Borgingsplan

Demoscene
EN

Introduction

This safeguarding plan has been drawn up for the application for 'Demoscene' with the intangible heritage. The purpose for 'borgingsplan' is providing insight into how the demoscene is 'secured' and how the demoscene wants to do this.

In the process of applying for the status of intangible heritage, the Knowledge Center for Intangible Heritage in Arnhem gives a workshop in which the safeguarding plan is made. In this document you will find the result of this workshop.

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If you want to contribute to the request for status for 'demoscene', you can ask your suggestion and/or questions in discord :https://discord.gg/EvRV2pPNy9

1. Name of the Intangible Heritage:

Demoscene

2. Why do you want to include the intangible heritage in advantages and/or disadvantages?

We see the Inventory of Intangible Heritage of the Netherlands as a great opportunity to make the tradition of the demoscene known to a wider audience.
This could possibly support the organization and announcement of demo parties in the Netherlands.

The early recognition in Finland and Germany also shows how intangible cultural heritage of value is created every day, connecting people and communities, including in the digital age. And that the concept and interpretation of 'intangible heritage' itself continues to evolve and can be given surprising new interpretations. We also want to maintain this for the demo scene in the Netherlands.

For the members of the heritage community, belonging to the 'demo scene' is a true 'way of life' within a community of like-minded people with their own jargon and shared rituals. We think it is time to take the breeding ground of digital art seriously and recognize it as part of the Dutch intangible heritage.

3. Describe here how the intangible heritage is practiced today (history goes to another question).

For the explanation of the demo scene it is enlightening to first explain what a 'demo' is in this context. A demo (short for demonstration) is a computer program that shows visual effects and music. All effects are calculated "live" by the computer, so it cannot be compared to playing a video file. The challenge for a demo can be artificially imposed by doing it with a limited amount of software (for example a maximum of 1024 bytes in size) or on specific (old) hardware.

A demo can be made by one person or a group of people (demo group), each with their own specialization such as graphic design, music and/or programming. These persons and groups almost always use a nickname and often also a group name, for example, the writers of this text call themselves "RamonB5" and "havoc" from the group "Desire" and "zeno4ever". A person who is actively involved in making demos or related things is called a 'scener'. The motivation for making a demo is based on your own intrinsic interest and technical challenge, for example seeing if something works or learning to program specific old hardware or a limited amount of instructions / memory of a computer.

Sceners like to show each other their demos, which usually happens during a demo party, a physical gathering that usually takes place over a weekend. To participate, a demo must not have been previously distributed or displayed and must fall into one of the categories offered by the demo party organization. After all submitted demos have been presented on a large screen, visitors can assign points to all demos themselves. After some time, the organizers

close this voting process and add up all the points given per demo to make the final result. The demo with the most points wins, of course.

Examples of the different categories (Revision 2023): PC Demo, PC 64K Intro, PC 8K Intro, PC 4K Intro, Oldskool Demo, Oldskool 4K Intro, Oldskool Graphics, Oldskool Music, , Amiga AGA, Amiga ECS/OCS, Amiga Demo, Amiga Intro, Streaming Music, Executable Music, Tracked Music, Fast Music, , Modern Graphics, Photo, Paintover, Animated GIF, 4k Executable Graphics, 3D Graphics, ASCII / ANSI / PETSCII, 256 Byte Intro, Game, Animation/Video, Wild

All results of a demo party are collected in a text file and published under the name 'results.txt'. These results are collected by sites such as Pouet.net and Scene.org, where people can leave appreciation through scores and comments.

Anyone can submit a demo to join a demo party, there are no minimum experience requirements or other requirements. Participating is more important than winning itself.

Mapping the intangible heritage

4. Which organisations/groups/associations and/or persons are involved in the intangible heritage? Describe how they are involved.

Administrators (directors/organisers/tractors)

The Demoscene has no central overarching collective organization. The administrators for this application are individuals who are themselves active in the demoscene and find it important to make the demoscene known to the public.

Quantity: 3

Practitioners

The following groups can be distinguished within the demoscene:

Sceners
Individuals are usually known by a nickname. This person may belong to a group and have a specialization in programming, graphics, music or organizing. There are also participants at events that do not (or no longer) actively specialize, but are there for networking opportunities or social contacts.

Demo Groups
Individual sceners can use group names, but as a rule a group is a collaboration of several sceners. Often there is a practical division of tasks between the members of such a group based on skills and interests in, for example, graphics, music, programming or organizing.

Demoparties

The events where demos made by groups and/or individuals are released. These demo parties are usually organized by a group of people supported by people who are present during the demo party.

All these entities do not represent an official organizational form such as an association, foundation or company. They are usually (group of) people who work together to make a demo or organize a demo party (such as Outline, LoveByte and X for the C64)

Companies/institutes
The Demoscene has strongly influenced areas such as computer games industry and media arts over the years and Demoscene has been producing great artists for decades; programmers, musicians and graphic artists. A number of Dutch digital pioneers have a history in the demo scene. such as, for example, Oscar winner Danny Geurtsen, music producer Bas Bron, including Arjan Brussee and Thijs Kruithof from Amsterdam's Guerrilla Games, producer/composer Reyn Ouwehand, including Jurjen Katsman from Nixxes Software, or Roel Ezendam and Roan Albers from RageSquid, to name a few .

In addition, there are a large number of companies with sceners who facilitate things for the demo scene in different ways. For example, Hogeschool Rotterdam, Outline Services, Tasty Chips, cables.gl, DKeV, TuM.

Quantity: 350

Public/consumers/customers
The audience is potentially very large because the demoscene creates digital products that can be easily distributed worldwide via the internet. To further quantify this, some statistics:
- The most viewed video about demoscene productions on Youtube has around 1.2 million views. According to statistics, approximately 4% of these viewers come from the Netherlands, which would amount to 48,000 visitors from the Netherlands [cite source-link video]
  https://www.youtube.com/watch?v=roBkg-iPrbw
- The most viewed demo on YouTube is "Chaos Theory" by Conspiracy with 534,000 views, which would indicate approximately 21,200 viewers from the Netherlands
  https://www.youtube.com/watch?v=ZfuierUvx1A
- The most popular demo in the scene.org archive has been downloaded 15,527 via the server in Rotterdam.
  https://files.scene.org/view/demos/groups/farb-rausch/fr-025-final2.zip
  https://www.youtube.com/watch?v=6AUpZNq2vSQ
- The most viewed Dutch demo scene live stream had 6500 unique viewers, 1200 of whom watched simultaneously.
- The most visited demo party in the Netherlands has allowed up to 400 visitors in the past decade.

Quantity: 1200

5. Describe here the history and development of the intangible heritage. Don't forget the last decades.

Note in advance, the history of the demoscene is mainly collected afterwards, usually because it is not always recognized or experienced as a historical moment at that time. The history mentioned below is as it is now known to demoscene applicants, it is possible that new historical moments will emerge in the future, so that we will have to (literally) rewrite history. This is especially true for the 'firsts', such as first music disc, first demo disc, etc.

In the early home computer era (from the 1960s to the late 1990s) it was quite normal to copy software from your friends and acquaintances for your own use. Legal protection such as copyright was not yet enshrined in law at the time, so this was not illegal either. The software developers then implement their own technical measures to prevent copying and thus secure their income. From that moment on, people and groups are also active to remove this copy protection (cracking software or cracking) so that you could duplicate the software in question.

Throughout the Netherlands in the 1980s and 1990s there were many local clubs that met monthly at playgrounds, cafes and other public spaces to exchange software with each other. Here the first computer technicians were active to get to know their home computer and learned how to make their first cracktro/demo here.

Someone who had cracked the software wanted to let them know that he had done this, so he put a 'cracktro' with his nickname in front of the actual program. A cracktro could be a simple screen with only static text to scrolling text with music and other graphical effects. Over time, the cracktro became more sophisticated, but gradually there were also more objections to the illegal nature of software cracking. In the Netherlands, legislation was passed in 1994 that made it illegal to copy software without permission.

The real-time graphic animations from this point on were increasingly shared and distributed independently of the cracked video games, expanding and eventually taking up the space of entire floppy disks.

The people and groups who made these demos felt the need to show each other what they had made and then organized the first demo parties, the first of which took place in the Netherlands in 1987 in Venlo.

Since then, several technological milestones (such as the emergence of the personal computer around 1995, modem with Bulletin Board System (BBS), and the Internet shortly after) have impacted the demo scene, prompting it to change its rules and competition formats. to fit. As a matter of principle, no illegal content is offered via our archives on the internet. A team of experienced sceners has been put together that checks new content that becomes available for legality and removes illegal elements from old content. In addition, we have a lawyer specialized in media rights in our midst who advises with a say in any doubts or complaints. All in all, these measures have resulted in no conflicts between the demoscene and enforcement authorities in the past 25 years.

Other dimensions for the continuous development and progress of the Demoscene are caused by the constant interplay of new styles, design and techniques (historical and contemporary) that are intertwined, combined or, conversely, compete with each other. A wider acceptance and implementation of live elements in demoscene events can also be regarded as innovative. Although the demoscene is de facto one of the oldest forms of computer art, the scene has continuously developed itself and has now also formed a community that mainly operates digitally. The Dutch scene often plays a pioneering role in this context.

6. Where does the intangible heritage take place? Describe here the place/route/locations/workshop where it is practiced.

Demoscene is a worldwide, decentrally organized culture form whose epicenter of activity is in Europe.

Since its emergence in the second half of the 1980s, the demo scene has continued to grow due to the rise of home computers on the one hand and the emerging gaming industry on the other. Hence the stronger presence in home computer oriented regions such as Western and Northern Europe or Oceania and the more limited presence in console oriented regions such as North America and Asia.

Ultimately, the Demoscene has grown into a global community, with collectives and events on all five continents.

Although Demoparties have always maintained a regional character and physical encounters are an integral part of the identity of the Demoscene, it is not limited to regional categorization. Due to the extensive online networks, the demoscene is easily accessible to anyone with an internet connection.

Physical demoscene gatherings are of course linked to a location. There are currently two larger demo parties that are regularly organized in the Netherlands ("X" in Someren and "Outline" in Ommen).

7. When does the intangible heritage take place? State here, if applicable, the dates or period that it takes place.

Demoscene activities, such as making demos, encounters between sceners, online gatherings take place throughout the year.

In addition to the aforementioned Dutch demo parties, many Dutch demosceners also visit demo parties in other countries, such as Evoke in Cologne and Revison in Saarbrücken. A full overview of upcoming demo parties can be found athttps://www.demoparty.net

Analysis of the intangible heritage

8. What parts does the intangible heritage consist of? Name the components point by point as described in question 3.

1. Demoparty is announced by means of an 'invite', a demo with the date and place where this will take place
2. Demoscene groups collectively create demos often in combination of programmer, musician and graphic designers or individual productions such as music, graphics or code.

3. These productions can be handed in by the sceners or groups to the relevant demo party organization (upload to server).
4. The categories are announced. As an example for the Revision 2023 demo party, there are 27 categories:

   PC Demo, PC 64K Intro, PC 8K Intro, PC 4K Intro, Oldskool Demo, Oldskool 4K Intro, Oldskool Graphics, Oldskool Music, , Amiga AGA, Amiga ECS/OCS, Amiga Demo, Amiga Intro, Streaming Music, Executable Music, Tracked Music, Fast Music, , Modern Graphics, Photo, Paintover, Animated GIF, 4K Executable Graphics, 3D Graphics, ASCII / ANSI / PETSCII, 256 Byte Intro, Game, Animation/Video, Wild

   Explanatory terms for the category :
   'Oldscool' is on hardware from the 80s/90s like Commodore 64, ZX Spectrum, Atari 800.

   "K" stands for Kilobyte (1024 bytes), which is the size of the demo file. 1 A4 of text is about 3000 characters, so roughly 3K. A 4K demo is a program with a maximum size of 4096 bytes.

   In addition to the different categories, there are usually live coding competitions in the form of 'Shader showdown' (with GPU shaders) or 'Byte Battle (with TIC-80 fantasy console).' Through a knockout competition, 2 or more people make a game within 25 minutes. visual effect, the one with the most points moves on to the next round.

5. Sceners get together at scheduled demo parties
6. All submitted demos will be shown during the demo parties
7. There is a vote (by the audience with "votekey") on the best demo within the category
8. The demo party will then be concluded with an award ceremony

9. Which of the (core) components mentioned in the previous question would you like to pass on?

The core parts we would like to pass on are:

1. Demoparty will be announced with date and place where this will take place
   (If this were not to happen, it would of course be difficult to gather an audience)
2. Demoscene groups make demos together
   (Except for the final demo, this is of course about the nature of the process and its commonality)
3. These productions can be handed in by the sceners or groups to the relevant demo party organization (upload to server).
   (So that the organization can display it to the assembled public on location and afterwards make it available on the internet)
4. But parties are also announced with specific frames / categories within which competitions are organized. The categories are announced in advance as a framework for the groups within which the demos must be made.
   (We are therefore explicitly not concerned with the literal content of the enumeration made in the previous question, but with the preservation of a varied palette of categories within which friendly competition can take place. are subject to change and we also find that dynamic very important)

5. Sceners get together at scheduled demo parties
   (The physical gathering of demosceners is very important for the social structure of the demoscene and for strengthening mutual bonds)
6. All submitted demos will be shown during the demo parties
   (Viewing, commenting and assessing each other's demos together is for many the part that they want to keep for the other core parts mentioned and the moment during the party that is most awaited, even before the result or celebration of any results achieved)
7. The public votes on the best demo within the category
   (This is essential to achieve a ranking chosen by the public, votes are collected and counted by the organisers)
8. The demo party will then be concluded with an award ceremony
   (This is how the results of the organized competitions are also announced)
9. The demos are almost always made available after a party via online platforms such as Pouet or Demozoo, which can rely on the infrastructure of Scene.org
   (So that people who couldn't be at the party can still easily and quickly download, view, analyze, etc.)
10. An important part is also showing each other how some technical challenges have been tackled and documentation is being made to explain how it all works.
    (Through publications by or with the cooperation of the makers and organizers themselves, in the form of blogs, vlogs, podcasts, articles in own and external media, etc.)

10. What are the core values of the intangible heritage that you want to preserve?

We do not want to pass on specific parts of current practice because we realize that creative computing is by definition subject to innovations and social circumstances. It is more about passing on the culture that has developed over the years. This culture can be described as mainly based on meritocracy[1], often consisting of friendly competition between each other, thereby increasing individual and collective creative skills, and experiencing casual fun in software development because there are no restrictions from business perspectives and the possibility exists to compare your own products with those of others. to compare. Of course, mistakes are sometimes made during this process, which is also something that we do not want to banish in the future, but rather want to keep an open approach and use it to learn from. This dynamic interaction as a whole can be seen as the method of the demoscene, the system through which we are stronger as a whole than as individual individuals.

Of course we want demoscene productions made to date to be preserved for the future. But in order to remain relevant, we will therefore have to continuously try to respond to new trends and developments in the field of computer technology and to changes in the public perception of digital art.

For an effectively functioning demoscene community, meeting other demosceners regularly at parties is of great importance. Social ties form the basis of our activities and maintaining and expanding them is therefore important to be able to continue to develop our activities in the future. To facilitate this, physical meetings are and will remain necessary.

Ad 1) Meritocracy means that the demoscener's reputation is based on his/her past activities.

Meaning of the intangible heritage

11. Why is this intangible heritage important to the custodians and practitioners?

The reason for taking part in the demo scene yourself is often the desire to expand the collection and/or to broaden knowledge. During that process, people almost automatically come into contact with customs that apply in the demo scene regarding friendly competitions and the free sharing of knowledge and skills. This motivates some people to actively contribute to the demoscene themselves. Over time, this leads to contacts between new and old practitioners in all kinds of contexts, so that one's own collection and knowledge can indeed be broadened by everyone. Ultimately, this leads to a strengthening of the communal feeling among demosceners and has created a community that values the continued existence of our shared hobby.

12. Why would younger generations want to adopt this intangible heritage?

From reactions of already joined the demoscene practitioners it turns out that they often came into contact with demoscene-related fields in other ways before they discovered the demoscene. Some examples of this are young people who received an old console, home computer or synthesizer from their parents to play with, are looking for systems and tools to make chiptune music, or have developed an interest in programming for their game development or VJ hobby. shaders.

For young people, the demoscene is attractive because it can be a portal for free expression. There is a strong do-it-yourself mentality within the scene and it is easy to find like-minded people to work on projects. You can measure your skills against those of other participants in a friendly way. Meanwhile you increase your knowledge and skills by learning from (the mistakes of) yourself and your fellow sceners. And after the completion of a project, the assessment by your peers follows, so that you know exactly how your work is appreciated by others in the know. And vice versa, you are of course allowed to have an opinion about the work of others, even if you like.

Documentation and transfer of the intangible heritage

13. In what way is (knowledge of) the intangible heritage documented?

Demoscene productions are digital files and therefore extremely suitable for collection in online archives. Meta-information about demoscene productions (including results achieved, technical requirements, links to downloads, ratings of other sceners) are collected on websites.

Since the 1980s, knowledge has often been shared in the demo scene in the form of text files, which are regularly merged into so-called "disk magazines" (a floppy on which dozens

of text files are collected in a format that is easily accessible via a menu). Since the late 1990s, the function of these magazines has been increasingly (but not yet fully completed) taken over by websites.

In addition to textual descriptions, making source code and source files publicly available is also a good practice in the scene. Sometimes these sources are simply included in the archive with a new production, sometimes such files are distributed separately or in larger collections with source files from multiple productions and/or sceners. A recent trend is writing "post mortems" after making a production, often in the form of blog posts.

In the 1990s and 2000s, the demoscene increasingly records its live events in video format. Live streams of events have also been offered since around 2010 and since 2020 some demo parties have only taken place online. Video recordings are mainly offered via mainstream platforms such as Youtube and Twitch.

14. What does the archive and/or collection consist of? Where is it kept?

There are a few websites where archives are kept of all demos (and therefore also of Dutch demoscene). Most products made for current demo parties can be found on these sites :

- https://demozoo.org
- https://www.pouet.net

These two reference websites largely rely on a joint archive ("scene.org"), the central server of which is housed in the server rooms of Rotterdam University of Applied Sciences. In addition to demoscene productions, this archive also contains (collections of) supporting files, such as results, invitations, video registrations, disk magazines, source code, tools, etc.

15. How is the intangible heritage now passed on to future generations?

Our archives are publicly available to anyone with an internet connection. Our physical events and online communication channels are also easily accessible to interested parties from outside. In addition, there are various websites with information and descriptions about the demo scene that can be consulted. In practice, these passive forms of communication appear to lead to a modest but relatively stable influx of new participants.

For several years now, demosceners have been investing more and more time in active communication towards specific groups of potential participants. By organizing (live) shows, lectures and seminars, we try to encourage such groups to make a demo or to participate in one. But we also try to build bridges by inviting artists from outside the scene to perform at our own events. Groups with which such "crossovers" have been realized in the past and have led to a measurable increase in the number of participants in demoscene events include the chiptune scene, live coding scene, FPGA programmers, independent game developers and media technology students.

Strengths Weaknesses Opportunities Threats analysis of the intangible heritage

16. What are the strengths of this intangible heritage?

The strongest point of the demoscene is the mutual solidarity and the willingness to help each other. It is easy to make new contacts among like-minded people and because of the low threshold of the demoscene and the extensive use of the internet as a means of communication, you can quickly and easily find like-minded people in other parts of the country or the world.

Another strong point is the informal character and openness of the demoscene. The use of nicknames reinforces the sense of equality of all participants. At demo parties you can find everything behind such a nickname, from the unemployed to successful entrepreneurs, from factory workers to scientists, from 10-year-olds to grandparents, it all occurs and much more. A side effect of the use of nicknames that has recently become topical is the fact that most nicknames cannot be linked to gender, genetic origin, sexual preference, religion, skin color or other such arbitrary categorization. Especially when using it online, behind a nickname you are mainly just yourself and this is seen as a great asset within the demo scene. And that is how it is experienced by a number of "minority" groups that are now proudly over-represented within our community.

Flexibility is another strength we want to mention. Because the demo scene is focused on technology, it is in our nature to want to respond quickly to new developments. The tendency to set ourselves challenges has also repeatedly enabled us to respond very quickly to new developments or regulations. A good example of this is how the demo scene has very quickly developed and mastered methods during the corona pandemic to take online demo parties to the next level. Competitions that previously had to take place on a stage and for which physical cable connections were indispensable, were converted to an internet-based model within a few days or weeks. Thanks to the clever use of our self-developed software in combination with the streaming software used and plugins look a lot better than ever before.

As a final strong point, we mention the often open availability of source code and tools that, in addition to being very educational, can also be useful in making demos and other software, as well as music and graphics. Many demosceners also distribute the source files with every production they release or a link to an online "repository" from which any internet user can easily transfer the entire project to their own computer. Software tools that demosceners have made themselves for making (parts of) demos are also often made freely available on the internet. These tools are not only often used by other demosceners to make (parts of) demos, but are also widely used in, for example, the chiptune scene to make music on old computers, by pixel artists to create graphics, and by shader programmers to create prototypes. of graphic effects over the web.

17. What are the weaknesses of this intangible heritage?

The group of people available for organizational tasks within the demoscene is relatively small. People who are willing to take on organizational tasks are also usually very attached to spending time working on productions themselves and socializing with other sceners in

addition to the organizational activities. This means that more volunteers are needed to realize certain things within the demoscene than elsewhere, and that coordinating organizations becomes more complex without yielding more results.

Because much of the demoscene is still working with older computers and media, we are vulnerable in certain areas in terms of possible loss of data and perhaps even the opportunity to show our productions on the systems for which they were developed. As time goes by, an increasing part of our archive could show such pain points.

Our archives are run by volunteers and financed by sponsorship and selfless donation. A more structural and future-proof approach would be desirable. Seeking a connection with umbrella organizations that can better facilitate this is obvious, but such organizations have so far shown no interest in cooperation.

Because people who grew up in the 1980s and 1990s and since then experience the demoscene in largely the same composition and visit demoparties, some currents have arisen whose followers (seem to be) less fond of new influx. Or at least that is how it is experienced by some newcomers, and that is a pity anyway, even though the actual intentions of such movements are often positively intended and they have influenced other newcomers (often people who grew up at the end of the last century) sometimes has an attractive effect because nostalgic feelings are evoked.

Due to the meritocratic nature of the demoscene, a statement or opinion of a more famous scener is sometimes wrongly accepted as true, while the opinion of a lesser-known scener or person from outside the demoscene turns out to be correct.

18. What are the opportunities for this intangible heritage?

Due to the general prevalence of streaming and video and audio-on-demand services among large parts of the population, a potentially huge audience is available for content created by us. Because much of our content concerns computer programs, these will first have to be converted to video format before they can be made available to the general public via platforms such as YouTube. This process is relatively laborious but is being steadily implemented by a large number of volunteers and there is now a video version of approximately 27,000 demoscene productions on YouTube.

Most viewers of such videos are still local and find the video they want through sites run by demosceners, such as Pouet and Demozoo. If we succeed in cracking the "YouTube algorithm", higher viewing figures are obvious. Another opportunity is to collaborate with YouTubers who have already managed to tap into a larger audience in order to reach a larger audience. Ultimately, the real chance is of course that people might decide to make a demo themselves, then the circle is complete.

We also see emulators as an opportunity. In short, an emulator is a program that imitates a certain computer platform. With such a program it is possible to make our archive accessible to a much larger audience than just the people who own a copy of the specific computer on which the production can run, especially in the case of emulators that are available as a website and thus can function on many modern platforms without an installation procedure.

Some population groups and regions are less strong or even hardly familiar with the demoscene. In such regions there are often few or no demo parties or other occasions

where demosceners meet. By supporting initiatives to organize demo parties in relatively unexplored parts of the world and by organizing online demo parties that are accessible to everyone worldwide with an internet connection, we have the opportunity to appeal to a much larger audience and perhaps motivate them to participate. .

There are many possibilities for crossovers and in our opinion this often yields interesting results for both parties. We try to take this into account when programming our own events and regularly and gladly take up opportunities to show our arts to a different audience. We see continuing to enter into these types of collaborations as a great opportunity to spread the demo scene further.

19. What are threats to this intangible heritage?

The average age of demosceners has risen sharply. In the 1980s and 1990s, the vast majority of visitors were under 30 or even under 20. The average age has now risen sharply, and at some gatherings the average is now (well) above 40. This naturally implies that the demoscene is aging and that insufficient growth of new participants to realize and stabilize participant numbers and numbers of released productions is imminent.

There are many other interesting leisure activities and more are being added in this modern society. For a while, the demoscene has consciously innovated relatively slowly, mainly for nostalgic reasons, and in 2023 some parts of the demoscene have still changed little since the 1980s or 1990s. For example, there are still several demo parties every year across Europe that are fully focused on the Commodore 64, a computer that came on the market in 1982 and has not been produced since 1994. Computers in general and storage media in particular do not last forever and therefore there is a risk that the audience will shrink because fewer and fewer people have a working computer of a certain type, that productions will be lost because backups have not been made before media rot hits , and that the demo scene is becoming less attractive to young people because they have less or no connection with older platforms and forms of competition.

Demoscene is a relatively unknown phenomenon for the general public and a number of reasons for strong growth in the past have disappeared over the years. Due to the link with cracked software from the 1980s, there was a kind of "viral marketing", everyone who wanted to play free games first got to see a crack intro and therefore the generation that grew up at the time is much more aware of the existence of the demoscene. After the cracking and demo scenes grew apart, the focus of the demo scene was for a long time on "doing one's own thing" and there was little initiative to achieve crossovers with other movements or otherwise appeal to a wider audience. In this way we have probably missed quite a lot of opportunities to do justice to the demoscene for a larger audience and the risk is that this will happen to us even more often.

20. What steps have been taken in the past to resolve weaknesses/threats/issues?

Unfamiliarity of the demoscene :
- Publicizing the demo scene by organizing (online) demo parties that everyone can participate in. This has been proven effective, the Dutch online demo party Lovebyte

has not only become the demo party with the most released productions worldwide out of nowhere, but has managed to activate several dozen previously unknown people for the demo scene since 2021.

- By providing regular streams on popular platforms, we hope to reach and interest a younger and wider audience. A good example of this is Field-FX's Twitch channel, which shows live coding sessions every week and people who want to try this live coding themselves can participate in a session the same evening.
- And also by providing demoscene streams, presentations, workshops, performances and the like as part of events organized by other cultural institutions, we hope to reach a wider audience and arouse interest. Good examples of this are the shows we did in collaboration with hacker camps such as MCH in the Netherlands and EMF in England and the show at the Neude that we organized together with Creative Coding Utrecht during Uitfeest, and the workshops the day after.
- Various reports, documentaries and articles have been published by external parties in which the demoscene is highlighted. This regularly generates many reactions and inspires some people to approach. We try to open up to interested reporters and cooperate with requests to film, investigate or interview. Good examples of this type of publication are the Hungarian documentary "Moleman 2 - The Art of Algorithms", the reports of ARTE tv about various French demo parties, or the columns and articles published by the well-known Dutch IT news website Tweakers.net and the British newspaper The Independent.

Appealing to a younger audience
- Since 2013, we have been organizing live programming competitions in addition to the traditional demoscene competitions. Where previously only the end result of the programming was shown on a screen at demo parties, with live coding all programming is done live on stage. The audience sees every letter of the code being typed by the programmer. Among the programmers is a DJ whose signal is connected to the microphone input of the programmers' PCs, which the programmers use to synchronize their effects with the music. This cross-media approach is much more insightful than traditional demoscene formats and therefore seems to resonate better with a young audience. The field of participants in these competitions is on average at least 10 years younger than the average age of the demo scene as a whole. Our approach is of course to continue this tradition and to continue to develop new formats in order to meet the taste of younger generations.
- By taking seriously and offering opportunities to young participants and volunteers, we try to keep them motivated and make it clear to other young people that the demoscene is not an elitist club of old men where newcomers cannot get a foot in the door
- During a demo party there are often workshops to introduce new sceners in making demos or live coding or online playlist such as 'Tiny Code Xmas'

Preservation of productions
- Soon after internet connections became more widely available in the nineties, the first demoscene archives appeared on the internet. One of these early internet archives (scene.org) has since become the generally accepted central archive of the demoscene. The board of scene.org consists of several sceners who are members of the Finnish association that finances and facilitates this archive. The central server of scene.org is located in the computing center of Rotterdam University of Applied Sciences. For scene.org and its daughter and sister projects, several dozen volunteers are active on an informal voluntary basis who sort and upload files and screen files submitted by the public.

- The scene.org archive is mirrored by servers all over the world, often located at a company or institution with which demosceners work or have close ties.
- Demosceners also maintain warm ties with the well-known Internet Archive. A well-known leader of the Internet Archive. Mr. Jason Scott, is also a former demo party organizer and founder of textfiles.com, one of the early "competitors" of scene.org. Scene.org now provides a mirror of textfiles.com and Internet Archive has supported and advised the demoscene in various ways over the years.

Workshops are also often organized during demo parties and other events to teach young people how to make their own demos.

Safeguarding the intangible heritage in the coming years

21. Below are several themes. State for each theme which problems or points for attention you identify with the assurance (if applicable). State for each theme which safeguarding action(s) you will undertake (if applicable). Note: Not all issues or concerns may have assurance actions and not all assurance actions arise from issues or concerns. Name them if possible.

A. Awareness/Promotion/Communication

Problems/point(s) of attention :
Relative unfamiliarity of the demoscene compared to some other digital hobbies

Guarantee action(s) :
- Making the demo scene known by organizing (online) demo parties because they are accessible worldwide, an example of this is from the Netherlands https://lovebyte.party/
- We will be offering live streams and recorded events more often via popular streaming platforms such as Youtube and Twitch
- We actively look for opportunities to increase awareness of the demo scene by joining other communities and organizing live shows, performances, workshops, etc. in collaboration with them. A good example of this is the collaboration with the Dutch hacker movement during MCH 2023.
- We will continue to cooperate with researchers, writers and documentary makers who (may) wish to publish about us and our activities in order to increase public awareness.

B. Education / knowledge transfer

Problems/point of attention(s)
Information, documentation and tools for new participants in the demoscene are often available but not easy to find.

Assurance action(s)
We improve the findability of already available information, documentation and tools by setting up targeted central indexes. For example, for the live programming component

https://livecode.demozoo.org/ has been created, effects created during short competitions or joint jams can be added by participants themselves. The site also contains an overview of already played and yet to be played matches and jams.

We try to organize seminars and workshops more often, as we have done before in collaboration with Creative Coding Utrecht.

Demo parties actively approach new entrants and, in addition to a podium, also offer some kind of course or trajectory to enable entrants to acquire the basic skills necessary for successful participation in these competitions. A good example of this is https://tcc.lovebyte.party/

C. Documentation / archiving / research

Problems/point of attention(s)
Old hardware and software are no longer available, due to media breaking or hardware not generally available.

Assurance action(s)
Much old hardware and software can be emulated on modern hardware. This is not the real original experience but can be a very practical way to archive it.

Individuals are actively searching for missing original floppy disks to complete archives. This usually requires special hardware and an 'image' is made of the floppy disk that can then be used by emulation software.

D. Collaboration with Others

Problems point(s)
Many collaborations are on an informal voluntary basis. This concerns sponsorship of activities and events, but also joint projects or partnerships with the aim of archiving the history of the demo scene. It could also be advantageous for shows and performances organized in collaboration with other more officially organized communities to set up a central organization with which external parties can speak, make agreements, and then be assured that even if a certain person, continuity of the demoscene can be expected.

Assurance action(s)
- The network we have already created on an informal voluntary basis and the data we have already collected and archived is comprehensive and of a caliber of completeness that can be called unusual for a community of creative volunteers. Nevertheless, we must continue to work on consolidating existing cooperation in the field of data distribution and storage, as this is currently largely arranged informally.
- More actively looking for partnerships with organizations outside the demo scene that could facilitate an even more permanent safeguarding of the archive we have built up. There are organizations that have the explicit aim of safeguarding certain archives for future generations and that is ultimately our ambition. It would be useful to find out whether such organizations are willing to help safeguard our archive.
- Where necessary, consolidate our internal organization so that better agreements can be made (not with a single contact person, but with an organization on behalf of all of us, where possible in black and white instead of informally).

E. Within the community/group/organization

Problems/point of attention(s)

Assurance action(s)

F. Reaching new target groups

Problems/point of attention(s)
Demoscene is a relatively small niche hobby.

Assurance action(s)
Trying to enthuse active demosceners to do outreach activities at organizations outside the demoscene (lectures, screenings, seminars, workshops, competitions, etc)

Also make it possible during existing demo parties that people who are unfamiliar with demoscene get inspired. This is already happening through live streaming of events and holding online competitions, this could be further expanded.

G. Youth/youth

Problems/point of attention(s)
As described earlier in the safeguarding plan, the Demoscene has existed since the introduction of home computers and there is a chance that the demoscene is becoming less attractive to young people today because they have less or no connection with older computer platforms. Aging within the demo scene is a point of attention for us

Assurance action(s)
Within the demo scene, specific activities are developed to enthuse young people, such as special introductory events at demo parties or teaching the art of coding in schools by volunteers from the demo scene. By bringing this to the attention of this target group and offering opportunities to and from young participants, we try to get and keep them motivated. Also described earlier, it appears that young people have come into contact with the demoscene-related fields in a different way.

H. Laws and regulations / permits / spatial planning
Problems/point of attention(s)

Demo parties are held at physical locations that sometimes require a permit. The local administrators might not be able to understand the demoscene and therefore reject an application.

There have also been several complaints about noise nuisance following demo parties.

Assurance action(s)
Trying to explain demo parties well to (local) administrators, through good documentation of background and positive effects of demoscene.

If enforcement or the police come by or report otherwise, the organizers will cooperate and try to find an acceptable solution in consultation.

I. Finances / Income

Problems/point of attention(s)
Demo parties are usually organized by people who do not have an official foundation or other organizational form. This puts the person in question at financial risk, which is undesirable. We regularly rely on Chamber of Commerce registrations of sceners who are active as freelancers or entrepreneurs.

Assurance action(s)
Covering risks by setting up foundations or other official bodies.

J. Parts of the heritage that are discussed in society

Problems/point of attention(s)
One of the ethical discussions now taking place within the demoscene is the emergence and application of Artificial Intelligence (AI). This is probably the same kind of discussion as in many other (creative) communities.

Some demosceners see the use of AI as an interesting and innovative way to explore new possibilities and push boundaries in demos creation. AI techniques can be used to generate complex images, effects or animations that would otherwise be difficult or time-consuming to create by hand. This can lead to new forms of artistic expression and technical challenges.

On the other hand, there are also demosceners who are concerned about the ethical implications of using AI in the demoscene. This can range from "stealing" others' work to train an AI model to concerns about AI's influence on creativity, originality and the human factor in the creation of demos themselves.

There is also a risk of polarization within the demoscene about whether or not to allow the use of AI for the creation of demoscene material.

Assurance action(s)

AI is now more widely available with text to art and ChatGPT and therefore important to realize that the demoscene is a diverse and inclusive community, with different opinions, values and beliefs. As a safeguard, we must conduct discussions about the use of AI and its ethics in an open and respectful manner, taking into account the diverse viewpoints within the demo scene and the wider digital creative community.

An example that has been discussed is to add a separate specific category to demoscene parties for AI generated content.

Sustainability

Problems/point of attention(s)
For ESG (sustainability), demoscene knowledge can be an opportunity instead of a (negative risk). When making demos, the makers are often looking for ways to get the best possible performance out of their computers. This requires efficient and optimized code. This is the same kind of code that also contributes to reducing the energy required by (enterprise) software and therefore to green software. Demosceners can help create awareness about the importance of energy-efficient code (among new software developers in business, but also in schools and universities), by sharing best practices and tips. This can also help raise awareness in the wider IT industry of the benefits of reducing the environmental footprint of software.

Assurance action(s)
As a point of attention, the knowledge and experience of being able to program efficiently is an example for many software developers. There is now a lot of attention within the business community and demosceners can share their knowledge and experience, as is done at ASML in Veldhoven.

When organizing demo parties, attention can be drawn to setting them up as sustainably as possible with green electricity and reusable facilities (no plastic).

In addition, people in the demo scene have a lot of experience in keeping old hardware up and running, so that it is used longer or used in a different way that contributes to the circular economy.

22. Are there other communities/groups/associations/in some cases an individual active within the same/comparable intangible heritage and if so, is there active contact with them?

Demoscene is an international community, in some countries intangible heritage status has been applied for and granted. (Poland, Finland and Germany). We communicate with each other through Art of Code with the aim of obtaining this recognition on a global level.

As far as we know, there are no similar initiatives in the Netherlands. However, there are active groups and organizations that specialize in a particular discipline that is also part of the demoscene tradition, for example "chiptune music", "live coding" or "pixel art". Many of these groups and organizations involve people who are also active as demosceners, and vice versa, people from these movements regularly leave or transfer to the demoscene. By participating in each other's initiatives, active contact is maintained naturally and effectively. The disadvantage of this approach is that the contact is relatively fragmented in nature.

23. Photos and video of the intangible heritage.
Shared photos on google drive.

Links to videos
Revision Demopary - https://www.youtube.com/@revisionparty
Lovebyte (online) - https://www.youtube.com/@Lovebytedemoparty
▶ Tiny Code Christmas - Day 1
psenough demo scene reports - https://www.youtube.com/@psenough
FieldFx - https://www.twitch.tv/fieldfxdemo
ID2022 - Seminar: Roundtable on past and future of demoscene
Gaspode - Demoscene Alphabet https://www.youtube.com/watch?v=eq8pf58Y4d4
Shader Showdown Finale 2018 https://www.youtube.com/watch?v=ZwR0zFe57Y4
Shader Showdown Quarterfinals 2019
https://www.youtube.com/watch?v=4GRD1gCX7fk
Byte Battle 2021 Semifinal https://www.youtube.com/watch?v=sjQ5vr05-yQ

24. Bibliography

- Art of Code http://demoscene-the-art-of-coding.net
- Demoscene: The Art of Real-time by Markku Reunanen.
- Demoscene Research (a collection of scientific material concerning the demo culture) http://www.kameli.net/demoresearch2/
- Got Papers? Preserving the demoscene's material heritage https://gotpapers.scene.org/
- Online disc magazineshttps://diskmag.conspiracy.hu/

25. Other Appendices

Scene.org https://scene.org/
Pouet :https://www.pouet.net/
Demozoo : https://demozoo.org/
Commodore 64 archive :https://csdb.dk/
Commodore Amiga Archivehttp://janeway.exotica.org.uk/search.php
Textfile art archivehttp://textfiles.com/
Demoscene live coding archivehttps://livecode.demozoo.org/
Blog demoscene https://6octaves.blogspot.com/p/demoscene.html
Demo party calendarhttps://www.demoparty.net/

Amiga Hardware Programming
Teach Yourself Demoscene in 14 Days
Demoscene Research