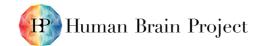# *Toolkit on equality in governance structures, procedures and implementation (D9.2 – SGA3)*

Figure 1: Symbol for the EDI Governance Toolkit for CoLIPRIs

Figure 1: Toolkit to integrate EDI (Equality, Diversity, Inclusion) in governance principles of complex, large scale, international, public funded research infrastructures (CoLIPRIs) and projects.

Source of hummingbird: https://www.freepik.com/free-vector/abstract-humming-bird-colorful-logo_9131332.htm

Project Number:	945539	Project Title:	HBP SGA3

Document Title:	Toolkit on equality in governance structures, procedures and implementation
Document Filename:	D9.2 (D76) SGA3 M18 ACCEPTED 220520.docx
Deliverable Number:	SGA3 D9.2 (D76)
Deliverable Type:	Other
Dissemination Level:	PU = Public
Planned Delivery Date:	SGA3 M18 / 30 Sept 2021
Actual Delivery Date:	SGA3 M18 / 29 Sep 2021; accepted 20 May 2022
Author(s):	Karin GRASENICK, CONVELOP (P121) Julia TRATTNIG, CONVELOP (P121) Pilar Flores ROMERO, UPM (P68)
Compiled by:	Julia TRATTNIG, CONVELOP (P121)
Contributor(s):	**Diversity and Equal Opportunities Committee (DEOC)**, especially Annemieke MICHELS, EPFL/EBRAINS (P1) Andrea ALONSO-ALLENDE, EPFL/EBRAINS (P1) Katrien VAN LOOK, EPFL (P1) Mathew ABRAMS, KI (P37) Peter GIEROW, LNU (P41) Johanna FUSSEIS, MUI (P42) Björn KINDLER, UHEI (P47) Mira MARCUS-KALISH, TAU (P57) Lars MUCKLI, UGLA (P87) Benjamin WEYERS, UT (P130) **T9.5 Members:** George OGOH, DMU (P16) Michele FARISCO, UU (P83) - also member of DEOC
WP QC Review:	Anja HANSEN, FT (P19)
WP Leader / Deputy Leader Sign Off:	Lise BITSCH, FT (P19)
T7.4 QC Review:	Annemieke MICHELS, EBRAINS (P1)
Description in GA:	Challenges to implement equality measures in the governance for an interdisciplinary, distributed partnership differ from the challenges single universities or regional projects face. The HBP has analysed and implemented suitable guidelines, structures and procedures which will be further developed according to the changes in SGA3 and evaluated with surveys and interviews. The toolkit will make the scientific background, best practice, and practical tools available for interdisciplinary projects with comparable challenges.

Abstract:	This Toolkit provides support for integrating EDI (Equality, Diversity, Inclusion) in governance principles of complex, large-scale, international, publicly funded research infrastructures (CoLIPRIs) and projects, like EBRAINS or the HBP. It is based on experiences and processes developed in the HBP. It covers important elements of governance such as organisational power relations, stakeholder management, questions of leadership and career development, principles for event planning and development of procedures. Additionally, the European framework for equality as well as terminology related to EDI are elaborated.
Keywords:	Governance, equal opportunities, diversity, inclusion, gender, toolkit, structures, procedures, implementation, power (relations), stakeholders, collaboration, decision-making.
Target Users/Readers:	Policymakers, (HBP) scientists and managers of science responsible for the governance of complex, large-scale, international, publicly funded research infrastructures (CoLIPRIs) and projects.

Table of Contents

Table of Tables

Table of Figures

1.　Get started with EDI in Governance

Good governance is key for a project, organisation or infrastructure to be successful. However, especially in complex, large-scale, international, publicly funded research infrastructures (CoLIPRIs) and projects, it is difficult to establish a good governance framework as there are many stakeholders with different, sometimes conflicting, interests involved. The role of governance is to align these interests for joint collaboration, with support of appropriate structures, processes and accompanying tools.

It is essential to consider principles of Equality, Diversity and Inclusion (EDI) to achieve good governance, not only for the benefits of the project or organisation, but also for the successful contribution of individual project members. Everyone working in a project or organisation is more committed to its vision, and will identify with the endeavour, if they feel equally valued, in all their diversity.

This Toolkit aims to provide support for integrating EDI (Equality, Diversity, Inclusion) in governance principles of complex, large-scale, international, publicly funded research infrastructures (CoLIPRIs) and projects, like EBRAINS or the HBP. It draws upon experiences and processes related to governance in the HBP, such as guidelines, interaction with a diversity of stakeholders, virtual collaboration and many more. An essential characteristic of this Toolkit is that it tries to combine the multifaceted, different levels of an interdisciplinary, complex project with various stakeholders (like the HBP) with EDI principles from a governance perspective. Other existing toolkits are often designed for a local university or institution, thus not providing guidance or considering the complexity and different layers of large-scale international projects.

Furthermore, it is designed for everyday usage by offering basic information on and quick checklists for diverse governance levels and elements. Existing toolkits often require profound knowledge on gender topics and related terminology and are thus not easily applicable, additionally as their setup is rather complex (Kerschbaum et al., 2020). Other existing toolkits often focus on only one specific area (such as GEECO for engineering or IGAR for integrating gender analysis into research), whereas this Toolkit is designed inclusively to enable the consideration of EDI principles in the governance of all kinds of projects and infrastructures. It designs and communicates standards for interactions, engagement and decision-making and the following elements will be discussed:

1) The context of governance, i.e., the European framework for equality, the difference between governance and management, the impact of complexity on projects and the relevance of EDI principles in governance.

2) Important terms related to EDI, such as sex, gender, diversity, unconscious bias, inclusion, equality, intersectionality or RRI, are defined. This Toolkit does not require profound knowledge on this terminology, but offers information for further support.

3) Governance tools and how EDI principles can be integrated. Continuous communication, structures and procedures, as well as Gender Equality Plans (GEP), Terms of Reference and guidelines are regarded as governance tools which can be used to mainstream gender and further diversity dimensions throughout the project, infrastructure or organisation.

4) Exploration of how EDI principles can be considered for the development of leadership and talents. This includes the design of (s)election procedures, the encouragement of leadership commitment, the agreement on criteria for excellence and the support of career development (e.g. through mentoring).

5) Principles for event planning including webinars, conferences, workshops and calls (for expression of interest). This part aims to provide answers for the following questions: Why is it important to consider EDI principles in event planning? How to implement these principles in event planning? How to ensure them in interactive formats?

By covering these elements, tools for important areas of governance are provided and can be implemented by policymakers, scientists and science managers responsible for the governance of CoLIPRIs and projects.

1.1   References

Kerschbaum, Stefanie/Kleinberger-Pierer, Magdalena/Grasenick, Karin (2020): When is a tool a tool? An analysis of guiding materials & websites to integrate dimensions of gender and diversity into research. URL: https://www.convelop.at/wp-content/uploads/2020/05/Gender-Toolkits-Analysis_200525-1.pdf

2.   Acquire the context

2.1   Understand the relevance of EDI principles

Granting equal opportunities matters not only for fairness and social justice, but also for improving economic outcomes and performance in Research and Innovation (R&I), which is especially crucial for scientific endeavours (EU, 2019). Equal opportunities allow all members (of a project, but also of society in general) to thrive and contribute; if everyone is committed to participate, using diverse skills, scientific disciplines and backgrounds, a diversity of perspectives will come together. In this understanding, all perspectives and fields of expertise are equally valuable and important to enhance innovation.

Additionally, equal opportunities aim to guarantee equal participation (i.e. inclusion) for everyone, and thus enhance diversity, which broadens possibilities: increasing human capital capacity in general (because the talent pool increases), as well as individual human capacity (because diverse personal contexts can be considered). For example, gaps due to military services, illnesses or care duties for children or elderly are normalised in recruiting procedures to enable equal opportunities for all suitable candidates (Brink/Benschop, 2011).

Equality (aka equal opportunities) lies thus in the very centre of the European Union's values as stated in Article 20 of the Charter of Fundamental Rights of the European Union (EU Agency for Fundamental Rights, 2021/2009): "Everyone is equal before the law."

Article 21 states: "any discrimination based on any ground such as sex, race, colour, ethnic or social origin, genetic features, language, religion or belief, political or any other opinion, membership of a national minority, property, birth, disability, age or sexual orientation [is] prohibited".

Article 22 focuses on the respect of diversity.

These three articles of the Charter of Fundamental Rights show that Equality, Diversity and Inclusion (EDI) (see "Annex: Some basic definitions") are core principles of the EU. This view permeates all policy documents and strategy papers, i.e. the framework of the European Union, and is thus firmly anchored at governance level.

- Equality means that everyone should have the same chances and rights, independent from other factors such as socio-economic background, gender, ethnicity, disabilities, etc.

- Diversity means that everyone is defined by a variety of dimensions (e.g. race, ethnicity, gender, disability, sexual orientation, gender identity, national origin, scientific disciplines, socio-economic status, thinking and communication styles, etc.).

- Inclusion means that everyone should be included, i.e. to create an environment in which equal opportunities are ensured for diverse people to participate.

Article 8 of the Treaty on the Functioning of the European Union confirms the importance of equality as follows: "In all its activities, the Union shall aim to eliminate inequalities, and to promote equality, between men and women" (Official Journal of the EU, 2012). In the strategy paper "A Union of Equality: Gender Equality Strategy 2020-2025", the European Commission (EC) clarifies that the perception of men and women addresses these genders in all their diversity, "to express that, where women or men are mentioned, these are a heterogeneous categories including in relation to their sex, gender identity, gender expression or sex characteristics. It affirms the commitment to

leave no one behind and achieve a gender equal Europe for everyone, regardless of their sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation" (EC, 2020a).

As principles of equality and diversity are clearly noted in the European framework, governance units must act consequently. It has consequences for the involved partners and actors if these principles are neglected. For example, if a researcher were to be dismissed due to their sexual orientation, it would have legal consequences for the institution.

It is essential that EDI principles are integrated in governance structures and frameworks, such as the European Charter for Researchers or the European Code of Conduct for Research Integrity (see "Consider the European framework for equality") and that these charters and policy documents are considered to ensure equality to everyone. These structures, frameworks and laws ensure protection against discrimination and serve as guidance for governance structures on how to implement equality according to the values of the European Union. It is a joint undertaking by all stakeholders – as also stated in the Gender Equality Strategy Factsheet (EC, 2020b). Therefore, all partners should be committed to ensure EDI principles, as these are given in Governance frameworks, and work together to achieve a future with equal opportunities for all.

2.2   Consider the European framework for equality

This section offers an overview of the European framework for equality: It focuses on recent strategic documents and programmes, mainly addressing scientific contexts such as the European Charter for Researchers.

2.2.1   *"A Union of Equality"*

The European Commission aims to achieve "a Union of equality" (EC, 2020c) through a Task Force on equality, as well as a dedicated portfolio which focuses on the areas of gender and LGBTIQ equality, anti-racism, support for Roma in equality, inclusion and participation. Equality will thus be ensured with different mechanisms, policies and actions to change structural and intersectional discrimination and societal stereotypes.

2.2.1.1   EC Gender Equality Strategy 2020-2025

The Gender Equality Strategy[1] for 2020-2025 (EC, 2020a) was the first strategy paper of the "Union of equality" approach, focusing on equality for women and men, in all their diversity, to freely pursue their chosen path in life and to thrive in society and the economy. The strategy tackles several key areas, among others to challenge gender stereotypes and achieve gender balance in decision-making and in politics. To ensure such equality for representation and decision-making is an integral part of governance. In the field of Research & Innovation, the Horizon Europe programme foresees some special commitments with regards to gender equality (see "Horizon Europe").

2.2.1.2   EU Anti-Racism Action Plan 2020 2025

The EU Anti-Racism Action Plan[2] (EC, 2020d) is also part of the "Union of equality" approach of the EU and aims at tackling racism and racial discrimination across society on various levels, among others in legal framework, data collection, a Diversity and Inclusion Office within the Commission as well as a more diverse staff to improve representativeness. These are essential EDI aspects in governance and the framework of the EC. The need for detailed data collection, as stated in the EU

---

[1] https://ec.europa.eu/info/policies/justice-and-fundamental-rights/gender-equality/gender-equality-strategy_en

[2] https://ec.europa.eu/info/policies/justice-and-fundamental-rights/combatting-discrimination/racism-and-xenophobia/eu-anti-racism-action-plan-2020-2025_en

Anti-Racism Plan, also shows the importance of disaggregated data collection, which might also be relevant for data collection and use on infrastructures such as EBRAINS.

2.2.2 Horizon Europe

Horizon Europe[3] (EC, 2021) is the new Research & Innovation funding programme of the EC until 2027. It is built upon three pillars: excellent science, global challenges and European industrial competitiveness and innovative Europe. With regards to gender equality, it foresees a strengthened commitment and tackles gender equality as crosscutting issue. Therefore, the integration of gender into research & innovation content becomes a requirement by default. Examples for how to integrate these dimensions are offered in the Gendered Innovations II (EC, 2020e) policy report. Moreover, from 2022 onwards, all organisations and institutions which apply for funding need to have a Gender Equality Plan (GEP) (see "Set up Gender Equality Plans") in place. Both these requirements aim at creating structural change for a better gender equality.

2.2.3 The European Charter & Code for Researchers

The EC adopted a Charter for Researchers and a Code of Conduct[4] for the Recruitment of Researchers (EC, 2005) in 2005 and since then, 1,280 organisations have endorsed these two documents. The Charter consists of a set of general principles and requirements to specify roles and responsibilities of researchers and funders of research and can thus be understood as a framework for the working environment of researchers at all stages of their career. It addresses points such as research freedom, good practice in research, public engagement, accountability, etc. The Code of Conduct complements the Charter with regards to selection procedures.

2.2.4 The European Code of Conduct for Research Integrity

The European Code of Conduct for Research Integrity[5] (ALLEA, 2017) was developed in 2017 by All European Academies (ALLEA), which consist of more than 50 academies from over 40 countries in the Council of Europe region. The aim is to ensure joint values and principles for regulating research. These are based on the following fundamental principles of research integrity: reliability, honesty, respect and accountability. The code of conduct touches furthermore on important aspects for the research community such as publication and dissemination, reviewing and evaluating, collaborative working, etc.

2.2.5 The European Charter for Access to Research Infrastructure

The Charter[6] (EC, 2016) states that: "Research Infrastructures should have a policy defining how they regulate, grant and support access to (potential) users from academia, business, industry and public services." The Charter is relevant […] "for providing access in order to conduct research, to undertake experimental development, to provide education and training and to deliver services." Thereby, infrastructures "shall not discriminate on any personal grounds and may consider establishing equal opportunities policies." (EC, 2016: 10).

---

[3] https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en
[4] https://euraxess.ec.europa.eu/jobs/charter-code-researchers
[5] https://allea.org/code-of-conduct/
[6] https://ec.europa.eu/info/sites/default/files/research_and_innovation/2016_charterforaccessto-ris.pdf

2.3   Differentiate governance from management

The term governance is used for different types of organisations such as states, infrastructures or corporations or projects (temporary organisations). Such organisations comprise different units and actors, so called stakeholders, with their own goals and interests, which are usually not all aligned and can even be conflicting. Thus, governance refers to sustaining coordination and coherence among a variety of stakeholders by setting a framework for interactions, engagement and decision making (Turner and Müller, 2017; Biesenthal and Wilden, 2014; Abednego and Ogunlana, 2006).

In the corporate governance literature derived from agency theory, an agent (head of unit, or leader of an organisation or project) acts on behalf of the principle or owner (private or public funding institutions or organisations (Derakhshan et al. 2019, Jensen and Meckling, 1976). Governance thus involves legal arrangements and contracts between principle and agent, between central offices and suppliers, organisation and staff etc. (Winch, 2006). Additionally, organisational arrangements refer to the structure and processes clarifying how decisions are made and by whom, where and how information is shared, collaboration and trust building enhanced, what behaviour is considered as adequate and how deviations from goals and contracts will be handled (Ahola et al., 2014).

An appropriate governance framework ensures that goals of organisations or projects can be reached. It might be committed to equality, diversity and inclusion and thereby critically reflect which stakeholders are involved, who represents specific groups, how decisions are taken. Special attention will thus be paid to whose voices get heard, to power relations and informal networks which might counteract transparency and fairness.

Given the challenges deriving from conflicting objectives and interests within a system of asymmetric power relationships, hence unequal access to information, governance must answer the following questions:

- Who involves whom? How will stakeholders be enabled to contribute?

- Where does governance take place (formal vs. informal networks?)

- How will the asymmetric power relations be considered in the design of transparent and fair processes and practices?

Project management is concerned with the operative implementation needed to plan, implement, monitor, and report on achievements. Management too, thereby needs to take decisions, however within the predefined framework. Classical tools of project management are for example Gantt charts, budget planning, or performance indicators. However, it has been realised that organisations and their projects are embedded in dynamic environments (Bosch-Rekveldt, 2011) and characterised by specific levels of complexity (see "Complexity in projects"). Rather than trying to follow and control a linear plan, organisations and projects need to "prepare and commit" to unavoidable changes (Priemus, Bosch-Rekveldt & Giezen, 2013, Koppenjan et al., 2011).

Agile planning has emerged from experiences in software industry as an approach to stay flexible under complex and uncertain conditions. As the Agile Manifesto states since 2001:

"We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

Individuals and interactions over processes and tools

Working software over comprehensive documentation

Customer collaboration over contract negotiation

Responding to change over following a plan

That is, while there is value in the items on the right, we value the items on the left more."

(Agile Manifesto, 2001)

The following table (Table 1) lists elements of project governance in contrast to elements of project management to support differentiation of governance from management:
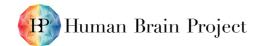
Table 1: Elements of project governance vs. elements of project management

Project Governance	vs	Project Management
Coordination of a variety of stakeholders (incl. representation of diverse groups, etc.)	≠	Coordination of project activities and objectives
Setting a framework for interactions, engagement and decision making (incl. legal arrangements and contracts)	≠	Planning, implementing, monitoring and reporting on achievements (Gantt charts, budget planning, etc.)
Structure and processes of decision making (e.g. formal/informal networks)	≠	Decision making within a predefined framework (thus limited)

2.4   Be aware of organisational power relations

The Cambridge Dictionary defines power as the "ability to control people and events" or as the "amount of political control a person or group has in a country" (Cambridge Dictionary). Both definitions prove that control is a crucial element to constitute power and therefore, it is also a key element of governance. Hence, it is essential that powerful actors are held accountable, i.e. that power is linked to responsibility (Lukes, 2007). According to Hannah Arendt, power is communication and not coercion as power radically differs from control, domination or violence (Arendt, 1970). This understanding also refers to the concept of governance, in which communication is one crucial aspect. Arendt states that power arises whenever people come together and act in concert (Arendt, 1970). Consequently, power exists in all spheres of collaboration and interaction, as in research projects and infrastructures like the HBP or EBRAINS. "Organizations develop numerous practices that embody the unequal power relations prevalent in society, including marginalisation based on gender, race and class" (Amis, 2018: 1137). These unequal power relations are reflected in hiring practices, promotion decisions, assignments of organisational roles and decisions on how the organisation will be structured and governed (Amis, 2018).

In this respect, it is important to differentiate the different justifications for power distribution within organisations and institutions: Power can stem from institutional hierarchies, as well as unique personal contributions to critical contingencies of the institution. Whereas the former is clearly identifiable as formal power due to certain positions in these institutions, the latter can be understood as informal power, which can even be more effective than formal power. Such informal power stems from groups or coalitions emerging from individual networks, length of time in an institution, expert knowledge, value of an employee, amount of effort, personal attractiveness and structural centrality in an organisation (which often leads to bigger personal networks).

Especially these individual networks show the complexity of power relations within an organisation as these are beyond a manager's ability to control (Cenk Sozen, 2012). Restricted access to informal networks, and hence to power, creates a cycle of disadvantage for members of minority groups who are unable to influence decision-making processes and governance actions of institutions (Amis, 2018). Transparency and fairness are thus two key aspects to justify power relations: if these are comprehensible for others, acceptance of others increases. Responsibility by design integrates ethical and social dimensions in the research process and is thus the further development of RRI (Stahl et al., 2021).

One method to analyse power relations is the 5-R method – former 3-R method (NCPE). Especially for intersectional approaches (see "Intersectionality"), this method aims to analyse the different aspects of power relations. Intersectional theories aim to develop a single framework for elaborating power relations that encompass sexism, racism, class oppression, heterosexism, and other axes of oppression in their complex interconnections. The original example of black women, who are discriminated against due to gender and race, illustrates these multiple and intersecting forms of domination (Allen, 2016).

The objective of these guiding questions (see Table 2) is to provide support for reflecting on complex power relations in projects or (infra)structures. For this reason, these questions must be understood as non-exhaustive examples, which are intended to stimulate further questions for analysis.
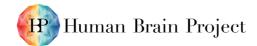
Table 2: 5-R method

Questions used in the 5-R method:
Representation: Is the representation of different genders equal?
• Example: Are men, women, non-binary genders and other identities represented (equally) in boards, in general staff, etc.?
Resources: How are resources (temporal, spatial of financial resources) distributed?
• Example: How are financial and temporal resources allocated among early-stage and senior researchers?
Realia: What is the current reality for different genders (gender roles, etc) and why is the current reality as it is (e.g. due to traditions, societal structures, culture, etc.)?
• Example: Do traditional gender roles impact the working reality for staff members, e.g. women scientists ranging labs after experiments and teaching more than men scientists who are focusing on publications and research.
Rights: What are the rights of different genders (among others concerning protection against discrimination)?
• Example: Are different communities like LGBTQ informed about their right to be protected against discrimination? Do leaders ensure that different groups exercise their rights, e.g. that pregnant women are no longer allowed to work in labs from a given date.
Realisation: What new goals and measures should be developed?
• Example: What measures need to be taken to achieve gender balance in leadership positions?

2.5 Involve your stakeholders wisely

Stakeholders are defined as all parties, including people, communities, and organisations, that impact or are impacted by the project. Stakeholders can be both internal and external to the project. They can influence a project direction significantly, e. g. by financing it or by relying on a strong social network. Other stakeholders might have little opportunity to influence or even shape conditions for their participation, even though they are affected by it (see "Be aware of organisational power relations"). Depending on how a project is perceived to impact their interests, stakeholders will be either supportive, rather neutral, or obstructive, even destructive to the project. Demotivation, passive resistance, and badmouthing should not be underestimated in this context (see also Vogwell, 2003).

Hence, an important aspect for every organisation or project is to analyse interests and influences of stakeholders. Stakeholder interests might not be aligned with the official goals of a project and might contradict each other. Moreover, they might change (see "Complexity in projects").

Analysis and strategic stakeholder management is therefore critical to the success of projects.

Strategic stakeholder management comprises (i) identification and analysis of stakeholders, (ii) strategies for stakeholders' engagement and communication, and (iii) monitoring of stakeholders' engagement. The derived strategy must be reviewed regularly as projects and stakeholders' interests change over time.

2.5.1 Identify your stakeholders

This involves the identification of all the parties (people, organisations, etc.) affected by the project as well as documentation of their interests, potential participation, and influence or impact (see Table 3). Tools and techniques refer to information collection, analysis and representation via:

• involvement of experts (interviews, focus groups), research of relevant documents

• descriptive analysis of potential interests, power, influence (positive/negative) and further relationships of stakeholders

• analysis of measures concerning engagement and communication

- representation, visualisation either as social network graph, or as a table, for example in a so called "power matrix", see e.g. https://www.stakeholdermap.com/stakeholder-matrix.html.

> **Governance and Stakeholder Diversity:**
>
> Every organisation, project, has representatives, persons who represent specific funding or partner organisations, societal interest groups, or scientific communities. Representatives are often selected or elected based on informal networks and unquestioned assumptions who is best suited for a certain position. Competences are often judged from outward appearance, roles and task areas are assigned based on informal recommendations. Governance following EDI principles can counteract biases by setting up facilitated processes for such decisions and by emphasising transparency, and a respectful, inclusive communicative culture. Involving stakeholders differently gives new impetus to innovative approaches and success.

Table 3: Guiding questions for stakeholders' analysis

Source: Grasenick, Karin (2011): Woran gute Projekte scheitern – und was man dagegen tun kann. Kohärenzmanagement: ein Mittel zur Bewältigung von Komplexität und Veränderung in anspruchsvollen Projekten. Norderstedt: Books on Demand GmbH.

Analysis Steps	Guiding Question for projects of organisations or projects as organisations
Networks and Boundaries	• Who are the clients? Who has the resources to define the scope of the project? • Which goals do these stakeholders have? How are they represented? • How does this relate to other projects or goals relevant for the stakeholders? • Which further external perspectives are important (partners, suppliers, competitors, users, societal perspectives …)? • Which internal expertise and perspectives are important (units, staff)? • What are the main changes to be anticipated by the project or organisational goal? Who will be affected? To which extent?
Stakeholders and Expectations	• Which relevant stakeholder groups can be derived? How homogeneous or diverse do these stakeholder groups and their representatives appear? • How might these stakeholders perceive the project? • What will change for the stakeholders if the project succeeds? • What expectations does the stakeholder group have? • Who will benefit if the project succeeds? Who will experience gains? • Who will experience losses? What criticism can be expected?
Relations and Impacts	• What expectations does the project have of the stakeholder group? • What can/should stakeholder groups contribute? • What are their specific strengths? • What are the prerequisites for getting involved in the project? • What could create trust, what could enhance positive relationships? • What could motivate specific stakeholder groups? • What could be achieved by involving specific stakeholders that would not be possible without them? • What opportunities and risks can be derived? • Who is in relationship with whom? What characterises the relationship? • Who listens to whom? Who influences whom (directly, indirectly)? • What impact does this have on relevant factors? (Motivation and opinion formation, resources, decision-making, …) • What opportunities and risks arise from these relationships?
Conclusions and Measures	• What needs to be done so that the goals of the project are clear? • Who is to be involved and in what form? When? How often? • Who should be informed about what? When? How often? • What risks must be considered and counteracted? • What can be offered as compensation for losses?

- What needs special attention? What further measures need to be taken?
- How can EDI principles be considered for stakeholder engagement?

2.5.2   Engage your stakeholders

Stakeholder engagement may vary from primary information exchange to decision making and co-creation processes. In complex projects, decisions made and information exchanged with one group of stakeholders does not automatically include other groups in an adequate way. Power asymmetries and complexity can lead to processes and decisions perceived as non-transparent or even exclusive. For governance committed to EDI principles it is therefore crucial to ensure that communication, engagement, and decision-making processes are designed adequately. Communicating with each stakeholder appropriately can play a vital role in keeping them on board (see also https://www.mindtools.com/pages/article/newPPM_08.htm).

To consider the diversity of stakeholders, to setup appropriate processes for regular interaction between different stakeholders can facilitate their active participation (see also PMBOK® GUIDE, 2017). Such planning includes different forms of meetings and information, clear regulations on how decisions are taken and by whom. It must be considered that perceptions of what is perceived as respectful communication can vary significantly. With more different cultures, disciplines, and hierarchy levels, communication itself becomes more complex (see "Communicate constantly").

2.6   References

Abednego, Martinus P./Ogunlana, Stephen O. (2006): Good project governance for proper risk allocation in public-private partnerships in Indonesia. In: International Journal of Project Management. Vol. 24(7), p. 622-634. DOI: https://doi.org/10.1016/j.ijproman.2006.07.010

Ahola, Tuomas/Ruuska, Inkeri/Artto, Karlos/Kujala, Jaakko (2014): What is project governance and what are its origins? In: International Journal of Project Management. Vol. 32(8), p. 1321-1332. DOI: https://doi.org/10.1016/j.ijproman.2013.09.005

All European Academies ALLEA (2017): The European Code of Conduct for Research Integrity. URL: https://allea.org/code-of-conduct/ [17.08.2021]

Allen, Amy (2016): "Feminist Perspectives on Power". In: Edward N. Zalta (ed.): The Stanford Encyclopedia of Philosophy (Fall 2016 Edition). URL: https://plato.stanford.edu/archives/fall2016/entries/feminist-power/.

Amis, John M. et al. (2018): "Inequality, Institutions and Organizations". In: Organization Studies, 2018, Vol. 39(9), p. 1137. DOI: https://doi.org/10.1177/0170840618792596

Arendt, Hannah (1970): On violence. New York: Harcourt, Brace & World.

Beck, Kent et al. (2001): Manifesto for Agile Software Development. URL: https://agilemanifesto.org/ [17.08.2021]

Biesenthal, Christopher/Wilden, Ralf (2014): Multi-level project governance: Trends and opportunities. In: International Journal of Project Management. Vol. 32(8), p. 1291-1308. DOI: https://doi.org/10.1016/j.ijproman.2014.06.005

Bosch-Rekveldt, Marian (2011): Managing project complexity: A study into adapting early project phases to improve project performance in large engineering projects. URL: http://resolver.tudelft.nl/uuid:a783e581-bc7a-4efa-adcb-7e9201840367

van den Brink, Marieke/Benschop, Yvonne (2011): Gender practices in the construction of academic excellence: Sheep with five legs. In: Organization, Vol. 19, No. 4, p. 507-524. DOI: 10.1177/1350508411414293.

Cambridge Dictionary: Power. URL: https://dictionary.cambridge.org/dictionary/english/power

Cenk Sozen, H. (2012),"Social networks and power in organizations". In: Personnel Review, Vol. 41 Iss 4 pp. 487-512. DOI: http://dx.doi.org/10.1108/00483481211229393

Cleland, D. I. (1986). Project stakeholder management. *Project Management Journal, 17*(4), 36–44.

Derakhshan, Roya et al. (2019): Project governance and stakeholders: a literature review. In: International Journal of Project Management. Vol. 37(1), p. 98-116. DOI: https://doi.org/10.1016/j.ijproman.2018.10.007

European Commission (2005): EURAXESS. The European Charter & Code for Researchers. URL: https://euraxess.ec.europa.eu/jobs/charter-code-researchers [17.08.2021]

European Commission (2016): *European Charter for Access to Research Infrastructures. Principles and Guidelines for Access and Related Services.* DOI:10.2777/524573

European Commission (2020a): Gender Equality Strategy 2020-2025. 5.3.2020. URL: https://ec.europa.eu/info/policies/justice-and-fundamental-rights/gender-equality/gender-equality-strategy_en

European Commission (2020b): Striving for a Union of Equality. The Gender Equality Strategy 2020-2025. Factsheet. DOI: 10.2775/671326

European Commission (2020c): Union of equality: the first year of actions and achievements. Statement. 22.12.2020. URL: https://ec.europa.eu/commission/commissioners/2019-2024/dalli/announcements/union-equality-first-year-actions-and-achievements_en [17.08.2021]

European Commission (2020d): EU Anti-racism Action Plan 2020-2025. The Commission's plan to step up action against racism and achieve a Union of Equality. URL: https://ec.europa.eu/info/policies/justice-and-fundamental-rights/combatting-discrimination/racism-and-xenophobia/eu-anti-racism-action-plan-2020-2025_en [17.08.2021]

European Commission (2020e): Gendered Innovations 2. Research & Innovation. Brussels, 24.11.2020. URL: https://ec.europa.eu/info/news/gendered-innovations-2-2020-nov-24_en [17.08.2021]

European Commission (2021): Horizon Europe. Research & Innovation funding programme until 2027. URL: https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en [17.08.2021]

European Union (2019): Gender equality and Diversity in R&I. Factsheet. 10.12.2019. URL: https://ec.europa.eu/info/sites/default/files/research_and_innovation/knowledge_publications_tools_and_data/documents/ec_rtd_factsheet-gender-equality_2019.pdf [11.08.2021]

European Union Agency for Fundamental Rights (2021/2009): Charter of Fundamental Rights of the European Union. URL: https://fra.europa.eu/en/eu-charter [11.08.2021]

Official Journal of the European Union (2012): Consolidated Version of the Treaty on the Functioning of the European Union. 26.10.2012. URL: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A12012E%2FTXT [11.08.2021]

Jensen, Michael C./Meckling, William H. (1976): Theory of the firm: Managerial behavior, agency costs and ownership structure. In: Journal of Financial Economics. Vol 3(4), p. 305-360. DOI: https://doi.org/10.1016/0304-405X(76)90026-X

Koppenjan et al. (2011): Competing management approaches in large engineering projects: The Dutch RandstadRail project. In: International Journal of Project Management. Vol. 29(6), p. 740-750. DOI: https://doi.org/10.1016/j.ijproman.2010.07.003

Lukes, Steven (2007): "Power". In: Contexts, Vol. 6, Number 3, pp 59-61. DOI: 10.1525/ctx.2007.6.3.59

National Commission for the Promotion of Equality (NCPE): Gender Mainstreaming in Practice. Factsheet. URL: https://ncpe.gov.mt/en/Pages/Our_Publications_and_Resources/Our_Publications_and_Resources.aspx [20.07.2021]

PMI® https://www.pmi.org/learning/library/stakeholder-management-task-project-success-7736

Priemus, Hugo/Bosch-Rekveldt, Marian/Giezen, Mendel (2013): Dealing with the complexity, uncertainties and risk of megaprojects: redundancy, resilience and adaptivity. In: Priemus, Hugo/van Wee, Bert (eds.): International Handbook on Mega-Projects. Cheltenham: Edward Elgar Publishing Limited. DOI: https://doi.org/10.4337/9781781002308

Project Management Institute, A Guide to the Project Management Body of Knowledge (PMBOK® GUIDE) – Sixth Edition, Project Management Institute, Inc., 2017

Stahl, Bernd et al. (2021): "From Responsible Research and Innovation to Responsibility by Design". In: Journal of Responsible Innovation (JRI). DOI: https://doi.org/10.1080/23299460.2021.1955613 (P2893)

Turner, JR/Müller, R. (2017): The governance of organizational project management. In: Sankaran, S/Müller, R/Drouin, N (eds.): Organizational Project Management. Cambridge: Cambridge University Press.

Vogwell, D. (2003). Stakeholder management. Paper presented at PMI® GlobalCongress 2003—EMEA, The Hague, South Holland, The Netherlands. Newtown Square, PA: Project Management Institute.

Winch, G. M. (2006): The governance of project coalitions: towards a research agenda. In: Lowe, D. (ed.): The Commercial Management of Complex Projects: Defining the Discipline, p. 324-343. Oxford: Blackwell.

3. Integrate EDI principles into your governance tools

An appropriate governance framework ensures that goals of organisations or projects can be reached. As governance is concerned with aligning different, sometimes conflicting stakeholder interests, appropriate design of structures, processes and accompanying tools are of general concern, and EDI principles should be specifically addressed for the benefit of the organisation, setting a framework for interactions, engagement and decision-making.

For a large project or infrastructures based on partnerships it is relevant to define and communicate standards. In terms of leadership and collaboration, there are several layers to be considered: Decision-making bodies and boards and their composition, specific tasks and positions within the partnership, collaboration and teamwork and related career opportunities.

EDI principles should be considered in the following standard government instruments:

- Core structures and procedures, representing how decisions are made and who is involved

- Co-created and shared principles for expected behaviours (e.g. a vision, charter, code of conduct, or a so called "netiquette", that is an etiquette for the internet)

- Contracts with partners that include EDI principles, e.g. on the election procedures of board and their expected composition

- Terms of Reference (ToR) that include such principles on membership, leadership, and interaction

- Standard operating procedures (SOPs) for communication and decision making, and guidelines, briefing documents that support the implementation of EDI principles

- Continuous communication of the principles within the partnership, e.g. by newsletters, as standing items on meeting agendas, checklists for workshops etc.

- Capacity Building (e.g. dealing with unconscious biases), leadership and career support (e.g. mentoring)

- Clear regulations to counteract the violation of EDI principles and discrimination

- Monitoring and reflection and collaborative action to improve strategy and measures.

The design and implementation of EDI principles in government instruments is supported by gender mainstreaming and diversity management as described in Section 3.1 (see "Implement Gender Mainstreaming & Diversity Management").

3.1   Implement Gender Mainstreaming & Diversity Management

Gender Mainstreaming is a strategy that reflects who benefits – and who doesn't - from which specific objectives, resources, or measures, originally with a clear focus on binary gender. It is based on collecting and analysing the necessary data, addresses the language, and especially who is involved in decision making, has access to resources and services. However, this strategy has also been heavily criticised for having produced only meagre results and thus of being unable to alter the mind set of responsible actors. Furthermore, scholars argue that it is better developed as policy approach than as concept and that the particularity of Gender Mainstreaming is not clearly defined and understandable. Lastly, some feminists reject the term "mainstream" due to its androcentric meaning as it reinscribes the position of women as deviation from a male norm (Bendl, 2012).

The European Union adopted the strategy of Gender Mainstreaming, defining it as "the (re)organization, improvement, development and evaluation of the policy processes, so that a gender equality perspective is incorporated in all policies, at all levels and at all stages, by the actors normally involved in policy-making" (Council of Europe, 1998), based on the Treaty of Amsterdam (1997).

Diversity Management is a concept that stems from organisation management. Diversity Management addresses the challenges that arise when different individuals are supposed to collaborate effectively together. Cost savings and increased innovation capacity are advantages of professional diversity management: based on lower staff turnovers and lower absenteeism rates. Furthermore, due to the diverse backgrounds and perspectives on tasks, people solve problems differently and can thus be more innovative. However, the economic reasoning for diversity management without further references to affirmative action programs against racial and gender discrimination in the US has been criticised (Köllen, 2021).

Diversity Management impacts organisational culture and how business is done. For this reason, it is crucial that top management is committed (O'Donovan, 2017) to analyse and set measures in three areas of intervention: objectives and strategies, structures and processes, individual competences.

The European Union itself can be seen as an ongoing project for diversity management as the diverse member states with their respective histories, languages, economies and (political) cultures come together to a joint governance centre in Brussels (Becker, 2004). Furthermore, 26 EU member states have developed and signed diversity charters. These charters as well as examples for good practices are available at the EU Platform of Diversity Charters, which was created in 2010 (EC, 2021a).

The following table (see Table 4) supports the implementation of Gender Mainstreaming & Diversity Management.

Table 4: Implement Gender Mainstreaming and Diversity Management

Gender Mainstreaming and Diversity Management
Planning Cycle
1. Analysis: What is the organisation doing, who is contributing, how are practices perceived?   2. Planning: Based on the organisational purpose: what objectives should be set? Which specific measures and which resources are needed? How to create commitment and communicate it?   3. Implementation What structures and processes, which competences are necessary?   4. Monitoring and Evaluation What is the actual outcome?
Area Objectives and Strategies
• Is it clear how diversity contributes to organisational strategies and aimed achievements?   • Is diversity addressed in guiding corporate documents, e. g. vision and mission statement, organisational objectives, contracts, Charters or Code of Conducts, recruiting and leadership guidelines, …?

- What data is known about the potential workforce and its sociodemographic details? And who is actually contributing, at which hierarchy level, function or role, with which resources?
- What is known about the diversity of potential partners? And who is actually collaborating?
- What is known about the diversity of potential users? And who is actually participating?
- Which measures are already in place? Which aspects of diversity are addressed? How is their effectiveness measured?

Area Structures and Processes

- Which structural units are responsible for the implementation, at which hierarchical level? Do they have the knowledge, power, resources to implement diversity management in their area of responsibility?
- Are top management meetings in place dedicated to diversity strategies and measures?
- To which extent are decision finding bodies, meetings and workshops designed to include different hierarchical levels, expertise, and perceptions?
- Are operating procedures in place that support reflection and inclusion of diverse contributors?
- Which communication channels are used to provide ongoing information on diversity objectives, measures, and outcomes?
- Which procedures are foreseen to monitor and further develop EDI principles?
- Are leaders hold accountable? – By which processes and responsible units?

Area Individual Competences

- How is diversity expertise integrated on top management level? Who is responsible?
- Do those who are responsible have the necessary expertise to guarantee compliance with diversity principles? (e. g. responsible for organisational objectives and strategies, for collaboration with external partners and/or in teams, for user design, operating procedures)
- Which trainings offered for whom? (e. g. gender/diversity analysis, anti-bias, interdisciplinary collaboration, intercultural training, leadership, inclusive workshop design, mentoring, peer groups)

3.2 Set up Gender Equality Plans

The new European framework Horizon Europe (see "Horizon Europe") highlights gender equality as crosscutting principle and increases its importance through the following three levels (European Commission, 2021b):

1) Compulsory Gender Equality Plans (GEPs) as an undefined eligibility criterion for certain categories of legal entities from EU countries and associated countries.

2) Obligatory integration of gender dimension in research and innovation content, an award criterion evaluated under the excellence criterion, unless the topic description explicitly specifies otherwise.

3) Increasing gender balance with a target of 50% women in Horizon Europe-related boards, expert groups and evaluation committees; moreover, gender balance among research teams becomes a ranking criterion for proposals with the same score.

As stated above, public bodies, research, organisations and higher education institutions are obliged to have GEPs in place from 2022 onwards to ensure sustainable institutional change (European Union, 2021).

GEPs offer a set of actions aiming at:

1) Conducting impact assessment of procedures and practices to identify gender inequalities and bias (in a first step, this impact assessment defines gender in a narrow sense, but invites to consider intersections with other forms of inequalities such as race, age or disability as well)

2) Identifying and implementing innovative strategies to correct such gender inequalities and bias

3) Setting targets and monitoring progress via indicators (European Commission, 2012)

This set of actions is intended as a strategy to achieve gender equality and mainstream gender (see "Implement Gender Mainstreaming & Diversity Management") in institutional structures. GEPs can also take into account intersections (see "Intersectionality") with other inequalities (on the ground

of race, age, ethnicity, disability or sexual orientation). However, this also requires more analytical resources, data and expertise.

According to the European Institute for Gender Equality[7] (EIGE, 2021), GEPs consist of several steps or phases:

- Analysis phase to collect sex-disaggregated data and assess processes and practices critically

- Planning phase to define objectives and targets

- Implementation phase to implement actions and entangle in outreach activities

- Monitoring phase to evaluate process and progress regularly to adjust and improve future interventions

These phases also show the various elements of a GEP to achieve gender equality. This objective can also be tackled through a Gender Action Plan, which is less extensive, but must also be understood as a roadmap for promoting gender equality through different actions. This means that a Gender Action Plan is also a policy framework addressing different stakeholders, levels and areas of action as well as ensuring transparent results (European Commission, 2020).

The HBP has developed such a Gender Action Plan I (Grasenick, 2019) for the second project phase (April 2019-December 2021). This Gender Action Plan II (Grasenick, 2021) was further developed for the current, last phase of the project (January 2021-March 2023) and positively evaluated by the European Commission. Gender Action Plans of the HBP comprise activities in the four areas of intervention:

- Develop and support HBP Stakeholders to share a Vision on diversity and equality, setting targets, supporting, and carrying out own activities.

- Analyse Structure and Processes of the HBP to identify leverage points for change.

- Contribute to Research and Lectures at HBP-related workshops and publications.

- Support Individuals, Teams, Leaders, offering advice on diversity in teams, as well as career building workshops.

The HBP regularly performs Gender Monitoring to evaluate the ongoing measures. The Report on the Implementation of the first Gender Action Plan (Grasenick, 2020) summarises the experiences with implementing activities related to equal opportunities during the second project phase. Most recent monitoring proved that measures for gender equality continue to be successful as the share of women in HBP leadership positions further increased (Trattnig/Grasenick, 2021).

3.3   Formalise structures for EDI

One possibility to ensure EDI principles in governance structures is to create certain units dedicated to these issues. For the governmental level, Women's Units or Women and Equality Units are examples of such institutional structures for EDI issues (Squires/Wickham-Jones, 2004). On a national level, the correspondent government unit would be a ministry (e.g. the OECD suggests to create "an institution for gender equality with adequate level of responsibility and position within the governmental structure" (OECD, 2018: 18).

They aim is to ensure that gender mainstreaming activities - or more generally speaking EDI related objectives and principles - are indeed implemented at different levels and in different units. For such areas of responsibility, sufficient expertise, resources, visibility and authority are necessary. Given the cross-cutting nature of EDI, dedicated units cannot be successful without full commitment and collaborative alliances of key stakeholders and decisions making units.

Without sufficient resources, visibility and authority to ensure the implementation of EDI principles, power and influence are very limited. It is thus essential that these units have clear responsibilities

---

[7] https://eige.europa.eu/gender-mainstreaming/toolkits/gear/what-gender-equality-plan-gep

in order to be heard and taken seriously. Therefore, it is suggested that these units are located within the highest possible level of governance (OECD, 2018).

Additionally, the direct involvement in the decision-making structures, sufficient competences and commitment of top leadership are of crucial importance.

Another critical issue is that these units or teams are often made up of an above-average number of women, i.e. the work on these issues is mainly led and carried out by women. This is a reproduction of gendered work which is creating a paradox since it is work aiming to create equality for both men and women, in all their diversity (Caffrey et al., 2016).

Such units or persons are usually established to support the implementation of EDI principles in governance structures and/or to specifically counteract discrimination. Examples are

- Gender unit, equality and diversity unit, central equal opportunities office
- Gender and Diversity Advisory Committees
- Working Groups for Equal Treatments
- Ombudsperson, Anti-discrimination Offices

3.4 Agree on Terms of Reference

Terms of Reference (ToR) define the purpose and structures of a project, committee, evaluation or similar group (see Table 5). They outline the responsibilities and framework of the respective task, including the different stakeholders and roles. Furthermore, they set guiding principles or values as well as schedules (Independent Evaluation Group, 2011).

Table 5: Template for Terms of Reference

Template for Terms of Reference (boards, committees, working groups, ...)
1.   Purpose/Function
1.1   A brief introduction, and if applicable: how does the purpose relate to Diversity and Equal Opportunities? what are the guiding principles? 1.2   Who are the stakeholders? 1.3   What does this board, committee, working group do?
2.   Membership
2.1.   The board/committee/... is preferably gender balanced and should represent the governance structure/community/... in its diversity. Its members come from different domains and have various functions (board members, leaders, scientists, technologists, or managers). Specifically, the following areas of responsibilities are represented: • Institutions/Units/... (a minimum of 2 members per unit; ideally of different genders) and selected tasks/programmes/... (at least one member of specific tasks/programmes/...) • Students representatives (a minimum of 2 members; ideally of different genders) 2.2.   Each unit/institution/ ... and students appoint two members (ideally of different genders, representing the diversity of their communities), who are invited to take turns in a balanced way, if required. Furthermore, specific areas of expertise may be represented. 2.3.   Members are appointed for a specific period of time. Members will reflect on a yearly basis their ability to contribute. If applicable: The board/committee/... can stay constantly open for new members. This means that the number of members is not limited, but concerning decisions, the representatives of a unit/institution/... (or student's representatives) have to agree among themselves how to vote because the number of counting opinions is fixed and limited (see section 5.5.7). 2.4.   In case appointed members do not have the resources to contribute according to their role, they will inform the board/committee/... and support the search for a suitable replacement. 2.5.   If applicable: The board/committee/... may consult other experts on an ad hoc basis
3.   Coordination of the board/committee/...
3.1.   Who coordinates the activities?

3.2.	Who reports to whom, when, how?

4.	Leadership of the board/committee/...
4.1.	The board/committee/... has one Chair and one Co-Chair who represent the board/committee/... internally and to external bodies. The board/committee/... will elect its Chairs from among its members. Each member can nominate candidates who will be asked if they agree on being nominated within two weeks. Each member has a vote. One round of voting will take place: The first placed person becomes Chair and the next placed person of different gender becomes Co-Chair. The tenure of the Chairs is until date XY.

5.	Working principles
5.1.	The board/committee/... uses a mailing list to communicate all information relevant to its members. If applicable: All information, minutes and results will also be stored and made accessible on an online platform for the board/committee/... as well as for all project/institution/... members by the coordinator.
5.2.	If requested by the board/committee/... Chairs or the coordinator, the Chairs will have a teleconference with the coordinator prior to the meeting.
5.3.	If stakeholders or members bring in a topic with a request for confidential treatment, the committee is bound by confidentiality.
5.4.	The board/committee/... plans to have in-person-meetings/videoconference meetings on a regular basis (e.g. once a month). Additionally, open meetings and webinars to discuss specific issues will be organised (as necessary). Meetings are scheduled by the coordinator in consultation with the board/committee/.... The agenda will be shared with board/committee/... members prior to the meeting. Preparation, minutes, and follow up of the meeting will be undertaken by the coordinator. The minutes are approved in the next meeting.
5.5.	Consultation of the board/committee/... proceeds as follows:
5.5.1.	The responsible person for the implementation of the Gender Equality Plan reports on a regular basis on the status of measures and related documents.
5.5.2.	Stakeholders may approach the coordinator or board/committee/... members with a request. Each member can introduce initiatives and ideas for discussion.
5.5.3.	Material that requires feedback is provided online/via email. Such inputs include, for instance, the specific implementation concept for an activity, or documents such as guidelines and reports that have been prepared in advance.
5.5.4.	Each board/committee/... member decides ideally within seven working days whether this input is of interest and relevance to the domain they represent, and whether they want to provide feedback and engage in the discussion.
5.5.5.	Feedback can then be provided in writing or verbally within a specified period to the coordinator who coordinates the discussion. The feedback differentiates major concerns and suggestions for improvement.
5.5.6.	Based on the feedback provided by the board/committee/..., the responsible person will revise the material in close contact with the board/committee/... members until all "major concerns" are clarified.
5.5.7.	Finally, the board/committee/... decides on the final version of their internal recommendations by majority vote. The coordinator does not have voting rights.
5.6.	The board/committee/... members support the communication of recommendations, measures and activities in their area of responsibility.

6.	Declaration of interests
6.1.	Board/Committee/... members have to declare immediate conflicts of interest through the foreseen procedure or registry. When issues are discussed that may involve a conflict of interest, the affected members should make this known and not participate in other specific discussions. Conflicts of interest can be reported in oral or written form and should be noted in the minutes of the relevant meeting.

7.	Review schedule
7.1.	These Terms of Reference can be reviewed upon request by a member or by the governing body to which it reports.

3.5   Design procedures and guidelines

3.5.1   Communicate constantly

Communication is necessary to sustain relationships. While frequent communication is supposed to support trust and commitment in decisions and progress being made, this does not mean per se that they are fair or have been based on EDI principles.

However, within CoLIPRIS, just keeping everyone informed is already a challenge. Stakeholders loosely coupled might contribute to several different organisations. The information they receive daily might be overwhelming and distracting. Special attention should be paid to new members (employees, board members, …) and as there is no substitute for personal, face-to-face communication, especially in CoLIPRIS, additional channels are needed to guarantee that information is distributed fairly and equally.

Thus, communication in CoLIPRIS needs special attention. Relevant information must be made accessible and constant reminders to make use of this information are needed.

Such constant communication must include the EDI principles themselves, information on where to find them and support in implementing them, and what happens if key principles are found to be violated.

3.5.2   Set standards for your operating procedures

A standard operating procedure (SOP) is a process that follows explicitly formulated and controlled steps. By setting a standard for these steps and assigning clear responsibilities, SOPs are a key element for quality control by offering guidance for everyone in an organisation.

However, it must be kept in mind that every standard, all strong regulations reduce flexibility. As such, the degree of regulations must be considered carefully and evaluated on a regular basis while guidelines, checklists etc. might provide more flexible approaches to communicate EDI principles within an organisation (see Table 6).

Examples for processes which should be more strongly regulated and carefully documented are recruitment and (s)election procedures for roles and positions within an organisation, key decision finding processes involving the distribution of critical resources, calls for new partners, conflict regulations, regulations against discrimination, compliance regulations.

Examples for processes which might need some more flexibility refer to co-creation of innovative ideas, design of public events, leadership principles that need to be adapted to a various of different areas of responsibility.

3.5.3   Decide which guidelines you need

The function of guidelines is to offer support for project members, users or any other target groups. It is the role of governance to consider if there is need for specific guidelines and why. These guidelines must then be produced and, most importantly, their communication and usage in day-to-day practice must be ensured. In the understanding of this process, guidelines and their usage contribute to capacity building.

This process implies that guidelines must be communicated clearly and regularly to the target groups to ensure correct usage. An example of such communication would be their regular promotion through internal project newspapers or in meetings.

The communication of such existing guidelines is one of the biggest challenges: if guidelines remain unknown, governance might fail to implement higher visions or mission statements for values and norms on a practical level (see Table 6).

Another challenge concerns the difficulty to transfer guidelines into everyday practices: often, guidelines might be too long or extensive for practical usage. Especially in research contexts, guidelines on data protection or EDI-issues often do not meet researchers' requirements. Researchers often face time pressure when working on new research proposals or applying for funding, and do not have time to acquire much background knowledge, despite a general openness for these issues. They need easily applicable and pragmatic tools that offer quick support. Therefore, one solution for this challenge can be to develop dedicated guidelines which are specially designed for the project's needs. For this reason, specific guidelines[8] were created for the HBP, covering different areas related to gender, equal opportunities and diversity.

Table 6: Checklist for designing constant communication, procedures and guidelines

Checklist for designing constant communication, procedures and guidelines
Standard Operating Procedures (SOPs)
• Which processes occur routinely? What are the key processes, that must be of high quality and produce the main outcome of the organisation? • Which procedures must be followed by everyone and why? To which extent will flexibility be hindered? What is the worst that can happen if the process – or a part of it – does not exist? • Which procedures impact EDI? (e.g. procurement, recruiting, event planning, …) • Who will be affected by the procedure? How are the stakeholders involved in the design? • Who will be the owner of the procedure? Which resources and decision-making authority are involved? • How to ensure that stakeholders know the SOPs and have the expertise to follow it? What happens if they don't? • Are the SOPs evaluated and updated?
Guidelines
• Which procedures and working practices need some specific expertise? From whom? • Which guidelines are already available? Are EDI principles included in available guidelines? • Would content and language fit the potential users/stakeholders? Should guidelines be newly developed? • Who is engaged in developing the guidelines? • How are the guidelines communicated, remembered, and made visible? • Are they evaluated and updated?
Checklists
• Which procedures and working practices involve specific steps, whereas none should be missed? • Which knowledge and expertise can be assumed? • Which guidelines are already available? Would content and language fit the potential users/stakeholders? • Are EDI principles included in available guidelines? Should guidelines be adapted or new once produced? • Who is engaged in developing the guidelines? • How are the guidelines communicated, remembered, and made visible? • Are they evaluated and updated?

3.6 References

Becker, Michael (2004): „Managing Diversity in the European Union: Inclusive European Citizenship and Third-Country Nationals. In: *Yale Human Rights & Development Law Journal*, Vol. 7, Issue 1, 2004, p. 132-183.

Bendl, Regine/ Schmidt, Angelika (2012): „Gender Mainstreaming: An Assessment of Its Conceptual Value for Gender Equality." In: *Gender, Work & Organization*, Vol. 20, Issue 4, July 2012, p. 364-381. DOI: https://doi.org/10.1111/j.1468-0432.2011.00584.x

---

[8] https://www.humanbrainproject.eu/en/about/gender-equality/measures-and-materials/#_guidelines

Caffrey L, Wyatt D, Fudge N, et al. Gender equity programmes in academic medicine: a realist evaluation approach to Athena SWAN processes. BMJ Open 2016;6:e012090. doi:10.1136/bmjopen-2016-012090

Council of Europe (1998): Gender Mainstreaming: Conceptual Framework, Methodology and Presentation of Good Practices. Final Report of Activities of the Group of Specialists on Mainstreaming, EG-S-MS, 98/2, Strasbourg: Council of Europe.p. 13.

EIGE: *Gender Mainstreaming. Institutions and Structures in the European Union.* URL: https://eige.europa.eu/gender-mainstreaming/institutions-and-structures/european-union [11.08.2021]

EIGE: *What is a Gender Equality Plan (GEP)?* URL: https://eige.europa.eu/gender-mainstreaming/toolkits/gear/what-gender-equality-plan-gep [16.09.2021]

European Commission (2021a): Diversity management. URL: https://ec.europa.eu/info/policies/justice-and-fundamental-rights/combatting-discrimination/tackling-discrimination/diversity-management_en [23.07.2021]

European Commission (2012): *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. A Reinforced European Research Area Partnership for Excellence and Growth.* COM(2012) 392 final. Brussels, 17.7.2012. URL: https://eige.europa.eu/sites/default/files/era-communication_en_2012.pdf

European Commission (2020): Gender Action Plan – putting women and girls' rights at the heart of the global recovery for a gender-equal world. 25.11.2020. URL: https://ec.europa.eu/commission/presscorner/detail/en/IP_20_2184 [16.09.2021]

European Commission (2021b): *Gender equality in Horizon Europe.* URL: https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/democracy-and-citizens-rights/gender-equality-research-and-innovation_en

European Institute for Gender Equality (EIGE): Gender mainstreaming. URL: https://eige.europa.eu/gender-mainstreaming [23.07.2021]

European Union (2021): *Horizon Europe. Gender Equality.* DOI: 10.2777/410001

Grasenick, Karin (2019): *HBP Gender Action Plan I.* https://doi.org/10.5281/zenodo.5535662

Grasenick, Karin (2020): *HBP GAP Implementation Report M1-M24.* https://doi.org/10.5281/zenodo.5535676

Grasenick, Karin (2021): *HBP Gender Action Plan II.* https://doi.org/10.5281/zenodo.5535670

Independent Evaluation Group (2011): Writing Terms of Reference for an evaluation: a How-To Guide. URL: https://ec.europa.eu/regional_policy/sources/docgener/evaluation/doc/05102016/prep_writing_tor.pdf

Köllen, Thomas (2021): Diversity Management: A Critical Review and Agenda for the Future. *Journal of Management Inquiry.* 2021;30(3):259-272. DOI:10.1177/1056492619868025

O'Donovan, Deirdre (2017): "Inclusion: Diversity Management 2.0". In: Machado C., Davim J. (eds): *Managing Organizational Diversity.* Springer, Cham. DOI: https://doi.org/10.1007/978-3-319-54925-5_1

OECD (2018): *OECD Toolkit for Mainstreaming and Implementing Gender Equality. Implementing the 2015 OECD Recommendation on Gender Equality in Public Life.* URL: www.oecd.org/gender/governance/toolkit [11.08.2021]

Squires J, Wickham-Jones M. New Labour, Gender Mainstreaming and the Women and Equality Unit. *Journal of the American Psychiatric Nurses Association.* 2004;6(1):72-76. DOI: 10.1177/1078390320960535

Trattnig, Julia/Grasenick, Karin (2021): "International Women's Day: The future is equal - leading women in the HBP." Featured HBP News, 8.3.2021. URL:

4.   Develop leadership and talents

Most universities and companies have their own processes for personnel decisions and recruitment, career development programmes, leadership training and guidelines.

However, the principles, as well as the accompanying support, vary significantly per country, as well as in each organisation. Even within one university or company, the actual implementation of the agreed-on principles has been proven to be difficult.

Many universities and research institutions have developed programmes, action plans and guidelines to provide support and to ensure high standards in recruiting (e.g. the University of Helsinki Equality and Diversity Plan 2017–2018). To create an effective and transparent process, some efforts are necessary, which include addressing unconscious biases influencing our decisions based on previous experiences and schemas (see Koch, D'Mello, Sackett 2015 for an overview). We cannot eliminate biases, but we can reduce their influence and optimise our decision making.

A detailed recruiting process, with templates and background information for each stage, is outlined in the HBP Talent Guideline: "I don't care who they are, I just want the best person" (Grasenick, 2019).

For a large project or infrastructures that are based on partnership, it is relevant to define and communicate standards. In terms of leadership and collaboration, there are several layers to be considered: decision-making bodies, and boards and their composition, specific tasks and positions within the partnership, collaboration and teamwork and related career opportunities.

A diverse workforce and equal opportunities for job candidates is not only a matter of fairness and responsibility but will also result in having relevant contributors for excellence and innovation: For complex tasks, a diverse team may achieve better outcomes than a homogeneous group of "the best people in a field" (Stewart, Valian 2018, p43ff), if managed well.
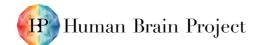
Concerning evaluators, decision-making bodies and peer-review committees, it is recommended that these bodies are diverse, in terms of gender, backgrounds, ages, etc. All members of these bodies should be trained concerning possible unconscious biases. Senior academics have a responsibility to support and sponsor talented members of under-represented groups (Brink/Benschop, 2011: 520).

The main goals of related EDI principles are expected to be:

- Decision making bodies and boards represent all genders and further diversity traits relevant for the partnership, proportional to the overall staff and/or available statistics.

- In general, personnel of the partnership represent the diversity of the related talent pool of the addressed regions or communities.

- Tasks and workload are distributed fairly, as well as career opportunities, resources and support.

- Communication and interactions are transparent, avoiding hidden networks and their agendas while enabling accessibility of leaders and permeability.

- Guiding principles are communicated, known, and implemented in the partnership.

- Conflicts, biases, discrimination are counteracted.

Can be implemented by:

- Contracts with partners that include EDI principles, e.g. on the election procedures of board and their expected composition.

- Templates for terms of reference (ToR) that include such principles on membership, leadership, and interaction (see "Agree on Terms of Reference").

- Standard operating procedures (SOPs) for communication and decision making.

- Guidelines, available in use for (s)election of leaders, in meetings etc.

- Trainings (e.g. on online leadership and collaboration of specific disciplines), mentoring and coaching for different career stages, in relation to the partnership.

- Clear structures and procedures to counteract discrimination, biases, and conflicts, such as working groups or units for equality or ethical issues, ombudsperson, a registration process for concerns and most importantly clear regulations for consequences.

- Continuous communication of the principles within the partnership, e.g. in newsletters, as standing items on meeting agendas, checklists for workshops etc.

- Monitoring for reflection and collaborative action to improve strategy and measures.

4.1 Design (s)election procedures

The following checklist (see Table 7) documents an ideal (s)election process, with the aim to ensure that suitable candidates are not overlooked but encouraged. The most suitable candidate for the specific position can be identified by considering and reflecting on how to overcome potential obstacles. For further details, consult the HBP Talent Guideline (Grasenick, 2019), offering the following guiding questions for the process design, and a template to evaluate candidates.

Table 7: Checklist to design (s)election procedures

Process to announce an open position and to (s)elect a candidate
Description, Required Competences, and Resources Needed
• Is there a clear description which tasks must be fulfilled? • Does the description include the competences expected from the candidates? • Does the description include the time and finances needed to fulfil the tasks? • Are the rules for (s)election procedures transparently defined?
Announcement and Access
• Is it clear who should be considered for the position and how diverse potential candidates could be? (e. g. based data on project staff or statistics) • Have representatives for the diversity of applicants or candidates given feedback how they perceive the announcement (e.g. by different gender, age, nationality)? • Are the position and the (s)election process announced broadly via various networks to ensure that candidates are reached and encouraged to apply? • Is there a standardised template for applicants to apply and present themselves (CV, motivational letter, presentations)?
Preselection (if applicable)
• Are those who preselect candidates trained in considering potential biases? • Is the number of preselected candidates kept rather large then small? • Is the process documented and justified?
(S)election
• Is the jury, board, or group involved in the (s)election diverse? • Do jury or board members know how to counteract potential biases? • Has each candidate the same opportunity to represent herself/himself? • Is the interview process based on a standardised template (if applicable)? • Is the process of decision finding facilitated by an expert (if applicable, e.g. to reflection on potential biases, same questions for every candidate?)
Documentation, Reflection, Improvement
• Is the process documented (diversity of applicants, experts involved in decision finding, justification of decisions, …) and reflected against potential biases?

4.2   Agree on criteria for excellence

Depending on the position, candidates need to be evaluated depending on certain criteria. In academia, recruiting decisions are often based on so called scientific excellence (see "Scientific excellence"). However, scientific projects like the HBP and EBRAINS involve far more Consortium members than purely scientific staff for whom the debate on scientific excellence is formative. Employees such as technicians or admin staff also contribute extensively to the success of the endeavour.

This raises the question how to measure excellence for the different positions in the project. Moore et al. (2017) go further and question the concept of excellence in general and if it actually means anything. They ask: "Does this pervasive narrative of "excellence" do any good?" (Moore et al., 2017: 1). According to them, ""excellence" [...] is a flexible term that operates in a variety of contexts across a range of registers" (Moore et al., 2017: 2). For this reason, they argue for an alternative rhetoric based on soundness and capacity-building to enable a more pluralistic approach to the distribution of resources and credit. For academia, this would mean a shift from evaluation of outputs to evaluation of practice: "This focus on the practice of research, including its communications, rather than the performance of success at research can also be aligned with developing narratives of Responsible Research and Innovation (see "Responsible Research & Innovation (RRI)") and public engagement" (Moore et al., 2017: 10).

However, as excellence is still regarded important in scientific contexts, it is essential that the criteria for excellence to evaluate candidates for open positions are fixed in advance. The following template (see Table 8) aims to provide some criteria with description as guiding elements for the evaluation of a candidate. Depending on the open position, not all criteria might be applicable. Evaluators are thus invited to use this template as guidance for further development depending on the criteria for the position in charge.

Table 8: Template to evaluate candidates for an open position

Candidate	Description	Weighting
Specific field of expertise	Competences related to job description, e.g. competent to lead, connect, summarise and report achievements, etc	
Current position	If applicable: as general description	
Personal information	If applicable: hidden for blind review, nationality, age, gender, etc. to be revealed at the latest possible time.	
Criteria (if applicable)	**Examples**	
Scientific achievements	recent publications, patents, successful grant applications, etc. (e.g. last 3 years: most innovative, relevant for the open position)	
Experiences related to expected competences	Previous and actual projects or tasks relevant for the open position	
Responsible Leadership	Knowledge on gender, diversity, unconscious biases, concrete plans and commitment on how to set EDI measures in the specific area of responsibility.	
External Representation	Competent to represent the board or group etc. towards external stakeholders, partners, at conferences, etc.	
Internal Representation	Capable of putting the common cause above self-interest. Contributes to a balanced representation of partners involved (avoid over-representation of specific partners, disciplines, or genders)	
Ambiguity Tolerance, Communication Skills	Competent to balance conflicting interests and requirements, conflict resolution skills, ….	

Motivational Skills	Motivating members or partners to contribute in alignment with the projects vision.	
Management Skills	Lead to ensure that formal (funding) requirements are met (in collaboration with further involved tasks or units)	
Resources and Availability	Time, commitment, and resources to carry out the tasks related to the position/role (e.g. number of meetings, availability during reporting and development phases, ….)	
Plans, Vision	Which vision/plans does the applicant have for the position and the related tasks?	
Added Value	What value does the applicant add? (e.g. new or different expertise or perspective, access to different networks, …)?	
Summary of points, adjusted with the weighting of criteria, verbal conclusion		

4.3 Encourage leadership commitment

European-funded projects are expected to strive for equal opportunities for all affiliated personnel, at all career levels and functions, with a specific focus on gender. In this respect, a partnership receiving funding could be a role model for further projects by developing a vision and mission as well as clear guidance for people with leadership responsibilities. Chartas and/or Codes of Conduct might be formulated, while the European regulations and guidelines (see "Consider the European framework for equality") should be the baseline.

Within the partnership, each country or institution has its own leadership principles. However, high-level documents are often not known by the staff and/or tend to be forgotten. Thus, it might be helpful to develop a document that can be signed thereby indicating personal commitment to follow EDI principles, independently from a specific leadership position.

In the following, an example for an EDI Mission Statement, as endorsed in the HBP, and a checklist for leaders (see Table 9) to identify and reflect leadership practices relevant for their area of responsibility, are outlined.
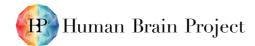
4.3.1 Example for an EDI mission statement

The HBP has developed a mission statement for equal opportunities, diversity and inclusion to enhance these elements within the partnership framework. This mission statement can be considered as example for promoting equal opportunities within a project, organisation or infrastructure (HBP, 2020):

"The HBP strives, by all means, for equal opportunities for all affiliated personnel, at all career levels and functions, with a specific focus on gender. In this respect, the HBP intends to be a role model for complex large-scale science projects. To achieve these goals, the [Boards] set the framework and measures for equal opportunities to address the equal opportunities goals as defined in [the strategy]. Leaders in charge of personnel decisions define and justify the composition of their staff, their goals and equal opportunities measures.

The HBP reference model for equal opportunities is a cascade model:

- All genders are expected to be represented at each career level in proportion to the level below.

- The initial figures are derived at the level of PhD students and Postdocs, based on ratios from sources like the European SHE FIGURES, the Elsevier gender report or organisational statistics.

- If there is a significant difference, the responsible leaders will check closely to try to find the reason. If the reason is discrimination, the HBP will endeavour by all means to fix that.

The HBP fosters a collaborative culture that acknowledges and values each individual's contribution to its innovative results, without discrimination.

Leaders are aware that distributing work and resources impacts equal opportunities and act accordingly. Each leader and each person affiliated contributes to fairness and equal opportunities within his or her area of responsibility, following the checklist for equal opportunities and the hiring and (s)election procedures for personnel and representatives.

The HBP adopts a learning attitude and will further develop principles, guidelines and procedures. Results are continuously monitored and evaluated. The related [EDI Unit and Committee] supports all leaders and persons affiliated with the HBP in their activities concerning equal opportunities."

Table 9: Example for an EDI Leadership Checklist

Example for an EDI Leadership Checklist	Yes/No
1) Do we maintain statistics that differentiate gender and career levels of our staff?	
2) Have we checked our statistics against available reference numbers (e.g. university data, reports of the European Commission or publishers like Elsevier)?	
3) Does the diversity of our team represent the diversity of the available workforce?	
4) Are all genders proportionally represented at all career levels?	
5) Are job advertisements tested with representatives of the target groups to ensure that they are a clear invitation to all groups, e.g. genders, nationality, age?	
6) Are the networks and channels for advertising open positions evaluated on a regular basis to ensure that the greatest pool of possible applicants is reached, especially applicants who are under-represented according to the reference data?	
7) Are all open positions communicated transparently and made easily accessible to the overall pool of applicants with the specific skill profile sought (e.g. scientific background, language competences, etc.)?	
8) Are guidelines and briefings in place for selecting applicants via evaluation of written applications (to counteract unconscious biases in the best possible way, e.g. considering type of contract/framework conditions under which certain achievements have been made)?	
9) Are guidelines and briefings in place for designing and documenting hiring interviews (to counteract unconscious prejudices in the best possible way)?	
10) Are hiring or appointment decisions clearly documented and communicated to all applicants (if possible explaining how the decision was reached, in accordance with national regulations)?	
11) Are measures in place to support new team members and/or leaders in performing their new tasks to the best of their abilities (e.g. buddy systems, mentoring, welcome packages, training, etc.)?	
12) Do we know and have we made best use of related measures at our organisation or university?	
13) Is the distribution of work resources within a team or unit re-evaluated on a regular basis (e.g. time for research and publishing, distribution of additional administrative workload, writing proposals, time in the lab, lab equipment, salaries, financial resources for conferences, etc.)?	
14) Are measures in place to ensure a collaborative, inclusive culture that values each person's contribution (e.g. team training, workshops enhancing mutual understanding across all disciplines, cultures, and genders, regular reflection, surveys, support in conflict resolution, etc.)?	
15) Are measures in place to enable life-work-balance, in collaboration with employers and other relevant organisations (flexible working hours, Kindergarten, dual career service, coaching)?	
16) Have we provided career advice and development plans for all employees?	
17) Are there measures in place to make sure that these plans are not influenced by unconscious biases (e.g. comparing and reflecting plans, as well as work distribution in a team, to ensure that the distribution is fair and that what is demanded for a specific career goal does not differ significantly from one person to the other)?	

18) Are measures in place to counteract disadvantages and to give talented people the chance to acquire all necessary skills (e.g. based on cultural differences, less experiences with specific tasks)?	
19) Do we monitor and reflect on data on drop-out rates and career aspirations and career achievements?	
20) Are leaders actually held responsible for an inclusive work environment enhancing equal opportunities within their area of responsibility (e.g. via training or by redefining their area of responsibility)?	
Conclusions of this reflection, follow up steps:	

4.4 Virtual collaboration & Covid-19

Complex, large-scale, international, publicly funded research infrastructures (CoLIPRIs) and projects are defined by a mosaic structure, distributed among several countries and various institutions, thus involving a diversity of stakeholders. Due to this framework, the collaboration within the project mainly takes place virtually, i.e. through emails, phone or video calls and meetings. For this reason, communication (see "Communicate constantly") is especially crucial to provide everyone involved in the project with relevant information and create commitment. Leadership needs to be aware of these special conditions to ensure good governance.

The Human Brain Project (HBP), as one of the three FET (Future and Emerging Technology) Flagship projects, is one of the largest research projects in the world. Starting in 2013, more than 500 scientists and engineers at over than 140 universities, teaching hospitals, and research centres across Europe come together to address one of the most challenging research targets – the human brain. Due to this remote structure, project members of the HBP collaborate mainly virtually - a type of collaboration which was enhanced by Covid-19 for many people worldwide. Virtual collaboration, i.e. working from home with increased digitalisation, became the new normality (Waizenegger et al., 2020).

As stated above, "the HBP has a long-lasting experience of interdisciplinary collaboration by virtually bridging distances because its involved partners are not only complex but also spatially remote" (Grasenick/Guerrero, 2020). To ensure inclusive virtual collaboration, the following two levels must be considered by leaders, especially in times of crisis:
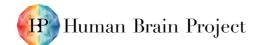
Personal life & mental health

Everyone has different personal living situations and especially during the Covid-19 crisis, family and other social significant obligations may vary depending on the changed living conditions. In times of crises such as the Covid-19 crisis, women are often hit harder because existing gender inequalities are exacerbated (EC, 2021).

Furthermore, everyone reacts differently to a crisis, not only depending on their personality, "but also on the specific circumstances of life, which bring stability, or other factors of uncertainty, for example, the financial situation, personal health or remoteness of friends and family members" (Grasenick and Guerrero, 2020).

Professional life & virtual collaboration

"The impact a pandemic like Covid-19 can have on the professional situation depends, among others, on the educational background or scientific discipline and career stage of a person. While some can make progress by working from home, others might depend on lab work, contributions to conferences or a research stay abroad. Especially for early career stage scientists, contracts might not be safe or at severe risk due to travel restrictions, no or restricted access to labs and further resources crucially needed to progress" (Grasenick and Guerrero, 2020). Therefore, it is helpful to clarify "different options of contracting under the given circumstances [in order to] provide as much security as possible." (Grasenick and Guerrero, 2020).

Virtual collaboration will continue after the end of the pandemic and, despite some challenges such as the clear distinction of boundaries between work and personal lives (Vasel, 2021), it also offers many advantages, the most important being that it can take place anywhere. However, these "virtual environments lack the opportunity to dedicate the same amount of time and involve all

senses, which is even more critical when cultural and professional differences come into play" (Grasenick and Guerrero, 2020). Although virtual meetings are better for the environment, "they are more exhausting because movement in between meetings is missing, voices sound different, and it is unclear who looks at what on the monitor" (Grasenick and Guerrero, 2020). For this reason, it is essential to pay attention to these specific characteristics of virtual collaboration by reflecting on the following questions (see Table 10) and thereby consider EDI principles to allow everyone to thrive and contribute (virtually).

Table 10: Checklist for inclusive virtual collaboration

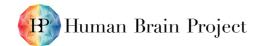| Checklist for inclusive virtual collaboration |
|---|
| **Personal life and mental health** |
| • Do you keep in touch with your team members, especially those you have not heard in a while?
• Do you show interest and understanding for the private life domains of your team members?
• Do you ensure a climate of safety and trust for team members to speak up (e.g. by revealing your own concerns)?
• Do you ask your team members what might help them in these extraordinary times of crisis (e.g. share helpful information on games or learning platforms for children with colleagues who are parents)?
• Is there the possibility for virtual coaching for team members?
• Especially in times of crisis, are further resources for support (e.g. psychological support, telephone counselling, etc.) communicated to the team?
• Are you aware that work results and performance might differ in home office compared to "normal" settings (in offices and not during crisis)?
• Do you give more time and ensure additional feedback for team members working from home office? |
| **Professional life and virtual collaboration** |
| • Do you pay special attention to younger team members or early career stage researchers? For example, do you schedule individual meetings dedicated to career planning to share thoughts?
• Do you make sure for enough time to get to know different virtual work style preferences (e.g. joint brainstorming in video calls with collaborative tools such as Padlet or Mural, phone calls, etc.)?
• Do you offer a variety of different collaborative channels and ways to contribute (e.g. telephone, Slack channel, chats, emails)?
• Do you make sure everyone feels good, i.e. safe and valued, in meetings (e.g. respecting privacy by not making it obligatory to have cameras turned on, making participants aware of the opportunity to show their names only, a preselected picture or a virtual background instead of their private environment)? Additionally, participants can be invited to share their preferred pronouns in brackets next to their name to ensure that everyone feels addressed correctly.
• Are you aware of the challenges of virtual collaboration? For example, "emails might not arrive, end up in spam filters, the content might be overlooked or hard to interpret" (Grasenick and Guerrero, 2020).
• Do you make use of the range of technical possibilities for collaboration in video calls (chat rooms, hand raising for questions, etc.)?
• Do you send documents beforehand to give participants enough time and opportunity to respond via different channels? |

4.5   Support career development

One of the most effective structural measures to support career development is through the implementation of a mentoring programme (see Table 11). Many universities and research institutions offer mentoring programmes to support their students, PhDs or often female researchers (as many mentoring programmes are for women support only). However, only a dedicated mentoring programme in a complex large-scale, international, publicly funded research infrastructure (CoLIPRI) or project can provide the special design needed for such an environment. This is one of the main differences compared to mentoring programmes offered at local institutions or universities: the latter aim to provide career support for mentees within their framework, i.e. mentors often stem from the same university/institution, country or scientific field, whereas a dedicated project

mentoring programme, such as the [HBP High Potential Mentoring Programme](#)[9], offers partnerships with mentors from different partnering projects, external institutions as well as different scientific fields and countries.

Due to the size and distributed nature of the project infrastructure, the design of the mentoring programme is unique because it takes place solely online. This means that all process steps (promotion, registration, matching, mentoring sessions, accompanying measures and feedback) are organised via a diversity of online tools (among others, emails, zoom/skype video calls, shared documents and collaborative tools like padlet or mural). In-person meetings are only organised in special cases by the mentoring partner themselves, e.g. when both mentee and mentor attend the same conference and decide to meet there. One of the main benefits of this online design is that mentoring partnerships are stable and regular because they can be held from any place.

As matching of the mentoring partnerships also takes place and is confirmed virtually, the question how similar mentor and mentee should be is of even more importance. Mentors often identify with the same gender, especially women-women-mentoring. Although these approaches show advantages, they also pose some risks: If mentor and mentee stem from a similar scientific discipline, mentoring sessions might focus on subject-specific aspects that should be supported by the respective subject supervisors. Additionally, life and professional experiences might not be reflected enough, but get simply adopted by mentees. Mixed-gender mentoring partnerships, as they are offered in the HBP High Potential Mentoring Programme, can open the understanding for contexts in which mentors or mentees cannot experience themselves and are thus more inclusive: For example, the access to networks or informal rules which focus primarily on a specific gender and to which women or minority members often do not have access. Lastly, it depends on the objectives and expectations of mentees if mentoring partnerships should be quite similar or not. For example, mentees might wish to have role models from the same gender concerning the compatibility of family and career. Still, it might open up new perspectives and approaches to have other role models than expected - in this case it could be men who violate traditional gender roles by insisting on both family and career (Grasenick, 2021).

Another reason for a dedicated project mentoring programme is to offer help for EDI-related issues within the project framework and thereby create a momentum of supporting networks, which can foster collaboration with other project members and identification with the project. This sense of belonging within the given framework can be enhanced with accompanying measures to meet other mentors and mentees and thereby increase networks. Networks within project structures can thus be steered by the governance side and consequently counteract informal networks that may be unknown to the governance level.

Therefore, a dedicated project mentoring programme does not only have individual advantages for mentors and mentees, but also structural advantages for the project.

Table 11: Elements of a mentoring programme

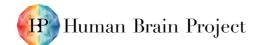| Process steps and elements for mentoring |
|---|
| What are the objectives and who are the target groups of the mentoring programme? |
| The target groups of the mentoring programme were identified, and the selection of target groups is justified (e.g. mentoring for under-represented groups like women or minorities). |
| Clear objectives for mentoring, which focus on present or future competences, were defined and discussed with experts and/or the target groups. |
| A mentoring type (e.g. one-to-one mentoring, group mentoring, peer-mentoring, cross-mentoring) which is adequate for the objectives and target groups was chosen and enough mentors are disposable for the chosen mentoring type. |
| Who coordinates the mentoring programme? |
| Coordination of the mentoring programme is carried out by a suitable person with enough experiences and expertise, good networks to promote the programme, competences to match mentoring partnerships and social skills for coordination activities. |

---

[9] https://www.humanbrainproject.eu/en/about/gender-equality/measures-and-materials/#_mentoring

There are enough financial and infrastructural resources for the implementation of the mentoring programme.
How is the mentoring programme promoted?
A mentoring programme might be promoted via several channels namely, email list and newsletter, social media, personal contacts, meetings and workshops, recommendations by leaders.
How does the registration proceed?
Registration for a mentoring programme should be online via a registration form. The landing page should explain the purpose of the overall mentoring programme, as well as the roles of mentors and mentees. The fields for the online registration should contain contact details, motivation, potential goals or areas covered by mentors and further information that will support the matching of mentors and mentees. Registration should be confirmed via email, including a timeline for an expected detailed response and contact persons.
How are mentees and mentors matched?
Mentees and mentors are matched according to the information provided during the registration. Additionally, mentors might also be searched via contact persons, with an anonymous profile relating to the goals of one or more mentees. Mentors and mentees are informed and instructed to meet. It is suggested to keep first meetings non-binding, with opt out options for both sides.
How is the mentoring process structured?
At the beginning, a mentoring agreement between mentors and mentees should be signed. It might be kept confidential or sent to the organisers for confirmation of the mentoring partnership. The mentoring partnership is clearly structured (number of meetings, organisation of trainings, formal confirmation of participation in the programme, etc.).
Are there any accompanying measures?
• Peer Groups • Support for Mentors Furthermore, regular reminders for these accompanying measures should be sent out and official closing of the programme should be announced to mentors and mentees via email. Mentors and mentees should be contacted regularly via email, phone or personally to solve any potential challenges of the mentoring partnership.
Is the mentoring programme evaluated at the end?
Lastly, mentors and mentees are asked for feedback to evaluate the programme and further improve it for a possible next implementation.

4.6   References

van den Brink, Marieke/Benschop, Yvonne (2011): Gender practices in the construction of academic excellence: Sheep with five legs. In: *Organization*, Vol. 19, No. 4, p. 507-524. DOI: 10.1177/1350508411414293.

European Commission (2021): 2021 report on gender equality in the EU. 05.03.2021. URL: https://ec.europa.eu/info/files/2021-report-on-gender-equality-in-the-eu_en [11.08.2021]

Grasenick, Karin (2019): Talent Guideline: "I don't care who they are, I just want the best person." DOI: https://doi.org/10.5281/zenodo.5236298

Grasenick, Karin/Guerrero, Manuel (2020): "Responsible Research and Innovation & Digital Inclusiveness during Covid-19 Crisis in the Human Brain Project (HBP)". In: *Journal of Responsible Technology*, Volume 1, Oct. 2020. DOI: https://doi.org/10.1016/j.jrt.2020.06.001. PLUS Publication ID: P2564.

Grasenick, Karin (2021): *Mentoring as a tool in promoting young talent: at universities. A handbook with practical guidance for mentors.* Coordination Centre for Gender Studies and Equal Opportunities, University of Graz. DOI: https://doi.org/10.25364/905.Mentoring.eng.20

HBP (2020): HBP Leaders' Commitment to Equal Opportunities and Inclusiveness. 8.3.2020. URL: https://www.humanbrainproject.eu/en/about/gender-equality/measures-and-materials/#_leadership [16.09.2021]

Koch, A.J./D'Mello, S.D./Sackett, P.R. (2015): "A meta-analysis of gender stereotypes and bias in experimental simulations of employment decision making". In: *Journal of Applied Psychology, 100*(1), p. 128–161. DOI: https://doi.org/10.1037/a0036734

Moore S et al. (2017) "Excellence R Us": university research and the fetishisation of excellence. In: *Palgrave Communications*. 3:16105. DOI: 10.1057/palcomms.2016.105.

Stewart, A./Valian, V. (2018): *An Inclusive Academy. Achieving Diversity and Excellence*, MIT Press.

Vasel, Kathryn (2021): "The pandemic forced a massive remote-work experiment. Now comes the hard part." In: CNN Business, 11.03.2021. URL: https://edition.cnn.com/2021/03/09/success/remote-work-covid-pandemic-one-year-later/index.html

Waizenegger, Lena/McKenna, Brad/Cai, Wenjie/Bendz, Taino (2020): "An affordance perspective of team collaboration and enforced working from home during COVID-19". In: *European Journal of Information Systems*, 29:4, 429-442, DOI: 10.1080/0960085X.2020.1800417

5.   Set the principles for events and interaction

Events offering webinars, workshops or conferences aim to reach and engage as many people as possible. To achieve this goal, it is essential that these activities are appealing to a diverse set of people. We are all different and although the HBP consists of 130 different partners, we are all united in the vision and work for the HBP and EBRAINS.

EBRAINS is committed to enhancing equal opportunities (HBP, 2021). It aims to demonstrate how diversity drives scientific excellence, innovation, and collaboration and to represent European good practice for fostering equal opportunities across various institutions, member states, disciplinary cultures and intellectual environments. In line with the strategies of the European Commission (EC, 2020a; 2020b), it seeks to achieve such aims through a variety of activities, including workshops, conferences, training events and lectures.

Consideration of equal opportunities and diversity must be addressed on two levels:

1) the diversity of lecturers, participants, contributors, and organisers as well as

2) diversity in relation to the content.

Contributors and participants can learn a lot from the organisers in terms of communication, fair possibilities for collaboration for all persons, regardless of gender and other diversity traits, and critical thinking.

The purpose of this section is to support reviewers in considering and evaluating aspects of gender, diversity and equal opportunities when planning events or Calls (for Expression of Interest, Papers). This means that several aspects must be taken into account to ensure that EDI principles are part of the content (where appropriate and otherwise explain why it is not appropriate) and considered for the selection of contributors, speakers, etc. This raises questions such as: Have you thought about the full spectrum of possible speakers, i.e. considering diversity dimensions? How does the content of the webinar address diversity and if the content does not address diversity, why not? Do early career stage researchers have a possibility to demonstrate their skills? Is the venue of the conference accessible to a diverse set of people? These questions are discussed in the following pages.

5.1   Consider EDI principles in event planning

(Online) conferences or other events (including, lectures, webinars, sessions, or workshops) aim at presenting HBP research, achievements or topics to certain audiences or the greater public. It is

essential to consider who is visible at these conferences or events as speakers, presenters, and contributors, such as senior scientists or PIs, as they may be seen as inspiration or role models by some people. It is important to make a diversity (see "Sex, Gender, Diversity") of role models visible, among others by speaker lists that consider equal opportunities, a variety of different contributions, possibilities to interact and exchange, etc.

Established scientists or PIs who are leaders can support the career development of early-stage researchers at events in different ways: one important option is to offer early-stage researchers an opportunity to present at these events (e.g. poster presentations) and to actively encourage them to contribute. Another option is to support early-stage researchers by sharing personal experiences and tips on career development in dedicated sessions (see "Enable strategic networking across generations").

Additionally, it is essential that events are inclusive (see "Inclusion & Inclusiveness"): This means, that contributors and participants should all be able to access the event. The following could be considered:

- how parents travelling with children and handicapped people can access the event (e.g. by providing a room, ensuring barrier-free access) as well as travel costs and visas

- for hybrid events how people attending only virtually are not disadvantaged compared to those attending on site.

- for online events, the time frame is also relevant as time zones differ, therefore, recording the event might offer the opportunity for other time zones to profit from the event as well (if presenters priorly agree to recording).

In interactive workshops or webinars, all participants should have equal opportunities to contribute (regarding roles, speaking time, etc.).

Considering EDI principles in event planning means to broaden possibilities, as bigger audiences could be reached and the impact of the activities is thus bigger, and enable more engagement, as diverse target groups have equal opportunities to contribute.
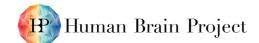
5.2 Plan events such as conferences, workshops and more

Table 12: Checklist for integrating EDI in event planning

Quick Checklist for EDI in Event Planning (conferences, webinars, (online) workshops, lectures, seminars, etc.)
Preparations
• Aim and target groups of the event
o Did you consider the diverse target groups in the definition of the event's aim?
• Is the process of the event organisation documented in a transparent way to be understandable for externals upon request?
o For example, in case the original speakers list represented the intended diversity and later on, two speakers cancelled, resulting in a homogeneous list (documentation of process), a transparent documentation is helpful to explain what happened (if needed).
• Organisational team
o Does the organisational team represent the diversity of the project/institution (different genders, ages, backgrounds, scientific disciplines, etc.) behind the event? If not, did the organisational team consult or discuss with a variety of members/different communities of the project/institution to ensure that their needs, wishes, etc. are considered?
o Does the organisational teamwork have EDI principles knowledge or experts in its committee to ensure that EDI principles are considered?
• Announcements for the event (prior to event)
o Are the channels used appropriate for the targeted participants, so that they will be reached? For example, special promotion via social media for events that target early-stage researchers.

- o Did you check the visuals and texts you would like to use with your target groups/different communities? Did you reflect on the materials with regards to diversity?

Venue (when appropriate, e.g. for on-site conferences)

- Is the venue adequate to consider different needs of diverse people, such as
  - o parents travelling with children (extra room)?
  - o people with special needs (e.g. barrier-free access for wheel chairs, protanopia/deuteranopia/tritanopia/achromatopsia (combination of colours, e.g. red-green-blindness), support for people with hearing-impairment by ensuring good visibility of speakers' faces, etc.)?
- How does the payment of the conference work? For example, researchers might have to pay in advance on their own and get refunded by their institution afterwards, which is not affordable for all. Are there any possibilities for financial aids, etc.?
- In case of hybrid format: Is special care taken to include online participants wherever possible, e.g. online poster sessions, etc.?

Event Programme (i.e. workshops, hands-on sessions, keynote lectures, etc.)

- Do early career stage scientists have an opportunity to demonstrate their scientific and presentation skills?
- Is the diversity of theoretical approaches within the scientific discipline visible in the conference programme (e.g. different schools of thought or traditions)?
- Are non-scientific sessions (e.g. networking sessions, etc.) part of the programme? Such networking formats are important for interdisciplinary collaboration and especially early-stage researchers can benefit for their career development by broadening their networks with the help of such networking formats.

Speakers, Lecturers, Presenters, or Contributors

- Was the diversity (in terms of gender, race, age, discipline, ….) of speakers, lecturers, presenters or contributors considered?
  - o Does it reflect the diversity of contributors in the field? If not, has a justification been provided?[10]

Participants

- Did the announcement reach the different communities you are expected to participate? If the number of participants is limited, are the regulations to select participants clear and transparent for everyone (first come first serve, level of qualification) ?
- How will participants with different cultural and educational backgrounds be encouraged to participate?
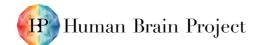
Research Contents

- Which diversity aspects are addressed and how (distinguished in the data and variables used)? If diversity aspects are not considered in the content, why not?
- What underlying theories and practical examples (if any) is the proposal referring to in terms of diversity (e.g. gender, age, race, social background, environmental influences, ethnicity, etc.)?
- Are examples of societal relevance of the research given? Depending on the workshop/ conference topic (if relevant), to which extent are topics of responsible research and innovation addressed?
- Are different genders, different research communities who have contributed to the discipline explicitly mentioned? For example, Ada Lovelace[11] as the first known woman computer programmer or the neurosexism debate[12] in neuroscience.
- Are the stakeholders or users of the knowledge created by the respective scientific discipline(s) identified?

---

[10] The European SHE FIGURES 2018 (see https://ec.europa.eu/info/publications/she-figures-2018_en) serve as reference data to compare if the proportion of speakers or lecturers for a specific scientific field and different academic levels is balanced. Concerning the proportion of female and male researchers, the Elsevier Gender Report (https://www.elsevier.com/connect/gender-report) also offers data for comparison.
See also the Report on the Implementation of the Gender Action Plan (see https://doi.org/10.5281/zenodo.5535676) to compare the proportion of women and men within the different Work Packages of the HBP.
[11] https://www.britannica.com/biography/Ada-Lovelace
[12] https://theconversation.com/how-neurosexism-is-holding-back-gender-equality-and-science-itself-67597

Methods and Materials
• Were materials checked with regards to potential unconscious biases (see "Unconscious bias") concerning diversity dimensions (e.g. gender, race, age, etc.)?
• Do the lectures implement different didactic approaches?
• Is there evidence that methods and materials are suitable for the target group?
Interaction
• For online events, remind participants of netiquette/housekeeping rules (see "Shared principles for expected behaviour") at the beginning of the online event (explain technical modalities, invitation to turn on the camera, raise hands if wish to speak, usage of appropriate language, constructive feedback, etc.)
○ When introducing the online event with the netiquette, clarify also how you will deal with "ghosts", i.e. participants who do not react when addressed, with cameras turned off.
• Make sure that interaction is "moderated", i.e. that contributions from participants are balanced. For example, encourage especially early-stage researchers to engage in the online workshop as they might be less prone to speak than senior researchers.
• Do participants have the possibility to interact and network (breakout sessions, polls, chats)?
Evaluation
• Is a contact point provided if participants would like to receive more information, give feedback, address concerns, etc. after the conference?

5.3   Implement EDI principles in Calls (for Expression of Interest)

The following checklist aims to support organisers of Calls (for Expression of Interest, for Papers, etc.) in considering EDI principles.

Table 13: Checklist for implementing EDI in Calls

Quick Checklists for integrating EDI in Calls
Preparation, Announcements
• Are the channels used to promote the Call appropriate for diverse communities?
• Are women, minorities, young researchers and other (vulnerable) groups especially encouraged to hand in proposals/papers, etc.?
• Did you check the visuals and texts you would like to use with your target groups/different communities? Did you reflect on the materials with regards to diversity?
• Are the evaluation criteria fixed in advance and transparent?
Content of the Call
• Is the formulation of the Call clear and understandable?
○ Are there any guidelines supporting applicants in the process (e.g., see Guidelines for CEoI[13]?
○ In case that questions arise, is a contact person responsible for Call management provided?
• Is the deadline for the Call also realistic?
• Does the Call explicitly refer to considering EDI principles in the submissions, i.e. address that submitted proposals/papers should consider diversity in terms of
○ research content (data/variables, underlying theories, etc.)
○ contributors (authors, speakers, schools of thought, etc.)
○ methods, materials or didactic approaches, etc.
○ or provide a justification if diversity was not considered.
Evaluation of the Call
• Is the evaluation process transparent?
• Is the jury/team of reviewers diverse (different genders, ages, backgrounds, scientific disciplines, etc.)?

---

[13] https://opencalls2.humanbrainproject.eu/call/filePreview/135

> o How does the jury/team of reviewers handle potential conflicts of interest? (For example, a personal relationship to applicants (such as family members, friends, etc.) might influence decisions and thus hinder equal opportunities.)

5.4   Enable strategic networking across generations

Especially in interactive contexts, it is important to consider EDI principles as these are often overseen in dynamic situations. Furthermore, research has shown that women and other vulnerable groups do not interact in the same way as men (Hearn, 2020). It is thus essential to actively encourage women, young researchers and minorities to interact and thus ensure equal opportunities. To achieve this, it is crucial to create specially designed formats which allow facilitated interactions for networking across generations.

To support networking in an unequal setting, e.g. senior and early-stage researchers, it is essential to prepare and promote targeted questions in a facilitated session (e.g. during a break or in a hands-on workshop). In such a networking session, early-stage researchers have the possibility to ask PIs and senior researchers (so called "Career Ambassadors") questions related to career development. Early-stage researchers (ESR) are highly interested to learn from PIs and their personal experiences. Especially persons who lack role models in specific fields of sciences are often eager to hear their stories.

The concept is as follows:

When taking place in a room, ESRs will be encouraged to first share their thoughts in small groups, then asked which questions they have. When taking place online, questions will be prepared to first vote on (see below), then use the chatroom or talk directly with PIs.

If there are no immediate questions from ESRs, the facilitator will engage in a conversation with the PIs.

Online format: 3 questions prepared for career coffee talk; participants vote for the first question:

- *What were the most difficult career decisions you had to take?*

- *Have you ever experienced biases towards yourself or colleagues? How to react?*

- *What do you consider as most important skills in academia (in addition to scientific excellence)?*

The following paragraphs summarise background information on questions that PIs might be asked.

- You might be asked to sketch the milestones of your career.

- How did you become part of your scientific community?

Networks seem to be important. In this respect, you might raise awareness to the fact that it can be difficult to become part of a network and gain visibility within the network. Especially our natural tendency to work with people who are more like us (homophily) can make it difficult for women or minorities to become part of the network. Networking and important information exchange related to career decision making often takes place outside of office hours, in combination with specific activities (alcohol consumption, sports etc.) this can also exclude persons with e.g. family obligations (Brink/Benschop, 2011).

- How to find support in academia? (a post-doc position, a mentor)

A mentor is not necessarily a formal mentor, but can also be a colleague, a relative, a supervisor or a friend who had more experience than you. This person might have offered advice to you, coached your confidence in certain situations or introduced you to other people that played a role for the further development of your career (Grasenick, 2021).

- Which success factors do you consider important in your scientific field? E.g. publications in high-impact journals, etc.

You might wish to draw attention to the relevance of first authorship, citation circles e.g. to not only publish but become cited by colleagues. Again, women and minoritised groups are less often cited and first or last authors. In this respect, early career stage scientists should reflect on their

citation practices. Other examples for differences are: request for co-authorships, h-index, teaching responsibilities, contracts (permanent, full-time, or part-time), male networks, reference letters and even career advice (Dworkin et al., 2020).

- What skills are relevant for an academic career? What else should be considered as success factor, e.g. phases of productivity, "multitasking" career (like managing family obligations and academia)?

When considering skills, also transferable skills should be considered (e.g. collaboration in an international team, communication skills, stress tolerance, etc.)

- You might also talk about the milestones in your career and what strategic steps you took to achieve them.

- Do you remember any critical situations or decisions to make that might have risked the further development of your career? What conclusions did you draw from this experience?

For example, the decision to reduce working hours at a certain point of the career might influence the further development of the career by receiving a higher position later than foreseen. This might especially be the case for young parents who wish to go on parental leave (Brink/Benschop, 2011).

- When you think back to particularly work-intensive times, what did you do to manage your life-domain-balance? What would you advise others to keep a healthy life-domain-balance?

Keeping a healthy life-domain-balance is important as both physical and mental health are bases for excellent work performances. Although it is "normal" to have work-intensive periods, overall life domain balance should not be neglected in the long term. Especially women might ask related questions, as they often do more reproductive work (i.e. childcare and domestic work) and thus have less time for themselves. Thus, family planning might also be a topic. Men as role models would be of high relevance in this respect too (Besselaar/Sandström, 2017).

- Collaboration is crucial for an academic career (becoming part of a network, being published and cited). Since academia is getting bigger (more researchers), competition has grown. Concerning the ideal of collaboration and fairness in science: To which respect does competition influence career opportunities? What would be your advice?

Workload and resources are sometimes distributed unequally within a team (e.g. time spent in the lab, coding, maintenance, conference organisation, more lectures, management of third party funds, …): Whereas some scientists are more able to focus solely on their career, others find it more difficult to say "no" to extra work not directly beneficial for their career – on average more women will be asked for such additional work. In general, women feel more responsible for the overall team or institute.

- What would be your advice? (in general: how to deal with stereotypes towards women and minorities, difficult situations within a team and supervisor, etc.)
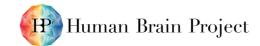
5.5   References

van den Besselaar, Peter/Sandström, Ulf (2017): Vicious circles of gender bias, lower positions, and lower performance: Gender differences in scholarly productivity and impact. In: *PLoS ONE* 12(8): e0183301. https://doi.org/10.1371/journal.pone.0183301

van den Brink, Marieke/Benschop, Yvonne (2011): Gender practices in the construction of academic excellence: Sheep with five legs. In: *Organization*, Vol. 19, No. 4, p. 507-524. DOI: 10.1177/1350508411414293.

Dworkin, J.D., Linn, K.A., Teich, E.G. et al. (2020): "The extent and drivers of gender imbalance in neuroscience reference lists". In: *Nature Neuroscience*, No. 23, June 2020, p. 918–926. https://doi.org/10.1038/s41593-020-0658-y

European Commission (2020a): Gender Equality in Horizon Europe. URL: https://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/gender_en.htm [17.08.2021]

European Commission (2020b): Gender equality strategy. Achievements and key areas for action. URL: https://ec.europa.eu/info/policies/justice-and-fundamental-rights/gender-equality/gender-equality-strategy_en [17.08.2021]

Grasenick, Karin (2021): *Mentoring as a tool in promoting young talent: at universities. A handbook with practical guidance for mentors.* Coordination Centre for Gender Studies and Equal Opportunities, University of Graz. DOI: https://doi.org/10.25364/905.Mentoring.eng.20

HBP (2021): Diversity and Gender Equality Activities Overview. URL: https://www.humanbrainproject.eu/en/about/gender-equality/ [17.08.2021]

Hearn, Jeff (2020): "Men and masculinities in academia. Towards gender-sensitive perspectives, processes, policies and practices". In: Drew, Eileen/Canavan, Siobhán (ed.): *The gender-sensitive university : a contradiction in terms?* New York: Routledge.

6. Annex: Some basic definitions

6.1   Sex, Gender, Diversity

Sex and gender are often differentiated as binary categories, however, the idea of two sexes is far too simplistic. For this reason, feminist theory often uses the distinction of "sex" and "gender": The underlying assumption is that sex differences are determined by biological factors (chromosomes, hormones, body composition, etc.), while gender considers the interplay with socio-economic and psychological factors (i.e. the effect of gender norms and roles) and further co-variables that might be influential.

Sex refers to the biological differentiation between "male" and "female" and is determined by chromosomes, genes, hormones and anatomy. The concept of "intersex" refers to a variety of conditions, whereby a person's combination of sexual, anatomical, and physiological traits does not fit the typical definition of male and female (Ainsworth, 2015; ISNA, 2015).

The term gender refers to the social construction of women, men and non-binary persons. Societies and cultures associate competences, behaviours and attitudes with a person's biological sex, and related expectations and ascribed roles might lead to differences in persons' paths through life, for instance, by influencing whether and how occupational choices and achievements are recognised.
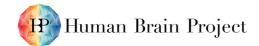
However, some theoreticians (among others Judith Butler) have criticised this distinction as both terms are understood as culturally constituted categories. From this perspective, gender is understood as "doing", as performative act (Butler, 1990). This conception has also been transferred to neuroscience, as Kaiser notes: "Sex/Gender" has been used to raise awareness that both categories are socially constructed, and both effect the brain in a complex interplay (Kaiser, 2012).

The term diversity comprises the manifold traits and characteristics of human subjects and their differences based on various dimensions. Some of these traits are inherent (e.g. sex, ethnicity, race, sexual orientation, body composition, physiology, age), some are ascribed or acquired (e.g. gender, skills, knowledge, technological literacy) and others are context related (e.g. different mobility capacities in private and working context, social and economic background, working and living environment, lifestyle) (Gardenswartz/Rowe, 2003). In the context of neuroscience, cognitive diversity, touching the fields of neurodiversity, neurogender and neurosexism (Rippon, 2016), plays an important role. It means that everyone has different cognitive skills, which result in innovation and benefits if individuals with these different skills work together (Page, 2007).

The European Union prohibits discrimination on the grounds of sex, race, colour, ethnic or social origin, genetic features, language, religion, belief, political or any other opinion, membership of a national minority, property, birth, disability, age or sexual orientation (EU Agency for Fundamental Rights, 2021/2009).

6.2   Equal opportunities / Equality

The Cambridge dictionary defines equality as follows: "the right of different groups of people to have a similar social position and receive the same treatment". It lists the following examples: "equality between the sexes", "racial equality", and "the government department responsible for equalities" (Cambridge dictionary). Equality thus means the legal right of equal treatment, for example equal treatment concerning payment of women and men or concerning the right to vote for women and men, BIPOC (Black, Indigenous and People of Colour) and white people, people with properties and poor people. Equality or also equal opportunities thus refers to the concept of having equal opportunities, independent from other factors.

6.3 Inclusion & Inclusiveness

The Cambridge dictionary defines inclusion as "the act of including someone or something as part of a group, list, etc. or a person or thing that is included". More specifically related to social sciences, inclusion is understood as "the idea that everyone should be able to use the same facilities, take part in the same activities, and enjoy the same experiences, including people who have a disability or disadvantage" (Cambridge dictionary). This means that inclusion is strongly linked to the concept of equal opportunities to include as many people as possible to participate or be represented. For example, it means to provide elevators and staircases so that wheelchair drivers can enter the same building facility.

Inclusion can also be understood as a process that tries to involve and value differences between individuals and groups. These differences, i.e. this diversity of people, is seen as a strength which helps to create a culture that links and empowers individuals to enable them to fully contribute and participate.

Inclusiveness is the outcome of the process of inclusion. That means that inclusion uses diversity as a resource to enhance inclusiveness. Inclusiveness is also the ability of a community to include all its members and avoid excluding any of them. It thus further means the integration of all members in systems, decision-making processes and actions (Talmage, 2017).

6.4 Intersectionality

The term and concept of intersectionality was coined by Kimberlé Crenshaw in 1989, referring to the concept of multiple discrimination. Therefore, the metaphor of an intersection is used to understand this concept as it describes that different types of discrimination intersect with each other. This means that several types of discrimination are not only added, but they are in a reciprocal relationship in which they reinforce or change each other (Crenshaw, 1989). "Gendered norms and misogyny intersect with other axes of oppression such as disability, class, religion or sexuality" (D'Souza et al. 2018: 973).
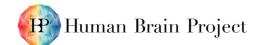
Originally, this concept was developed to focus on the double oppression of black women. For this reason, the classical triad of the concept is race, class and gender, but in fact every category of inequality (e.g. sexuality, age, disability, nationality or religion) can be subsumed under it. The question is: Who belongs because of which characteristics to oppressed social groups? Intersectional oppressions in hierarchical, unequal structures are visible on several levels, among others representation, construction of identity and social practices (Hill Collins/Bilge, 2016).

Intersectionality addresses thus multiple discriminations or inequalities in the framework of power structures. In these power structures, some people belong to the in-group and others to the out-group and in everyday acts, these are "othered" by differentiating them (Bhabha, 1994). For this reason, inclusion is a key principle to fight discrimination.

The Gender Equality Strategy 2020-2025 of the European Commission (EC) aims at creating a European Union, where women and men, girls and boys, in all their diversity, are equal. For this reason, the strategy will be implemented using an intersectional approach that combines gender with other personal characteristics and identity traits. That means that diversity and intersectionality are key principles for the coming work of the EC (EC, 2020).

6.5 Complexity in projects

In their study "Playing Complexity", Hertogh and Westerveld (2011) structure complexity of large infrastructure projects by differentiating technical, social, financial, legal, organisational, and time-related aspects. Examples for such aspects are new technical developments, difficulties in calculating costs and estimating risk, extensive regulations or contradicting laws, numerous, interfering processes, difficulties in keeping a long-term perspective. Social complexity is thereby identified as the most critical aspect and defined as originated in *"different interests and*

*preferences of stakeholders. When the impact of the project on stakeholder interests is large, differences in interest lead to differences in perception and opinion that heavily influence project progress" (*Hertogh & Westerveld 2011, p. 89*)*

Based on Senge, detail complexity is differentiated from dynamic complexity. The first type refers the number of interrelated elements. Dynamic complexity draws attention to changes emerging due to self-organisation and co-evolution which consequently cannot be predicted. (Senge 2006)

While research on "infrastructure projects" usually refers to transport or energy infrastructures of countries or cities, it provides useful insights for large and complex science projects or the development of research infrastructures, especially as studies on interdisciplinary research projects with more than 15 partner organisations have been proven to be rare. Characteristics defined by van Marrewijk et al. as uncertainty, complexity, politically sensitive and large number of stakeholders also apply to complex research infrastructures (van Marrewijk, Clegg, Pitsis, & Veenswijk, 2008).

EBRAINS is an example of a complex, large-scale, international, publicly funded research infrastructure (CoLIPRI) and a non-profit corporation (AISBL) is responsible for the governance and management of this distributed European infrastructure. Project and infrastructure are financed via European and national governmental institutions and are derived from a large-scale interdisciplinary science project (HBP). The infrastructure is distributed among several countries and research institutions and comprises the following technologies and services:

- Physical facilities such as supercomputer, microscopes …

- Data (related to neuroscience and brain research, e.g. brain atlases)

- Competences centres providing services (related to the data itself e.g. data curation, search for data, and specific algorithms and tools)

- Institutions providing a collaborative environment and training

EBRAINS is financed, maintained, and further developed by the following stakeholders:

1) European Commission (Horizon Europe, ESFRI European Strategy for Research Infrastructure),

2) Board of directors and European Nations co-financing the infrastructure,

3) EBRAINS AISBL legal entity coordinating the infrastructure,

4) Partner institutions contracted to EBRAINS legal entity, providing computers and/or services (partner institutions, further partners) and/or related scientific projects,

5) Communities using the infrastructure and contributing to open access software (trainings, workshops, conferences, individuals and/or institutions) and science

6) Companies, Industry Partners

7) Broader Public

6.6 Power

In feminist theory, power is a central concept, defining it either as domination, as resource to be (re)distributed, or as empowerment (Allen, 2016). The classic formulation for power as domination, i.e. as "power-over", stems from Max Weber, defining power as the chance that an individual in a social relationship can achieve their own will even against the resistance of others (Weber, 1922). Thomas Hobbes already defined power as a resource, thus as power - "to obtain some future apparent Good" (Hobbes, 1641), i.e. that power makes it possible to receive goods or similar future privileges. From a feminist perspective, power as resource is currently unequally distributed amongst men and women. For this reason, the objective is to redistribute power equally. Lastly, power as empowerment is also understood as "power-to", i.e. as capacity or ability and thus as alternative to "power-over", i.e. domination. In this understanding, power is the capacity to produce a change and consequently, as transformative (Allen, 2016).

Especially post-structural feminist perspectives acknowledge that knowledge and power are constituted in dynamic relationships. Therefore, feminist research aims to break up social silences

to dismantle ideologies justifying unequal power relations. Although this traditionally addressed power relations between genders or racial groups, it is equally applicable to other groups concerned from governance perspective (Carey, 2019).

6.7   Unconscious bias

Unconscious or implicit bias means to make judgements or decisions based on our prior experience, or own inherently deep-fixed attitudes and assumptions, and we are not aware that we are doing it. For this reason, implicit biases are different to conscious biases, made with full knowledge and intentionally. Nevertheless, implicit bias can contribute to various forms of inequality or discrimination. For example, it can lead to gendered impacts, if research is conducted gender-blind due to unconscious bias (Gvozdanović/Bailey, 2020). To limit explicit and conscious biases, laws have been established to limit discriminatory behaviour and change behavioural standards (e.g. civil rights movement in the United States), which leads to an inclusive, culturally competent society (Ross, 2014).

6.8   Shared principles for expected behaviour

For successful collaboration, it is essential that stakeholders agree on shared principles for expected behaviour. These principles can be fixed in charters and codes of conduct (see "The European Charter & Code for Researchers") as well as in forum guidelines and netiquette for virtual collaboration (see "Virtual collaboration & Covid-19"). For example, the HBP developed guidelines for the HBP Community Forum, considering it as "a civilized place for public discussion" (HBP Forum, 2020). These guidelines invite users to improve the discussion and show civil courage by flagging bad behaviour to moderator intervention.

This approach follows the concept of "netiquette", which is explained by the terms of which it consists: "network" or "internet" and "etiquette". It is the unofficial code of policies that encourage good behaviour on the Internet, especially on social media platforms or forums. It aims to regulate respect between different users, i.e., usage of appropriate language, being kind to other members, giving constructive criticism or feedback, etc.

6.9   Responsible Research & Innovation (RRI)

RRI is an approach to research which engages societal actors during the whole research process to align scientific insights with values, needs and expectations of society (Aicardi et al. 2018; Salles/Farisco, 2020). It was a key action of the "Science with and for Society" objective in Horizon 2020, focusing on the six thematic elements of public engagement, open access, gender equality, governance, ethics and science education (EC, n.d.). Since technical innovation and societal stakeholders are shaping the research process together from the beginning, the design of research & innovation is intended to be inclusive and sustainable. Currently, the concept of RRI is further developed to responsibility by design to emphasise its integration into the holistic research design (Stahl et al. 2021).

6.10   Scientific excellence

Scientific excellence is primarily linked to scholarly productivity and thus to meritocracy. This is the main reason for its reputation of neutrality and objectivity. Accomplishments, performances are perceived as objective merits that can be achieved by everybody. "Academics must be judged on merit alone, and social categories (e.g. gender, race and class) should not matter" (Brink/Benschop, 2011: 509). However, accomplishments depend on specific preconditions, and they are evaluated differently. For example, journal ranking systems rely on publications in English, thus not considering excellent publications in other languages. "These biases are particularly problematic in the social sciences and humanities, in which research is more regionally and nationally engaged" (Hicks et al.

2015: 430). Van den Brink and Benschop highlight that scientific excellence must be understood as "a social construction that is always embedded within a social context and is thus subject to multiple cultural and political influences" (Brink/Benschop, 2011: 209).

Additional to the different fields of science, gender inequalities in academia can be observed in several areas: gaps in the proportion of women in scientific fields, compensation, grand funding, credit for collaborative work, teaching evaluations, hiring and promotions, authorship and citations. These biases do not only concern women, but also other aspects, such as socioeconomic status, university prestige and race (Dworkin et al., 2020: 918).

6.11 References

Aicardi, Christine/Reinsborough, Michael & Rose, Nikolas (2018): "The integrated ethics and society programme of the Human Brain Project: reflecting on an ongoing experience". In: Journal of Responsible Innovation, 5:1, 13-37, DOI: 10.1080/23299460.2017.1331101. PLUS Publication ID: P1253.

Ainsworth, Claire (2015): Sex redefined. In: Nature 518, p. 288–291. DOI: https://doi.org/10.1038/518288a

Allen, Amy (2016): "Feminist Perspectives on Power". In: Edward N. Zalta (ed.): The Stanford Encyclopedia of Philosophy (Fall 2016 Edition). URL: https://plato.stanford.edu/archives/fall2016/entries/feminist-power/.

Bhabha, Homi K.: The Location of culture. London/New York: Routledge 1994.

van den Brink, Marieke/Benschop, Yvonne (2011): Gender practices in the construction of academic excellence: Sheep with five legs. In: *Organization*, Vol. 19, No. 4, p. 507-524. DOI: 10.1177/1350508411414293.

Butler, Judith (1990): Gender Trouble. Feminism and the Subversion of Identity. New York/London: Routledge.

Cambridge Dictionary: Equality. URL: https://dictionary.cambridge.org/de/worterbuch/englisch/equality [06.08.2020].

Cambridge dictionary: Inclusion. URL: https://dictionary.cambridge.org/de/worterbuch/englisch/inclusion [06.08.2020].

Carey, G., Dickinson, H. and Olney, S. (2019) "What can feminist theory offer policy implementation challenges?". In: Evidence & Policy, vol 15, no 1, 143–59, DOI: 10.1332/174426417X14881935664929

Crenshaw, Kimberlé (1989): Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine. in: The University of Chicago Legal Forum, 139-167.

D'Souza, Tanya/Griffin, Laura/Shackleton, Nicole/Walt, Danielle: "Harming Women with Words: the Failure of Australian Law to prohibit Gendered Hate Speech". In: UNSW Law Journal. Vol. 41, No. 3, 2018. S. 939-976.
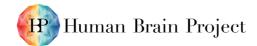
Dworkin, J.D., Linn, K.A., Teich, E.G. et al. (2020): "The extent and drivers of gender imbalance in neuroscience reference lists". In: *Nature Neuroscience*, No. 23, June 2020, p. 918–926. https://doi.org/10.1038/s41593-020-0658-y

European Commission: A Union of Equality: Gender Equality Strategy 2020-2025. Brussels, 5.3.2020.

European Commission (n.d.): Responsible research & innovation. URL: https://ec.europa.eu/programmes/horizon2020/en/h2020-section/responsible-research-innovation [11.08.2021]

European Union Agency for Fundamental Rights (2021/2009): Charter of Fundamental Rights of the European Union. URL: https://fra.europa.eu/en/eu-charter [11.08.2021]

Free On-Line Dictionary of Computing: Netiquette. URL: http://foldoc.org/netiquette [11.08.2021]

Gardenswartz & Rowe (2003): Diverse teams at work. URL: https://www.gardenswartzrowe.com/why-g-r [11.08.2021]

Gendered Innovations: "Race & Ethnicity". URL: https://genderedinnovations.stanford.edu/terms/race.html [11.08.2021]

Gvozdanović, Jadranka/Bailey, Jemimah (2020): "Unconscious bias in academia. A threat to meritocracy and what to do about it". In: Drew, Eileen/Canavan, Siobhán (ed.): *The gender-sensitive university : a contradiction in terms?* New York: Routledge.

HBP Community Forum (2020): FAQ. URL: https://forum.humanbrainproject.eu/faq [11.08.2021]

Hertogh, Marcel and Westerveld, Eddy (2010): Playing with Complexity. Management and organisation of large infrastructure projects. Online available at https://repub.eur.nl/pub/18456/ [23.08.2021]

Hicks, Diana et al. (2015): The Leiden Manifesto for research metrics. In: *Nature*, Vol 520, 23 April 2015, p. 429-431.

Hill Collins, Patricia/Bilge, Sirma: Intersectionality. Cambridge : Polity Press 2016.

Hobbes, Thomas (1641): Leviathan.

Intersex Society of North America (ISNA): "What is intersex?". URL: http://www.isna.org/ [11.08.2021]

Kaiser, Annelies (2012) Re-Conceptualizing "Sex and "Gender" in the Human Brain. In: Zeitschrift für Psychologie, 220(2), 130–136. DOI: https://doi.org/10.1027/2151-2604/a000104

van Marrewijk, A.H./Clegg, S.R./Pitsis, T./Veenswijk, M.B. (2008): Managing public-private megaprojects: Pardoxes, complexity and project design. In: International Journal of Project Management. Vol. 26(6), p. 591-600. DOI: https://doi.org/10.1016/j.ijproman.2007.09.007

Milken Institute School of Public Health (2018): What's the Difference Between Equity and Equality? 05.04.2018. The George Washington University. URL: https://publichealthonline.gwu.edu/blog/equity-vs-equality/ [06.08.2020].

Page, Scott (2007): The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies. Oxford: Princeton University Press. DOI: 10.2307/j.ctt7sp9c

Rippon, Gina (2016): "How 'neurosexism' is holding back gender equality – and science itself". In: The Conversation. URL: https://theconversation.com/how-neurosexism-is-holding-back-gender-equality-and-science-itself-67597 [11.08.2021]

Ross, Howard J. (2014): *Everyday Bias. Identifying and Navigating Unconscious Judgements in Our Daily Lives.* Lanham: Rowman & Littlefield.

Salles, Arleen/Farisco, Michele (2020): "Of Ethical Frameworks and Neuroethics in Big Neuroscience Projects: A View from the HBP". In: AJOB Neuroscience, 11:3, 167-175, DOI: 10.1080/21507740.2020.1778116. PLUS Publication ID: P2578.

Senge, Peter (2006): The Fifth Discipline: The Art & Practice of The Learning Organisation. New York: Currency Doubleday

Shea, Virginia (1994): Netiquette. San Francisco: Albion Books.

Stahl, Bernd et al. (2021): "From Responsible Research and Innovation to Responsibility by Design". In: Journal of Responsible Innovation (JRI). DOI: https://doi.org/10.1080/23299460.2021.1955613. PLUS Publication ID: P2893.

Talmage, Craig/Knopf, Richard C. (2017): "Rethinking Diversity, Inclusion, and Inclusiveness: The Quest to Better Understand Indicators of Community Enrichment and Well-Being". In: Kraeger, P. et al. (2017): New Dimensions in Community Well-Being. Springer Int. Publishing. DOI: 10.1007/978-3-319-55408-2_2, p. 7-27.

Weber, Max (1922): Wirtschaft und Gesellschaft.

WHO (2016): FAQs on health and sexual diversity. URL: https://www.who.int/news-room/q-a-detail/gender-and-health [11.08.2021]