



# OPEN SCHOLARLY COMMUNICATION IN THE EUROPEAN RESEARCH AREA FOR SSH - PREPARATION

## WP6 Innovation

### D6.1 Report on innovative models of governance

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DRAFT



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### Report on innovative models of governance

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## Contents

Executive summary	4
Introduction	4
<b>State of the Art Review</b>	<b>4</b>
Governance and Values	6
Knowledge Commons and P2P productions	6
Research Infrastructures, Trading Zones, Interdisciplinarity	7
<b>Stakeholder research</b>	<b>8</b>
Survey on OPERAS Governance	8
The Ideal Governance Model of OPERAS (Q. 1, 7, 8, 9)	9
Expertise, Task Distributions and Decisions-Making (Q. 4, 5)	12
Values (Q. 2, 3)	13
Motivations of Participants (Q. 10 to 15)	16
Tools (Q. 17, 18, 19)	16
Collaborations	18
Workshops	18
The UL Workshop on Digital Governance and Knowledge Infrastructures	19
OPERAS-P Workshop Innovative Models of Governance, 24 February 2021	21
<b>Intermediary recommendations</b>	<b>23</b>
<b>Conclusion and acknowledgements</b>	<b>24</b>
<b>References</b>	<b>25</b>

## I. Executive summary

Task 6.1 of Work Package 6 aims to analyse current models of governance implemented by research infrastructures and innovative forms of governance (and notably digital governance) in order to derive strategies and suggestions on how OPERAS may develop further and balance the needs of the stakeholders to ensure efficiency and reliability with the capacity to be open to new models of governance that emerge from the digital environment. In the following we describe our approach, the main findings as well as our suggestions for the development of a new governance model for OPERAS.

## II. Introduction

Task 6.1 of Work Package 6 aims to analyse current models of governance implemented by research infrastructures and innovative forms of governance in order to derive strategies and suggestions on how OPERAS may develop further its shared culture, common identity and values, and balance the needs of the stakeholders to ensure efficiency and reliability with the capacity to be open to new models of governance that emerge from the digital environment. The activities within this task were divided into 3 phases (1) mapping the state of the art; (2) stakeholder research; and (3) a final report to provide the OPERAS coordination team and its Core Group with conceptual tools to manage the wide diversity of cultural backgrounds, expertise, level of commitment within its community, which is typical of SSH communities. This intermediate report covers primarily sub-tasks 1 and 2, while task 3 will be mostly covered in the final report. We underline the different collaborations we undertook to develop our perspective and highlight the results of the different workshops and activities we conducted.

## III. State of the Art Review

Task 6.1 aims to analyse new forms of governance, especially using digital technologies.

These questions are at the crossroads of several fields, notably the governance of organizations, and more specifically digital governance in organizations and issues related to management (this is particularly relevant for OPERAS whose partners are geographically dispersed and the COVID crisis that covered almost the whole project made it even more needed), as well as RI's governance and knowledge infrastructure governance. Specific issues for OPERAS also have to be taken into account, may it be openness, multiculturalism, multilingualism and multi-stakeholderism. The diversity of possible approaches to the question of governance explains the abundance of literature

and the impossibility of being exhaustive in a field that is as much a matter of management studies as it is of studies in STS or in the sociology of innovation, in digital humanities or in information and communication sciences.

There exists a multitude of theories giving alternatives on how to manage individual behavior in the process of organizational performance and answering organizational performance questions in many different ways.

Therefore, we selected three key topics that mainly gathered the issues we wanted to explore within this work package: Governance and values; Research infrastructures, trading zones and interdisciplinarity; and finally Knowledge Commons and P2P productions. We also recommend the COPIM blog - we had the pleasure of collaborating with some of its members. It also provides excellent resources, in particular this [blogpost](#).

Governance models are numerous and often divided between top/down and centralized models with high control and shared governance. There are of course a variety of proposals within shared governance and models that developed by their own, as well as many variations when we deal for example with digital governance. The few entries we enlighten here give a first general overview of the current tendencies at stake, may it be with regards to agile methods, sociocracy, ambidextrous organizations, etc. The question of digital governance is transversal to these approaches in many cases but was also addressed on its own. *Managing Chaos: Digital Governance by Design* (Welchman, 2015) is for example one of the books which sustained our analysis. Welchman proposes to create a Digital Governance Framework, which enables decision makers of organizations to delegate decisions and duties. In doing so, they can decentralize the work and be more effective. In order to keep the digital process functioning, an organization needs a digital team, which should have all the resources and competences required to manage the digital presence of an organization. Welchman also recommends staying on track with a clear digital strategy as well as digital policies, which help to govern “online-world-risks”, such as issues about privacy or security. Organizations should nominate a policy steward, who has to ensure that these policies respect the organization’s status. Setting up digital policies develops the need to also re-examine the corporate, IT and marketing-focused policies of an organization, as the digital policies.

Besides digital policies and strategies, digital standards are another important part of digital governance. These standards help organizations to formulate a clear vision and help to work collaboratively and effectively in a decentralized environment. As it is the case for digital policies, a steward is also recommended for ensuring that all the standards are written down and respected. Working with standards forces organizations to define experts

and to separate between those, responsible for input and decision-makers. standards should also try to reflect the values of the organization and to embed them.

## A. Governance and Values

In this part we focused especially on the issue of “good governance”, its definition and framing by the United Nations, its assets and strengths as well as the criticism and refinement of this concept.

A 2009 United Nations paper on this question identifies eight major characteristics of good governance, which provide a useful framework for thinking about web (and other born-digital) archives: “Good governance ... is participatory, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable and inclusive and follows the rule of law” (<https://www.unescap.org/sites/default/files/good-governance.pdf>). These eight values have been systematically reviewed in order to study how they may apply in OPERAS. However, criticism and issues raised by good governance were also studied, may it be by Gisselquist (2012) in “What does ‘Good governance’ mean? (“First, “good governance” lacks parsimony. Unlike good concepts, good governance has endless definitions, and we always need the details of each to understand if we are talking about the same thing. (...) Second, “good governance” lacks differentiation. (...) Third, “good governance” lacks coherence. (...) Fourth, and most important, “good governance” lacks theoretical utility. It confuses, rather than aids, in the formulation of theory and the related project of hypothesis testing, not least because the concept is so fluid that analysts can easily define it in the way that best fits their data”), through the book by Poluha and Rosendahl (2002), *Contesting 'good' governance* (they contest standards that are common to western democracy as measures of “goodness” in government) or in *Rethinking Systems: Configurations of Politics and Policy in Contemporary Governance* (2010), by M. Crozier (where he discusses the different dynamics of changes that occur throughout communication systems and the effect it has on governance).

## B. Knowledge Commons and P2P productions

As underlined by Le Crosnier et al. (2011), the Nobel Prize of Economy, which was attributed to Elinor Ostrom has strongly contributed to raise the issue of commons. Ostrom’s book with Charlotte Hess (2011), has promoted the notion of Knowledge Commons, which highlights new modes of social entanglements and knowledge governance (Maurel, 2018) and issues linked to collaboration, participation, public domain (Dulong et al., 2012). Knowledge commons may be at risks of privatisation, enclosures (Linebaugh, 2010), as well as « stowaways » (Le Crosnier et al., 2011) and also claims for new forms of pedagogy and literacy (Merzeau and Mulot, 2017). Although some fields are

already strongly related to knowledge commons (e.g. libraries, see Dujol, 2017), other fields may benefit from these notions to create new entanglements (e.g. environment and digital, Petit, 2017) and invite cross-disciplinary perspectives. Finally, this issue of knowledge commons may strongly related with Open Access in the scientific field and the “future of research communication” (Neylon, 2013) as well as with P2P production and decentralized architectures and knowledge production (Musiani ; O’Neil et al. 2020)

### C. Research Infrastructures, Trading Zones, Interdisciplinarity

Research infrastructures, interdisciplinarity and the collaboration they induce, the ways in which collective knowledge is produced, particularly through cyberinfrastructures, their design and organisational aspects have given rise to sociological, ethnographic and managerial studies, as well as in the field of Digital Humanities and STS. These studies are of interest for our reflection on governance, whether they are trying to:

- Qualify, draw up typologies, study the specificities of research infrastructures (see Anderson, 2013; Edwards et al., 2007)
- Observe and engage in ethnographic work regarding the production of knowledge (Star, 2002; Antonijevic, 2015; Brown et al., 2009)
- Observe empirically and theoretically the changing modes in science and engineering as a result of cyberinfrastructures (Atkins et al., 2003; Hey and Trefethen, 2005).
- Think and study remote cooperation between geographically distributed and/or digitally communicating groups (Armstrong and Cole, 2002; Atkins et al., 2003; Sonderegger, 2009; Quan-Haase et al., 2015; Freeman, 2007; Carusi and Reimer, 2010) as well as collaborative scales (Ribes, 2014).
- Study collaborations and research teams in DH environments (Siemens, 2009; Foka et al., 2018), relations to (interactive) expertise (Ribeiro and Lima, 2015; Evans and Collins, 2010; Collins et al., 2006; Collins et al., 2007), and to interdisciplinarity (Cummings and Kiesler, 2005; Lewis et al., 2012)
- Rethink the design of more democratic innovations and knowledge production and their co-design and co-shaping by multi-stakeholders (Björgvinsson et al., 2010; Star and Ruhleder, 1996; Star and Bowker, 2006; Edwards et al., 2007; Pipek and Wulf, 2009; Karasti et al., 2018).



## IV. Stakeholder research

The development of a new governance model for OPERAS depends to a large extent on the needs and requirements of the community. Hence we based our initial research program on capturing these needs of the OPERAS community by reaching out to a diverse group of stakeholders within and beyond OPERAS. As a point of departure we conducted a survey with the OPERAS community to bring the *pain points* with the current government model to light and to grasp the specific context in which OPERAS operates: the vast majority of OPERAS constituents do not work exclusively for OPERAS but fulfill these tasks as a part of other activities and responsibilities they have in their home institutions, thereby limiting their time and availability.

OPERAS is by far not the first and most likely not the last research network that seeks out to build a governance model with a more balanced and less hierarchical form. We therefore aimed to connect with other initiatives in the same or similar domains to share and exchange experiences with them.

Our initial plan was to combine the insight of these external initiatives together with a thorough analysis of the survey in order to expose OPERAS stakeholders to our results and to gain further insights through direct interviews at the OPERAS general assembly planned for June 2020.

Due to the COVID19 pandemic in 2020 and the subsequent cancellation of the OPERAS general assembly we had to mitigate this strategy and decided to conduct a series of focused workshops that involve different types of stakeholders.

### A. Survey on OPERAS Governance

This survey was mainly conducted through March 2020 and was disseminated through the internal OPERAS-P channels, Twitter and the OPERAS-P blog. The survey took app. 15-20 minutes for answering its 25 questions. We decided to frame it around the values of OPERAS-P members and a concrete feedback on their experience after one year of involvement in OPERAS-P, in order to gather data regarding elements to be improved as well as future needs.

We received 26 answers overall (24 from OPERAS members, 2 from external respondents). App. 50% of the active members of OPERAS answered the survey. This is mostly a vision from experienced professionals, with responsibilities, which also reflects the people involved in OPERAS at this stage, as:



- 85% of respondents are between 35 and 65 years old. 7% are under 35 years old. 57% of the respondents are male.
- 54% of the respondents are academics, 15% involved in dissemination platform and repository, 11,5% are publishers, 7,5% involved in digital tools and service providers.
- “Director, professor, leader, head, group leader” are the main answers to our question regarding the position of respondents in their organization. One postdoc answered.
- Most of the interviewees are experienced with collective responsibilities (61,5%) in national and European research projects, as well as in their internal work (the 3 categories are equal = 61,5%). 20% also get experience in the associative sector.

## The Ideal Governance Model of OPERAS (Q. 1, 7, 8, 9)

In the current OPERAS organization, respondents highly value the fact that all voices are heard and that there are collaborative exchanges and discussions. They find the model efficient, inclusive and open, and underline sharing, transparency and consensus. Overall, respondents appreciate the fact that expertise drives decisions all the while maintaining a participatory decision-making process. The organization in small groups is also valued as well as the move towards the creation of a legal entity.

Some respondents underline the fact that there are already emerging leaders and “stronger” members within the network, but that these leading figures are able to listen to other voices and take them into account. This leadership may even be seen as a strength (*“The advantage of the current model is that the people with most dedicated time have made the effort to collate views from the community in order to make decisions that they then weigh against the current situation. I am confident that the leaders of OPERAS take well-grounded decisions”*). The *“possibility to create something”* is also mentioned.

However, some weaknesses and emerging issues are raised. For example, on “how to deal with increasing complexity” or on “how to avoid slowing down while growing”. When asked for explicit criticism of the organisation, participants highlight concerns about:

- The time needed for making decisions,
- An unclear organisational structure (how do things work within OPERAS?),
- A weak investment of some partners into the network,
- Tendencies for centralization and decision by elite model (3 answers),

- An overall lack of efficiency
- Too many channels and reports to be provided.

“Keep it simple”, as one respondent suggests seems a core mission as underlined by 3 respondents who lacks visibility on the current organization (*“At first glance, it is not always easy to understand which action/event is part from which project, but it helps to the lively aspect of the community”*). Another respondent notes the need *“for shifting towards a more formal governance structure”* as a necessary step in the organisation’s growth and maturity.

Regarding the ideal governance’s model for the future, a participative model, allowing to take into account all voices and needs within the community is valued by 64% of the respondents and an expert based model by 28%. Only 2 respondents preferred a model that is characterised as “Highly efficient, decisions should be taken fast”.

33% of the respondents also value a precise structure, with clear roles for everyone. The answers are very well balanced between several models and a flexible structure is also claimed for. This relatively even distribution of scores for very different modes of governance will provide a strong input for our future research activities. Based on the currently available data it is not clear whether mutually incompatible preferences exist or whether the different perspectives can be consolidated within a new structure.

What is clear is that 70% of the respondents would prefer a precise structure and to keep a number of committees with precise roles and responsibilities. “A bazaar rather than a cathedral” that a respondent suggested, based on Raymond’s eponymous book, is not the most valued path.

In these small groups, which participants appreciate, the representativeness of each cluster/ nationality, etc. is only very important for 20% of respondents, although inclusiveness is then underlined as an important value.

In practice respondents suggest several models, which are heterogeneous:

Some are more hierarchical and experts based

- “Collaborating with one or two leaders to animate the group and maintain the schedule”
- “Expert based, decisions should be taken by the ones who have most knowledge about the subject matter.”
- “Governance by clear responsibilities, according to time and proficiency”

- “Maybe something that would allow us to have access to information when we need it and then collect views in an efficient manner (e.g. via online surveys or the like). Also, if we could have focus groups with experts from different regions or subject areas might help. To ensure that we use everybody's time efficiently and take advantage of their respective expertise.”
- “Project organisation. Teamwork, concrete tasks and roles, challenging, ambitious”

Some are more community based

- “Community based governance with diverse user groups”
- “Community driven and community owned models, as these will distinguish us from other infrastructures”

Some value digital governance

- “By regular electronic voting (survey) we can measure how efficient that is.”
- “Digital governance”

Some suggest mixed models

- “A mixed-up between group discussion and hierarchical decisions, in order to keep the balance between diversity and efficiency.”
- “Participation/voting is obligatory, tasks are randomised”
- “Shared model of governance, in which competence and expertise are taken into account, but that is not rigid, and that can be revised over time.”

(all quotes above are taken from the survey responses)

Some respondents suggest precise models: Dariah; Agile governance; Ambidextrous organization.

*The respondents underline that the current governance structure of OPERAS is fit for the purpose and that it has achieved very valuable goals by creating a friendly but also efficient work spirit, although there is some lack of clarity and some concern about the future growth of the infrastructure, which may challenge this current balance. Respondents value efficiency as well as flexibility, experts-based discussions and decisions as well as the community, which would claim a governance model able to hold together these needs. On first sight, these claims might seem contradictory, but can be in our opinion*

*consolidated. They also invite us to look at agile governance and ambidextrous organisations that two respondents suggested.*

## **Expertise, Task Distributions and Decisions-Making (Q. 4, 5)**

How should decisions be made in OPERAS? This question conducted to very balanced answers, but consensus building based on discussions and expertise are key in the answers.

- I think that important decisions should be taken by experts - which is why trust (together with transparency) is essential. Members of OPERAS - and also the rest of the SSH community - must be secure in knowing that recommendations and initiatives coming from OPERAS are not directed to serve the interests of specific stakeholders, but are meant to serve the research community.
- A set of common principles
- As a small-scale reality

Between consensus, electronic vote, delegation of decision making, it's difficult to get a clear picture of the preferences within the group of respondents, but a combination of these models seem to eventually be the best option, as respondents underline that their answer may depend of the level of responsibilities, the nature of tasks, etc.:

- Discussion, but in respect of experts opinion taking into account
- A common plan of action - 3 to 5 years that should be discussed at least one year before it is approved by an assembly of all members; (b) a flexible enough to be operational under the different contexts and priorities.
- I guess it depends on the type of decisions. "Big" decisions that have consequences for the services provided, for example, should probably be delegated to expert groups that are put together specifically for those decisions or decision areas. Formal/administrative decisions (there can be a mandate put together beforehand) can be delegated to a constant group of individuals.
- There should be clear responsibilities and at the same time some flexibility. Maybe it is possible to compose a set of possible responsibility distributions, so that every group could choose from that predetermined set. In this way there will be some flexibility for the groups, but they will not use up too much time re-inventing the wheel.

Elections seem key for 1/3 of the respondents with regard to the management committee.

Regarding the distribution of tasks, an organization with no clear responsibilities has a very weak score. Freedom to organize within small groups and tasks and alternate responsibilities seems more estimated.

*Respondents value elections, expertise, as well as flexibility, the freedom to organize within small groups, and a combination between delegation and collective decision-making.*

### Values (Q. 2, 3)

The 5 most important values for the respondents were :

- Transparency 92%
- Openness 92%
- Honesty 84%
- Trust 80%
- Sustainability 73,08%

(followed by Sharing 72%)

Some values like transparency or sustainability are referred to as basic building blocks to enable all the others (*"Sustainability is the most important. Without ensuring it the other values become irrelevant". "Sustainability is 'the proof of the pudding': an infrastructure is good only if it can be maintained in the long run"*).

One respondent underlines that OPERAS should be an example for others. This was also an idea that appeared implicitly several times in the survey: the need for OPERAS to provide *"good governance"* as an example and fundamental pillar for its development.

Another respondent highlights the need to operate differently than commercial-entities. One respondent refers to the Principles of Open Science and/or the Fair Principles, and it is clear that OPERAS has to continue committing with such existing principles.

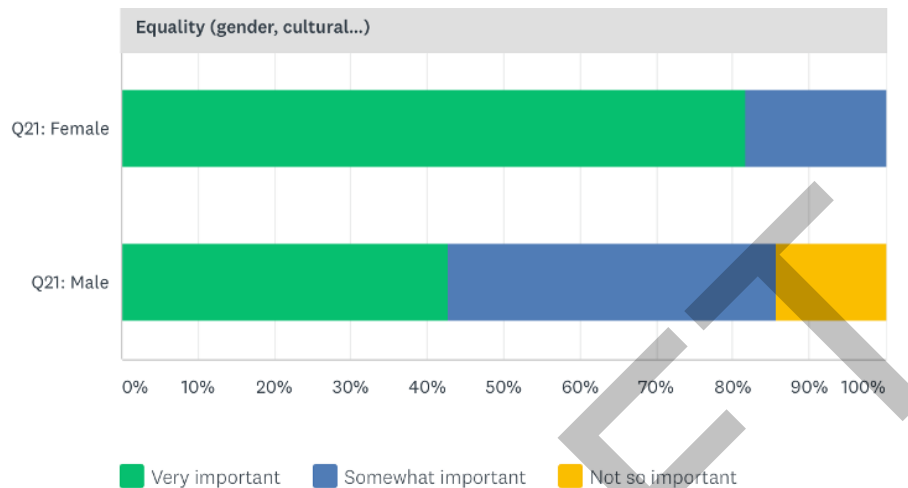
Transparency and trust are commented on several times as the most important values to link the community and ensure its durability.

2 respondents added inclusiveness (no elitist vision, diversity, etc.):

*"Inclusiveness. The power of OPERAS will be in sustaining diversity - in content, participants, objectives, language, culture, subject etc. It will need to include entities that*

*may consider themselves competitors. It is vital it doesn't become a vehicle to protect vested interests, establish entry barriers for new initiatives or create a publishing 'elite'.*

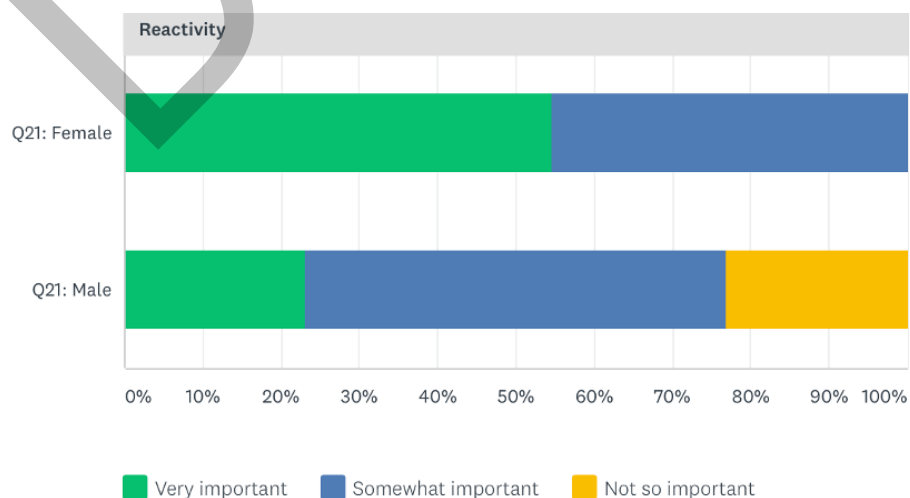
There are sometimes clear differences based on gender:



The 5 least important values as listed in answers are :

- Non hierarchical 38,4%
- Reactivity 12,50%
- Equality 12%
- Efficiency – Diversity – Based on commons: 3 values at 8%

Here again differences may appear based on gender:



Moreover, these answers don't mean that colleagues underestimate these values. When taking medium values into account, a more nuanced picture appears:

- Commons

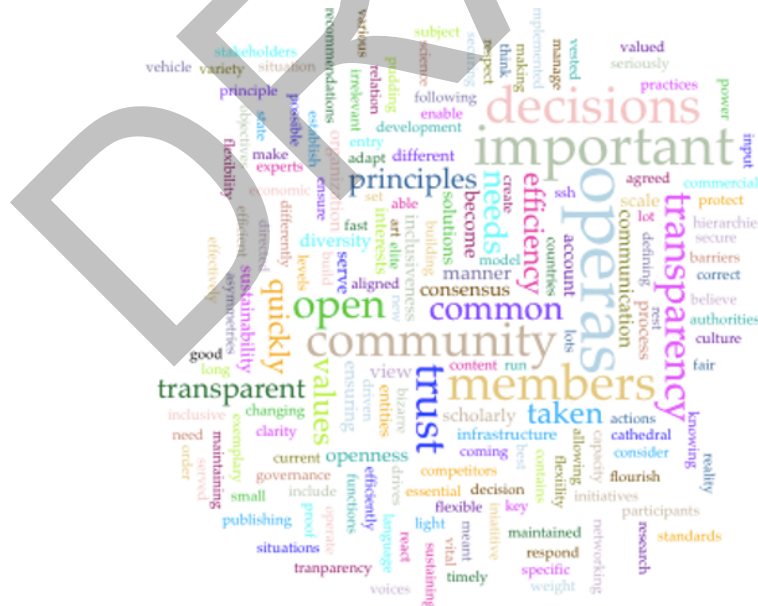
are important as well as

(Values over 50%):

- Shared authority
- Non hierarchical (a value which tends to polarize and divide opinions and feedbacks as we will further see)
- Reactivity
- Consensus building

Flexibility and efficiency are more valued in respondents' comments and are also to be further found in the participants' motivations.

*The values that the respondents find the most important are linked to transparency and trust as well as sustainability. Flexibility and efficiency are also key points underlined in comments. Diversity or non-hierarchical positions seem less important.*



*Word cloud based on the answers of respondents to the most important values they would favour in OPERAS*



### Motivations of Participants (Q. 10 to 15)

Participants show great motivation in contributing to commons and shared good, as well as “learning while contributing” and they give importance to the content of discussions.

Respect, engagement, trust, common goods are requirements for their participation as well as common and clear goals and deadlines. Here again we find this need for both community based values such as trust and transparency, but also for efficiency and clearness. Accountability is also underlined. On the contrary, shared values don’t seem to be key for achieving these goals if they are collective and clear.

Participants have limited time to achieve tasks within the project, which partly explain why they underline efficiency:

- 44% have 1-4 hours per week
- 40% have 4-8 hours per week

This time mainly depends on the fit of the project with their professional work, the time of the year and their overall workload (“The fit between the goals of the project and my own professional work”, “My interest on the challenges that need to be overcome are key for their long-term engagement”).

Respondents don’t underline a need for recognition and seem to be able to deal with tensions or individualistic agendas/persons. The feeling of being at ease with the tasks or the diversity of tasks and the agency to change tasks were also less selected.

*The motivations of participants are balanced between common good and pragmatism, the latter being linked with their daily professional work. Without being contradictory with their values are claims for efficiency. The most disturbing factors for involvement are a too high workload as well as never-ending decision-making processes and the feeling of wasting time.*

### Tools (Q. 17, 18, 19)

69% of respondents have no preference between F2F and virtual meetings. The others share equal preference between both options.

Respondents mainly underline the friendly and trustful spirit of OPERAS meetings. This seems like their main strength with transparency. Results are much more balanced and a bit more critical for the regularity, duration, agenda, minutes and organisation of meetings.

	1- Excellent				5- Could be improved
Regularity of the meeting	30.43% 7	30.43% 7	21.74% 5	8.70% 2	8.70% 2
Duration of the meeting	26.09% 6	26.09% 6	34.78% 8	4.35% 1	8.70% 2
Agenda of the meeting	26.09% 6	34.78% 8	21.74% 5	13.04% 3	4.35% 1
Minutes of the meeting	26.09% 6	34.78% 8	21.74% 5	13.04% 3	4.35% 1
Organisation of the discussion	30.43% 7	34.78% 8	17.39% 4	13.04% 3	4.35% 1
Content of the discussion	30.43% 7	26.09% 6	30.43% 7	4.35% 1	8.70% 2

Regarding tools and communication, there is a clear preference for a combination of Emails and Zoom. Digital social networks have the lowest score and Mattermost and Slack are not very successful either (as well as the idea of an internal newsletter). One respondent also added Google Drive to our suggestions.

*Participants value the friendly spirit within OPERAS, although their answers also underline this is no key motivation for their participation. Traditional tools like emails and Zoom were mostly selected. Participants are mainly not discouraged through online meetings and remote work.*

As this survey was conducted at the beginning of the COVID crisis, remote meetings seem at the time a bit more unusual than in the next months, as the whole project had to go through remote work and this was the case for the two workshops that were organized in the coming months.

## B. Collaborations

Within our task we had the chance to meet and to collaborate with several stake-holders in the field of digital governance and notably the co-founders of Meoh ([meoh.io](https://meoh.io)). Meoh is a think-and-do tank based in Brussels, which studies how social trust can inform new models of cooperation and governance in a networked society. We also had regular exchanges with COPIM (Community-led Open Publication Infrastructures for Monographs, <https://copim.pubpub.org>), which we already mentioned and whose work on governance started at the same time as ours.

Collaborations were especially visible during the September 2020 workshop organized by the C2DH at the University of Luxembourg, as :

- two members of COPIM were part of our scientific committee and our organizing team and one COPIM member gave a presentation
- we co-organized a roundtable with Meoh on Networked Governance and Multistakeholder Cooperation which gave some interesting clues about how stakeholders envision the needs and purposes of new ways of governance, how they apprehend digital tools in collaborative models and entwine values, principles and community guidelines in a governance model. At the crossroads of three topics of the workshop (Critical testimonies on the implementation or experiments with new modes of governance; Presentation and analysis of online decision-making tools; Prospective outlook on the governance of knowledge and research infrastructures), this proposal had a hybrid format, between tutorial, feedback on case studies and more theoretical discussions.

We also contributed with Meoh to a DGO workshop (with 10 participants from 8 nationalities, 8 countries and 3 continents) on multi stakeholder cooperation during the 21st Annual International Conference on Digital Government Research in June 2020 (<https://www.youtube.com/watch?v=tC9TdrhtLSY&feature=youtu.be>).

## C. Workshops

We co-organized two workshops on the topic of OPERAS governance and more generally governance of research infrastructures. The first one was entirely dedicated to digital governance and research infrastructures and was organized by our team in collaboration with a scientific committee (see below). It took place remotely, due to the COVID crisis on september 2020.

The second one was part of the OPERAS WG6 workshop, which was also organized online and this second one was more specifically focused on OPERAS governance and its perspectives.

### **The UL Workshop on Digital Governance and Knowledge Infrastructures**

A 2-days workshop on 7 and 8 September 2020 on “Knowledge Infrastructures and Digital Governance”, with the aim of combining theoretical and practical perspectives on issues that are constantly developing as a result of the wide-ranging forms of research infrastructures and the challenges facing digital governance. The report is available at : <https://www.c2dh.uni.lu/thinking/knowledge-infrastructures-and-digital-governance-workshop> and the keynote by Patrik Svensson, entitled “Shifting Frames: Towards Humane Infrastructures”, and most of the presentations are also available online.

The [Knowledge Infrastructures and Digital Governance workshop](#) was held over two afternoons on 7 and 8 September 2020. It was organised for WP6 of the [OPERAS-P](#) project by Valérie Schafer and Lars Wieneke ([C<sup>2</sup>DH](#), University of Luxembourg), who co-lead Task 1 for reflection on new forms of governance, especially using digital technologies. The aim of this event, held online due to the ongoing public health situation, was to combine theoretical and practical perspectives on issues that are constantly developing as a result of the wide-ranging forms and aims of research infrastructures and the challenges facing digital governance – whether based on generic or specialised tools, on infrastructures that are proprietary or shared, open or closed, more or less decentralised, etc.

The organising committee (Pierre Mounier ([OPERAS](#), OpenEdition, EHESS), Suzanne Dumouchel (OPERAS, [TRIPLE](#), Huma-Num, CNRS), Sherri Barnes (UCSB Library, [COPIM](#)), Janneke Adema (Open Humanities Press, ScholarLed, Coventry University, [COPIM](#)) and Cameron Neylon (Curtin University), all of whom also chaired a session) was delighted with the variety of proposals and approaches, a variety that was palpable in the choice of infrastructures or tools themselves, which ranged from [DARIAH](#) (contributions by Christoph Kudella and Francesca Morselli) and [Archives Portal Europe](#) (presentation by Marta Musso) to [DEIP](#) and [Meoh](#). The methodologies and theoretical approaches were just as wide-ranging, with STS strongly represented, as emphasised by session chair Francesca Musiani ([Internet & Society Center](#), CNRS), but equally fascinating contributions on inalienable infrastructures by Marcel LaFlamme (Ludwig Boltzmann Gesellschaft), on care, on the role of multistakeholderism (in the address by Maxime Bouillard and Gaël Van Weyenbergh from Meoh) and on infrastructural genealogies and legacies. The audience’s attention was drawn to this last point at the very start of the workshop, with the keynote by [Patrik Svensson](#) (Professor of Humanities and Information

Technology at Umeå University and Visiting Professor of Digital Humanities at UCLA). His keynote entitled “Shifting Frames: Towards Humane Infrastructures” highlighted the profoundly human dimension of these socio technical infrastructures and the agencies and configurations they involve ([keynote available](#) here, see also [references](#)). He also issued an invitation to reflect on the question of scales, low tech, etc. With a focus on values, “good governance”, negotiations and institutional and political challenges, participants were therefore encouraged from the outset to explore and embrace multiple perspectives on knowledge infrastructures and their digital governance. Challenges related to the digital economy and openness were a central thread in the contributions of the first session, which introduced DEIP (Decentralized Innovation Protocol), an Open Innovation Network designed to foster international and interdisciplinary collaboration among innovators, researchers and industry experts (see PPT[MOU1] ). This digital ecosystem introduces a merit-based multidimensional reputation system and incentive models. The address by Samuel Moore was also an opportunity to explore the approach adopted by the [Community-led Open Publication Infrastructures for Monographs \(COPIM\)](#) project and more specifically its work on governance ([presentation available here](#)). The focus of the second session was DARIAH, in particular the way in which it fosters cooperation and paves the way for sustainability, with the contribution by Christoph Kudella (Georg-August-Universität Göttingen, DARIAH-DE) (see PPT[MOU2] ) and the [presentation on “Institutional Dynamics in Research. Processes of Co-creation in Research Infrastructures”](#) by Francesca Morselli (DANS-KNAW, DARIAH, University of Verona). Here again, theoretical aspects (such as the notion of the “forkability” of a project), pragmatic issues and case studies were used to showcase infrastructures in action, explore their internal and contextual complexity and emphasise their need to be embedded in both the national and international landscape. Opening the second day of reflections on the notion of inalienable infrastructures, Marcel LaFlamme (Ludwig Boltzmann Gesellschaft) referred to feminist anthropologist Annette Weiner’s contributions to exchange theory as a means of encouraging reflection on maintenance and temporalities ([presentation available](#)). In [“Networked Governance and Multistakeholder Cooperation”](#), Maxime Bouillard and Gael Van Weyenbergh (MEOH), with Valérie Schafer and Lars Wieneke (C<sup>2</sup>DH, University of Luxembourg), reported back on a round table at DG2020 and drew on the design experience of MEOH to invite participants to explore notions of trust and asymmetries associated with multistakeholderism.

[Marta Musso’s contribution](#), which pieced together the cultural and political background of Archives Portal Europe and identified some of the issues and solutions facing it, inspired participants to reflect on the uses and institutional relations at work in this multilevel international aggregator, while also raising questions linked to multilingualism. This empirical analysis was complemented by Linda Sîle (Centre for R&D Monitoring

(ECOOM), University of Antwerp). She drew on an exploratory study of twelve national databases for research output currently operational in Europe to present an approach based on a matrix-like constellation that aims to highlight the complex shaping of these systems.

The concluding remarks and questions from the audience, some of whom also shared documentation and experience, highlighted issues that clearly deserved further analysis, may it be one participant's proposal to develop a typology of governance models for research infrastructures, as has been done in other fields of governance, to the need to consider both the legacies and the failures of these governance systems.

## **OPERAS-P Workshop Innovative Models of Governance, 24 February 2021**

The goal of this workshop was to present intermediate results of our work to the OPERAS network but also to challenge our findings. To this end we structured our work along six different perspectives:

- Governance: a broad field  
What is governance and how did its definition evolve over time?
- Digital Governance  
What can we learn from case studies in digital governance, such as the evolution of Internet governance in the W3C, Wikipedia governance described as “participative vigilance” or the governance of the Internet archive characterised by inclusiveness, accountability and legal regulations?
- Governance by design / by tools  
Can we embed governance models in the conception of organisations or through the tools these organisations use? What is the potential and limitation of emerging principles like *holocracy* for new forms of governance. Is decentralisation a virtue?
- Governance & values  
Based on the survey we analysed the appreciation of the current governance model of OPERAS by the community which offered a very nuanced view on potentially conflicting needs and their consolidation within the OPERAS governance system (e.g. flexibility vs efficiency). In terms of values, transparency and openness rank highly, but the sustainability of the network is deemed a *conditio sine qua non* for the existence of the network.
- Good governance  
What makes up good governance? We reviewed different (critical) perspectives



while highlighting the gaps in the theoretical concept and its limitations, e.g. through cultural differences.

- Innovation vs maintenance

Governance is a highly discussed concept that receives more and more attention due to the emergence of more and more (in)formal network structures. How much innovation is needed and how much innovation can an organisation digest? What is the cost of maintaining complex governance schemes and is there a pay-off?

We presented these different perspectives to a panel of three experts and asked them to comment on our findings. We furthermore developed their input further by asking specific questions based on their individual field of work.

Francesca Musiani has been an associate research professor at the French National Center for Scientific Research ([CNRS](#)) since 2014. She is Deputy Director of the Center for Internet and Society of CNRS, which she co-founded with Mélanie Dulong de Rosnay in 2019. She is also an associate researcher at the [Center for the sociology of innovation](#) (i3/MINES ParisTech) and a Global Fellow at the [Internet Governance Lab](#), American University in Washington, DC.

Professor Musianis theoretical work explores STS approaches to Internet governance, with particular attention paid to socio-technical controversies and to governance “by architecture” and “by infrastructure”.

As an expert of Internet governance, we asked Professor Musiani who currently works on governance controversies, debates, failures: how to build on failures to improve governance? As she studies asymmetries in her book *Nains sans géants* (“dwarfs without giants”) which is dedicated to decentralized architectures : is being small an asset for implementing governance ? What about decentralization (and modularity) as we mentioned previously? And scalability ?

We finally asked her what are currently the most interesting tendencies related to governance studies at stake in the scholarly field?

Jane Winters is professor of digital humanities and pro-dean for libraries and digital at the School of Advanced Study, University of London. She is co-editor of the open-access book series New Historical Perspectives and editor of a series on academic publishing, which is part of Cambridge University Press Elements: Publishing and Book Culture. Jane is Vice-President (Publications) of the Royal Historical Society. She has led or co-directed a range of digital projects, including Big UK Domain Data for the Arts and Humanities, Traces Through Time: Prosopography in Practice across Big Data, and Digging into Linked



Parliamentary Data. Professor Winters research interests include digital history, born-digital archives (particularly the archived web), the use of social media by cultural heritage institutions, and open-access publishing. She has published most recently on learned societies and humanities publishing, non-print legal deposit and web archives, born-digital archives and the problem of search, and the archiving and analysis of national web domains.

We asked Professor Winters as an expert in open publishing and scholarly communication as well as an expert on the governance of web archives : what are the most challenging points in “good governance” that you identified ? What are from your point of view “good governance” practices that are already implemented in OA and on which we may rely ? What are also the main tensions and risks we should be aware of ?

Lionel Maurel is *directeur-adjoint scientifique* at the national institute for social sciences and humanities of the French CNRS. He has worked extensively on the concept of the commons and author rights in the digital age.

We asked Lionel Maurel who has worked on “copyright madness”, the movement of commons, and as an expert in these fields (OA, commons, etc.) and who is a member of the Executive Assembly of OPERAS: what are the most pressing challenges you could identify for the governance of OPERAS? For OPERAS future? Has the movement of commons developed better practices of governance than others and how could we entwine them with efficiency and adaptability?

## V. Intermediary recommendations

The intermediate recommendations resulting from our observations, the analysis of the state of the art, the survey conducted within OPERAS-P, and the numerous collaborative exchanges with actors involved in the governance of knowledge or research infrastructures made it possible to identify points of progress, tensions and issues that were shared and discussed collaboratively, in particular with Francesca Musiani, Jane Winters and Lionel Maurel, who are mentioned above. The key points that we reported and analysed are :

- the question of temporalities, which is as much a question for the individual participants involved in the project (in particular the time spent working for OPERAS vs. the general workload) as of the longer temporalities of the project (and in particular the transition to an association which is faced with the need for institutionalisation, reliability and results, but which also wishes to pursue a flexible and creative process. The notion of the “forkability”

of a project, proposed by a speaker at our September 2020 UL workshop, also comes into play in this question)

- the question of centrality vs. decentralisation of governance models also gave rise to particular reflection, insofar as, as Francesca Musiani pointed out, hybrid models can exist and cohabit within the same organisation, making it possible to reflect on the notion of decentralised federation
- At the heart of OPERAS-P's reflection, the notion of the commons also poses major challenges and also requires finding its place in the governance model while respecting the need to comply with legislative and economic constraints and decision-making processes that must be efficient. As a central value of OPERAS-P, it needs to be refined in order to become a lever for growth in OPERAS, which must be supported by shared governance
- The risks of institutionalisation and how to maintain a flexible and innovative ecosystem are explicitly raised and also relate to issues of maintenance, trust, accountability, etc. Flexible task forces can help maintain innovation while also allowing for more structured arrangements for daily operations
- A need for a tailored-made solution for OPERAS, built on the existing but also taking into account the first failures, patterns identified during our exploration of governance models, at several levels must therefore be designed in co-construction with OPERAS stakeholders, while also reflecting the multi-stakeholderism at work in the project. The empowerment of the community seems essential here.

## VI. Conclusion and acknowledgements

Research networks are driven by the needs of the communities they serve and as such successful governance depends on the uses, cultures, needs and visions of their individual members. Exploring them through the OPERAS survey we designed, while entwining theoretical approaches and field studies helped to identify the needs, as well as successes, challenges and future requirements of OPERAS and its community. While we tried to shed light on the concept of governance through multiple perspectives we also acknowledge that the design of a new governance model for OPERAS mandates to invite the members that make up the very fabric of OPERAS to participate in this endeavour. We hope that we can stimulate the discussion within OPERAS through our input and that we can guide the constituents of OPERAS to build their own future governance model. However, as the late David Graeber pointed out in “The Utopia of Rules”, egalitarian structures are hard to formalize in environments that expect that groups are organised by

relations of hierarchy and command. Hence a more commons oriented governance model is challenging to implement while taking at the same time into account the requirements of the funding bodies.

In order to draft a new governance structure for OPERAS we therefore plan to organise a workshop with the different stakeholders within the network to discuss with them our findings in more detail and to work with them on improving the governance structure.

Our work wouldn't have been possible without the support, advice and contribution of our colleagues from COPIM (Community-led Open Publication Infrastructures for Monographs), in particular Sherril Barnes and Janneka Adema. We would also like to thank Gael van Weyenbergh and Maxime Bouillard from MEOH for the fruitful discussions and the opportunity to make use of their newly developed application. We sincerely thank the experts of our panel in March 2021, Francesca Musiani, Jane Winters and Lionel Maurel as well as our keynote speaker in September 2020, Patrick Svenson and all participants to our workshops and panels for their contribution.

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