# The Twin Black Hole

Key findings and proposals from the EU-commissioned Study Digital Agenda for European Film Heritage"

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Digital Agenda 10011001010101011100001002010-2020 for Europe

- European Commission, DG Information Society and Media, Directorate A "Audiovisual, Media, Internet", Unit A1/ "Audiovisual and Media policies"
- January to October 2011: 4 month research+surveys+interviews, 4 months consultation
- Online consultation open mid-July: www.dae-fimheritage.eu
- Workshop Sept 20th, Brussels
- Final Study expected Nov 11









- Cinema is digital. **Now.**
- Theatrical distribution became the last distribution channel to turn totally digital, after homevideo, TV, VoD
- Most analysts place the 'tipping point' for D-Cinema sometime in 2011 or 2012 (for the EU key markets)
- Analogue film industry and technology is already fading away, including film laboratories.
- Soon scanning technology will not be used in production and will eventually also disappear
- Already now most films are distributed also digitally, and some are only digitally distributed



- As all films are now produced digitally, they must be preserved digitally (any other alternative is short-lived and not pracatical)
- Analogue film preservation is safe, it should continue and be reinforced
- LTDP (Long Term Digital preservation) is a "system", not a technology or a product. It requires strict procedures and sustained investments. FHI should apply proven practices from other fields.
- Due to its well-known weaknesses (small size, market share and capacity to invest) it is unlikely that the European cinema industry alone can undertake the digitisation of its catalogue and the preservation of new productions



 Unless actions are taken immediately there is no doubt that we are heading towards two identical, huge **BLACK HOLES** for European cinema:

•In 2-3 years, there will be virtually no access on film. All analogue films will be LOST in practical terms for cultural and commercial purposes. We will loose the whole cinema history until now

- •Digitally produced films will face serious risk of loss. In 5 to 10 years, hundreds of new productions are at danger of being lost forever every year
- We are at risk of loosing all films produced until now, plus all those produced from now on

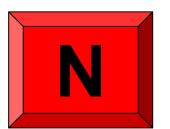


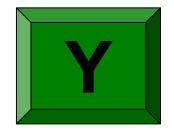
**Key findings and proposals** 

Question to MS:

## Do you want to keep cinema alive Or not?

(i.e. +€2.6B/year investments + `the cultural exception' + `the cultural diversity' + `the national identity', etc...)

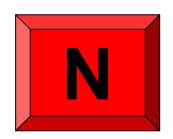




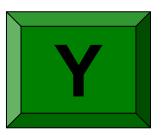
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## **Key findings and proposals**



## - THATS OK, LET'S MOVE ON



#### - PLEASE MOVE ON TO "REALITY CHECK"



- Compulsory deposit (legal or contructual) is in place in all MS except two (NL, UK) **BUT** in most EU countries, provisions for compulsory deposit are not sufficient for LTP, either analogue or digital
- Due to piracy concerns, opposition to compulsory deposit of digital materials - particularly non-encrypted - seems to be increasing
- No LTDP is realistic for encrypted materials
- LEGAL DEPOSIT SHOULD BE ENFORCED ACROSS EU (IF NOT, AT LEAST CONTRACTUAL DEPOSIT) FOR UNENCRYPTED DIGITAL FORMATS (TO BE DEFINED BY THE ARCHIVES)



- Cost to deposit a digital master in an archive is 0 (ZERO).
- The annual EU film production (1100 feature films + 1400 shorts) is calculated to require 5.8 PB/year of digital storage
- In 2015, the LTDP of these 5.8PB will cost between €1.5M and €3M, or 0,77% of annual state aid to cinema industry
- EU FHI film collections are calculated at 1M hours
- Costs of `pure' digitization (not restoration, hardly no preliminary work) are calculated between €500 and €2000 per hour



- The digitization of all this material is projected to result in 1.9 Exabyte of data (1900PB)
- The cost model projects costs of €290M to LTDP this amount of data (2015 costs)
- As a comparison, €290M is slightly more than one year's budget of a large European Opera House.
- In 2013 the VoD market is projected to reach €2B, 62% of viewing time on pure VoD channels is for cinema
- EU-wide State aid is calculated at €2.7B / yearly
- The home-video market was €9.5B in 2009. 2/3 of DVdD sales are for `catalogue titles' (older than 3-6 months)



Proposals for key recommendations

- LTDP must start now.
- **Digitization must also start now.** (time frame for their completion is 7 years)
- LTDP is a system, not a storage medium. This means that FHI must be legally authorised to perform all the processes required
- FHI should immediately start planning for digital repositories based on the OAIS Reference Model, these must be 'trusted repositories' able to preserve content safely and securely
- FHI should start **prioritizing digitization and LTDP now**



Proposals for key recommendations

- MS should engage themselves to create sustained support to FHI as LTDP requires regular ongoing funding
- Even at the planning stage, FHI need to be supported by MS with appropriate funding
- Digitisation plans should duly take into consideration all processed required *before* the actual digitisation
- MS should support FHI also for that. This includes the work required to clear rights, as one major reason behind FHI's concerns about copyright is that they lack the resources to research and clear them (also in the case of Orphans)
- Without these resources, digitization and access e.g. on Europeana – is simply **impossible**



Proposals for key recommendations

- Research is needed in developing systems to manage LTDP of cinema content, possibly open-source as such systems do not exist or are excessively costly. Ideally, if such an open-source solution was used across Europe, this would simplify interoperability (FP7?)
- FHI will need highly competent staff, trained and educated for analogue and digital archiving and preservation.
- Training of existing staff is also critical and it should be undertaken immediately.