

# Olfactory Storytelling Toolkit (OST)

## Deliverable D7.4

Version DRAFT



# Odeuropa

NEGOTIATING OLFACTORY AND SENSORY EXPERIENCES IN CULTURAL HERITAGE PRACTICE AND RESEARCH



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<b>Abstract:</b>	<i>The Olfactory Storytelling Toolkit: A 'how-to' Guide for Working with Smells in GLAMs and Heritage Institutions (OST)</i> is an open access resource created for conservators, curators, educators, tour guides, museum directors, archivists, librarians, and all others who are interested to work with smells in a heritage context. Its contents are based on the research carried out by members of the Odeuropa project. The guide is an online resource which is available via the Odeuropa website. The main goal of the resource is to provide a basis for cultural heritage professionals to use smell as a storytelling technique within their curatorial practices. It outlines best practices, procedures and instructions for using olfactory storytelling. In this document, we will describe the aims and development of the Olfactory Storytelling Toolkit, as well as its structure and our dissemination and exploitation strategy upon its release. The Olfactory Storytelling Toolkit can be reached at <a href="https://odeuropa.eu/the-olfactory-storytelling-toolkit/">https://odeuropa.eu/the-olfactory-storytelling-toolkit/</a> . This deliverable should be read alongside other impact related reports: <i>Guidelines on the use of smells in GLAMs (D6.1)</i> , <i>Questionnaires for Measuring the Value of Introducing Smells in GLAMs (D6.3)</i> and the <i>Odeuropa Impact Activities Report Year 1 (D2.2)</i> , and <i>Year 2 (D7.3)</i> .

## Table of Revisions

Version	Date	Description and reason	By	Affected sections
0.1	31 July 2023	Draft	S.C. Ehrich	All
0.2	11 August 2023	Internal review	W. Tullett, R. Troncy	All
0.3	14 August 2023	Revision after Review	S.C. Ehrich	All
0.4	18 August 2023	Second internal review	S. Tonelli; I. Lee-mans	All
0.5	28 August 2023	Revision after review, Additional section	S.C. Ehrich; I. Lee-mans	All
1.0	30 August 2023	Final check and approval by project manager	Marieke van Erp	-

## Executive Summary

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### Summary table

<b>Challenges</b>	The main challenges of developing the <i>Olfactory Storytelling Toolkit (D7.4)</i> and the connected tasks and deliverables were twofold. The first challenge was the broad lack of knowledge around the value and application of olfactory storytelling in GLAMs (galleries, libraries, museums, archives). The second challenge was reviewing and organising the knowledge we gained throughout the course of the project and compiling this together into a "toolkit" that is accessible and relevant to our target audience (GLAM professionals).
<b>Barriers</b>	The Covid-19 pandemic posed barriers for the tasks and impact activities related to this deliverable. In person meetings and workshops with GLAM professionals had to be scheduled online. To reach comparable 'nose-on' experiences we designed a set of offline olfactory knowledge strategies such as mailing smell kits and DIY Scent Programs. To ensure further hands-on engagement with GLAM professionals, we planned lectures and seminars that specifically targeted these audiences.
<b>Practices</b>	<b>D7.4</b> (coordinated by WP7) required the successful organisation and documentation of the events and workshops: Working with scent in GLAMs - Best Practices and Challenges, Follow Your Nose. A Guided Tour with Smell, Malodours as Cultural Heritage?, City Sniffers: a smell tour of Amsterdam's ecohistory, and Improve Your Olfactory Language <b>T7.2-T7.6</b> . Additionally, coordination with WP5 and WP6 was necessary via the completion of <i>Identifying existing smell narratives in museological and heritage practice (T5.2)</i> , <i>Assessment study: 'Biases and concerns of olfactory experiences in GLAMs (T6.1)</i> and <i>Digital resource reuse: measuring impact of olfactory museology techniques(T6.2)</i> . The completion of <b>D7.4</b> also required the completion of related deliverables <i>Guidelines on the use of smells in GLAMs ((D6.1)</i> , <i>Questionnaires for measuring the value of introducing smells in GLAMs (D6.2)</i> <i>Impact Activities Report Year 1 (D7.2)</i> , and <i>Impact Activities Report Year 2 (D7.3)</i> ). Throughout the development of the above activities, we learned that there are different opportunities for collaboration and knowledge exchange within olfactory museology practise. To ensure that <b>D7.4</b> represented various perspectives within the field and was applicable to all of our target audiences, we <b>(1)</b> invited external contributions from interdisciplinary experts and <b>(2)</b> conducted an external review with representatives from the GLAM sector and scent industry.
<b>Guidelines</b>	<b>D7.4</b> in itself is a guideline for working with smells in GLAMs. It is a basis for establishing best practices and guidelines for bringing scents to GLAMs and intends to be the starting point for future research efforts.

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## 1 Introduction: State of the Art

At the start of the Odeuropa project in 2021, cultural heritage institutions had already been experimenting with olfactory approaches for some time. Academic research started to capture this new trend, describing the potential for incorporating olfactory storytelling in GLAMs [Drobnick et al., 2006, Verbeek, 2016, Castel, 2018, Classen, 2007]. Methods for multisensory storytelling were projected to offer novel and innovative ways to present collections and a competitive way to attract new visitors. However, although the impact of olfactory approaches in GLAMs was projected as high, this was not yet based on robust scientific research. Furthermore, there were still many unanswered questions around the contextualisation and distribution of scents in museums and around the risks that those scents may pose to such environments [Spence, 2020].

To resolve these concerns, the Odeuropa project initiated a baseline measurement capturing **(1)** the interest for olfactory storytelling in GLAMs (galleries, libraries, archives, museums); **(2)** the values of olfactory storytelling within the cultural heritage sector; and **(3)** the concerns of GLAM professionals around olfactory storytelling. These issues were analysed in the deliverables *Guidelines on the use of smells in GLAMs (D6.1)*, and carrying out *Questionnaires for measuring the value of introducing smells in GLAMs (D6.2)*.

While our baseline measurements proved the significant interest and enthusiasm for the use of olfactory storytelling in cultural heritage institutions and the impact these methods has on their visitors, the results of our research showed that many challenges and questions remain. Questions include: how to present odours in GLAM environments in a way that leads to worthwhile storytelling? How to address issues around the authenticity and transparency of heritage scent representations? Is there conclusive scientific evidence that legitimises different values of olfactory storytelling in GLAMs? And how to safely and effectively present and distribute scents in GLAMs? This last question is crucial as the presentation and distribution methods employed for olfactory storytelling design are often viewed as hazards to the GLAM environment by heritage professionals. This is the case even though low but perceivable amounts of VOCs (volatile organic compounds) do not pose a risk to the artworks and surrounding environment (staff, visitors, and collection items) [Strlič et al., 2009].

The Odeuropa project set out to address these concerns. We analyzed the pros and cons of olfactory storytelling through experiments within the cultural heritage sector: by organizing olfactory events, trying out various methodologies for scent representations and distributions, and by organizing visitor impact measurements. These activities informed solutions to the challenges and barriers which exist within the field of olfactory museology and helped to better understand what was still lacking.

The Odeuropa project aimed to equip GLAM institutions and professionals with methods and guidelines for olfactory storytelling by publishing the *Olfactory Storytelling Toolkit (D7.4)*. The Olfactory Storytelling Toolkit (**OST**) informs and educates GLAM professionals about the (opportunities of) existing olfactory storylines, objects and environments that lie within their heritage collections and provide them with the resources necessary to use olfactory storytelling techniques and bring these topics through to their visitor engagement strategies. We achieved this via further research into the state-of-the-art of current olfactory event design (scent distribution techniques), experimentation with these different methodologies via Odeuropa's olfactory events, and lastly, by developing methodologies for conservators and curators to use when creating and evaluating scents as well as information on how to safely employ these techniques in GLAM environments.

Over the course of the Odeuropa project (2021-2023), the need for the **OST** became even more critical. Occurrences of olfactory events and exhibitions are rising (e.g. *Fleeting - Scents in Color (2020-2021)*, *Odore (2021)*, *Smell It! (2021)*, *L'Odysée Sensorielle (2021-2022)*, *Es-Senze (2022)*, *Respirer L'Art (2022-2023)*, and *Sensational Books (2022)* etc.) in addition to a boom of smell (culture) research and appreciation through the recent establishment of international olfactory-related institutions and businesses (e.g. *Olfactory Art Keller (2020)*, *World Taste and Smell Association (2021)*, and the *Smell Studies Group* etc.). Since the announcement of the project at the end of 2019, Odeuropa received dozens of requests from GLAM institutions, researchers

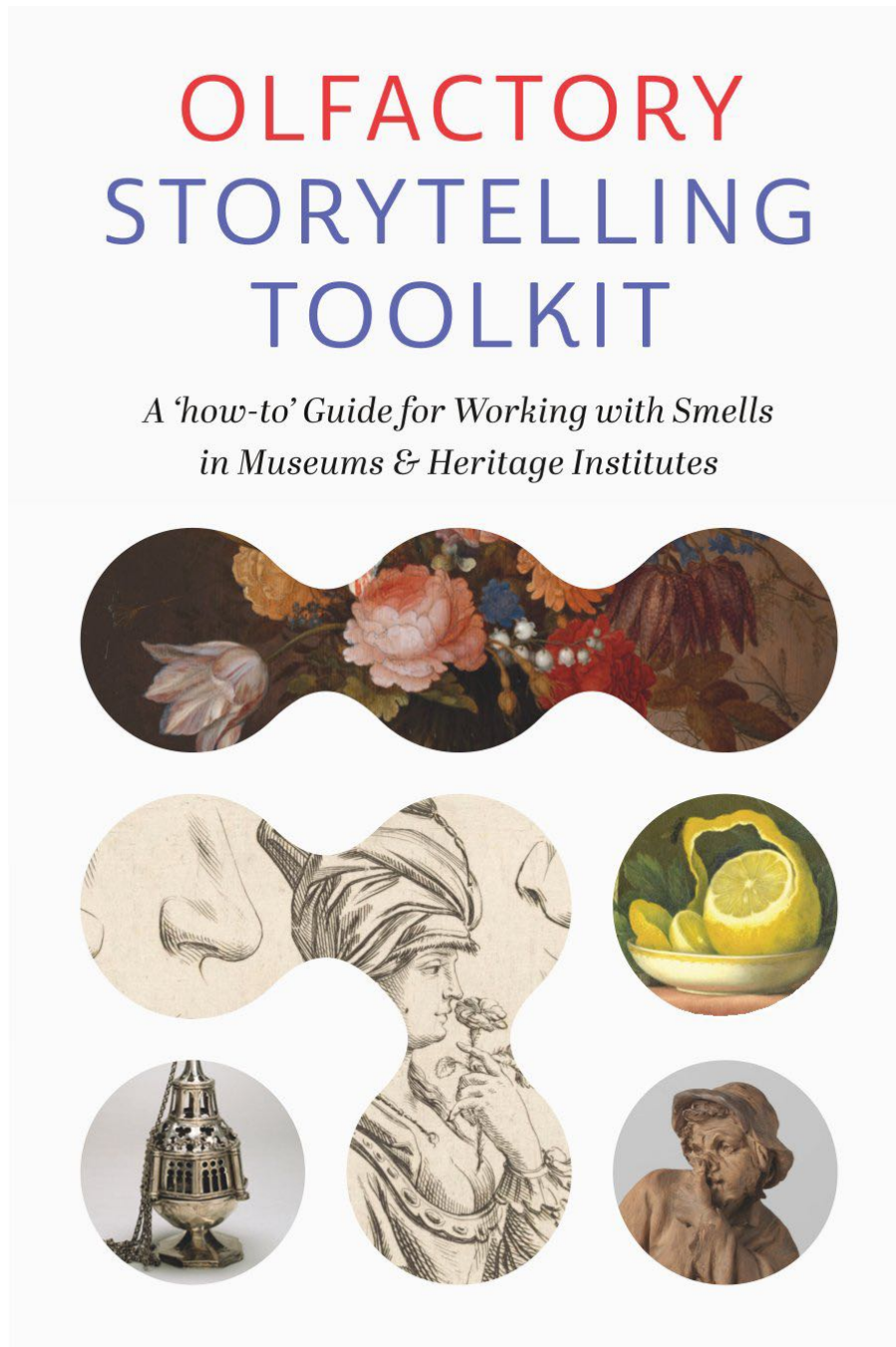


Figure 1: Draft Cover for the Olfactory Storytelling Toolkit: A “how-to” Guide for Working with Smells in Museums and Heritage Institutions designed by Mijke Wondergem.



and individuals who sought advice for using olfactory storytelling techniques in their own projects and events. Over 200 institutes and individuals signed up for the Odeuropa network to keep track of its progress, while the Odeuropa X (formerly Twitter) account has reached 1660 followers. The release of the **OST** will serve as a response to these interests, as well as a starting point for future research in the field of olfactory and sensory museology.

## 2 Development of the Olfactory Storytelling Toolkit

In this section, we will outline the initial goals, challenges, development and impact activities that contributed to the end result of this deliverable. The initial development and impact activities included Odeuropa's olfactory events and stakeholder engagement via various outputs.

### 2.1 Goals

The **OST** works towards three main objectives of the Odeuropa Project. Firstly, it supports the claim that critically engaging our sense of smell and our olfactory heritage is an important and a viable means for connecting and promoting Europe's tangible and intangible cultural heritage. Secondly, it is a resource that contributes to the tangible impact of digital heritage collections, by allowing different stakeholders and audiences to freely access and interact with Odeuropa's data, olfactory storylines, and strategies for olfactory storytelling and olfactory heritage science. Thirdly, it contributes to the education and training of cultural heritage professionals in the use of olfactory heritage strategies as well as raises the benefits and value of their implementation.

To address these aims, the knowledge and results of the activities carried out in WP5, WP6 and WP7 informed the development of ***The Olfactory Storytelling Toolkit: a "how-to" Guide for Working with Smells in Museums and Heritage Institutions (OST)***. To accommodate a broad user group, the **OST** is designed as an open-access resource, providing information and best practices for using olfactory storytelling in cultural heritage institutions. The resource is intended to be both practical and theoretical. It combines aspects developed from the state of the art researched by WP5, the historical team of Odeuropa (*Identifying existing smell narratives in museological and heritage practice (T5.2)*) as well as scientific evidence drawn from the interviews and questionnaires conducted by WP6, the olfactory heritage science team (*Assessment study: Biases and concerns of olfactory experiences in GLAMs (T6.1)* and *Digital resource reuse: measuring impact of olfactory museology techniques (T6.2)*). The **OST** is coherent with the other public facing deliverables: Demonstrators for Olfactory Heritage (**D4.6**) and Online Encyclopaedia of Smell Heritage (**D5.3**). Deliberate actions were taken to align these tools in terms of content, usability, and design.

### 2.2 Challenges

The main challenges of developing the **OST** and its connected tasks and deliverables were twofold. The first challenge derives from the overall lack of knowledge surrounding the value and application of olfactory storytelling in GLAMs. Historically, museological and art historical disciplines tend to be ocular-centric, meaning that most of the individuals who are a part of these professions are trained to approach heritage environments and collections with their eyes. [Levent and Pascual-Leone, 2014] They may lack the specific knowledge to detect olfactory narratives, topics, and objects within their collections and may not be accustomed to deliberate sensory engagement with(in) heritage environments. In fact, many conservators are quite cautious about olfactory storytelling, as the incorporation of these methods or the process of preservation for olfactory materials and artefacts can be seen as hazards to the GLAM environment (whether that is the object itself, staff, or visitors). We worked towards resolving this challenge by (1) organising olfactory events that specifically targeted GLAM professionals who had never used olfactory storytelling methods before; (2) conducting interviews with diverse olfactory experts to



better understand the existing challenges and barriers of olfactory storytelling in GLAMs; and **(3)** researching and testing various types of olfactory event design and the risks they pose on heritage spaces.

The second challenge was in the coordination and compiling of the information and knowledge we developed throughout the course of the Odeuropa project as well as making this information accessible to cultural heritage professionals. A considerable amount of research and testing went into the development of Odeuropa's olfactory events (the workshop *Working with scent in GLAMs - Best Practices and Challenges*; the olfactory guided tour *Follow Your Nose! A Guided Tour with Smell*, the workshop *Malodours as Cultural Heritage?*, the urban tour *City Sniffers: a smell tour of Amsterdam's ecohistory*, and the hackathon *Improve Your Olfactory Language (T7.2-T7.6)*) and the deliverables that were connected *Guidelines on the use of smells in GLAMs (D6.1)*, *Questionnaires for Measuring the Value of Introducing Smells in GLAMs (D6.3)*, *Impact Activities Report Year 1 (D7.2)*, and *Impact Activities Report Year 2 (D7.3)*.

In preparation of the **OST** content development, the results of these previous tasks and deliverables were carefully reviewed. To ensure that the content of the **OST** encompassed key learnings from our previous activities and met the needs of our target audience, close collaboration within the Odeuropa team was essential. We ensured this through **(1)** cross work package meetings to identify key outcomes of previous tasks and activities and discuss the best way to incorporate these into the **OST**; **(2)** attendance to workshops and conferences intended for a GLAM audiences as well as inviting GLAM audiences to Odeuropa activities where we could test out different parts of the **OST**; **(3)** the inclusion of external contributions to the **OST** by GLAM professionals; and **(4)** organising a formal external review of the first draft of the **OST** including individuals from the GLAM sector.

## 2.3 Initial Development and Impact

### 2.3.1 Impact Activities

The main goals of the impact activities which contributed to the development of the **OST** were firstly to build and activate a diverse network of stakeholders — especially within the cultural heritage sector. Secondly, it was important to collect experiences and concerns from experts already working with scents in GLAMs to better understand what knowledge was lacking in the field. Lastly, we aimed to research, apply, test and evaluate olfactory storytelling techniques for their efficiency. Overall, the impact activities carried out throughout the project gleaned positive results for the **OST**, especially their successful implementation of olfactory and digital methods (applications, demonstrators, databases, digital collections). This brings the results and outcomes of project full circle, ensuring that the **OST** considers all aspects and outcomes of the project when educating GLAM professionals on the best practices and guidelines of olfactory storytelling.

The impact activities outlined and summarised in the Impact Activities Report Year 1 (**D7.1**) and Impact Activities Report Year 2 (**D7.3**) were crucial to the development of the (**OST**). Impact activities refer to Odeuropa's olfactory events as well as various communication, dissemination and exploitation activities. The Odeuropa project organised five olfactory events including three workshops: *Working with scent in GLAMs - Best Practices and Challenges (T7.2)*, *Malodours as Cultural Heritage? (T7.4)* and *Improve Your Olfactory Language (T7.6)*; and two curated events: *Follow Your Nose! A Guided Tour with Smell (T7.3)* and *City Sniffers: a smell tour of Amsterdam's ecohistory (T7.5)*. All these events successfully collected information from stakeholders as well as tested and evaluated olfactory storytelling techniques.

To continue the communication of Odeuropa's goals and expertise to the target audiences of the **OST** and activate this network of different stakeholders, throughout the development of the **OST**, members of the Odeuropa project tested, communicated and evaluated various tools and content as it was being developed. This was achieved via various presentations and publications. Presentations where the **OST** received feedback from stakeholders (GLAM professionals, scent experts, scholars) include [Museum Next Digital Exhibitions Summit \(N= 150\)](#) [Memory of Scent Workshop \(N=42\)](#), [Immersive Media Conference 2023 for the Swedish Heritage Board \(N=60\)](#),



Figure 2: Stakeholders participating in a workshop around the **OST** resource, *The Heritage Scent Design Brief* at the Lorentz workshop, <https://www.lorentzcenter.nl/nose-wise-modelling-smell-as-a-cultural-phenomenon.html> Nose Wise: Modelling Smell as a Cultural Phenomenon in July 2023. Photo credit to Sofia Collette Ehrich.

<sup>1</sup> Europeana Digital Storytelling Festival 2023 (N=160), and the Lorentz workshop, *Nose Wise: Modelling Smell as a Cultural Phenomenon* (N=25). Furthermore, the advisory board was invited to comment on the **OST's** development and vision in May 2023.

Through collaborations with the *American Historical Review*, we were able to create an online teaching module to encourage teachers to use smells and embodied learning in their own teaching practice. Additionally, we were able to test distribution methods via the production of two printed scent cards as well as disseminate and publish early methods and guidelines for olfactory storytelling.<sup>2</sup>

The Odeuropa project always put the inclusion of GLAM professionals in our impact activities at top priority. Collaboration and discussions with these individuals – our collaborations with Museum Ulm in Germany and the Amsterdam Museum in the Netherlands for example – was another important part of developing the **OST** in a way which meets the expectations of our target audience.

<sup>1</sup>View Sofia Collette Ehrich's presentation, *How Can We Smell History? – Mapping Out Modes of Olfactory Event Curation* on the Riksantikvarieämbetet YouTube Channel: <https://www.youtube.com/watch?v=YByb-wbXw6E>.

<sup>2</sup>see Leemans, I., Tullett, W., Bembibre, C., and Marx, L. (2022). "Whiffstory: Using Multidisciplinary Methods to Represent the Olfactory Past." *American Historical Review*, 127(2), 849-879. [https://research.vu.nl/ws/portalfiles/portal/221554457/Whiffstory\\_Using\\_Multidisciplinary\\_Methods\\_to\\_Represent\\_the\\_Olfactory\\_Past.pdf](https://research.vu.nl/ws/portalfiles/portal/221554457/Whiffstory_Using_Multidisciplinary_Methods_to_Represent_the_Olfactory_Past.pdf) and Marx, Lizzie, et al. "Making Whiffstory: A Contemporary Re-creation of an Early Modern Scent for Perfumed Gloves." *The American Historical Review* 127.2 (2022): 881-893. [https://research.vu.nl/ws/portalfiles/portal/221553739/Making\\_Whiffstory\\_A\\_Contemporary\\_Re-creation\\_of\\_an\\_Early\\_Modern\\_Scent\\_for\\_Perfumed\\_Gloves.pdf](https://research.vu.nl/ws/portalfiles/portal/221553739/Making_Whiffstory_A_Contemporary_Re-creation_of_an_Early_Modern_Scent_for_Perfumed_Gloves.pdf).



Figure 3: Sofia Collette Ehrich presenting the **OST** to a group of stakeholders at the **Memory of Scent Workshop** in October 2022. Photo credit to Inger Leemans.



### 2.3.2 Impact Measurement

At the start of the Odeuropa project, we understood that many GLAM professionals were not trained to work with smell and that standardised practices and methodologies to do so meaningfully did not yet exist. This lack of knowledge resulted in an overall reluctance to incorporate olfactory storytelling in GLAMs.<sup>3</sup> The avoidance of scents in heritage spaces prevented GLAM institutions from taking advantage of the possibilities and benefits that can result from olfactory storytelling. This is where scientific evidence of the value and impact of smell in GLAMs was crucial. Although using scent in GLAM institutions was not a new concept, a methodology for understanding the impact and value of their inclusion had not yet been developed.

To work towards this methodology, the Odeuropa team conducted interviews with olfactory experts and developed questionnaires as part of the impact measurement. Firstly, *Guidelines on the use of smells in GLAMs (D6.1)* outlined the existing barriers and concerns that GLAM professionals have for working with smells. Secondly, *Questionnaires for measuring the value of introducing smells in GLAMs (D6.3)* established scientific standards to measure the impact of olfactory storytelling in heritage environments. Questionnaires were conducted at Odeuropa's own olfactory events as well as those across Europe. We reached over 800 GLAM visitors who described their experiences of engaging with olfactory storytelling. This data was central to the development of the **OST** as it provided significant, scientifically measured results which communicated the potential impact smell has on visitor experience. We were able to incorporate these findings into the **OST** content not only as a way to encourage olfactory storytelling but to also legitimate its impact.

### 2.3.3 External Review

To legitimise the creation of the **OST**, we organised an external review of the first draft of the contents of the **OST** and its related resources. The reviewers included two GLAM professionals (one familiar with olfactory storytelling and the other unfamiliar with olfactory storytelling), one master's student in the museum and cultural heritage sector who is also a curator, and one founder and director of a non-profit institution dedicated to open access education for perfumery as well as to arranging olfactory art and events for the community.

The external reviewers of the **OST** are listed below (in alphabetical order):

- (1) **Marie Clapot**<sup>4</sup> is a sensory museologist, disability justice advocate, and associate museum educator for Accessibility at the [Metropolitan Museum of Art](#) in New York City.
- (2) **Emma Giessmann**<sup>5</sup> is currently completing her Master's in [Cultural Heritage and Museum Studies](#) at Deakin University and working as a curator at [Museums Victoria](#) in Melbourne, Australia.
- (3) **Dr Sarah Grant**<sup>6</sup> is a Senior Curator in the Art, Architecture, Photography and Design Department at the [Victoria and Albert Museum](#), in London, United Kingdom.
- (4) **Saskia Wilson-Brown**<sup>7</sup> is the Founder and Executive Director of the [Institute for Art and Olfaction](#) Los Angeles, California, in the United States.

To carry out the review, the reviewers were provided with all the written content and 11 resources of the **OST** as well as an evaluation form to guide their process and feedback.<sup>8</sup> Reviewers were provided one month to carry out the review. All necessary content of the **OST** was

<sup>3</sup>See *Questionnaires for measuring the value of introducing smells in GLAMs (D6.1)*

<sup>4</sup><https://www.researchgate.net/profile/Marie-Clapot>

<sup>5</sup><https://www.linkedin.com/in/emma-giessmann-648646193/?originalSubdomain=au>

<sup>6</sup><https://www.vam.ac.uk/blog/author/sarahgrant>

<sup>7</sup><https://artandolfaction.com/saskia-wilson-brown/>

<sup>8</sup>The **OST** will have consist of a downloadable PDF book that can be downloaded in its entirety. The 11 resources to assist olfactory storytelling projects will be available separately via the Odeuropa website.

provided in a way which was difficult to duplicate or share prematurely. Documents and resources were watermarked and a notice of confidentiality was placed at the beginning of the document as well as in the emails exchanged with the reviewers.

Overall, the review of the **OST** was positive. The reviewers found all the content and resources clear and useful. They all expressed that they would use this information to create their own events. They found the overall choice of language and structure accessible and relevant to the target audiences. Critique was mostly in relation to design, format and usability of the **OST**. Many reviewers expressed that it was difficult to differentiate between chapters and sections as well as the *smell manifestos*, *case studies* and various resources. These concerns will be addressed during the layout design process.

The reviewers provided helpful tips for improvement. Firstly, they suggested improvements in terms of terminology and language, especially for the titles of sections and chapters. Secondly, it was suggested to better differentiate between olfactory art and olfactory storytelling. And lastly, reviewers suggested to create a resource or diagram that helps navigate the **OST** as a whole. The Odeuropa project carefully reviewed the feedback forms and implemented the suggestions.

A few reviewer observations, which we report in their original form:

- (1) “The case studies were quite engrossing (to me at least). I made audible *wow’s* whilst reading and it definitely got me thinking about how I could utilise scent in my own practice. The Tasha Marks and Claire Dobbin case study especially demonstrated how scent is both a deeply personal experience (linked to memory and nostalgia) whilst also being universal (providing new opportunity pathways for engagement and diversity of experiences)”.
- (2) “The resource is very helpful, in particular the statistics you give from your survey of visitors, as the main goal in incorporating olfactory experiences. [It shows] our museum would be able to attract and engage with younger and more diverse audiences (not just our core visitor group) and help to ‘unlock’ our permanent collections in new ways/make our pre-20th-century collections relevant to today’s museum goers”.
- (3) “I am so excited that this will soon become a resource accessible to so many! Congratulations to all of you!”

(see Appendix A for the *Olfactory Storytelling Toolkit Review Form*.)

### 2.3.4 Case Studies for Inspirational Olfactory Storytelling

One of the challenges of the **OST** was to ensure that the resource is representative of the interdisciplinary nature of olfactory museology. To achieve this, the **OST** includes external contributions from olfactory experts. This provides the opportunity to **(1)** engage with and bring attention to the interdisciplinary network we built from WP7’s impact activities and **(2)** present knowledge that goes beyond the authors of the **OST**. The external contributions are meant to inspire and inform users of the **OST** to use olfactory storytelling in their own practice as well as provide tangible examples of how this has been done successfully in the past.

External contributions to the **OST** were organised by contacting individuals that engaged in Odeuropa’s impact activities (e.g. *Workshop Working with Scent in GLAMs - Best Practices and Challenges (T7.2)*) and GLAM professionals who have experience with olfactory storytelling techniques. A template, which was developed by the Odeuropa team, was sent around to collect meaningful experiences and best practices. (See Appendix B for the *Template for Contributions of Inspirational Olfactory Storytelling*.)

Upon receiving the answers to these templates, members of the Odeuropa team reviewed the answers and organised the information into informative *Case Studies*. In total, we curated six case studies from seven different olfactory storytelling experts. Each case was created and arranged into a relevant section of the **OST**.

Find details of each *Case Study* below (in alphabetical order):

- (1) **Marie Clapot**<sup>9</sup> is a sensory museologist and the associate museum educator for Accessibility at the **Metropolitan Museum of Art** in New York City. She contributed the knowledge she acquired through the educational programming she has organized for visitors to the MET. She offered tips that were particularly helpful to better understand how olfactory storytelling can contribute to broadening accessibility efforts. Clapot's case study is part of **OST Section 1: Curating Olfactory Narratives**.
- (2) Freelance curator **Claire Dobbin**<sup>10</sup> and sensory consultant **Tasha Marks**<sup>11</sup> worked together on the olfactory exhibition, *London: Port City* at the **Museum of London Docklands** from 2021 to 2022. This case study is presented via a full length interview with the two of them that offers a unique perspective of how a sensory consultant and curator can work together to create a project featuring olfactory storytelling. Marks and Dobbin provided suggestions for developing authentic heritage scents based on lived experiences of a particular community as well as for olfactory exhibition design. Marks and Dobbin's case study is part of **OST Section 2: Creating a Heritage Scent**.
- (3) Olfactory event design expert and scent designer **Jorg Hempenius**<sup>12</sup> has been working on museum olfactory events for many years. This case study outlines knowledge he has collected working on various olfactory event design projects. He provides tips and tricks for choosing a scent distribution method that meets the museum's needs. Hempenius' case study is part of the **OST Section 3: Olfactory Event Design**.
- (4) **Ineke Huysman**<sup>13</sup> is a senior researcher at **NL-Lab** and the **Huygens Institute for the History of the Netherlands**. She is currently the coordinator for projects around the letters of Constantijn Huygens, Johan de Witt, and Dutch and Frisian Stadtholders' Wives. This case study is based on the knowledge she acquired working on a project called, *Geheugen van Geur* (Memory of Scent). She spoke on behalf of the entire *Geheugen van Geur* team about the experience of recreating Constantijn Huygens' (1596-1687) *Ode de Parfum: To My Mother* (c. 1635). Huysman's case is part of **OST Section 1: Curating Olfactory Narratives**.
- (5) **Lizzie Marx**<sup>14</sup> is an art historian and curator at the National Gallery of Ireland in Dublin. She has worked on various olfactory events including those of Odeuropa. Her case study is based on the knowledge she acquired while co-curating Odeuropa's event *Follow Your Nose! A Guided Tour with Smells* (2021-present) in collaboration with **Museum Ulm** and **IFF**. This case study is presented via an interview where Marx offers her personal experience of working on the project particularly the research she carried out to develop the heritage scents as well as her observations of participants of the tour. Marx's case is placed in **OST Section 3: Olfactory Event Design**.
- (6) **Caro Verbeek**<sup>15</sup> is a sensory art historian and curator at the **Kunstmuseum Den Haag**. She has coordinated many olfactory events. Her case study is based on the knowledge she acquired as the curator and coordinator of the project, *In Search of Scents Lost - Reconstructing the volatile heritage of the avant-garde* which took place at the **Rijksmuseum** in Amsterdam from 2014 to 2019. She covers tips about conducting olfactory guided tours for low-sighted individuals as well as how to create historically informed scents with perfumers. Verbeek's case is placed in **OST Section 2: Creating a Heritage Scent**.

<sup>9</sup><https://www.researchgate.net/profile/Marie-Clapot>

<sup>10</sup><https://www.linkedin.com/in/claire-dobbin-2a138b224/?originalSubdomain=uk>

<sup>11</sup><https://www.avmcuriosities.com/>

<sup>12</sup><https://www.museumbeleving.nl/>

<sup>13</sup><https://www.huygens.knaw.nl/en/medewerkers/ineke-huysman-2/>

<sup>14</sup><https://www.codart.nl/guide/curators/lizzie-marx/>

<sup>15</sup><https://research.vu.nl/en/persons/caro-verbeek>

### 3 Outcome of the OST

This section will outline the final result of the *The Olfactory Storytelling Toolkit: A 'how-to' Guide for Working with Smells in GLAMs and Heritage Institutions*. This includes the resource's functionality, content, structure, and key resources.

#### 3.1 Result

*The Olfactory Storytelling Toolkit: A 'how-to' Guide for Working with Smells in GLAMs and Heritage Institutions (OST)* is an open access resource created for conservators, curators, educators, tour guides, museum directors, archivists, librarians, and all others who are interested to work with smells in a heritage context. Its contents are based on the research carried out by members of the Odeuropa project. The guide is an online resource available via the Odeuropa website that provides a basis for cultural heritage professionals to use smell as a storytelling technique within their own curatorial practice. It outlines best practices, procedures and instructions for using olfactory storytelling and it offers a formal methodology for doing so as well as practical, hands on tools that can be easily put to use. Although the overall language of the **OST** is meant for museum curators, different parts of the toolkit will suit the needs of different types of cultural heritage professionals as well as other professionals (scent designers, artists, educators etc.) who would benefit from the use of olfactory storytelling.

Overall, the **OST** provides clear methods – from beginning to end – for bringing an olfactory narrative from the (physical) collection item to visitor engagement. The guide not only presents tips for curating a strong olfactory narrative (and how digital heritage collections can help finding these stories) but also outlines the more practical elements of olfactory storytelling such as sniffing out olfactory objects and spaces with *smellwalks*, best practices for presenting and distributing scents in the GLAM space, and creating heritage scents with a scent designer. We also provide information about how to carry out your own risk assessment in GLAM environments.

**D7.4** consists of (1) the public facing and open access resource, *The Olfactory Storytelling Toolkit: a 'how-to' Guide for Working with Smells in Museums and Heritage Institutions* (working draft in appendix)<sup>16</sup> and (2) a report outlining the resources methodology and development.

#### 3.2 Functionality

The final result of the **OST** is in the format of an online, downloadable PDF guide with additional resources available to download individually via the Odeuropa website. Providing the **OST** in this format allows users to view the content from different digital devices or print the resources. All content is organised in its own section on the Odeuropa website and is available to download in its entirety or by section. The main guide includes images, diagrams, charts, checklists and informational text to ensure easy reading. The additional 11 resources or “tools” are in the form of printable PDF worksheets, guidelines and resources.

The intended use of the **OST** is to be read via its online PDF as it has interactive components via hyperlinks. The hyperlinks lead to websites of mentioned olfactory events, external resources and online databases, and audio-visual content. Hyperlinks are also used to direct users to the Odeuropa developed resources for the user's own use and exploration.

#### 3.3 Content and Structure

The **OST** is divided into four sections which each contain a series of chapters. The sections and chapters can be read consecutively or individually based on the user's knowledge and goals.

<sup>16</sup>the version of *The Olfactory Storytelling Toolkit: a 'how-to' Guide for Working with Smells in Museums and Heritage Institutions* included in the appendix is not the resource's final form. On November 28th, 2023, the final and fully designed demonstrator will be launched and fully accessible via the Odeuropa website.



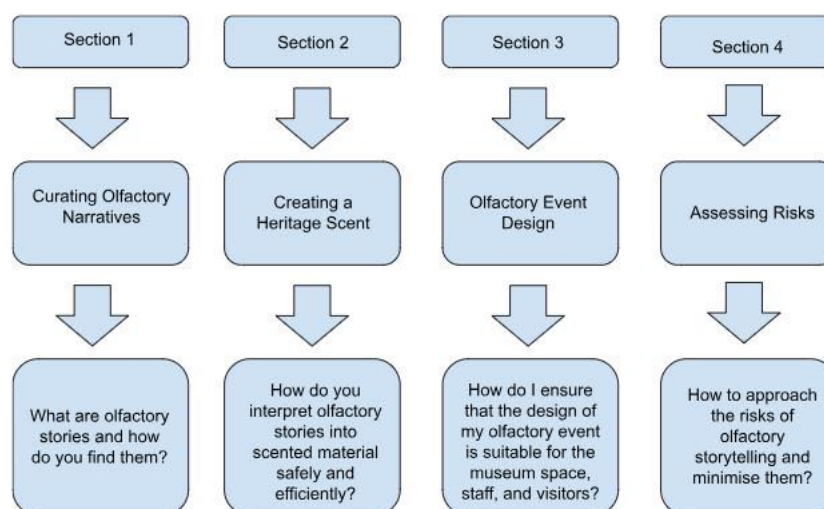


Figure 4: Diagram of an overview of the structure of the *Olfactory Storytelling Toolkit: a 'how-to' Guide for Working with Smells in Museums and Heritage Institutions*.

**Section 1 - Curating Olfactory Narratives** focuses on linking GLAM collections with olfactory storytelling. This starts by defining olfactory narratives and tips on how to find them. The section offers examples of keywords and vocabularies that will help GLAM professionals identify olfactory narratives within digital collections. The section concludes by providing nose-first methodologies - *smellwalks*, a *sniffer in residence*, and *depot sniffing sessions* - for exploring heritage spaces with an olfactory perspective.

**Section 2 - Creating a Heritage Scent** focuses on bringing the olfactory narrative to the nose of the visitor. The section starts by defining a heritage scent and providing a methodology for identifying them. This section also offers tips for working with various types of scented materials for the use of olfactory storytelling including raw materials, essential oils and custom compositions created by a perfumer as well as the scents that are already in your collections (from olfactory objects or the *smellscapes* of heritage sites). The section also covers how to create a bespoke scent with a scent designer and tips for doing so, which includes addressing topics of authenticity, briefing, and evaluation.

**Section 3 - Olfactory Event Design** focuses on how to bring an olfactory narrative and heritage scent together to create an engaging visitor experience. The section starts by mapping out the different examples of olfactory event design from olfactory exhibitions to olfactory workshops. The remaining chapters are practical and hands-on, outlining the costs and time involved to create an olfactory event as well as pros and cons of different scent distribution methods.

**Section 4 - Risk Assessment** focuses on assessing and mitigating risks associated with working with smells in GLAMs. The section outlines initial advice that will help the user to consider the impacts of introducing new volatile organic compounds (VOC) into a museum environment and how to develop strategies to mitigate them. This section furthermore covers guidelines to communicate with the public about the provenance and safety of the chemical compounds used in olfactory storytelling.

**Case Studies** presenting examples of inspirational olfactory storytelling appear at the end of each section of the **OST**. These showcase how curators, scholars, scent designers and olfactory consultants have used olfactory storytelling in their own practice successfully. Each contribution varies in topic and format and offers personal experiences of the benefits and challenges of bringing scents into the museum.

The full contents of the **OST** is outlined below:

- (1) **Introduction. Scent in the Museum**

**(2) Smell Manifestos**

- (1) *The Persuasive Power of Smell* by cognitive neuroscientist [Jane Plailly](#).<sup>17</sup>
- (2) *Honouring the Multifaceted Sense of Smell* by anthropologist and philosopher [Annick Le Gu  rer](#).<sup>18</sup>
- (3) *Diary of Smells: Olfaction as an Experiential Medium, 2010-2023* by olfactory artist [Josely Carvalho](#).<sup>19</sup>
- (4) *Using Scent to Enhance the Artistic Experience* by perfumer Nadjib Achaibou

**(3) Section 1. Curating Olfactory Narratives: Linking Scents with Collections:**

- (1) **Chapter 1:** How to make connections between your collection and olfactory narratives?;
- (2) **Chapter 2:** How to find olfactory information in digital collections?;
- (3) **Chapter 3:** How can using a sniffer in residence assist achieving a nose-first perspective?;
- (4) **Chapter 4:** How can smellwalks capture the olfactory landscape in and around heritage sites and institutions?;
- (5) **Case Study #1:** Senior Researcher, Ineke Huysman on the Project *Geheugen van Geur* (Memory of Scent);
- (6) **Case Study #2:** Sensory Museologist, Marie Clapot on her Work with Olfactory Storytelling at the Metropolitan Museum of Art, New York

**(4) Section 2. Creating a Heritage Scent:**

- (1) **Chapter 1:** What are heritage scents?;
- (2) **Chapter 2:** How to acquire fragrant materials?;
- (3) **Chapter 3:** Considerations for using malodours for olfactory storytelling.;
- (4) **Chapter 4:** How to develop a heritage scent with a scent designer?;
- (5) **Chapter 5:** How to evaluate heritage scents?
- (6) **Case Study #3:** Sensory Consultant, Tasha Marks (AVM Curiosities) and Freelance Curator Claire Dobbin on *London: Port City* at the Museum of London Docklands (2021/2022);
- (7) **Case Study #4:** Sensory Art Historian and curator Caro Verbeek on the *In Search of Scents Lost* Project (2015-2019)

**(5) Section 3. Olfactory Event Design:**

- (1) **Chapter 1:** What type of olfactory event is right for me?;
- (2) **Chapter 2:** What are the costs of an olfactory event?;
- (3) **Chapter 3:** How to present scents in heritage environments?;
- (4) **Chapter 4:** What are the pros and cons of smell distribution methods?;
- (5) **Chapter 5:** How to manage olfactory events?
- (6) **Case Study #5:** Olfactory Event Design Expert and Scent Designer Jorg Hempenius on Inspirational Olfactory Event Design in GLAMs;
- (7) **Case Study #6:** Art Historian and Curator Lizzie Marx on *Follow Your Nose! A Guided Tour with Smells* at Museum Ulm, Germany (2021-present)

**(6) Section 4. Accessing Risks**

- (1) **Olfactory Storytelling Inspiration 7:** Olfactory Exhibition at Prado Museum, Madrid

**(7) Conclusion**

<sup>17</sup><https://www.crnl.fr/en/user/227>

<sup>18</sup><https://annicleguerer.com/>

<sup>19</sup><https://www.joselycarvalho.com>

### 3.4 Olfactory Storytelling Resources

Each section of the **OST** has downloadable resources that the user can use for their own olfactory storytelling projects and events. These resources will be available via the Odeuropa website as well as referred to and hyperlinked in the main text.

See below an overview of each downloadable resource:

- (1) **OST Resource 1 - Cards to Design Olfactory Narratives:** This resource helps the user think about how scents link to the items, main themes, and storylines in their collection. The fill-in worksheet is designed for printing and cutting and it offers a series of pro-forma cards that can be filled in and moved around as you wish.
- (2) **OST Resource 2 - Olfactory Keywords:** Digital collections hold a lot of artworks with olfactory relevance, however, many are not equipped with such vocabularies. This resource is a list of smell terms in six languages: Dutch, English, French, Latin, Italian, Slovenian. This list will assist users navigate digital collections, providing them with specific vocabulary words to search for.
- (3) **OST Resource 3 - Nose-First Art Historical Odour Wheel:** This resource offers a fun and simple way for users to find olfactory stories in their collections. The odour wheel starts with scent families in the first ring, which connects to odourants in the second ring, and specific artworks and artefacts in the third ring, ending with an outer ring with [Iconclass codes](#).<sup>20</sup> Iconclass is a database that many GLAM institutions use to categorise and name their collection items and metadata.
- (4) **OST Resource 4 - Smellwalk Form:** This resource is a worksheet that the user can use when conducting *smellwalks*. The document helps the leader of the smellwalk participants through the smellwalk process and what to reflect on. This *smellwalk* form was developed by Victoria-Anne Michel as part of her PhD research in the Odeuropa Project.
- (5) **OST Resource 5 - Smellwalk Guidelines:** This resource is to be used for carrying out *smellwalks* in and around heritage institutes. Heritage professionals can use this guide to train themselves and each other to prepare for and conduct *smellwalks*.
- (6) **OST Resource 6 - Heritage Scent Design Brief:** This resource is a form that assists cultural heritage professionals, historians, and researchers in the process of making a scent for the use of olfactory storytelling. It outlines all the information necessary for a scent designer/perfumer to make a smell interpretation intended for the use of olfactory storytelling. This brief is part 1 of a 2 part scent development process.
- (7) **OST Resource 7 - Heritage Scent Design Brief Example:** This resource is a completed *Heritage Scent Design Brief* (OST Resource 6) for Odeuropa's *Liberty Bell Smell*. The resource is meant to assist the user's own completion of a *Heritage Scent Design Brief*.
- (8) **OST Resource 8 - Heritage Scent Development Report:** This form provides the opportunity for the scent designer to reflect on the creation of a scent intended for olfactory storytelling. This includes the process and the materials used for the smell creation. The document is to be filled out by the scent designer. This report is part 2 of a 2 part scent development process.
- (9) **OST Resource 9 - Heritage Scent Development Report Example:** This resource is a completed *Heritage Scent Development Report* (OST Resource 8) for Odeuropa's *Liberty Bell Smell*. The resource is meant to assist the user's own completion of a *Heritage Scent Development Report*.

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<sup>20</sup><https://iconclass.org/>

- (10) **OST Resource 10 - Guidelines for Evaluating Heritage Scent Creations:** This resource provides different guidelines for evaluating heritage scent creations made for the purpose of olfactory storytelling in GLAMs. We propose three different evaluation schemes: an isolated evaluation, a contextualised evaluation, and a peer review evaluation.
- (11) **OST Resource 11 - How to Conduct Olfactory Guided Tours:** This resource is a guideline and instructional guide for conducting olfactory guided tours in heritage institutes. Heritage professionals can use this guide to train themselves and each other to prepare for and conduct olfactory tours.

The first draft of *The Olfactory Storytelling Toolkit: a 'how-to' Guide for Working with Smells in Museums and Heritage Institutions* is included in Appendix C. This contents of this document will remain the same, however, it will change in design and usability.

## 4 Communication, Dissemination and Exploitation Strategies for the Olfactory Storytelling Toolkit

Our plan for the communication, exploitation, and dissemination of the **OST** involves the following steps:

- (1) **The Launch of the OST:** Originally, the **OST** was to be launched and presented to stakeholders in a nose-on, educational workshop. For optimal dissemination and exploitation efforts and to ease organisation, the consortium agreed to launch the **OST** in combination with the *Entrepreneurial Hackathon (T7.10)*. The event, which we labeled the **Smell Culture Fair** will take place on November 28th, 2023 in Amsterdam, the Netherlands at the historic Trippenhuis building. Combining these two events heightens their impact on the target audiences and as the *Entrepreneurial Hackathon (T7.10)* aimed to present all the Odeuropa tools together (*Demonstrators for Olfactory Heritage (D4.6)*, *Online Encyclopaedia of Smell Heritage (D5.3)*, and the *Olfactory Storytelling Toolkit (D7.4)*), combining the events will further exemplify the variety of possible users of these tools and how they can be used together.

The event on November 28th will welcome 140 participants from our target audiences. We aim to include 40 individuals from the GLAM sector, 40 individuals from the scent industry, scent technologies and flavor analytics, 20 individuals from research and education, and 10 individuals from press and media. We expect around 30 members of the Odeuropa Project to attend the event. The day will include informational panels, training sessions, Q and As, and panel discussions. The **OST** will play an important role in the training sessions which will directly target GLAM professionals who want to learn more about olfactory storytelling. Furthermore, the **Smell Culture Fair** is organized as a matchmaking event. At the exposition part of the fair, GLAM professionals can engage with perfumers, scent marketing companies and other possible partners for future multi-sensory events. Thus, the legacy of the Odeuropa project can support and be in conversation with future collaborations around olfactory museology.

The Cultural Heritage Policy Roundtable (part of *Policymaking: olfactory heritage as intangible heritage (T7.7)*) will follow the **Smell Culture Fair** on November 29th. A targeted audience of 30 heritage policy makers will discuss the value of olfactory heritage and sensory heritage as a whole.

- (2) **Communication of the OST:** The launch of the **OST**, will be communicated through various outputs. It will be presented via a formal press release, the Odeuropa Newsletter (N=500), the Odeuropa X channel (N=1660+ members), the social media channels of the Odeuropa members, and through targeted newsgroups (*NEMO*, *Museum Contact*, the *NOSE Network*, and *Europeana*). The GLAM professionals who have collaborated on the **OST** function as

an additional layer of communication through their use of social media towards our target stakeholder groups.

- (3) **Dissemination of the OST:** As explained above, over the course of the Odeuropa project, we disseminated parts of the **OST** through hands-on presentations and publications reaching over 500 participants. We will continue this practice both within the scope of the project and beyond. Apart from the **OST** training sessions at the *Smell Culture Fair*, we aim to present the **OST** at ICOM-CC 20th 2023 conference (paper accepted for the Theory, History and Ethics of Conservation group), at NEMO European Museum Conference 2023 (proposal in progress), and at SITEM 2024 (International trade show for museums, cultural venues and tourist sites - proposal in progress). We aim to outline the development of the OST in a research paper.

To assure easy use and dissemination of the **OST**, we will make a short video which explains the goals and main components of the **OST**. The video will be hosted in the **OST** web environment and on the Odeuropa YouTube channel. The **OST** website ([www.odeuropa.eu](http://www.odeuropa.eu)) will be hosted by the KNAW for at least 5 years after the conclusion of the project. The data will also be stored at the KNAW DANS repository.

- (4) **Exploitation of the OST:** With IFF, Odeuropa is preparing a smell box, the *Odeuropa x IFF Historical Scent Collection*, with a dozen of the most significant heritage scents that Odeuropa researched and developed. This box will include a leaflet that refers to the methodologies of Odeuropa and how the **OST**, supports them. 150 of the smell boxes will be distributed during the *Smell Culture Fair* and *Policy Roundtable*. The remaining kits will be sent to our stakeholder communities, specifically GLAMs with an interest in multi-sensory storytelling. The box - in addition to its clear connection with the **OST** - can be an easy starting point for future olfactory events in their institutions and to enhance the impact of their collections.

In 2024, in collaboration with the [Amsterdam Humanities Hub](#), Odeuropa will organise a multi-sensory dinner for targeted stakeholders that assures the exploitation of the OST in future projects. Furthermore, we are preparing for an Innovation Action proposal in the Horizon Europe Cultural Heritage and Creative Industries domain. In this future project we can further test and refine the **OST**.

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