SUMMARY RESULTS OF THE PUBLIC CONSULTATION

INTRODUCTION

The consultation on Opportunities and Challenges for European Cinema in the Digital Era was launched to gather information and views from all stakeholders on digital cinema, in particular digital cinema distribution and the digital equipment of European cinemas.

The consultation comprised 4 questionnaires: 3 questionnaires were addressed to professionals (exhibitors, distributors, producers/sales agents) and one to other stakeholders (film agencies, film professionals' associations, digital service companies…). The questionnaires are attached in Annex II.

The consultation was open for two months (16 October 2009 – 16 December 2009): 329 contributions were received; half of them coming from exhibitors (see Annex III for details). This document is a summary of the contributions received, reflecting also some individual provocative or innovative thinking.

This summary represents the views expressed in the contributions received and not the position on these issues of the European Commission.

This consultation will provide valuable input for the European Commission in finalising a Communication on digital cinema this summer, as well as a new MEDIA support scheme for the digitisation of cinemas offering substantial European programming (to be launched in the autumn).

TECHNICAL ISSUES

Standard

Most stakeholders consider that a unique standard for digital projection is essential but that it should be open and compatible worldwide. They consider that the DCI specification is the best system for now.

All equipment that is DCI-compliant is interoperable. Only an agreed standard[1] can ensure the inter-operability of projection systems, but some want it open to HD and other formats.

A certification entity able to test and certify technology as being compliant to the standard would also be very useful. If there is no certification by technical bodies, the manufacturers should make sure that their systems are inter-operable (auto-certification).

A few respondents raise the question of costs (security = 1/3 costs) and therefore of access for smaller cinemas. Some claim that no serious research has been done by

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[1] The standards employ technology that is royalty-free, license-free, and ensure the security of the content with the most robust methods available today. A number of competitive mastering systems exist today that can package content in the standard format.

any European country on DCI and that a standard <2k would be enough for 8 meter screens (i.e. the majority of European screens).

If working towards a single standard is a good idea, restricting content may not be wise. Will exhibitors be assured that, if they invest, standards will remain unchanged long enough?

Among the equipped exhibitors (1/3 of the respondents, i.e. 55 cinemas), only one opted for 4k, 32 for 2k (with 3D in 14 cases), 3 for HD and 18 for 1,3-1,4k.

The reasons why they chose **2k** are: need to be DCI compliant to get majors' and 3D films, to have the same quality for European films, only possibility on the market, because quality should be higher than home cinema, necessary for big screens and long projection distance. Even if some consider that a lower resolution could be adequate until screens of 50 m^2, distributors don't deliver in such formats.

On the other hand, the exhibitors equipped with **1,3-1,4 k** consider this is enough for the size of their screens, although they are not always satisfied with the quality of the projection. Some admit there is a lack of content and this is no solution for the future. Only the 3 HD-equipped cinemas are very satisfied and one claimed that HD 1,9k is better than 2k as the contrast ratio is higher.

Half a dozen exhibitors equipped with a resolution lower than 2k claim they have already been refused access to digital films, but:

- in accordance with the DCI specifications, the American studios will not supply quality below 2k;
- there are also problems to find independent/European films: according to a German exhibitor, almost 100% US films, 70% DE films and only 40% European films are available on digital.

Digital masters

Out of 58 stakeholders (questionnaire 4):

- 25 think that a digital master should be compulsory for public supported films;
- 15 argue there should be a specific public support (for producers and for distributors of European non national films), in particular during the transition period. The support could also aim at generalising digital post-production. In France, an extra cost of 40.000 € per film is mentioned and it is even proposed to support 35 mm masters since their costs will be increasing as digital distribution becomes more widespread;
- 6 call for the digitisation of catalogues/archives (digital library at European level?), for example through the establishment of "National Digital Film Archives that store the technically highest available version of the film for future screenings and encoding for other media".

As far as the costs are concerned, 36 say they should be borne by the producer, 9 mention producer and/or distributor, 2 only distributor and 2 call for national or European funding.

In general it is considered that this should be the same as for the inter-negative in the 35 mm world. Moreover, as it is part of the post-production process, the producer is the one who should control quality and, according to one contribution, he/she should even do the DCDM and the 1st DCP to ensure the same quality everywhere.

Although a strong majority of the **producers** consider digital cinema as an opportunity (for the circulation of their films), there still seems to be a lack of knowledge or experience on their side.

One third of the respondents still don't include mastering costs in their production budgets, for the following reasons: it is up to the distributor/sales agent; difficult enough to complete the film (costs postponed), extra cost over 35mm and video delivery; no national support (except in the UK); no need for digital master.

This does however seem to be changing as sales agents/distributors now consider that the digital master should be part of the delivery list of the producer[2]. Half of the producers who have already made a digital master (34 out of 46) did so from their own initiative (in particular, in the UK), the other half on request from sales agents/distributors/festivals.

As far as older films are concerned, two thirds have not digitised any and only two producers seem to be aware of Eurimages' digitisation scheme.

One **single master** for all distribution channels is not yet technically possible, but the majors are busy designing a "super-DCP" or a so-called 'mezzanine format'. There is a lack of EU research in that field.

A 2k DSM (digital source master) is enough to make all other masters (TV, DVD…), the quality of which is lower. To encourage the pay-once approach, some contributors think that information and market evolution will solve the problem, some call for training and some call for public support to digital masters/producers/digital post-production.

A broader view has also been expressed: there should be a unique master for several countries in Europe.

Technical industries

Some contributions highlight the lack of transparency and the lack of competition between laboratoriess, which explains why the prices remain high.

From the technical industries' point of view, digital transition will have a cost in terms of employment (jobs will disappear in the 35 mm labs) and vocational training (to train others to the new digital needs). This will reduce the margins of the technical industries, which will therefore no longer be able to cash-flow independent production and distribution as they did previously.

This is overlooked by most stakeholders, who want the transition to be as quick as possible.

Database of equipment certificates (Trust Device List)

The question of a European-wide database raised mixed feelings: 1/3 are in favour, 1/3 against.

[2] "However it will require that more European screens are made digital. Until that point, the demand from the distributors will be limited and again it will be more dificult to convince the producers that it is actually relevant to produce digital material. It's a catch 22 situation."

The **pros**: more cost-efficient, would favour European exchanges, equal access to screens for all service providers, most Member States will not create databases, open access across borders; would stimulate competition between digital labs; will in particular benefit to companies with international booking practices (studios).

The **cons**: national databases first (and make them interoperable), barrier to new entrants (free access to the market must be maintained), trans-national databases justified for small markets only but distribution is national anyway.

Some argue that even if there was a pan-European database, big players would consider that it is too critical an issue for their business to rely on a third party. This raises question as to who the third party could be (neutral, trustworthy…) and who would be ready to pay for it (highly cost-intensive to update)?

EXHIBITORS

The equipped exhibitors have mainly financed their digital switch with their own investment: 29 (8 of which in combination with public funding) out of 55.

The remaining options were:

- mostly/only public funding: 7 x UK Film Council, 3 x Ireland (85%), 1 European Structural Funds (Malopolska)…
- 6 leasing, only 1 VPF-deal
- 4 public-private partnerships

The expected period of return on investment is 5-6 years on average (from 4 to 7 years). It is longer when the equipment is (fully) publicly funded: 8-10 years and of course shorter for 1,3k equipment: 2 years.

Digital cinema seems to be able to attract new audiences thanks to alternative content, special screenings, increased flexibility and a wider repertoire BUT extra revenues are limited except for opera and 3D. According to others (7), this is wishful thinking. Two argue that even 3D is not profitable because of the investment costs and glasses (and revenue-sharing problems with the majors).

As far as **alternative content** is concerned, this is mainly opera, National Theatre (UK), concerts + sports + games + travel films, B2B activities like seminars and product presentations (often only once a month).

In terms of revenues, the feelings are mixed: it does provide extra revenues to some (UK), but according to others the financial benefits are marginal given that the provider is taking 55-60% of the total box office. It is certainly no panacea!

As far as a possible reduction of **staff costs** is concerned, the message is clearly no (35), 3 even say it will be the opposite! Still 12 expect savings when the cinemas /the industry are/is fully digital. It is also expected to reduce projection costs associated with making up and breaking down 35mm prints.

Exhibitors claim that digital cinema has not modified their relationships with distributors in most cases, but some highlight:

- the <u>positive</u> consequences (10): more flexibility, it is easier to get prints and above all earlier (national releases). As one exhibitor put it: "I am allowed to keep films in my program for a much longer period of time. Additionally, I am allowed to have fewer screenings a week of one film. Bottom line: I can show more films in the same period of time".

- On the negative side (2x2): when not all screens are digitised, distributors are much more unwilling to supply 35mm prints, so it is impossible to move films between screens and some distributors have been trying to pass on shipping costs concerning hard drives to us rather than absorb them themselves.

As far as the availibility of European films on digital is concerned, it depends on the territory/distributor/network of cinemas: no problem in the UK, Ireland, Sweden; OK with Microcinema in Italy and independent distributors in Germany; almost impossible in Denmark, Poland, Slovakia.

Some key/KDM problems have also been mentioned but the situation is improving.

DISTRIBUTORS

On the whole stakeholders (questionnaire 4) agree that distributors should/will contribute to the costs of digital equipment.

The distributors are considered as the main beneficiaries of the digital switch (costs reduced up to 90% as well as localisation costs are ten times cheaper in digital), so they should be the main source of funding and cover most costs.

The proposed percentages of contribution depend if there is a solidarity fund or if it is only for small cinemas: they start at 20-30% in the 12 newer Member States and reach 70-80% elsewhere.

Attention should however be paid to the following elements:

- distributors should keep part of the savings NOW;
- the transition period will be more costly for them;
- mastering costs (for foreign films) should be taken into account;
- some are ready to pay for projector and server only;
- alternative content providers, advertising companies and, according to some, producers should also contribute;
- what about the financing of second generation equipment?

Among the distributors themselves (45 contributions), 24 are ready to contribute, 9 are not and 8 agree under conditions: as long as the VPF is reasonable and a digital release is not more expensive than in 35 mm.

¾ of the respondents have already distributed films digitally, 9 of them have even distributed more than 10 films on digital. The number of prints really depends on the equipment level of the country. The films are almost always delivered by hard disk (only 3 used ADSL).

Distributors tend to see digital distribution as both an opportunity (26) and a risk (15).

An **opportunity** because savings can indeed be made (although 10 say there are none for now):

- 10.000-15.000 € for a big digital release in a small territory or 20% (Belgium);
- per copy: 300-740 € before VPF, 100-250 € after;
- UK: 2000-15.000 £ in total or 350-1500 £ per copy;
- majors: copy = 140 € instead of 600 € but VPF to be added.

AT the end of the day it depends on the number of copies, the cost or access fee of the master and the amount of the VPF. For some (in the UK at least), the prime advantage so far has been that they have been able to release a film on a greater number of screens, for about the same price as they would have been able to release a film in 1-3 prints.

It is also a **risk** because cheaper/quicker distribution will enable majors' films to be released more widely and there is also competition from alternative content, so there will be less space for European films; VPF models will favour majors and lead to concentration.

To make sure of greater flexibility in the multiplexes and multi-screen cinemas, where digital screens tend to be filled with major US films (especially 3D), it is always best to supply 35mm to ensure a second week, so release becomes more expensive than in 35mm only.

FINANCING ISSUES

VPF deals

Hardly any information from exhibitors as only 1 cinema that responded is equipped through a VPF deal. A few comments received concerned this issue:

"As well as the existing relationship with the distributors for bookings we've had to develop a relationship with yet another intermediary (the integrator/content supplier).

A VPF deal does not suit us as the third party requires all equipments to be covered by the deal, but we have already bought two with our own funds.

It is always more difficult to get digital copies when the distributor has not signed a deal with the third party and this is more often the case with European than American films. It already happened that 35mm prints had to be used when the distributor had not signed a deal with the third party, even if a digital copy was available.

The US major studios refuse any discussion about VPFs if it is not part of a global VPF deal.

This is the paradox with the whole VPF mechanism: those that need it least get most, and those that need it most get least[3]."

Distributors:

Why have only 2 independent European distributors have signed long-term VPF deals so far? Main reasons: distributors want to keep their independence, they don't want exclusivity with one integrator and the VPF is too high (digital becomes more expensive than 35 mm for small releases).

In summary the model proposed by integrators to distributors is seen as barely profitable, not adapted to the circulation of prints (degressive VPFs), it leaves small

[3] Version française dans le texte: "D'autre part il faudrait faire en sorte que la participation des distributeurs soit répartie équitablement entre toutes les salles de cinéma et non pas comme on s'achemine vers une mainmise des grandes salles qui jouent les films en première sortie et qui récolteront donc les VPF, alors que les salles de prolongation ou des petites villes qui récupèrent actuellement les copies 35mm après leurs exploitation dans les salles de sortie ne pourront pas trouver de financement pour leurs équipements (car le distributeur ne peut pas payer plusieurs VPF sous peine de voir ses frais de sortie devenir nettement plus élevés que pour le 35mm)."

exhibitors aside and is in the end considered as an obstacle to a more global mutualisation.

Distributors are ready to contribute to the costs through VPF deals provided the terms are not discriminatory. "A VPF deal is also a commitment by the distributor to supply films to the exhibitor. The problem with the commitment by the distributor is that this can easily become a block-booking or film-bundling arrangement, which many Member States have made illegal under competition law."

To ensure complementarity with public schemes, several proposals have been made:

- coordinated national roll-outs: public-private partnerships based on VPFs;
- by making deals with distributors mandatory to receive support;
- public support for categories of cinemas or of costs (booth adaptation, maintenance, extension of guarantee) not covered by VPF deals.

Public support should not be counted against exhibitor, but two diverging interpretations have been quoted:

- any public support directly aimed at digital conversion will reduce the VPF, hence not helping exhibitors;
- some VPF deals allow exhibitors to include funding from public sources to their own contribution to the deal without this affecting the value of the studio contribution.

The introduction of public support will possibly imply a lower contribution from major studios but simultaneously will facilitate a mechanism by which all cinemas can benefit from VPF contributions. Thus, public support will correct the imbalance in the spread of VPF contributions and will equalise the diversity of VPF rates between majors and independent distributors because the level of the VPF contribution will be equal for all participants in the overall scheme. (solidarity fund)

What is the third parties' point of view?

- o VPF's can be made to work for small cinemas if they group together;
- o public bodies could compensate private entities if there is a costs disadvantage to digitisation in certain regions or types of cinemas;
- o Member States (and regions) should not make it a condition of their public support for digital conversion that full transfer of ownership title on the digital projection system is made to the exhibitor;
- o To avoid market distortion: first VPF deals, second the solidarity fund and only thirdly a direct subsidy.

Public funding

Why? To limit the transition period and for objectives of general public interest (cultural but also social cohesion…) for an equal access to cinema and for film diversity.

At local/regional level

Everybody agrees on the role played by local cinemas but two approaches came out:

- one market driven: local buying groups are all that is needed, public support should only be granted if there is no alternative;

- funding is necessary to support a cultural offer and local economy (which benefits from the presence of cinemas), but should be complementary to national schemes (cost of projection-booth adaptation, guarantees for bank loans…) and, according to some, focus on rural and arthouse cinemas only.

<u>European Structural Funds</u>

Limited possibilities (funds already used or earmarked) except for new Member States[4] (to reduce digital failure), but lack of information and need to prove impact on regional development, prosperity and (equal) access to culture.

Should be complementary to private models and national supports, but matching funds are needed and procedures should be simplified for SMEs.

They are also opportunities to encourage Member States and regions to formulate their strategies for digitisation and to discuss those strategies with the Commission (best practices).

<u>At national level</u>

In Member States a variety of political, social and economic conditions prevail; thus different approaches to digitisation may be appropriate in different countries. No (viable) cinema should be left aside.

The different approaches are:

- support for all cinemas in a solidarity fund (Norway, France, Germany, Netherlands…);
- support on cultural/diversity grounds (Poland, Ireland);
- market driven solution[5] (UK).

General associations of exhibitors (UNIC, FNCF) favour inclusion of all cinemas, whereas associations of arthouse cinemas call for positive discrimination (AG KINO…).

In terms of aid intensity: proposals vary from 1/3 to max 90% (in exchange for specific programming).

CASE STUDY: IRELAND

Since 2004, the **Arts Council** and **Irish Film Board** have worked together to provide two major capital funding programmes to support cultural cinema exhibition:

a) They provided capital grants of €750,000 and over towards the construction of arthouse cinemas with an obligation on the operators to programme within the

[4] Due to the costs of digital equipment, digitisation will occur first in more prosperous regions via private models

[5] "Public funding will have three potential effects: it will provide a disincentive for studios to consider providing appropriate financial support for those cinemas seeking to convert; it will provide a disincentive to those cinemas wishing to convert to do so via a market-driven route; and it will serve to lessen any downward pressure on digital equipment prices. Timing is therefore essential: public support only after exploration of market solutions."

requirements of the **Europa Cinemas** Network. The Lighthouse Cinema in Dublin and Solas Picture House in Galway were recipients of capital grants under this programme.

b) They provided a national **Cinema Digitisation Scheme** for fulltime and part-time arthouse cinema providers. In 2008, grants of €750,000 were made and provided for the installation of 11 digital projectors throughout Ireland.

ESF might be accessed through local authorities and the LEADER programme to assist the remaining part-time arthouse cinema providers to upgrade their facilities. Also, there are a significant number of single screen cinemas throughout the country which are in need of digital projection equipment.

In Ireland **municipalities** have approached support on a case-by-case basis:

For example, in Galway, the local authority invested €2m in the purchase of a site to facilitate the building of a 3 screen arthouse cinema. The Arts Council and the Irish Film Board invested €1.25m; and the **Department of Arts, Sport and Tourism** invested €2m. These investments were for the development of the cinema including fit-out and digital projection equipment.

25 of the respondents (out of 71) strongly support a scheme facilitating the **access of exhibitors to credit**[6] or supporting their financing costs (only 2 find it irrelevant and want subsidies only).

Why?

- To lessen dependence on distributors/studios + exhibitors prefer to buy their equipment directly thus avoiding recourse to third parties;
- The measure is not very costly, but has a high multiplying factor;
- Much less likely to distort the current market than would a direct funding route;
- The rigour and level of scrutiny allied to the commercial lender would offer greater reassurance as to the future sustainability of the individual cinema business than would be the case with a one-off grant.

However

- facilitating access to credit might be the answer for a limited number of exhibitors; for others it should not replace but be complementary to funding or solidarity schemes;
- in the new Member States such schemes would be more relevant for multiplex chains or VPF business model operators than individual single screen cinemas.

<u>At European level</u>

Main proposals:

[6] State could help by providing security (best approach): underwriting loans by a certain percentage so that the bank's risk is less.

- To facilitate the creation of a European Digital Source Master for the distributors of European non-national films (to be adapted into national Digital Cinema Distribution Masters);
- To support cinemas proportionally to their programming of European works;
- A scheme which opens up a line of credit for exhibitors would be preferable to direct financial support. The European Commission could therefore consider the possibility of creating a back-up financial programme (a European credit guarantee system) or a sort of I2I Audiovisual for exhibitors.

In terms of complementarity, there should only be EU support

- if local/national support (with a minimum contribution and a ceiling) or each euro invested = one (or a %) euro matched by a European Fund;
- for associated costs (booth adaptation, maintenance costs…);
- if private financing is not available;
- to reduce the digital divide between Member States.

TRAINING

Digital technologies are changing the way films and audiovisual are financed, produced, distributed and watched. Digital change - including digital cinema - requires a different mindset and new competencies will be needed to take advantage of opportunities.

Public bodies and professionals' associations have therefore identified training needs in the following fields:

- operational: how to work and maintain the devices as far as possible independently. Support is particularly needed for the smaller operators, often serving communities in small towns or rural areas;
- programming & marketing skills: how to tap into new opportunities of digital;
- training for post-production personnel and technical directors of distribution companies working on digital formats;
- some claim that training for producers is needed more than in the projection booth…

Most consider that this training is missing in their Member States (except France and the UK) and should be delivered at national level[7]. At European level, some activities (Media Salles, Europa Cinemas) have been identified and two more could be explored:
- training for trainers (in cinema schools…);
- sharing best practice in digital change to bring together learning across Member State boundaries.

At a professional level, there seems to be a lack of information but the training needs are not considered so crucial:

1. **Producers** are learning with post-production service providers, but when needed training should not only focus on how their post-production and delivery obligations are changing in the light of the new technologies, but also cover marketing and distribution strategies for

[7] Only German stakeholders call for EU support in the training area.

the digital era, as well as online marketing and social networking strategies for film promotion and PR. Only one contribution refers to a need to provide international training at a European level "to homogenise expectation and output in advance of cinema digitisation".

2. **Distributors** are mostly learning by doing and the whole technical work is outsourced with specialist companies. However, management of the keys, reporting and invoicing and maybe new booking patterns could be examined further. A comprehensive website on the availability of digital masters of European titles would also be useful.

3. Equipped **exhibitors** get trained by their equipment suppliers/manufacturers or in-house (learning by doing). Non-equipped cinema operators are ready to follow the same path and would rather have money than training! There is hardly any national training available (except in France and the UK), it is often not considered as necessary but some needs have been expressed regarding projectionists and new IT aspects of the equipment to better exploit digital possibilities. There is no expectation from the EU level. A platform for the sharing of knowledge between independent cinemas and independent training (i.e. by non commercial operators) has nevertheless been called for.

DIGITAL CINEMA GLOSSARY[8]

2K
Resolution of 2048 pixels per line

4K
Resolution of 4096 pixels per line

Alternative Content
Content available through a digital cinema system that would typically occur on a “one-off” basis or “off-peak hours” run basis. Sometimes referred as “non-traditional content”.

CPL – Composition Playlist
A Composition Playlist consists of all of the essence and metadata required for a single presentation of a feature, trailer, advertisement, or logo. A single CPL contains all of the information on how the files are to be played, at the time of a presentation. There is a separate CPL for each version of a motion picture/feature (composition).

D-Cinema
A contraction of digital cinema. In the classic model the entire production chain from scene to screen is a digital process, with images first captured and processed digitally before then being compressed, encrypted and transmitted via satellite, broadband or disc to cinema theater for digital projection.

DCDM - Digital Cinema Distribution Master
A master set of files that have not been compressed, encrypted, or packaged for Digital Cinema distribution. The DCDM contains all of the elements required to provide a Digital Cinema presentation.

DCP - Digital Cinema Package.
The set of files that are the result of the encoding, encryption and packaging process.

Definition
A description of sharpness or clarity of a picture. High definition (HD) pictures portray a lot of detail, while low definition pictures look soft and less clear.

Digital image
An image defined by code values.

Digital Cinema Projector
A Digital Cinema Projector is one that conforms to the DCI specifications. The available options in the marketplace today are those equipped with Texas Instrument’s DLP Cinema® chip or Sony’s SXRD® technology.

DSM – Digital Source Master
The Digital Source Master is created in Post-Production and can be used to convert into a DCDM (Digital Cinema Distribution Master). The DSM can also be used to convert to a film duplication master, a home video master, and/or a master for archival purposes.

DLP
Texas Instrument’s Digital Light Processing digital projectors, which use arrays of tiny mirrors mounted on DMDs (Digital Micromirror Devices) to project the image. Currently over one million

[8] Source: EDCF (European Digital Cinema Forum)

DLP-Based systems have been sold worldwide (though very few of this number to date have been cinema projectors).

HDTV
High Definition Television

Interface
A means of passing on information from one application to another. Interfaces can either be proprietary, in which case only one or a chosen few applications can use it, or open with the interface details publicly available and, best of all, complying with the appropriate international standards.

Interoperability
The ability of systems to interoperate – to understand and work with information passed from one to another. Applied to television this means video, audio and metadata from one system can be used directly by another. Digital signals may be originated in various formats and subjected to different types of compression so care is needed to maintain interoperability.

JPEG 2000
A wavelet-based image compression standard. It was created by the Joint Photographic Expert Group (JPEG) committee with the intention of superseding their original discrete cosine transform-based JPEG standard. It is the compression method specified by DCI for digital cinema picture tracks.

KDM – Key Delivery Message
The KDM provides the method for securely delivering content and key elements. A KDM contains the ‘keys’ to unlock the elements of a CPL for a specific device. If a DCP contains multiple CPLs, a unique KDM is required for each different CPL, and can only be generated for devices on the Trusted Device List (TDL).

Library Management Server® (LMS)
A group of servers and networking components that are integrated and tested to create a powerful central hub for all communication needs in the multiplex. It allows central storage of all films, alternative content, trailers, advertising and more. This component networks the theatre, increasing the value of the individual components on each screen.

Mastering
Mastering indicates the set of those technical activities that lead to the finished edited master of a program, which normally materializes the creative intent of its authors.

Media Server
Each digital cinema projector requires a media player to decompress and decrypt Digital Cinema Packages (DCP), allowing the content to be played on the associated projector. There is one media server for every projector in a multiplex.

TDL – Trusted Device List
The TDL is list comprised of digital equipment installed in theatres for which studios or other rights owners have given their approval to these ‘trusted’ devices to play their content. KDMs are only created for devices on the list. This adds another level of security to the DC process.

Transport and Delivery
Digital Cinema Packages (DCPs) and Key Delivery Messages (KDMs) are transported either physically on media (such as hard drives) or electronically or via satellite. When the DCP arrives at the theatre and is loaded, it is unpackaged, decrypted and decompressed for play out by the projection equipment.

QUESTIONS ADDRESSED TO PROFESSIONALS

Exhibitors

Already digitally equipped

1. How much did you pay for the server + projector (per screen)? How much were the installation costs?
2. Did you have to adapt the projection cabin(s) and its/their environment? How much did it cost per cabin (for cable extraction, air conditioning…)?
3. Can you already give us an indication of the lamp and maintenance costs linked to your digital equipment?
4. Which projection standard did you opt for (1.3k, HD, 2k, 4k…)? Why? If 2k/4k, did you acquire 3D equipment as well?
5. If you are equipped with 2k/4k: considering the layout of your screening room(s) and the size of your screen(s), would a lower resolution have also been adequate (in terms of cost/quality)?
6. If you are equipped with a resolution lower than 2K: are you satisfied with your equipment (in terms of cost, quality of projection…)?
7. If you are equipped with a resolution lower than 2K: have you already been refused access to any digital films (exclusivity films from the US/European majors)?
8. How did you finance the purchase of the equipment: own investment, VPF deal, bank loan, public support…? For any of those, what is your expected period of return on investment?
9. If you have signed a VPF deal with an integrator, is the nature of your business relationship with US majors any different from the one you used to have in the 35 mm world? If so, how? Do your contractual obligations/commitments with the majors have an impact on your relationship with European distributors? What is the added value of a third party? What are the advantages and the constraints/limits of its intervention?
10. How many digital films have you already screened? What is the share of national, European and Hollywood films among those?
11. Has digital cinema distribution modified your relationship with distributors? If so, in which way?
12. What has your experience been with distributors of European digital films (in terms of VPF/digital contributions, key management, logs…)? Is it difficult to get European films in digital format?
13. Have you already screened alternative content? If so, how often? Has this created additional revenue streams? Please detail per kind of alternative content: opera, concerts, sport events, games…
14. Has digital cinema distribution enabled you to attract new audiences and/or to generate extra revenues (thanks to a diversified programming, digital advertising, alternative content, 3D…)?
15. Has digital enabled you or will it enable you to reduce staff costs?

16. In the exhibition sector, what are the new training needs created by the digital technologies? Do existing national or European training activities meet those needs? What are your expectations?

<u>Not yet digitally equipped</u>

1. Do you intend to acquire digital equipment in the near future? If so, what kind of projection standard would you opt for and why?
2. What kind of training would you need to facilitate your digital conversion? Do existing national or European training activities meet those needs? What are your expectations?
3. Are the existing VPF models adapted to your cinema(s)/activities? Could your cinema(s) have access to this model?
4. Is there any other alternative on the market? If so, please describe it/them.
5. If you don't intend to acquire digital equipment in the near future, why is that? What kind of incentives would you need to access digital equipment: public support, an improved access to credit…?
6. It has been argued that cinemas that cannot afford the equipment could close down when film distributors switch from celluloid to digital. Do you feel your cinema(s) could be among those? If so, why?

Distributors

1. Have you already distributed films digitally? If not, why?
2. If so, how many titles have you released? On how many copies/screens each?
3. How much did you pay per digital copy?
4. Which delivery method did you use: hard disk, broadband or satellite?
5. Did you have to make the digital master (DSM and/or DCDM) yourself? If so, how much did it cost? Did the producer/sales agent contribute to the costs?
6. How much money was saved through digital distribution (per film, compared to 35 mm)?
7. Were your films denied access to any digital screens? If so, on which grounds?
8. Do you pay a VPF/digital contribution in all cinemas where your film is digitally screened? How much is it? Is the amount different for cinemas equipped through an integrator?
9. Where exhibitors have signed a VPF deal with an integrator, has this changed the access conditions of your films to their screens? If so, in which way?
10. How do you explain that to date no European distributor has signed a long-term VPF deal with an integrator?
11. Are you ready to contribute to the digital equipment costs of European cinemas? If so, to which extent and under which conditions?

12. How does digital cinema distribution affect your existing relationships with producers, sales agents and exhibitors?
13. Do you see digital cinema distribution as an opportunity or a risk for the distribution of European (non-national) films? Please explain.
14. In the distribution sector, what are the new training needs created by the digital technologies? Do existing national or European training activities meet those needs? What are your expectations?

Producers (sales agents)

1. Have you already made a digital master (DSM) for one of your films? If not, why not?
2. If so, for how many films? How much did it cost (per film)? Did you receive any funding for this (e.g. Eurimages/national support)
3. Was it your own initiative or did you do it on request (from the distributor/sales agent)?
4. Are mastering costs now included in your production budgets? If not, why not?
5. Have you already digitised some of your older films?
6. Do you see digital cinema distribution as an opportunity for the circulation of your films? Why?
7. In the production sector, what are the new training needs created by the digital technologies? Do existing national or European training activities meet those needs? What are your expectations?

QUESTIONS ADDRESSED TO OTHER STAKEHOLDERS

1. What are the new training needs created by the digital technologies? What are the needs that are not covered by your national training activities?

2. Which measures should Member States take to make sure that digital masters are available for their future national productions?

3. Who should pay for the mastering costs of a digital film?

4. How can the "pay once approach" be encouraged (= one single master, to be slightly adapted for each distribution channel: cinema, HDTV, DVD…)?

5. How can the inter-operability of the different projection systems be ensured?

6. Should there be one single standard for digital projection?

7. Should there be a pan-European database for trusted device lists (equipment certificates)?

8. How could the regions/municipalities contribute to the digital equipment of their local cinemas?

9. Which role could the European Structural Funds (ESF) play? (How) should the Member States be encouraged to use the ESF for the digitisation of their cinemas?

10. To which extent/Under which conditions should the Member States financially support the digitisation of their cinemas?

11. How can the complementarity of public support schemes with the existing VPF models be ensured?

12. To which extent should distributors contribute to the costs of digital equipment?

13. Would a scheme facilitating the access of exhibitors to credit or supporting their financing costs be relevant?

14. How can the complementarity of a possible EU scheme with national/regional support schemes be ensured?