



“Adding socio-economic value to industry through the integration of artists in research and open innovation processes”

DELIVERABLE 3.1

Preliminary Version of Project Web Site

Grant agreement no: 732112





Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

Document information:

Project acronym:	VERTIGO	
Project full title:	Adding socio-economic value to industry through the integration of artists in research and open innovation processes.	
Project type:	Coordination and Support Action (CSA)	
EC Grant agreement no	732112	
Project starting / end date	01.12.2016 / 30.05.2020	
Website:	https://vertigo.starts.eu	
Deliverable No.:	3.1	
Responsible participant:	LIBELIUM	
Due date of deliverable:	28/02/2017	
Revision history:	V0.1 / 29.05.2017	David Palomares - LIBELIUM
	V0.2 / 31.05.2017	David Remón - LIBELIUM
	V0.3 / 01.06.2017	Hugues Vinet, Clémentine Gorlier - IRCAM
	V0.4 / 05.06.2017	David Palomares - LIBELIUM
	V0.5 / 05.06.2017	David Remón - LIBELIUM
	V0.6 / 07/06/2017	Guillaume Pellerin, Emilie Zawadzki - IRCAM
	V0.7 / 08/06/2017	Hugues Vinet - IRCAM
	V0.8 / 13/06/2017	Ana Solange Leal – INOVA+
	Final / 14/06/2017	Hugues Vinet - IRCAM
Dissemination level:	Confidential, only for members of the consortium (including the Commission Services)	
Authors:	David Palomares, David Remón (LIBELIUM), Hugues Vinet, Clémentine Gorlier, Guillaume Pellerin, Emilie Zawadzki (IRCAM)	

Disclaimer:



This document's contents are not intended to replace consultation of any applicable legal sources or the necessary advice of a legal expert, where appropriate. All information in this document is provided "as is" and no guarantee or warranty is given that the information is fit for any particular purpose. The user, therefore, uses the information at its sole risk and liability. For the avoidance of all doubts, the European

Commission has no liability in respect of this document, which is merely representing the authors' view.



Table of Content

Table of Figures.....	4
Executive Summary.....	5
SECTION 1 – Objectives and actors	6
1.1 Objectives	6
1.2 Actors involved	6
1.3 Main releases.....	6
SECTION 2 – Preliminary design	8
2.1 Infrastructure.....	8
2.2 Design and development of VERTIGO platform	8
2.3 Integration of the ULYSSES platform	9
2.4 Logo and design	9
SECTION 3 – Implementation.....	11
3.1 Results of VERTIGO platform	11
3.2 Implementation on the ULYSSES platform	19
3.3 Results of STARTS platform	23
SECTION 4 – Management.....	27
4.1 Mezzanine CMS	27
SECTION 5 – Conclusions and next steps.....	29
References.....	30
Annex A – About Django.....	31
Annex B – About Mezzanine.....	32
Annex C – About Docker.....	33
Annex D – About mezzanine-organization (Mezzo)	34
Annex E – Installation, development and maintainance	35



Table of Figures

Figure 1.	VERTIGO's logo.....	9
Figure 2.	VERTIGO's Home page.....	10
Figure 3.	Project section in VERTIGO's web site	11
Figure 4.	Consortium section in VERTIGO's web site	12
Figure 5.	Artistic Network section in VERTIGO's web site.....	13
Figure 6.	Residencies Program in VERTIGO's web site	14
Figure 7.	Call for Artistic Residencies in VERTIGO's web site	15
Figure 8.	R&D Projects Section in VERTIGO's web site	16
Figure 9.	Project Details section in VERTIGO's web site.....	17
Figure 10.	VERTIGO STARTS competition page	18
Figure 11.	Information provided by applicants.....	19
Figure 12.	Information provided by applicants.....	20
Figure 13.	Step of the assignment of candidates to the persons responsible for the revision of the candidatures	21
Figure 14.	Step identification of the person in charge of the evaluation	21
Figure 15.	The evaluation interface of project proposals	22
Figure 16.	STARTS home page	23
Figure 17.	STARTS description page.....	24
Figure 18.	STARTS list of projects	25
Figure 19.	Selection and revision of ICT projects in VERTIGO's backoffice	26
Figure 20.	Organizations Management in VERTIGO's backoffice	27
Figure 21.	Creation of static pages' content in VERTIGO's backoffice	27



Executive Summary

This document formalises the content of the deliverable D3.1- preliminary version of the VERTIGO web platform. This document as a report was delivered later than the formal deliverable deadline but the successive releases of the preliminary web platform were issued on time with this date and with the various and rapidly evolving functional project deadlines, as further explained.

The preliminary version of the project web site consists of a basic website with very clear and straight sections. These sections are oriented to give information about the project and the partners involved in it, as well as to the dissemination of the projects and events related to it.

The main functions of this preliminary version, available at vertigo.starts.eu are the following:

- To provide corporate information about the VERTIGO project
- To be the support of the first VERTIGO STARTS call for residencies

In addition, following the request of the European Commission, this preliminary version also included the development of the starts.eu site presenting basing information on the STARTS initiative and its various projects.

This preliminary version uses a template style instead of the final style specifically designed for the project that will be present in the official release of the web site. The main objective for this version is the content itself and not the way it is presented.

Regarding advanced functionalities, specially any kind of registration form and the integration and maintenance of existing artist databases, they will be implemented in subsequent versions of the site and will not be part of this preliminary version.



SECTION 1 – Objectives and actors

1.1 Objectives

The main objective for the preliminary version is to have ready the functions and visualizations to manage the first Call for Artists. These functions and visualizations include methods to input new ICT Projects to be selected for the Call, evaluate them, accept or reject them and publish them in the platform if they are accepted. It also includes the visualization of the relevant information about the Call.

Besides these visualizations, information about the VERTIGO project itself, along information about the partners must be shown in the platform.

The other objective of the preliminary version is to set the basis of the web platform in order to have a scalable and reliable system that can be easily installed, maintained and upgraded.

1.2 Actors involved

The main actors involved in the creation of the preliminary web version are:

- Libelium: Coordination with IRCAM about the requirements and development of the preliminary version.
- IRCAM: Coordination with Libelium about the requirements and development of the preliminary version. Production of the contents of the vertigo.starts.eu site and of the VERTIGO STARTS residencies call in ULYSSES.
- Artshare: Specification of the starts.eu site and production of the related content.
- FhG: Collection and selection of the ICT Projects that are candidates for the first Call.

The rest of the partners had a role in the testing and giving feedback of the functions of the web.

1.3 Main releases

The formal delivery date of the preliminary platform was Month 3 (end of February). Actually, its delivery followed an incremental process which was required by the fast-evolving requirements of the project (including the integration of the starts.eu site and of a call for projects which were not foreseen at the beginning) and provided the expected features at the various key deadlines of the project. The main releases were the following:

- February 15th: first main release including corporate project communication for vertigo.starts.eu (content and development: IRCAM) and basic elements of starts.eu (content: Artshare; development: IRCAM)
- March 13th: second main release related to the official announcement of the call, including all the information on the call for projects and for artistic residencies (development: IRCAM and



Libelium; content: IRCAM), online forms for project applications and extensions of starts.eu (content: Artshare).

- April 21st: Third main release corresponding to the opening of call for artistic residencies. Availability of online information on selected projects (list, and project-specific pages). Development: IRCAM and Libelium; content: IRCAM, and extensions of starts.eu (content: Artshare). Opening of the call for artistic residencies on Ulysses (configuration and content: IRCAM).

Since this deadline, this continuous development was continued, in particular by integrating new features for the starts.eu site (development: Libelium, content: Artshare).



SECTION 2 – Preliminary design

2.1 Infrastructure

In order to deploy the platform and make it easily accessible from the Internet, the first step was to have a host server and a domain name. In both cases, IRCAM was in charge of this task.

For the deployment, IRCAM provides and administrates one of its servers, that is used to host all the content related to the platform, as the web server, the source code or the database.

For the domain name, IRCAM registered the domain starts.eu, as the VERTIGO project is part of the STARTS initiative and can be accessed through the subdomain vertigo.starts.eu.

Also, IRCAM has a platform related to the VERTIGO project, ULYSSES, that was be used for the first call in order to manage Residencies, as the ULYSSES platform provides mechanisms to handle user accounts and some data is shared between both platforms.

2.2 Design and development of VERTIGO platform

The development is based on the previous platform of mezzanine-organization, developed by IRCAM. Mezzanine-organization is a Content Manager System written in Django (Python) that simplifies some of the common task of a web page, like the management of the data. More information about mezzanine-organization and Django can be found in the Annexes.

The platform is encapsulated as an application in a Docker container, along the database and some tools to help the development. In this way, it can be easily deployed in any machine without the need to install or configure all the programs needed to run the platform. More info about Docker can be found in the Annexes.

As for the contents of the web page, Django uses the Model-View-Controller software architectural pattern. This means that each page presented in the web has three interconnected parts: The Model manages the data (connections to the database), the View shows the data in different forms (each HTML page rendered for the user with the data needed) and the Controller controls the flow of the data between the Model and the View.

For this reason, each content part of the web follows the MVC architecture. For instance, for the ICT Projects, it has been developed a Model with the data fields requested in the Deliverable 2.1, the Controller that collects and validates the data, and several Views to show the projects as a list, show the details of each project, or forms to input new projects. This same pattern has been applied to the different content necessary for the preliminary version: ICT Projects, Producers and Calls.

When a user applies to a Call, the web page redirects the user to the ULYSSES platform.

Apart from this content, other pages with static content have been developed to show the information about the VERTIGO project and the partners involved.



2.3 Integration of the ULYSSES platform

Seeing that many European actors, in the field of music, organize competitions for Artists (composers and performers), IRCAM is at the origin and coordinator of the ULYSSES project supported by Creative Europe and manages the development of its platform (<http://www.ulysses-network.eu/>). The objective is to formalize online the competition administration process, giving the possibility:

- For Artists to apply online, enter information and upload works: audio, video or other files.
- For jury members to access easily to the information entered by the candidates and to make their evaluation.

Artists have the possibility to create a personal space on the ULYSSES platform, containing their personal information and their multimedia documents (CV, works, scores, biographies etc.) and to apply to one or more online competitions. The application forms are intuitive and can be easily fulfilled. The institution that organizes the competition defines first with the person in charge of the ULYSSES platform, the way that this competition has to be organized (mandatory documents and information that have to be uploaded by candidates, how the selection will occur, how many steps, which type of evaluation is required etc.). After that, the institution has a free control of its administration space, especially designed for its needs, and can control many aspects: promotion of the competition online, dates of the opening, closing, follow-up of the applications, of the evaluations...

ULYSSES was used for managing the first VERTIGO STARTS artistic residencies call by creating a specific call in ULYSSES with all related information and a specific configuration of forms to complete and files to upload conformant to the call specification. The platform is also used for managing reviews and juries.

2.4 Logo and design

This preliminary version uses the default templates of mezzanine-organization, as the final style is still to be defined.

The logo has been designed by IRCAM, it has been included in this first release of the web and can be seen below in Figure 1.



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts



Figure 1.

VERTIGO's logo



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

SECTION 3 – Implementation

3.1 Results of VERTIGO platform

In the Figure 2, below, VERTIGO's landing page is shown.



Figure 2.

VERTIGO's Home page



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

Visitors can move through the menu in order to see the project details and the different information related to the calls, residencies, etc. Figure 3 shows the Project Section in VERTIGO's web site:

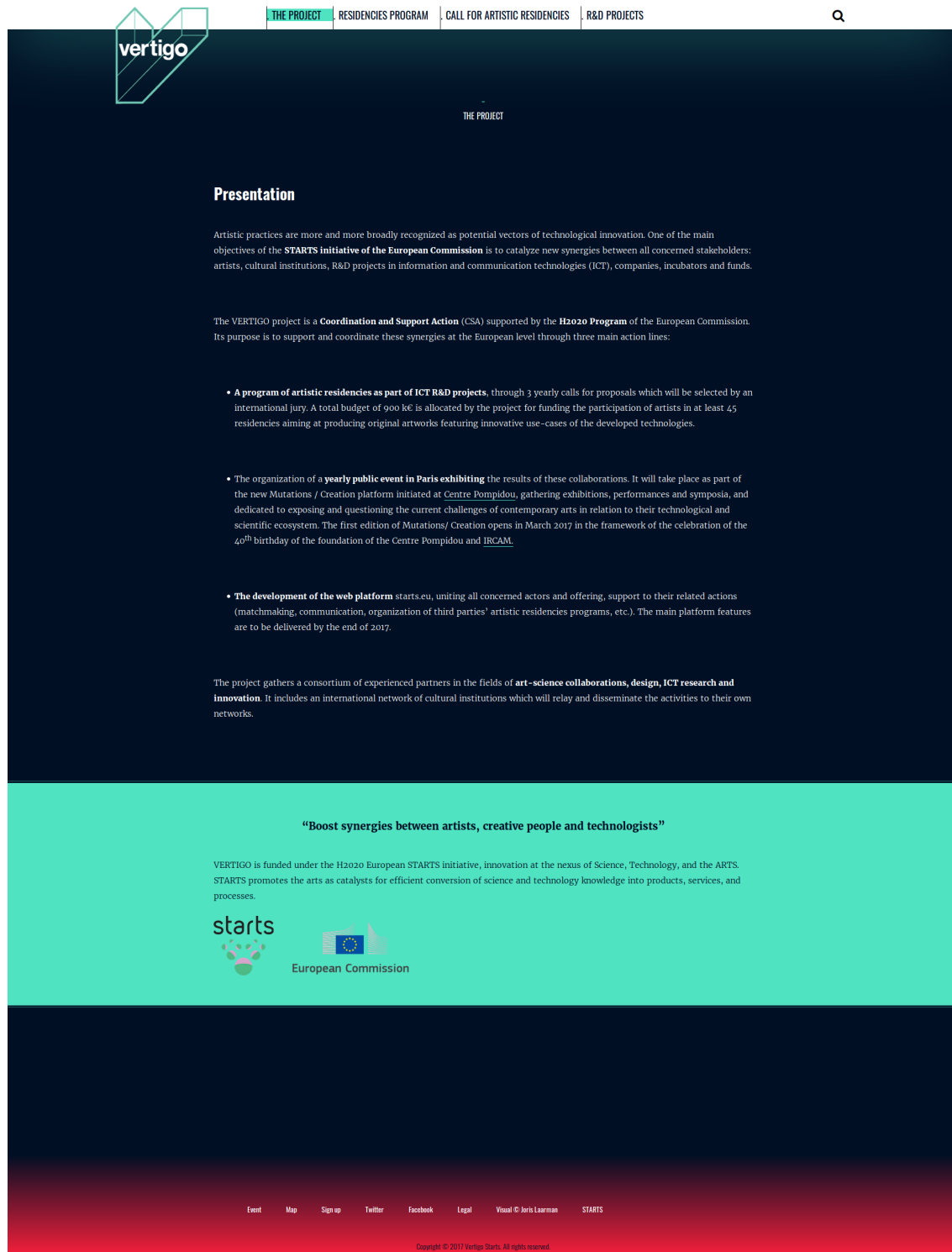


Figure 3.

Project section in VERTIGO's web site



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

The partners composing the consortium and their details can be seen in Figure 4:



Figure 4.

Consortium section in VERTIGO's web site



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

In the same way, collaborators are listed in Artistic Network section (see Figure 5 below).

THE PROJECT | **RESIDENCIES PROGRAM** | **CALL FOR ARTISTIC RESIDENCIES** | **R&D PROJECTS**

ARTISTIC NETWORK

The role of these correspondents is to liaise with their local artistic and industrial communities, – corporations, individual artists or arts organisations – in order to promote the activities of the VERTIGO project. In particular, they will highlight the opportunities for fellowships and residencies within innovation projects, and will identify suitable matchmaking events where artists and technologists can get together and which may be sponsored or supported by VERTIGO.

V&A
(London, U.K.)
The Victoria & Albert Museum is the largest museum of art and design in the world, housing a permanent collection of over 4.5 million objects. Founded in 1852, it holds many of the UK's national collections and houses some of the world's greatest resources for the study of architecture, fashion, furniture, textiles, photography, jewellery, theatre and performance, the cultures of childhood, and many more. Total visits to the V&A's sites last year were over 3.7 million.

La Biennale di Venezia
(Venice, Italy)
"La Biennale di Venezia" is not for profit Foundation which carries out research in the field of contemporary arts. La Biennale di Venezia organises in Venice public exhibitions and Festivals such as the International Art Exhibition, the International Architecture Exhibition the Festival of Contemporary Dance, the Festival for Contemporary Music, and the Festival for Contemporary Theatre, and the Venice International Film Festival.

ARS ELECTRONICA
(Graz, Austria)
Since 1979, Ars Electronica has sought out interferences and congruities, causes and effects at the interface between art, technology and society. The ideas circulating here are innovative, radical, and eccentric in the best sense of the term. They influence our everyday life – our lifestyle, our way of life, every single day. The Festival as proving ground, the Ars as competition fostering excellence, the Center as a year – round setting for presentation & interaction, the FuturLab as an on-house R&D facility and Solutions as a business unit serving industry and economy extend their feelers throughout the realms of science and research, art and technology.

FutureEverything
(Manchester, U.K.)
Established 1999, FutureEverything is an award winning innovation agency that delivers art, design and innovation for cities, business, science and the arts. It delivers art commissions, living lab research, design for science, city service design, citizen engagement and innovation ecosystems. It is globally pioneering in the combination of ICT and art to stimulate innovation and acceptance. Annually, FutureEverything presents internationally renowned festivals of art, ideas and invention in Manchester (UK), Moscow (RU) and Singapore (SG).

Zentrum für Kunst und Media
(Karlsruhe, Germany)
The ZKM Center for Art and Media was established by the Federal State of Baden-Württemberg and the City of Karlsruhe in 1989 as a foundation under public law. According to paragraph 3 of the Foundation Charter, the ZKM is charged with the task of facilitating extensive examination of culture and media technology, especially in the fields of imagery, music, speech and combinations thereof as an institution of research, cultural mediation and further education.

Laboral
(Leizor, Spain)
The Laboral Centro de Arte y Creación Industrial Foundation is a cultural body to serve the general interest, as well as the governing body of the art centre. The aim of the Foundation as described in Article 6.1 of the statutes are "to promote and disseminate art and industrial creation through the management of Laboral Centro de Arte y Creación Industrial". Laboral is part of the European Digital Art and Science Network (EDASN), a plurinational project cofunded by the Creative Europe Programme of the European Union.

T-S-L-A-C-T
(Prague, Czech Republic)
T-S-L-A-C-T is not active on local, national, and international level in the intersection of newly emerging technologies, media and arts. Only during the last two years T-S-L-A-C-T produced more than 20 arttech projects ranging from interactive digital installations, performances, talks and workshops. T-S-L-A-C-T is a fast growing excellence centre with a permanent laboratory venue open to the public for lectures and workshops.

FACTORIA CULTURAL
(Madrid, Spain)
FACTORIA CULTURAL is a creative incubator and hub that promotes the development of entrepreneurial initiatives in the various fields of technology, communication and the arts, all included in the Creative and Cultural Industries (CCI). FACTORIA also welcomes charities and other non-profit associations that develop their activity in this sector.

CreativeApplications.Net
(Glasgow, U.K.)
CreativeApplications.Net (CAN) was launched in October 2008 and is one of today's most authoritative digital art blogs. The site timely best reports innovation across the field and catalogues projects, tools and platforms relevant to the intersection of art, media and technology. CAN is also known for pioneering and contextualising noteworthy work featured on the festival and gallery circuit, executed within the commercial realm or developed as academic research.

BERNHOVA
(Ljubljana, Slovenia)
Bernhova Institute is a not-for-profit cultural institution operating in the fields of investigative art, culture and education practices focusing on the future of the arts of art, technology and society. It is an active production platform which encourages, facilitates and showcases investigative artistic production, creates public debate and stimulates a critical understanding of the time we live in with citizen science and its own developed educational approach named "investigative learning".

RIXO
(Hälsjö, Latvia)
RIXO is a based center and creative lab in Riga, which actively works since the end of 90s, in the field of new media art and ICT culture. Through their artworks, festivals, exhibitions and publications they have continuously introduced innovative themes (from internet radio and locator media to culture, ecology, and post-history), becoming one of the most important nodes for artistic and cultural innovation in the North European network.

DE TAŌ
(Shanghai, China)
The TechnoArt Studio of DeTaŌ Master Roy Aacchi provides for art, technology and consciousness research, teaching, and practice in a transdisciplinary and transcultural context. It offers a four year advanced degree in TechnoArt Arts, and doctoral research in the DeTaŌ Node of the Planetary Collegium (Plymouth University). The studio offers workshops, lectures, exhibitions and conferences to universities and arts organisations throughout China.

LEONARDO
(Lyon, France)
Leonardo/Office Association Leonardo, is the brand name for the activities of the Association Leonardo. It is the French/European sister organisation of the American-based Leonardo/ISAST which publishes the Leonardo Book Series and journals Leonardo (MIT Press) founded in 1968. Leonardo/Office, as well as Leonardo/ISAST, have a strong, long term knowledge in documenting, publishing and disseminating art-science-technology activities, both through in print and online publications.

IFFP
(Bratislava, Slovakia)
The mission of the Institute of Physics is to understand physical phenomena at the macro- and the micro scale through experimental and theoretical research. Studies are realized both on our facilities, and in collaboration with leading European and world laboratories. Current research at the Institute focuses on condensed matter physics, nuclear physics and subnuclear physics. The key research area of the Institute which in terms of scientific output is most productive is the research on quantum technologies and quantum information.

Fiy Global
(Taipei, Taiwan)
Fiy Global is founded by National Culture and Arts Foundation, Taiwan, since 2016, in association with Digital Art Center, Taipei. We serve as a platform between Taiwan and the world to share information, strengthen national and international networks, and to develop new horizons.

NICS
(Campinas, Brazil)
The Interdisciplinary Nucleus for Sound Studies (NICS) is a pioneering research organization based at the State University of São Paulo at Campinas, in Brazil. Since its creation in 1983, it has focused on questions arising from the various points of intersection between the arts – particularly music – and the sciences, in a long history of providing an environment in which students and academics from the fields of performers, arts and engineering can interact and work together on contemporary artistic issues and practices.

MANO
(Rio de Janeiro, Brazil)
The laboratory hub MANO was established in September 2010, and operates under the Graduate and Post Graduate Program in

Figure 5.

Artistic Network section in VERTIGO's web site



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

The Residencies program offered by VERTIGO Starts initiative is shown in VERTIGO's web site and can be seen by clicking on the proper link in the menu (see Figure 6):

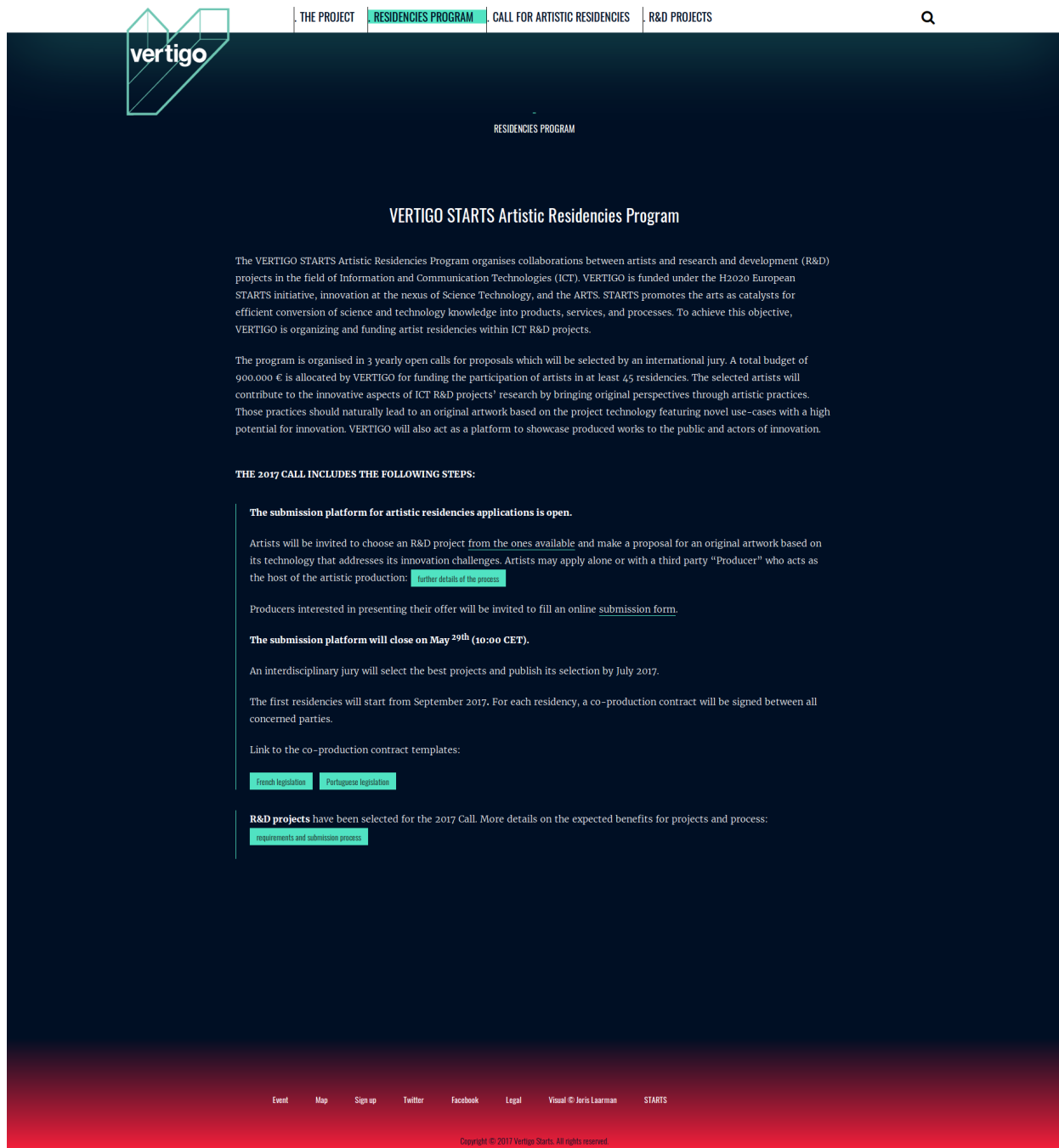


Figure 6.

Residencies Program in VERTIGO's web site



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

The details of the First call for artistic residencies are also explained in the web site, as shown in the Figure 7:

THE PROJECT | RESIDENCIES PROGRAM | **CALL FOR ARTISTIC RESIDENCIES** | R&D PROJECTS | 2017 JURY | CONTACT

vertigo

CALL FOR ARTISTIC RESIDENCIES

Are you an artist or creative? Have the chance of getting a grant for collaborating with an R&D ICT-Project and producing an original artwork based on its technology!

The application **platform is now closed.**

PURPOSE OF THE VERTIGO STARTS ARTISTIC RESIDENCIES

The call builds on the STARTS initiative (Innovation at the nexus of Science, Technology, and the ARTS) which promotes the collaboration of artists with R&D projects in the field of ICT (Information and Communication Technologies) as catalysts of innovation processes.

The call is open to artists willing to collaborate with the partners of an R&D ICT-Project in order to develop, in particular through the production of an original artwork based on its technology, a fresh approach to its innovation challenges.

The list of R&D ICT-projects selected by VERTIGO is available online

After having chosen a project in this list, applicants shall elaborate the idea of an original artwork based on its technology. They shall also explain the projected process of its design and production including the expected interactions with the project partners for the investigation of the artistic and technological issues to be explored through experimentation.

APPLICATION PROCESS

- Choose the R&D ICT-Project you want to collaborate with from a [list of available projects](#);
- Present your artistic work including your bio and selected works;
- Describe the artwork you propose to produce for the selected R&D ICT-Project and its production workplan;

Figure 7.

Call for Artistic Residencies in VERTIGO's web site



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

The list of the available ICT projects for the first call is shown in the web site under the section “R&D projects” (see Figure 8).

[THE PROJECT](#)
[RESIDENCIES PROGRAM](#)
[CALL FOR ARTISTIC RESIDENCIES](#)
[R&D PROJECTS](#)
[2017 JURY](#)
[CONTACT](#)

AVAILABLE PROJECTS

the examined boy

AMORE

AMORE investigates how humans use language to talk about the world, and enables computers to understand us.

Welcome to The Wallace Collection,

ARCHES

How can we use technology to make museums accessible to everyone including people who don't like technology?

BEACONING

Gamified and Pervasive learning environment for 'Anytime Anywhere' learning

BINCI

BINCI will deliver binaural production tools for artists to produce immersive music and audio contents.

Bio4Comp

Research on computers based on biomolecular machines looks for creative solutions.

BiPhoProc

New computing machine is explored, inspired by brain processing concepts, and applied to real world problem.

Figure 8.

R&D Projects Section in VERTIGO's web site



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

A detailed view of every selected ICT project is also available, as seen in Figure 9:



Figure 9.

Project Details section in VERTIGO's web site



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

3.2 Implementation on the ULYSSES platform

The ULYSSES platform was used for the implementation of the call for residencies. A specific call was created as part of ULYSSES, configured with all VERTIGO-specific elements of information and fields to be completed, and documents to be uploaded by applicants. ULYSSES also manages the reviews and jury logins, access to information and remote evaluation. We find on this page all the information relating to the registration of an artist for the VERTIGO Artistic Residencies Program, there is a link to this page on the website vertigo.starts.eu in the call for artistic residencies page when the call for artists submissions is open.

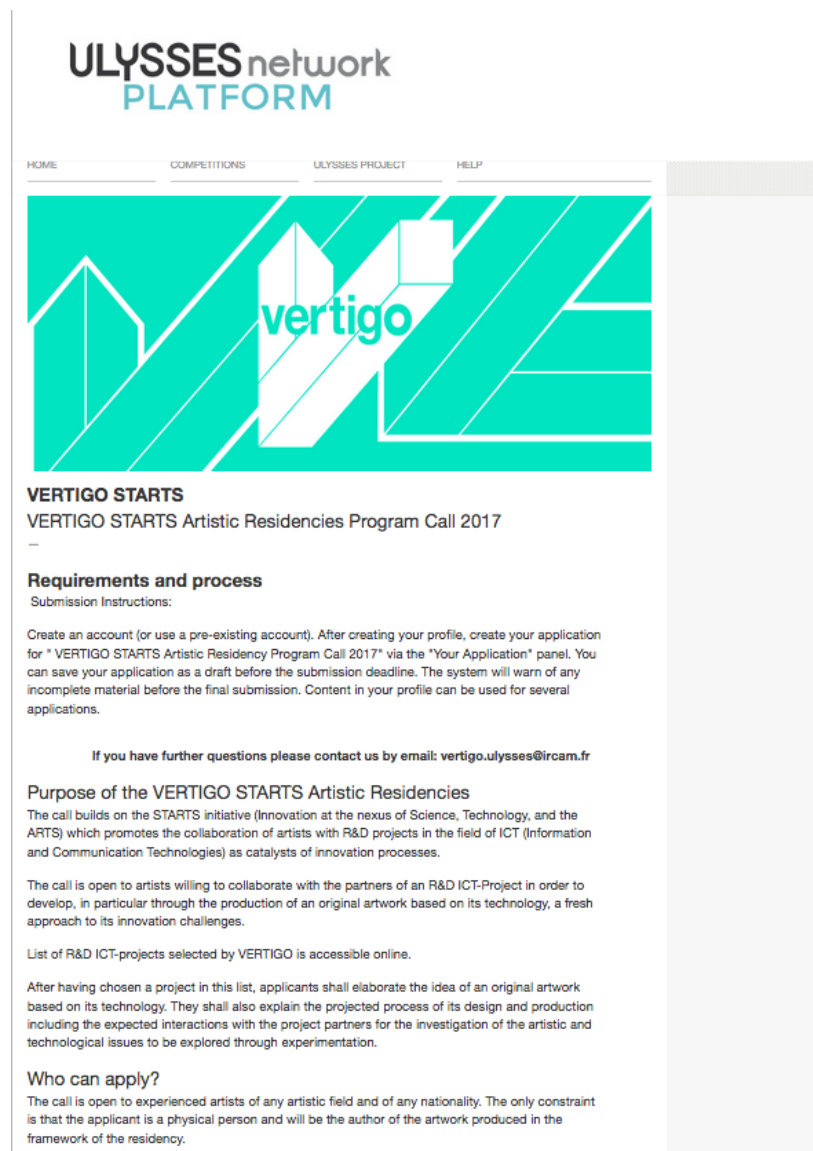


Figure 10.

VERTIGO STARTS competition page

Each artist needs to create an account on ULYSSES to complete, in a second step, the submission. CV, Letter of motivation, Artist video, prior work, project proposal and many other fields are required



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

for each applicant. Some information is public information, they will be use if the proposal is selected for the presentation on the website and other tools for communication and dissemination, all information is used for the selection by the jury members.

In order to respect the data confidentiality from our applicants, the following screenshots are those of a fake application.

Informations	News	Candidates	Jury members	'jury' step	'post-jury' step
--------------	------	------------	--------------	-------------	------------------

Candidate details [Export to excel](#)

Personal informations

Name : Lala Clemem

Citizenship : French

Gender : Woman

Birth date : Jan. 31, 1981

Email : clementine.ircam@gmail.com

Address

25 chemin des cruyes

75011 Paris

Phone (1) : 06323131980

// Private // Artist contact details

Private content: to be available to Vertigo partners, jury members and chosen ICT-projects

Street Address

Phone

Fax

Mobile

Email

// Private // Producer contact details (optional)

Organization name

Street Address

Phone

Fax

Mobile

Email

// Private // Co-creation process experience

Do you have experience with working in organizations in a co-creation process? If so, please describe it (40-60 words)

The call builds on the STARTS initiative (Innovation at the nexus of Science, Technology, and the ARTS) which promotes the collaboration of artists with R&D projects in the field of ICT (Information and Communication Technologies) as catalysts of innovation processes.

The call is open to artists willing to collaborate with the partners of an R&D ICT-Project in order to develop, in particular through the production of an original artwork based on its technology, a fresh approach to its innovation challenges.

List of R&D ICT-projects selected by VERTIGO is accessible online.

After having chosen a project in this list, applicants shall elaborate the idea of an original artwork based on its technology. They shall also explain the projected process of its design and production including the expected interactions with the project partners for the investigation of the artistic and technological issues to be explored through experimentation.

Edit element

// Private // Artist CV and residency project

Artist CV

CV

Edit document

Figure 11.

Information provided by applicants



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

Edit document	
Letter of motivation for ART-ICT co-creation	<input type="text" value="letter"/> Edit document
Project proposal	<input type="text" value="Project proposal"/> Edit document
Prior work video	<input type="text"/> Edit media
Artist video	<input type="text"/> Edit media
Proposal of experts to be included and requests of experts to be excluded from the evaluation (in order to avoid conflict interests)	<p>The call builds on the STARTS initiative (Innovation at the nexus of Science, Technology, and the ARTS) which promotes the collaboration of artists with R&D projects in the field of ICT (Information and Communication Technologies) as catalysts of innovation processes.</p> <p>The call is open to artists willing to collaborate with the partners of an R&D ICT-Project in order to develop, in particular through the production of an original artwork based on its technology, a fresh approach to its innovation challenges.</p> <p>List of R&D ICT-projects selected by VERTIGO is accessible online.</p> <p>After having chosen a project in this list, applicants shall elaborate the idea of an original artwork based on its technology. They shall also explain the projected process of its design and production including the expected interactions with the project partners for the investigation of the artistic and technological issues to be explored through experimentation.</p> Edit element

// Public // Proposal

ICT project selection	
Working title of proposal	vertigogo
Descriptive title of proposal (110 characters)	<p>The call builds on the STARTS initiative (Innovation at the nexus of Science, Technology, and the ARTS) which promotes the collaboration of artists with R&D projects in the field of ICT (Information and Communication Technologies) as catalysts of innovation processes.</p> <p>The call is open to artists willing to collaborate with the partners of an R&D ICT-Project in order to develop, in particular through the production of an original artwork based on its technology, a fresh approach to its innovation challenges.</p> <p>List of R&D ICT-projects selected by VERTIGO is accessible online.</p> <p>After having chosen a project in this list, applicants shall elaborate the idea of an original artwork based on its technology. They shall also explain the projected process of its design and production including the expected interactions with the project partners for the investigation of the artistic and technological issues to be explored through experimentation.</p> Edit element
Brief description of proposal (150-200 words)	<p>The call builds on the STARTS initiative (Innovation at the nexus of Science, Technology, and the ARTS) which promotes the collaboration of artists with R&D projects in the field of ICT (Information and Communication Technologies) as catalysts of innovation processes.</p> <p>The call is open to artists willing to collaborate with the partners of an R&D ICT-Project in order to develop, in particular through the production of an original artwork based on its technology, a fresh approach to its innovation challenges.</p> <p>List of R&D ICT-projects selected by VERTIGO is accessible online.</p> <p>After having chosen a project in this list, applicants shall elaborate the idea of</p>

Figure 12.

Information provided by applicants



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

Then, the candidates are assigned to their jury.

The screenshot shows the 'Ulysse administration - VERTIGO STARTS' interface. The top navigation bar includes tabs for 'Informations', 'News', 'Candidates', 'Jury members', 'Jury step', 'Post-jury step', and 'Evaluations'. The 'Jury step' tab is active. Below the navigation bar, there's a section titled 'Manage jury / candidate allocations for "VERTIGO STARTS : jury"'. It includes filters for 'candidate group' and 'jury member group', and an 'Action' dropdown. A table below shows the assignment of candidates to jury members. The table has columns for 'Candidate' and various jury members (G., G., G., M., B., M., M., S., L., J., A., C., H., S., M., J., A., R., Y., J., G., F., K., P., A., C., F., L., W.). Each cell contains a checkbox for assignment. The 'Candidate' column also has a checkbox. The table is currently empty, showing only the headers.

Figure 13. Step of the assignment of candidates to the persons responsible for the revision of the applications

Each reviewer has an account on Ulysses with applications concerning its project. Jury members will have the same platform for evaluation but for the reviewing step, the person in charge of this task does not have access to all the submissions.

The screenshot shows the 'ULYSSES network PLATFORM' login page. At the top right, there's a link 'No account yet ? Register now' and a 'Log in' button. The main heading is 'ULYSSES network PLATFORM'. Below it, there's a navigation bar with links for 'HOME', 'COMPETITIONS', 'ULYSSES PROJECT', and 'HELP'. The main content area is titled 'Log into Ulysses platform' and contains a login form with fields for 'Username' and 'Password', and a 'Log in' button. Below the login form, there's a link 'No account yet ? Register now' and a link 'Forgotten your password ?'.

Figure 14. Step identification of the person in charge of the evaluation



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

The person in charge of the evaluation has the possibility to comment the application.

ULYSSES ADMINISTRATION Evaluations VERTIGO STARTS : jury Help 1 col 2 cols

VERTIGO STARTS : jury

Filters: All (18) To evaluate (17) In progress (0) Evaluated (1)

Candidate 1/18 Previous Next

To evaluate

Candidate Informations folded

Born :
Citizenship :
Website : <http://www. .com/>

// Private // Artist contact details folded

// Private // Producer contact details (optional) folded

// Private // Co-creation process experience folded

// Public // Proposal folded

Audio Player folded

Prior work video : folded

Video Show Download

Notes

Link: <https://vimeo.com/v>

Artist video : folded

Video Show Download

Notes

Artistic quality : 1

Art-science congruency : 1

Figure 15.

The evaluation interface of project proposals

3.3 Results of STARTS platform

In addition to the initial workplan, following a request of the European Commission, the first project platform also included the management of the starts.eu site as the main STARTS portal, providing basic information on STARTS and on each of the supported projects (news, links).



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

In the Figure 16 the home page of STARTS is shown.

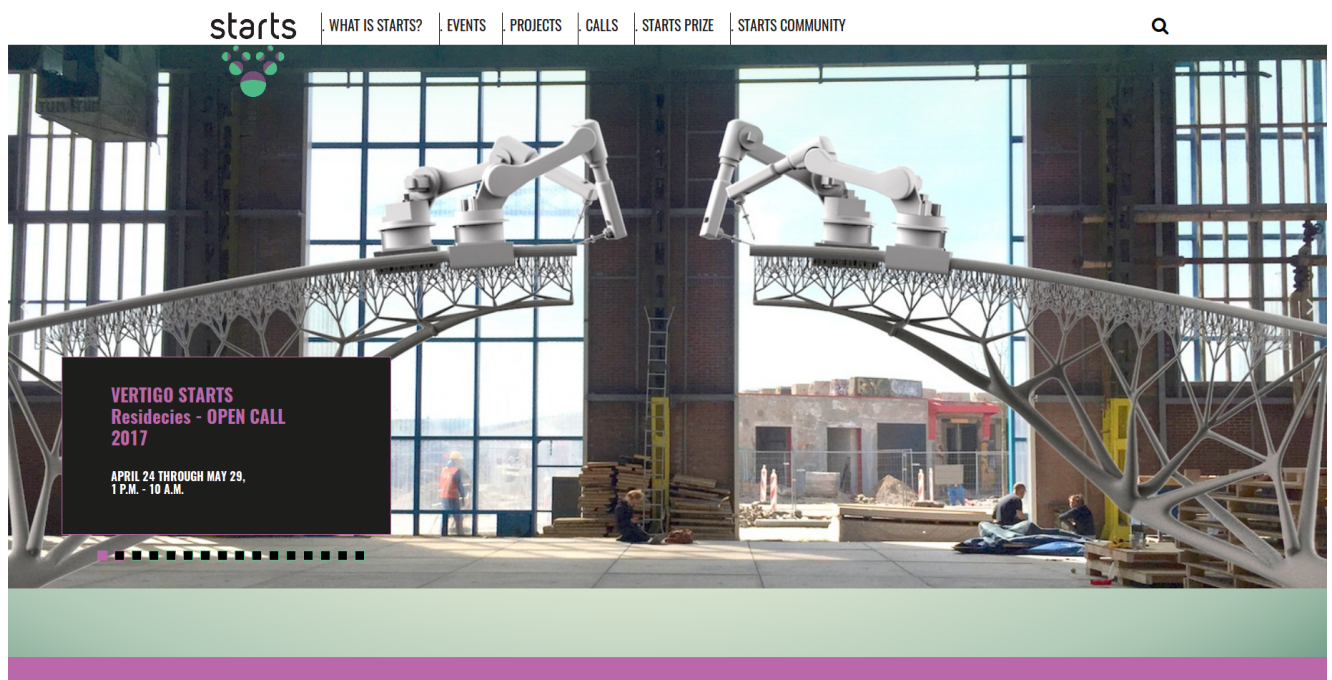


Figure 16.

STARTS home page



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

The description page of STARTS can be seen in the Figure 17.

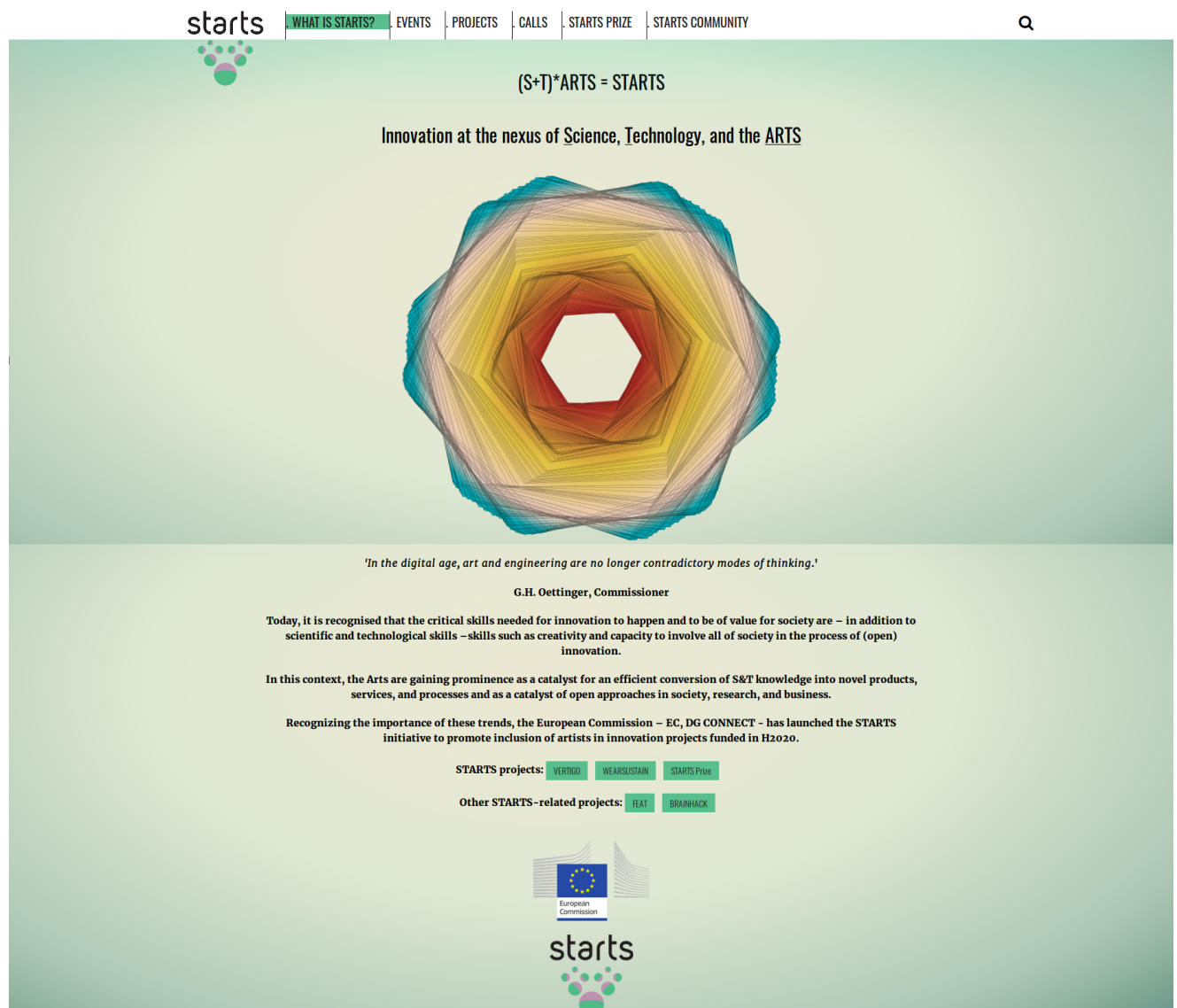


Figure 17.

STARTS description page



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

The Figure 18 shows an example of the list of STARTS projects.

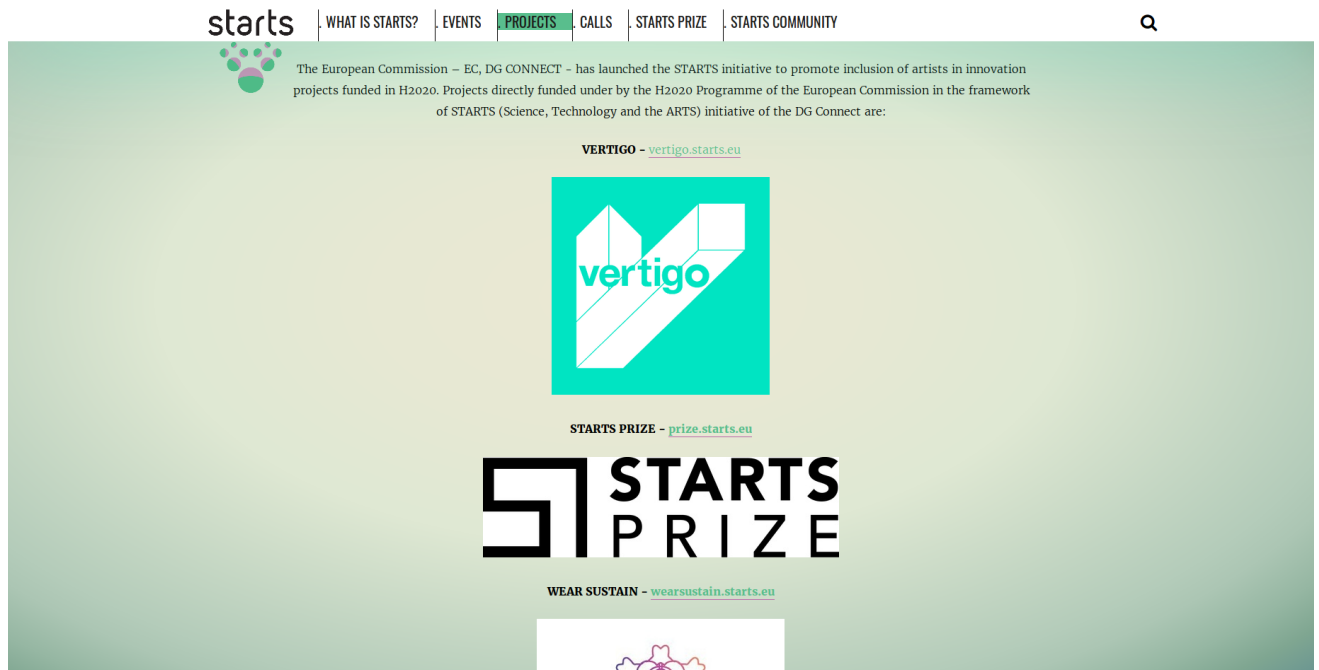


Figure 18.

STARTS list of projects



SECTION 4 – Management

4.1 Mezzanine CMS

Thanks to the backoffice provided by Mezzanine, the content of the platform can be created, edited and administrated. This content includes static pages, data entered by and shown to the users, like the ICT projects, and private data of the platform.

The backoffice has been configured to allow the partners to carry out several tasks needed by the Project, like creation of new calls, selection and revision of ICT projects, or users and organizations management.

Below, some examples of the management of the content through the Mezzanine backoffice can be found, like the Selection and revision of ICT projects (see Figure 19), the management of organizations (see Figure 20) and the creation of static pages' content (see Figure 21).

Title	Created	Topic	Validation status	Start date	End date	Status	External ID
EMOBODIES	April 20, 2017, 8:02 p.m.	ICT	accepted	-	-	<input type="radio"/> Draft <input checked="" type="radio"/> Published	View on site
SDP	April 18, 2017, 11:40 p.m.	ICT	accepted	-	-	<input type="radio"/> Draft <input checked="" type="radio"/> Published	View on site
MAGIC SHOES	April 14, 2017, 6:41 p.m.	ICT	accepted	Oct. 1, 2017	Oct. 1, 2018	<input type="radio"/> Draft <input checked="" type="radio"/> Published	View on site
OLA	March 9, 2017, 4:02 p.m.	ICT	accepted	Oct. 1, 2017	March 1, 2018	<input type="radio"/> Draft <input checked="" type="radio"/> Published	View on site
Desbunde Exhibition	April 20, 2017, 3:10 a.m.	ICT	pending	Oct. 1, 2017	Dec. 15, 2017	<input type="radio"/> Draft <input checked="" type="radio"/> Published	View on site
Virtuosisty	April 18, 2017, 11:36 a.m.	ICT	accepted	Sept. 1, 2017	-	<input type="radio"/> Draft <input checked="" type="radio"/> Published	View on site
Brain Lighting	March 10, 2017, 11:22 a.m.	ICT	accepted	Sept. 1, 2017	March 1, 2018	<input type="radio"/> Draft <input checked="" type="radio"/> Published	View on site
CAST	March 9, 2017, 2:28 p.m.	ICT	accepted	Sept. 1, 2017	Feb. 1, 2018	<input type="radio"/> Draft <input checked="" type="radio"/> Published	View on site
AMORE	April 10, 2017, 2:10 p.m.	ICT	accepted	Feb. 1, 2017	Jan. 31, 2022	<input type="radio"/> Draft <input checked="" type="radio"/> Published	View on site
CUPIDO	April 7, 2017, 5:35 p.m.	ICT	accepted	Feb. 1, 2017	Jan. 31, 2021	<input type="radio"/> Draft <input checked="" type="radio"/> Published	View on site
Smart bra straps- Wearable body sensors	March 23, 2017, 8:10 p.m.	ICT	rejected	Jan. 8, 2017	Jan. 8, 2018	<input type="radio"/> Draft <input checked="" type="radio"/> Published	View on site
Bio4Comp	April 7, 2017, 1:16 p.m.	ICT	accepted	Jan. 1, 2017	Dec. 31, 2021	<input type="radio"/> Draft <input checked="" type="radio"/> Published	View on site
IoF2020	April 18, 2017, 11:44 p.m.	ICT	accepted	Jan. 1, 2017	Dec. 31, 2020	<input type="radio"/> Draft <input checked="" type="radio"/> Published	View on site
MONICA	April 12, 2017, 1:34 a.m.	ICT	accepted	Jan. 1, 2017	Dec. 31, 2019	<input type="radio"/> Draft <input checked="" type="radio"/> Published	View on site
Create-IoT	April 11, 2017, 11:32 p.m.	ICT	accepted	Jan. 1, 2017	Dec. 31, 2019	<input type="radio"/> Draft <input checked="" type="radio"/> Published	View on site
Smart Rural Areas	April 10, 2017, 1:33 p.m.	ICT	accepted	Jan. 1, 2017	Dec. 31, 2019	<input type="radio"/> Draft <input checked="" type="radio"/> Published	View on site
Programmable Matter	March 31, 2017, 9:52 a.m.	ICT	accepted	Jan. 1, 2017	Jan. 12, 2019	<input type="radio"/> Draft <input checked="" type="radio"/> Published	View on site

Figure 19.

Selection and revision of ICT projects in VERTIGO's backoffice

:



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

MEZZANINE

vertigo.starts.eu David Change password View site Log out

Select organization to change

0 of 32 selected

<input type="checkbox"/>	Name	Organization type	Organization role
<input type="checkbox"/>	Ars Electronica	Network Partner	-
<input type="checkbox"/>	Artshare	Partner	-
<input type="checkbox"/>	Association Culture Tech	Partner	-
<input type="checkbox"/>	Association Leonardo/Olats	Network Partner	-
<input type="checkbox"/>	Centre Pompidou	Coordinator	-
<input type="checkbox"/>	CNRS	-	-
<input type="checkbox"/>	Creative Applications	Network Partner	-
<input type="checkbox"/>	DeTao Master	Network Partner	-
<input type="checkbox"/>	EPFL	Partner	-
<input type="checkbox"/>	Factoria Cultural	Network Partner	-
<input type="checkbox"/>	FLY GLOBAL DIGITAL ARTS FOUNDATION	Network Partner	-
<input type="checkbox"/>	Fraunhofer	Partner	-
<input type="checkbox"/>	Futureeverything	Network Partner	-
<input type="checkbox"/>	INOVA+	Partner	-
<input type="checkbox"/>	IPSAS	Network Partner	-
<input type="checkbox"/>	Ircam	Coordinator	-
<input type="checkbox"/>	Kersnikova Institute	Network Partner	-

Add organization

Search

Filter

- By is on map
- By organization type
- By organization role
- By validation status

Figure 20.

Organizations Management in VERTIGO's backoffice

MEZZANINE

vertigo.starts.eu David Change password View site Log out

Change custom page

History View on site

en fr

Title: The project

Status: ☐ Draft ☒ Published

Published from: Date: 2017-02-09 Today Time: 18:01:48 Now Expires on: Date: Today Time: Now

Content:

Artistic practices are more and more broadly recognized as potential vectors of technological innovation. One of the main objectives of the **STARTS initiative of the European Commission** is to catalyze new synergies between all concerned stakeholders: artists, cultural institutions, R&D projects in information and communication technologies (ICT), companies, incubators and funds.

The VERTIGO project is a **Coordination and Support Action (CSA)** supported by the **H2020 Program** of the European Commission. Its purpose is to support and coordinate these synergies at the European level through three main action lines:

- A program of artistic residencies as part of ICT R&D projects, through 3 yearly calls for proposals which will be selected by an international jury. A total budget of 900 k€ is allocated by the project for funding the participation of artists in at least 45 residencies aiming at producing original artworks featuring innovative use-cases of the developed technologies.
- The organization of a yearly public event in Paris exhibiting the results of these collaborations. It will take place as part of the new Mutations / Creation platform initiated at Centre Pompidou, gathering exhibitions, performances and symposia, and dedicated to exposing and questioning the current challenges of contemporary arts in relation to their technological and scientific ecosystem. The first edition of Mutations / Creation opens in March 2017 in the framework of the celebration of the 40th birthday of the foundation of the Centre Pompidou and ICA.
- The development of the web platform starts.eu, uniting all concerned actors and offering support to their related actions (matchmaking, communication, organization of third parties' artistic residencies programs, etc.). The main platform features are to be delivered by the end of 2017.

Delete Save Save and add another Save and continue editing

Figure 21.

Creation of static pages' content in VERTIGO's backoffice



SECTION 5 – Conclusions and next steps

The development over mezzanine-organization has been proved an appropriate choice, as it has allowed the building of the preliminary website and its first release in a short time, including the multi-domain management, but still having a lot of features.

It has been also a good choice for the scalability of the platform, as it is easy to develop new features and integrate them in the current configuration.

The next steps in the development of the platform will be influenced by the release of the platform specifications with the Deliverable 3.2 on Month 6.

Nevertheless, some of them can be mentioned now:

- The functions related to the management of residencies.
- The inclusion of a login system for each user.
- The integration with the ULYSSES platform.



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

References

- [1] <https://www.djangoproject.com/>
- [2] <http://mezzanine.jupo.org/>
- [3] <https://www.docker.com/>
- [4] <https://github.com/Ircam-Web/mezzanine-organization>



Annex A – About Django

Django¹ is a high-level Python Web framework that encourages rapid development and clean, pragmatic design. Built by experienced developers, it takes care of much of the hassle of Web development, so you can focus on writing your app without needing to reinvent the wheel. It's free and open source.

- Ridiculously fast: Django was designed to help developers take applications from concept to completion as quickly as possible.
- Fully loaded: Django includes dozens of extras you can use to handle common Web development tasks. Django takes care of user authentication, content administration, site maps, RSS feeds, and many more tasks — right out of the box.
- Reassuringly secure: Django takes security seriously and helps developers avoid many common security mistakes, such as SQL injection, cross-site scripting, cross-site request forgery and clickjacking. Its user authentication system provides a secure way to manage user accounts and passwords.
- Exceedingly scalable: Some of the busiest sites on the planet use Django's ability to quickly and flexibly scale to meet the heaviest traffic demands.
- Incredibly versatile: Companies, organizations and governments have used Django to build all sorts of things — from content management systems to social networks to scientific computing platforms.

¹ <https://www.djangoproject.com/>



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

Annex B – About Mezzanine

Mezzanine² is a powerful, consistent, and flexible content management platform. Built using the Django framework, Mezzanine provides a simple yet highly extensible architecture that encourages diving in and hacking on the code. Mezzanine is BSD licensed and supported by a diverse and active community.

In some ways, Mezzanine resembles tools such as Wordpress, providing an intuitive interface for managing pages, blog posts, form data, store products, and other types of content. But Mezzanine is also different. Unlike many other platforms that make extensive use of modules or reusable applications, Mezzanine provides most of its functionality by default. This approach yields a more integrated and efficient platform.

² <http://mezzanine.jupo.org/>



Annex C – About Docker

Docker³ containers wrap a piece of software in a complete filesystem that contains everything needed to run: code, runtime, system tools, system libraries – anything that can be installed on a server. This guarantees that the software will always run the same, regardless of its environment.

Containers running on a single machine share the same operating system kernel; they start instantly and use less RAM. Images are constructed from layered filesystems and share common files, making disk usage and image downloads much more efficient.

Docker containers are based on open standards, enabling containers to run on all major Linux distributions and on Microsoft Windows – and on top of any infrastructure.

Containers isolate applications from one another and the underlying infrastructure, while providing an added layer of protection for the application.

³ <https://www.docker.com/>



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

Annex D – About mezzanine-organization (Mezzo)

Mezzanine-organization⁴ aka Mezzo is a complete CMS for organizations with complex workflows. It is based on Mezzanine and Django.

Mezzanine-organization features:

- Page, news and event management
- Smart media management (video, audio, etc...)
- Project data management including demo repositories
- Activity management of person per department
- Job candidacy forms
- Full translation models
- Fully dockerized for easy setup

The development is managed by Guillaume Pellerin (IRCAM) and Emilie Zawadzki (IRCAM)

Mezzo is free software: you can redistribute it and/or modify it under the terms of the GNU Affero General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

mezzanine-organization is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Affero General Public License for more details.

⁴ <https://github.com/Ircam-Web/Mezzo>



Annex E – Installation, development and maintainance

Installation

Clone

On Linux, first install Git⁵, Docker-engine⁶ and docker-compose⁷ and open a terminal.

On MacOS or Windows install Git and the Docker-Toolbox⁸ and open a Docker Quickstart Terminal.

Then run these commands:

```
git clone --recursive https://github.com/yomguy/mezzanine-organization.git
```

Install

Our docker composition already bundles some powerful containers and bleeding edge frameworks like: Nginx, MySQL, Redis, Celery, Django and Python. It thus provides a safe and continuous way to deploy your project from an early development stage to a massive production environment.

For a production environment setup:

```
cd mezzanine-organization
```

```
docker-compose up
```

which builds, (re)creates, starts, and attaches all containers.

Then browse the app at <http://localhost:8021/>

On MacOS or Windows, we need to replace 'localhost' by the IP given by the docker terminal.

Warning: Before any serious production use-case, you must modify all the passwords and secret keys in the configuration files of the sandbox.

Daemonize

The install the entire composition so that it will be automatically run at boot and in the background:

```
sudo bin/install.py
```

5 <http://git-scm.com/downloads>

6 <https://docs.docker.com/installation/>

7 <https://docs.docker.com/compose/install/>

8 <https://www.docker.com/products/docker-toolbox>



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

Options:

```
--uninstall : uninstall the daemon
```

```
--cron : install cron backup rule (every 6 hours)
```

```
--user : specify user for cron rule
```

```
--systemd : use systemd
```

```
--composition_file : the path of the YAML composition file to use (optional)
```

This will install a init script in /etc/init.d. For example, if your app directory is named mezzanine-organization then /etc/init.d/mezzanine-organization becomes the init script for the OS booting procedure and for you if you need to start the daemon by hand:

```
sudo /etc/init.d/mezzanine-organization start
```

Development

Dev mode

For a development environment setup:

```
docker-compose -f docker-compose.yml -f env/dev.yml up
```

This will launch the django development server. Then browse the app at <http://localhost:9021/>

On MacOS or Windows, we need to replace 'localhost' by the IP given by the docker terminal.

Warning: In this mode, Django is run with the runserver tool in DEBUG mode. NEVER use this in production!

Back

If you modify or add django models, you can produce migration files with:

```
bin/makemigrations.sh
```

To apply new migrations:

```
bin/migrate.sh
```

Accessing the app container shell:

```
docker-compose run app bash
```

Front



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

The styles are written in SASS in app/static and the builder uses Gulp. All the building tools are included in the app container so that you can build the front in one command:

```
bin/build_font.sh
```

To start the gulp server to get dynamic building:

```
docker-compose run app gulp serve
```

Gulp will launch BrowserSync. BrowserSync is a middleware that expose the website on port 3000. Any change on CSS or JS files will trigger the build system and reload the browser.

Maintenance

Log

var/log/nginx/app-access.log

nginx access log of the app

var/log/nginx/app-error.log

nginx error log of the app

var/log/uwsgi/app.log

uwsgi log of the app

Backup & restore

To backup the database and all the media, this will push all of them to the var submodule own repository:

```
bin/push.sh
```

Warning: use this ONLY from the production environment!

To restore the backed up database, all the media and rebuild front:

```
bin/pull.sh
```

Warning: use this ONLY from the development environment!

Upgrade

Upgrade application, all dependencies, data from master branch and also recompile assets:

```
bin/upgrade.sh
```



Adding value to research and technology through integration of artists in projects and synergy creation between creative industries, entrepreneurs, researchers and arts

Repair

If the app is not accessible, first try to restart the composition with:

```
docker-compose restart
```

If the app is not responding yet, try to restart the docker service and then the app:

```
docker-compose stop
```

```
sudo /etc/init.d/docker restart
```

```
docker-compose up
```

If the containers are still broken, try to delete existing containers (this will NOT delete critical data as database or media):

```
docker-compose stop
```

```
docker-compose rm
```

```
docker-compose up
```

In case you have installed the init script to run the app as a daemon (cf. section "Daemonize"), you can use it to restart the app:

```
/etc/init.d/mezzanine-organization restart
```

If you need more informations about running containers:

```
docker-compose ps
```

Or more, inspecting any container of the composition (usefully to know IP of a container):

```
docker inspect [CONTAINER_ID]
```