifies how each operates online<sup>2</sup>. EUROCOPYA believes this to be an appropriate way of identifying the practical arrangements that may need to be made to boost the online content economy.

- The comments below refer exclusively to audiovisual and cinematographic works. For clarity's sake, our replies are structured to address the following issues:
- 1. Definitions
- 2. Comments on the current satellite system. Extension of the cable system to certain online uses of copyrighted works.
- 3. Transfer of rights in a cinematographic or audiovisual work to the producer for the online exploitation of the work.
- 4. The role of collective management in the exploitation of cinematographic and audiovisual works.
- 5. The territoriality principle in the exploitation of cinematographic and audiovisual works.
- 6. Exceptions.
- 7. Exhaustion of rights.
- 8. Creating a Community copyright title.

See our previous contributions to the Commission's work: Creative Content Online in the Single Market, COM (2007) 836 final - Political and regulatory matters submitted for consultation - Contribution by EUROCOPYA (27/02/2008), Preliminary comments: "First, EUROCOPYA would again like to express its deep concern with the fact that both the communication as well as the new public consultation still seem to be thinking that "Online Creative Content" can be addressed as a whole, through a horizontal EU-wide approach, whereas this notion actually covers various interests and very different industries such as online music rights, press, audiovisual works, feature films, sport programs, etc. All these various contents are related to different industries and economies that cannot be aggregated in one single paradigm such as "online content industry. EUROCOPYA would especially like to stress the differences that exist between the music industry, often used by the Commission as a paradigm in its approach to the online world, and other creative industries, such as the movie and audiovisual industries. In particular, unlike music, "release windows" and territorial exploitation of rights are applicable to the audiovisual industry, especially in the movie industry, and are still making sense in the online market."

#### 1. Definitions.

- 1.1. As we see it, the digital networks economy is a fluid, flexible but complex market, as of today under-studied as far as distribution of copyright-protected content is concerned. An initial problem stems from the use in the discussion on rights management of the generic concept of "Internet rights", which may generate confusion and lack of clarity.
- 1.2. Different models for the online distribution of audiovisual works on digital networks do or will exist alongside each other, and will probably mostly be managed through exclusive rights (in which case online exploitation opens in terms of financial and cultural development new rights windows for the exploitation of works, together with theatrical or DVD release, traditional TV, etc.), but may also possibly be collectively managed (e.g., the online simultaneous and unabridged retransmission of certain TV channels: see our point 2 below). These different forms of distribution may in most cases be identical to (or assimilated to) existing models, and as such require closer study in order to dispel the current confusion by creating appropriate definitions confirming that the general principles of copyright in force for traditional means of exploitation apply also online, in the framework of the May 2001 European Copyright Directive.
- 1.3. Unsurprisingly, the emergence of a new class of use of audiovisual works on online networks is also accompanied by changes in the audiovisual chain business activities, which has resulted in more specific functions developing in slots between producers and broadcasters (the latter also probably needing to be more clearly defined), like audiovisual services distributors or TV station editors/providers, and the arrival of new players like telecoms operators (who are turning into ADSL network operators, distributors and/or even TV station providers) and VOD (video on demand) platform aggregators. This trend reflects the growing complexity of the chain and the need for specialization and efficiency. We see it as crucial to properly identify these lines of business, which have a decisive effect on access, licensing and regulatory practices.
- 1.4. Finally, mapping the share-out of the value chain between the various business lines as identified would clarify the exercise of intellectual property rights and the

interrelationships between the spheres of audiovisual content (falling under broadcasting regulation), copyright (a matter for IPR regulation) and the economics of networks (which continue to fall under telecommunications regulation) and improve coordination between them to reflect the convergence that is happening.

1.5. We would therefore like to see an EU codex drawn up that defines the rights, practices and functions so as to achieve a proper concordance at EU level that will facilitate commercial transactions in on-line rights.

# 2. Comments on the current satellite system. Extension of the cable system to certain online uses of copyrighted works.

2.1. There is a very strong analogy in some current debates on copyright in relation to online exploitation of protected content with those that took place in the audiovisual field twenty years ago with the development of satellite broadcasting, the paradigm being that global media – satellite then, the Internet now – requires global – or at least pan-European – copyright management.

This paradigm was the basis on which the 1993 Satellite and Cable Directive was developed, which in principle enables the lawful distribution of audiovisual content by satellite to all the territories covered by the satellite footprint based on clearance in the one country from which the satellite signal ("uplink") is transmitted.

However, it is clear that the 1993 Directive's provisions on the satellite exploitation of cinematographic and audiovisual works have never been significantly implemented in this respect. The *de facto* exhaustion of rights implied by the fact that a satellite service authorised in the original uplink transmission country automatically acquires an operating licence in all countries within the satellite footprint has resulted either (i) in measures to reinstate territorial control over the exploitation of works, like signal scrambling or (to a very much lesser extent) the blacking-out of certain programmes, or (ii) modified programme schedules restricted to broadcasters' in-house content.

A recent European Audiovisual Observatory study on the international satellite transmission of television channels in the EU<sup>3</sup> indicates that of close to 5,500 channels received by satellite in Europe, nearly 4,000 (72%) are corresponding to

"satellite TV packages" which the study describes as "essentially national". Of the remaining 1,500 channels, the study looks at the 710 that are of European origin, finally concluding that about 420 (60%) are again essentially national, and just 290 internationally-oriented (a very large number of which are news channels, soft porn channels and niche channels targeting diasporas and minority communities). Moreover, even for this latter type of channel, distribution is managed on a percountry basis by scrambling the signal and retransmitting it via local cable, IPTV, satellite, mobile, etc. operators.

Although the implementation of a general pan-European management of satellite rights has failed, it however cannot be said that serious problems have arisen with access to film and audiovisual content, in consideration of the extreme abundance of satellite channels received in each EU Member State (especially through the 4,400 channels of the various existing "national" satellite TV packages).

2.2. It seems clear that extending the 1993 Directive's provisions on the satellite exploitation of audiovisual and cinematographic works to online services - as the reflection document seems to suggest in referring in particular to the position of "public service broadcasters [who] appear to favour an extension of the scope of the Satellite and Cable Directive of 1993 to online delivery of audiovisual content" - would have similar results and must therefore be rejected.

In the final analysis, only chronological (media by media) and territorial (country by country) management of rights is clearly able to ensure a plentiful and diversified supply of cinematographic and audiovisual content that can fit seamlessly into the existing media chronology for the benefit of all stakeholders (producers and rights holders, online platform operators and distributors, and consumers).

The resulting development of nationally-oriented VOD services, which is particularly strong in Europe, in no way runs counter to a plentiful and diversified online offering of cinematographic and audiovisual content, as is shown by the studies done on this topic since 2006 (see footnote 1 above).

 $<sup>^3</sup>$  Convergence, Copyrights and Transfrontier Television, issue 2009-8 of the series IRIS  $\it plus$ 

<sup>&</sup>lt;sup>4</sup> "... paralleling the scope of the new Audiovisual Media Services Directive. Transposing the rationale of this Directive to the Internet could imply that once an online service is licensed in one EU territory, for example the territory with which the service provider is most closely linked, then this license would cover all Community territories" (ibid.)

- 2.3. In reality, optimizing online services comprised of audiovisual or cinematographic works has nothing to do with the national or transnational coverage of these services, but rather with the visibility acquired by these works in a given market, thanks to the exclusivities granted to local distributors on said market. That visibility is indeed acquired mainly through theatrical release for cinematographic works and by the promotion done by broadcasters and/or digital platforms according to the rights windows contractually negotiated with the producers and/or distributors. It can be said, therefore, that the exploitation of European films must continue to be based on this territorial, media by media, management, and in particular on the efforts made by independent film producers and distributors at the time of theatrical release and during the later exploitation of these films in the different subsequent windows<sup>5</sup>.
- 2.4. The reflection document's suggestion as to a possible extension of the scope of the 1993 Satellite and Cable Directive might, however, be suitable as regards that part of the Directive that applies to Cable retransmission, to make it explicitly applicable to any kind of simultaneous, unabridged retransmission of TV programmes by a third party, taking a lead in particular from the much more neutral terminology (because not limited to cable) of Article 11bis of the Berne Convention on Copyright, which provides that

"Authors of literary and artistic works shall enjoy the exclusive right of authorizing ...

2. any communication to the public by wire or by rebroadcasting of the broadcast of the work, when this communication is made by an organisation other than the original one..."

This could in particular facilitate the unabridged and simultaneous broadcasting of TV channel programmes over the Internet (IPTV to TV and/or to PC).

The management of rights periods and holdbacks is a common practice, and part and parcel of audiovisual producers and distributors' business. VOD rights are at present usually transferred on a non-exclusive basis to different operators within the same market. Revenue from an audiovisual work can only be maximised in the digital world, however, if the different exploitation periods (windows) are observed. So, non-exclusive VOD rights, for recent works at least, can only be exploited at defined and limited periods so as not to detract from the rights to exploit that work on pay TV, pay per view or even free-to-air TV. Digital platform operators have clearly understood this mechanism. A look at the BSkyB site is informative in this regard. Several of BSkyB's site entries are given over to the promotion of films being shown in cinemas.

The 1993 Directive's provisions on Cable retransmission aim indeed to facilitate the simultaneous, unaltered cable retransmission of programmes already broadcast <sup>6</sup> through a mandatory collective management (on a per territory basis) of the right to authorize or prohibit such retransmission (Article 9 of the Directive)<sup>7</sup>.

But as the simultaneous & unabridged retransmission of TV programmes, initially limited to cable, has gradually spread to other types of networks (satellite, ADSL, mobile, etc..), one could envisage a possible extension of these provisions along a principle of technological neutrality (i.e. align other networks on the regime applicable to cable networks). As a matter of fact, such extension is already well underway in some Member States, through voluntary collective management agreements that could here be consolidated.

Furthermore, some online services are also acts of simultaneous and unaltered retransmission of pre-existing TV programmes.

Therefore, it would be appropriate to extend the provisions of article 9 of the Directive to any kind of simultaneous and unaltered retransmission to the public made by any operator (audiovisual services distributor) who is not the original broadcaster or television channel: cable operator, satellite package operator, mobile phone TV programme platform operators, IPTV service operator, etc.

These provisions would then cover the simultaneous and unaltered retransmission of television programmes over the Internet by any third party (operator) distributing them to its subscribers, which party (operator) would then be subject to a principle of mandatory collective management of the right to authorize or prohibit

<sup>&</sup>lt;sup>6</sup> Recital 33 of Directive 93/83/EC: "Whereas minimum rules should be laid down in order to establish and guarantee free and uninterrupted cross-border broadcasting by satellite and simultaneous, unaltered cable retransmission of programmes broadcast from other Member States, on an essentially contractual basis"

<sup>&</sup>lt;sup>7</sup> Article 9

<sup>&</sup>quot;1. Member States shall ensure that the right of copyright owners and holders or related rights to grant or refuse authorization to a cable operator for a cable retransmission may be exercised only through a collecting society.

<sup>2.</sup> Where a rightholder has not transferred the management of his rights to a collecting society, the collecting society which manages rights of the same category shall be deemed to be mandated to manage his rights. Where more than one collecting society manages rights of that category, the rightholder shall be free to choose which of those collecting societies is deemed to be mandated to manage his rights. A rightholder referred to in this paragraph shall have the same rights and obligations resulting from the agreement between the cable operator and the collecting society which is deemed to be mandated to manage his rights as the rightholders who have mandated that collecting society and he shall be able to claim those rights within a period, to be fixed by the Member State concerned, which shall not be shorter than three years from the date of the cable retransmission which includes his work or other protected subject matter.

<sup>3.</sup> A Member State may provide that, when a rightholder authorizes the initial transmission within its territory of a work or other protected subject matter, he shall be deemed to have agreed not to exercise his cable retransmission rights on an individual basis but to exercise them in accordance with the provisions of this Directive."

retransmission. This would not prevent rightsholders from individually authorizing the broadcasting of their works (under contracts with the TV station itself), or - through their collective management society - to refuse such retransmission in cases where it conflicts with their policy of individual rights management and/or pre-existing exploitation windows for the works retransmitted.

2.6. The Commission has the right of initiative over the legal instrument chosen to equalise these rights to cable retransmission (should that prove necessary).
EUROCOPYA is wondering whether an Interpretative Communication of the Satellite and Cable Directive focusing exclusively on Chapter II of the Directive might not suffice to modernise the current framework to enable a timely adaptation of the extension.

<u>Conclusion</u>: Extending the "cable retransmission" mechanism to online retransmission for certain pre-existing TV broadcast services properly defined is a viable possibility. Extending the "satellite rights" clearing mechanism of the 1993 Directive to the cross-border management of online services incorporating audiovisual and cinematographic works, however, is arguably moot since current practice tends to show that said Directive is not fitted to broadcasters' real needs (see the above mentioned European Audiovisual Observatory's satellite and cable study)<sup>8</sup>.

# 3. Transfer of rights in a cinematographic work to a producer for the online exploitation of the work.

- 3.1. The producer is the key partner in the creation and making of an audiovisual or cinematographic work. In the division of roles between the director and producer, the latter is indeed responsible for financing the work. The scale of the budgets involved means looking for public (financial assistance and support) as well as private partners (broadcasters and other audiovisual work distributors, banks, coproducers) in order to raise funding.
- 3.2. In exchange for this financial commitment without which the work could not exist, the rights of economic exploitation of the work are transferred to the producer (to

exploit it to best effect in order to recoup the costs). By thereafter assigning the rights per window and territory, the producer gradually covers and/or recoups the initial investment made to produce the work.

The transfer of rights has been recognized in European law in Articles 3.4 and 3.6 and Recital 15 of the Rental and Lending Directive.

- 3.3. However, the transfer of rights is still far from sufficiently harmonized, and this needs further improving, particularly for online exploitation. Transfer of the rights of contributors to the audiovisual work to the producer should be improved in some Member States, and certainly systematized to facilitate licensing for online distribution in Europe. In return for such mandatory and automatic transfer, the producer would be required to exploit the work and submit regular accounts, and online services publishers would have to produce certified schedules of box office receipts reporting all exploitations for each film. The point of this is not to deprive other rights-holders of their rightful remuneration from online exploitation, but to ensure that there is no break in online exploitation due to different rights transfer practices in member states.
- 3.4. Online rights cover a wide range of different acts of exploitation. The current trend is to enable a wider take-up of on-demand consumption of audiovisual services. Apart from the standard forms of VOD (pay-as-you-go or subscription, streaming or download to own), cinematographic or audiovisual works are also available online through non-linear (on demand) services through offerings of catch-up TV / Start from the Beginning and other similar types of offerings.
- 3.5. Transfers of rights to facilitate the online use of works are a prerequisite<sup>9</sup> that enable producers to optimise their rights management, but also provide the fluidity necessary to online exploitation.

<sup>&</sup>lt;sup>8</sup> Convergence, Copyrights and Transfrontier Television, issue 2009-8 of the series IRIS *plus* 

The reflection document itself alludes to this issue in the words, "there are many more rightholders involved in the creation of a film, director, producer, actors, script writer, music soundtracks, authors, to mention a few". Germane as it is, this observation does not tell the whole story: so far, in the analog world, the producer has been able - through the transfer of rights - to pull together in exchange for a fee the rights necessary for the economic exploitation of works for to ensure their distribution through cinemas, DVD, Pay TV, free-to-air TV. The same kind of transparency must be brought to the digital world.

- 4. The role of collective management in the exploitation of cinematographic and audiovisual works.
  - 4.1. The contractual assignment of rights (determined by clauses transferring rights in the work to the producer see point 3 above) is standard operating procedure in the audiovisual sector. Collective management of producers' rights remains limited to a handful of highly specific and circumscribed areas (mostly private copying and the unabridged, simultaneous retransmission of unencrypted channels by third parties), for practical reasons and/or pursuant to mandatory legal requirements. Rights may be managed individually on the basis of private agreements in order to build up a catalogue of films, which will then be referenced by the different ISPs and made available by other content distributors (e.g., pay TV services).
  - 4.2. The exploitation of online rights is arguably not a major issue that would per se require an extension of the field of collective management where audiovisual works are concerned (subject to the comments made in point 2 above, on the possibility of treating some on-line services of unabridged and simultaneous retransmission of pre-existing TV programs as equivalent to cable retransmission).
  - 4.3. More generally, since the producer must be the central player in the exploitation of the work based on the rights transferred to him (in return for the payment of a fee in principle proportional to the box office receipts and regular accounting to the authors concerned), authors' collecting societies should confine their activities to:
    - collecting and paying-out the remuneration which it is their responsibility to manage (by law or under an express agreement between producers and authors), and
    - defending the general interests of their members (advice and/or action to support the interests of their mandators).

This would avoid situations where collecting societies wrongly feel entitled to deal directly with users (on the grounds that by joining the society, the author purportedly contributed his rights to authorize or prohibit the use of his work, thereby putatively giving the collecting society concerned the legitimate right to deal directly with users), sometimes without even the producer knowing about it.

4.4. With respect to the extended collective licensing which is intended to enable an

orderly management of copyright by avoiding certain restrictions on forms of exploitation like simultaneous, unaltered cable retransmission (the current collective management system under the Cable Directive is indeed more or less an extended collective license), EUROCOPYA believes that this practice could possibly be extended at European level in limited cases, in particular for unabridged and simultaneous retransmission of pre-existing broadcast services (see our point 2 above).

# 5. The territoriality principle in the exploitation of cinematographic and audiovisual works.

- 5.1. The digital economy is not a single area. There is no "logical" congruity between the European single market and the digital market. What is true, by contrast, is that the "logic" of networks creates pressure on services organized on national lines<sup>10</sup>. Given its fluidity (the most apt metaphor is that of a paramecium, the form of a network is chiefly shaped by its users/contributors) the digital market can be glocal (e.g., a website or blog providing purely local news) or global (a site about a world-famous pop star).
- 5.2. Where buying and selling films on the Internet like video on demand is concerned, the kind of licensing depends not on the proactivity of those concerned, as with a blog or a non commercial site, but very much on the business policy initiated by the VOD service operators in agreement with producers and distributors. Studies done by the European Audiovisual Observatory show that the VOD offering is structured (by different telecoms operators, broadcasters, ISPs, etc.) along national lines (going together with the migration of works onto other physical (cinema screens) or analog (TV) networks). Territorialization therefore is arguably unaffected by the development of the online offer, and more connected to the other distribution windows. This (logically enough) does not hold true, however, for pirated offerings which tend to circumvent the conditions of time and space (window, territory) under which works are marketed to maximise revenues<sup>11</sup>.

E.g., Google which works out of Luxembourg, thereby benefiting from a reduced rate of VAT = loss of revenue for receiving countries and ultimately competition issues between operators of the same size.

The focus is all on the huge amount of income lost to piracy, but it is seldom pointed out that piracy wreaks havoc in the market, violating the chronologies and windows that ensure an orderly exploitation of the work for the benefit not just of the rightsholders but also the public.

5.3. Not all works are treated equally, of course. Some have difficulty accessing the market. The experience of recent years has shown that the "long tail" effect remains very limited and that the online public searches only for what it knows already (cf. study of pirate P2P networks which offers interesting data with regard to that, confirming that demand for audiovisual content highly concentrates on titles that have already the highest notoriety).

But the operating costs for online exploitation are lower than for a theatrical release, for example. Online exploitation therefore offers solutions to market access for certain films, provided it does not become a dumping ground for films rejected by the major operators.

### 6. Exceptions.

6.1. The EU copyright acquis has succeeded on all points in establishing a robust legal framework with sufficient flexibility to provide balance between rights holders and the interests of users.

The challenges thrown up by technological change affect the practical implementation of the law, rather than the law itself.

Underpinned by the fundamental principles set out in the "three-step test", the EU regime of a range of harmonized exclusive rights and an exhaustive list of copyright exceptions provides the right basis to work towards solutions in the digital environment.

6.2. However, with the widespread increase in dissemination of works in digital formats, piracy - and especially online piracy - of these works has increased exponentially.

Therefore, any exceptions and derogations must take account of the increased risk of unauthorized digital dissemination, particularly in the absence of adequate collaboration from our intermediaries who often hide behind existing limitations of liability or data protection rules.

It is our assessment that instead of considering new exceptions and limitations to copyright, attention needs to focus on how best to operate within the current framework, with practical solutions, such as licensing, and automated ways of

providing machine-to-machine permissions<sup>12</sup>. The three-step test already ensures that copyright exceptions do not conflict with such solutions.

6.3. The European Institutions may wish to consider facilitating a dialogue between stakeholders on a case-by-case basis before any review of existing legislation. A successful example of such a collaborative approach is the Memorandum of Understanding on Orphan Works achieved under the auspices of the European Commission between all stakeholders, including libraries.

### 7. Exhaustion of rights.

- 7.1. There is exhaustion of European distribution rights in the audiovisual sector. This means that a DVD put into circulation in an EU territory with rightsholders' consent can move freely throughout the EU. This exhaustion has resulted in market sharing agreements between several DVD publishers and made the illegal import of US DVDs into the Grand Duchy of Luxembourg in particular easier.
- 7.2. The singular characteristics of the forms of exploitation of audiovisual works mean that the exhaustion of DVD distribution rights cannot under any circumstances be extended beyond the EU's borders to the wider world. Nor can it be extended to other exclusive rights, especially the right of making available to the public which governs the exploitation of VOD and download-to-own films.

#### 8. Creating a Community copyright title.

8.1. The reflection document envisages the creation of a Community copyright title to facilitate the online exploitation of works on the European market. It also suggests that the European title would not replace but exist in parallel with national copyright titles. There are already precedents in EU law (e.g., Regulation (EC) No. 861/2007 of the European Parliament and Council of 11 July 2007 establishing of a European Small Claims Procedure) where a specific Community instrument must be used in cross-border transactions leaving national provisions intact and applicable when

 $<sup>^{12}</sup>$  See <a href="www.the-acap.org">www.the-acap.org</a> for a cross-industry solution to automated information on permissions for access to and use of content.

the national dimension of an activity or service remains relevant .

8.2. Such an instrument, however, has questionable relevance when it comes to copyright - specifically, as here, the right to literary and artistic property. Where the exclusive right combined with the transfer (assignment) of rights to the producer prevails, the producer remains free to choose to license online exploitation (including EU-wide online distribution)<sup>13</sup> to the licensees of his choice.

The exercise of copyright and related rights can in practice be ordered by contract (which necessarily implies agreement between the two parties). Although here again, we are not opposed to a discussion on the creation of a European copyright title, we feel that it would have to encompass such broad swathes of the right of literary and artistic property that the length, laboriousness and cost of the exercise would outweigh any efficiencies it sought to achieve. By contrast, EUROCOPYA is keen to improve the current framework for contractual relations, for example. Which is why we propose in section 1 (Definitions) that thought be given to solutions for unifying the definitions by which to identify the participants in the digital chain.

<sup>&</sup>lt;sup>13</sup> It is clear that were online distribution operators of continent-wide reach to exist (which they do not) and be contributing materially to both pre-financing of production and a significant rise in revenue generated by online exploitation, then producers would definitely adopt this pan-European model to promote a critical mass generating resources that may be greater than that obtained by combining windows and territories. See also the remarks above about the satellite mechanism which has not worked.