

## Digitising Contemporary Art (DCA)

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### Summary

*The DCA project aims to create high-quality digital reproductions to assure the long-term preservation as well as online access to such reproductions and their data. By July 2013, Rijeka's Museum of Modern and Contemporary Art, as one of the DCA partners, will digitise 730 artworks selected from their own collection. The metadata on the digitised objects will be mapped, enriched, contextualised, and aggregated for ingestion into Europeana. The partner institution can then make this digital content available through their own websites and other channels as well. This will facilitate the public online access to (parts of) contemporary art collections of partner institutions and foster augmented user experience. The DCA project intends to enhance the online visibility of contemporary art as an essential expression and an invaluable building block of European culture.*

**Key words:** digitization, contemporary, art, museums, metadata, preservation

### Introduction

The Museum of Modern and Contemporary Art (MMSU) was one of the first in Croatia which had have constructed its own digital collection of museum items supplementing it by online segments. Since 2005 a database emerged containing almost 7000 entries in respective collections divided on diverse visual art segments that through the online catalogue provided a global accessibility to the Museum's Collection in its virtual form. Despite MMSU personnel DIY principle, at that time it was an innovative project that introduced the institution to a contemporary communication forms and global dissemination of information on status and value of visual culture in Rijeka and Croatia. Aware of the global cultural policy of the „Digital Renaissance“, launched on the large scale by the European Commission within projects like *Europeana* or *The Information and Communication Technologies Policy Support Programme* (ICT- PSP) and re-

flected on the national level by the *Croatian Cultural Heritage* (CCH) project, MMSU continuously aims to foster greater cooperation between its role as the regional actor who is looking ways to strengthen the links between the various institutions involved in improvements and creation of up-to-date digital content, especially of contemporary artworks - a kind of cultural heritage still largely missing from *Europeana* and from CCH project on the national level.

Therefore, it was of great importance to join Belgium *PACKED* vzw initiative born out of wish to valorize the expertise that emerged out of the best practices in the field of conservation and presentation of Digital Art over the past two decades. The prevailing thesis that new media art is defined by its conceptual content and physical effects to a greater extent than it is by its original materiality provided the backdrop of the debate and recent efforts have resulted in the articulation of a new theoretical framework and new methods for digitalization.<sup>1</sup> At the same time, the reports on the results of an extensive research project about Installation Art led to a new terminology and offered a much better appreciation of, nowadays, one of the dominion artistic genre carried out by an international group of custodians active in the conservation of contemporary art.<sup>2</sup> Installations can be endless, often to the despair of the custodian of the work. How can one preserve and document the installation? What relation exists between the components and the space, and what is the spectator's part in the work? Questions of this kind are examined in connection with a number of case studies. Furthermore, main European projects on Digital and Installation Art put an emphasis on ethical questions, e. g. IPR clearance which is still in its infancy considering visual arts in Croatia. So on *PACKED* vzw initiative MMSU entered a newborn project -*Digitising Contemporary Art* (DCA). And whenever new project starts, new rules are drafted, new questions arise. In further text we are not only explaining this statement, but also, by following the same structure, helping the reader to locate where he/she may find the path in the project and contribute to the practical and theoretical discourse on this issue.

### **About the DCA**

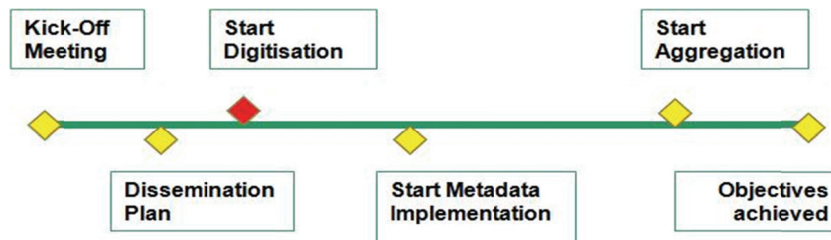
Digitising Contemporary Art, launched on January 1 2011, is a 30-month digitization project for contemporary art, precisely the art made after 1945. It is co-financed by ICT – PSP programme and intends to enhance the online visibility of contemporary art as an essential expression and an invaluable part of European culture. Thereby DCA wants to stimulate the interest of the general public by introducing a stronger presence of contemporary art as a reflection on the art of today to the *Europeana* portal. The aim of the project is not only to fill the gap in *Europeana*'s content supply but to develop the best practice in digitiza-

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<sup>1</sup> See the Variable Media Network, IMAP, DOCAM, GAMA and mediaartbase.de among others.

<sup>2</sup> See the project *Inside Installations* (2004-2007).

tion, preservation and conservation of such complex fields such as contemporary art. By comprising paintings, drawings, photographs, sculptures, installations, objects, videos, films etc., DCA will create a digital corpus of 26.921 high-quality reproductions of artworks and 1.857 of contextual documents which will become accessible and retrievable through *Europeana*, providing metadata and thumbnails that will serve as direct links to large-sized reproductions of each item on partner institutions portals. DCA corpus includes masterpieces from key artists of most European countries and will contain texts and images, as well as video and sound material – both still underrepresented on the portal.<sup>3</sup> The artworks and contextual documents mainly belong to institutions whose collections are less known or still unknown and that need support for their digitization. The 21 collections come from 12 European countries: 17 of which are from countries that are behind in making their heritage accessible through the European cultural heritage portal and 2 countries which are lagging in their effort to make their cultural heritage accessible. The main issues to be addressed within the project are the choices of specifications for digitization and metadata, so that they may be inter-operational, and finding the appropriate aggregation solution for each institution. DCA digitization action will also contribute to the preservation of the artworks. The digital images produced in the context of DCA will become part of the digital collections of each contributing institution. They will care for their long-term sustainability, as they do for their other data and images. DCA itself will provide guidelines and assistance on how to preserve digital files and keep them accessible over a long period of time.



Picture 1. DCA project work-flow

#### About the DCA Consortium

Competitiveness and innovation framework of the DCA project was flawlessly prepared by PACKED vzw. As a Project management who overall legal, contractual, ethical, financial and administrative management of the project will create and support the conditions necessary for a successful and effective col-

<sup>3</sup> Some of its best-known artists are Marina Abramović, Orla Barry, Christian Boltanski, Marie José Burki, Gusztáv Hámos, IRWIN, Sanja Iveković, Bjorn Melhus, Carsten Nicolai, Dan Perjovschi, Fiona Tan, Blast Theory, Luc Tuymans, Steina Vasulka, Franz West.

laboration and performance within the 24 partners from 12 countries; some were key partners in previous European projects. List of consortium is divided as follows:

Table 1. Content providers – museums and art institutions involved in the project (divided by countries)

<b>Austria</b>	Ars Electronica, <a href="http://www.aec.at">http://www.aec.at</a>
<b>Belgium</b>	argos - centre for art and media (Brussels), <a href="http://www.argosarts.be">http://www.argosarts.be</a> MAC's - Museum of Contemporary Art of the French Community of Belgium (Grand-Hornu), <a href="http://www.mac-s.be">http://www.mac-s.be</a> Mu.ZEE – Collection of the province of West Flanders and the City of Ostend (Ostend), <a href="http://www.muzee.be">http://www.muzee.be</a> Royal Museum of Fine Arts of Belgium (Brussels), <a href="http://www.fine-arts-museum.be">http://www.fine-arts-museum.be</a>
<b>Croatia</b>	MMSU - Museum of Modern and Contemporary Art Rijeka (Rijeka), <a href="http://www.mmsu.hr">http://www.mmsu.hr</a>
<b>Germany</b>	EMAF – European Media Art Festival (Osnabrück), <a href="http://www.emaf.de">http://www.emaf.de</a> HfG – Staatliche Hochschule für Gestaltung Karlsruhe (Karlsruhe), <a href="http://www.hfg-karlsruhe.de">http://www.hfg-karlsruhe.de</a> Transmediale (Berlin), <a href="http://www.transmediale.de">http://www.transmediale.de</a>
<b>Greece</b>	Frissiras Museum (Athens), <a href="http://www.frissirasmuseum.com">http://www.frissirasmuseum.com</a> MMCA - Macedonian Museum of Contemporary Art (Thessaloniki), <a href="http://www.mmca.org.gr">http://www.mmca.org.gr</a> National Gallery-Alexandros Soutzos Museum (Athens), <a href="http://www.nationalgallery.gr">http://www.nationalgallery.gr</a>
<b>Island</b>	National Gallery of Iceland (Reykjavik), <a href="http://www listasafn.is">http://www listasafn.is</a> RAM - Reykjavík Art Museum (Reykjavik), <a href="http://www.artmuseum.is">http://www.artmuseum.is</a>
<b>Latvia</b>	Latvian Centre for Contemporary Art (Riga), <a href="http://www.lcca.lv">http://www.lcca.lv</a>
<b>The Netherlands</b>	Museum Boijmans Van Beuningen (Rotterdam), <a href="http://www.boijmans.nl">http://www.boijmans.nl</a> NIMk - Netherlands Institute for Media Art (Amsterdam), <a href="http://www.nimk.nl">http://www.nimk.nl</a>
<b>Poland</b>	WRO Art Center (Wroclaw), <a href="http://www.wrocenter.pl">http://www.wrocenter.pl</a>
<b>Portugal</b>	Serralves (Porto), <a href="http://www.serralves.pt">http://www.serralves.pt</a>
<b>Slovenia</b>	MG – Moderna Galerija (Ljubljana), <a href="http://www.mg-lj.si">http://www.mg-lj.si</a>
<b>Spain</b>	Antoni Tapiès Foundation (Barcelona), <a href="http://www.fundaciotapiés.org">http://www.fundaciotapiés.org</a>

**Technical partners**

<b>Greece</b>	NTUA - National Technical University of Athens (Atena, Grčka), <a href="http://www.ntua.gr">http://www.ntua.gr</a> Ubitech – Ubiquitous Intelligent Technical Solutions (Atena, Grčka), <a href="http://www.ubitech.eu">http://www.ubitech.eu</a>
<b>Belgium</b>	Multimedia Lab Ghent University - IBBT Interdisciplinary Institute for Broadband Technology (Ghent, Belgija), <a href="http://multimedialab.elis.ugent.be">http://multimedialab.elis.ugent.be</a>

**The selection of artworks**

During the selection period each artwork from Museum's Collections was reviewed based on several criteria. They included considerations of presentational aspects of digitalized items within the project in relation to the extension of user population, as well as possibilities of creating new values by connecting artworks on the contextual level. Primarily, decision was to include the works that have representative status within Croatian contemporary art scene, showing initial points and logical developments of certain artistic tendencies, parallel to development of European and world art. Subsequently, the selection included works made by internationally renowned artists, recognized in critical and professional circles, as well as by regional artists representing innovative and experimental approaches. Finally, the criteria was to include works of cultural, historical and art-historical importance reflecting the artistic preoccupations, as well as cultural, social and political issues the other half of the 20th and early 21st century, characterized by a high aesthetic value and high artistic methodology. However, additional criteria soon appeared, focused on one of the basic functions of the institution - the preservation of artworks that have not yet been digitized and whose digitization is a priority in museological terms. After careful review, Collection curators have chosen overall 100 works from the Collection of Drawings, 100 works from the Collection of Prints, 150 works from the Collection of Photography, 10 works from the Collection of Posters, 290 from the Collections of painting, 20 from the Collection of Sculptures and 60 works from the Installations and New Media Collection. Thus, a total of 730 works that represent overachievements in their specific medium in relation to the specific context in which they appeared, providing a uniquely comprehensive survey of artistic tendencies in contemporary art.

**The problems of IPR clearance**

Since the artworks that we aim to digitise within this project have been created after 1945, almost all of them are still protected by copyright. However, since *Europeana* operates by a „clean hands“ policy, all the participating collecting institutions had to ensure that the copyrights on all content will be cleared and that *Europeana* will be able to display metadata and previews of the artworks,

as well as links to high-quality reproductions within their original context (on the website of collecting institution). It was very difficult to give an estimate of possible outcomes of the process of IPR clearance considering our contracts are rather diverse in terms of restrictions regarding creation of copies, distribution and presentation of materials. There are also few cases where there are no contracts or documentation of entry of the Museum's items, only the Purchase Rewards documentation. In these cases works were, especially after the major international exhibitions, left at the Museum and any attempt to contact the artist regarding regulation of the status of their work failed to be completed so, after a certain time, they were simply merged in the Museum's holdings. Moreover, often the distribution rights intended for the promotion of the works include only the right for displaying the work as well as the right for publishing the reproductions of work in classical printed material. It should be taken into account that these contracts are made at a time when digitization of works for on-line presentation was not a common museum practice. Finally, some contracts for the works made in co-authorship were signed only by one author without special authorization which would guarantee the agreement of others.

For these reasons, prior to digitization, we started the demanding process of updating contacts of the authors, co-authors and their right holders, as well as updating the Museum's database with new information about the IPR holders after the author's death. We are currently in the process of making new versions of the contracts or annexes to the existing contracts that will involve more elaborate conditions for presentation and access to digitized content.<sup>4</sup> In accordance to DCA consortium recommendations, we are planning to implement specialized contracts for photographers who will perform the digitization of the material, which will include the terms of use of digitized content and quality assurance of digitization in accordance with predefined guidelines and parameters.

### **The preparatory phase - MMSU digitization plan**

The first six months of the project was envisaged for project preparation activities that included reviewing the proposed materials and determination of their characteristics based on a few basic metadata such as: inventory number, title, year, author/artist, type (e.g. sculpture, painting), the material/carrier (e.g. oil/canvas, video/DVD), size/format, the current location (e.g. storage in a museum), where will it be digitised (e.g. Museum photo studio or outdoor location), transportation requirements, the condition of work (i.e. whether there is need for restoration of the works), IPR owner (the artist/artist's family), whether

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<sup>4</sup> Project leader PACKED has, together with the University of Patras (Greece), developed an online step-by-by guide for museums and other culture heritage organisations with regards to IPR issues within the project *ATHENA – Access to Cultural Heritage Networks across Europe*.

the rights have already been cleared for digitization/on-line presentation. For audiovisual works some additional questions were required related to the producer of the work, status of source material (e.g. master copies, presentation copies), rights we hold on source material (e.g. non-profit distribution/presentation within the Museum's activities, preservation, documentation), duration and other technical parameters (e.g. mono/stereo, the number of channels, video/film, black/white or color). These metadata improved the creation of tree-year digitization plan by providing the necessary filtration system for extensive material and influenced setting of objectives, resource planning and selection of technologies and specifications for individual operations.

Table 2. Content table

<b>ITEMS TO BE DIGITISED</b>	
Item no.	MMSU-2467 (1-160)
Title	Greenhouse
Year	2003
Artist (s) / Creator	Brajnović, Tomislav
Producer (in case of AV/sound work)	The Artist (in case of Film and Video)
Type	Installation
Material & Carrier	Greenhouse - glass and metal construction; various used items (ready-mades and found objects), film, video, sound, light, fog
Status of source material (in case of AV/sound work)	Screening copy (Audio), Masters (film and video)
Rights you hold on source material (in case of AV/sound work)	Rights for public presentation
Sizes / format	220 x 223,7 x 264 cm
Other technical parameters (in case of AV/sound work)	Film: (MMSU-2467-148), 8mm, colour (also stored/copied on Beta digital record and on DVD) Video: (MMSU-2467-147), VHS, colour, (also stored/copied on Beta digital record and on DVD) Audio: (MMSU-2467-146), CD (copy from the LP), stereo
Duration (in case of AV/sound work)	Film: t=2,14 min/sec Video: t=32,32 min/sec Audio record: t=52 min
Current location	External housing facility
Where will it be digitised	MMSU, Rijeka
Transportation required	Yes – 500 m and Artist's assistance
Condition of the work	Good
IPR owner	The artist
Rights already cleared for digitisation	No, but will be cleared during the DCA project
Rights already cleared for online publication	No, but will be cleared during the DCA project



Picture 1. Tomislav Brajnović, *Greenhouse*, ready-made greenhouse and used items, the standard 8 mm film, video, sound, light, 220 x 223,7 x 264 cm, 2003, MMSU-2467 (1-160)

Setting of objectives remained present during the whole decision-making process, relating to each individual work while respecting the overall structure of digitalization plan. Two objectives were constantly kept in mind while developing the digitization plan:

**a) conservation goal:**

**substitution**, e.g. creation of digital master copies that will serve as a substitution for analog video due to fragility of the original (such as VHS tapes) or obsolete carriers (e.g. VHS-recorder),

**documentation for conservation purposes**, e.g. creation of high-quality digital master copies of works that are in common use to minimize frequent handling which diminishes their condition.

**b) access/presentational goal:**

**research**, e.g. creation of high resolution digital master copies that will allow large increases and provide a detailed study of brush strokes in paintings, **on-line presentation**, e.g. presentation of collections to on-line users (usually in lower resolution).

After analysis and breakdown of each proposed work to the components and their characteristics in accordance with predetermined objectives, the works have been re-grouped into categories within the digitization plan separated by time segments. The plan was supposed to include clearly specified objectives and products of the project, plan of activities, responsibilities, resources and evaluation procedures.



### **Do it once, do it right!**

The saying that often runs in the guidelines of this project is *Scan one for every purpose*, or variations *Do it once, do it right!* It is applied as a metaphor for all the types of digitization, from scanning and shooting to video digitization. Therefore, it is proposed that delivery includes high-quality digital copies (master copies) from which the user copies are made that try to anticipate every potential use of digital reproduction (e.g. printing, web). As “best practice”, it is recommended that digital files created by photographing the items should come in 5 different formats:

- .dng, for digital negative: this open format comes a standard for the .raw format, that always depends on the camera type (there are in fact dozens of “.raw” formats); storing a .raw is useless if you don’t have the proper camera to operate it; the .dng avoids this problem;
- Uncompressed baseline IBM TIFF v6.0 CMYK, min. 300 dpi in A2 format, without interpolation; this comes as the “best” size, but it is not mandatory; the CMYK file will be used for printing (see below: output), and compare the result with the original;
- Uncompressed baseline IBM TIFF v6.0 RGB, same resolution: the RGB file is the best for viewing on a screen (see below: output); yet, to ensure perfect colors display, it should be used on a calibrated screen (not mandatory).

The following two formats are better suited for access purposes:

- .jpg RGB 300 dpi in A5 format: for intern use on the Intranet, for instance;
- .jpg RGB 72 dpi in A6 format: low resolution, to be published on the Internet.

The main obstacle for delivery of these technical parameters makes a request for A2 format with a resolution of minimum 300 dpi without interpolation that can be delivered only by cameras that use multi-shot technique, recording several consecutive photos that are later integrated into one. However, more important than the camera itself and its chromatic quality is, of course, primarily a photographer with a good feeling for characteristics of the original (e.g. color, two-dimensionality of images, spaciousness of installations), and the whole process that follows after the shooting. Nevertheless, if we want to be sure that delivery corresponds with the original and that we haven’t vainly spent the budget for low quality reproductions, we must engage in a color correction of printed material. Otherwise, the most common scenario is to simply store digital copies in the storage until at one point they are needed for catalog printing and after a few months or years you get unpleasantly surprised by the fact that the digital reproductions have totally different colors than the original. Photographers then claim that the problem is in printing, publishers shift the blame to photographers and artists then blame us. It is therefore necessary to check the quality of digital

reproduction and its CMYK version printed on calibrated printer according to ISO 12647v2 standard and its comparison with the original in a standardized viewing condition in order to avoid all effects of metamerism (the effect of light on colour pigments). Color corrections require an investment in the training of museum staff, purchase of necessary software, printers, lighting and is therefore, time and money consuming.

### The three-year digitization plan for MMSU

The three-year digitization plan for MMSU consists of four segments divided into four basic categories that relate to IPR clearances, metadata, digitization and the online implementation. Each of these activities within the segments are elaborated individually and include time frames for each item: creation of file names, updating, coding and implementation of metadata, the preparatory work (restoration, cleaning of VHS tapes, transport organization, participation of artists in set up of their works), creation of conservational masters and derived user copies (technical parameters and time frame in which they will be realized), post-production ("cropping" photos, leveling posters), quality control of deliverables (control files for viruses, testing formats, color corrections), storage of digital content, marking carriers (e.g. hard disk, Digital Betacam) and the implementation in Museum's website and *Europeana*.



Picture 2. The three-year digitization plan for MMSU

### Conclusion

Regardless to different levels of use of digital content enabled by the DCA project, different user groups often operate in a similar way - everybody wants an easy and quick access to trustworthy, high-quality digital reproductions of contemporary artworks – and if they have no commercial intentions, then they will also expect to get it free of charge. Anyone will be able to view the newly created digital content on the Web. In *Europeana* (and other portals) they will be pointed to the original context of the found items (e.g. the museum's website) by a link, in order to consult enhanced visual data and additional information on the actual work. Such links will enrich the *Europeana* experience, increasing the visibility of the contributing museum's website and also encouraging partners to develop (apart from DCA) new web applications, e.g. tools that will al-

low the user to create their own virtual exhibitions or collections. This will result in a more interesting experience of the institutions' contemporary art collections for the public.

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