R&D-Report

Inception Report
Conceptual foundation for the evaluation and monitoring of Bodø 2024: Project Monitor 2024

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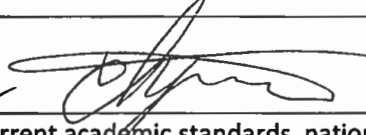Veronika Vakulenko
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MONITOR 2024
EFFEKTER AV BODØ SOM EUROPEISK KULTURHOVEDSTAD

NORD University

Dean's approval

Title	Publicly available Ja	Publication no. 93
Inception Report: Conceptual foundation for the evaluation and monitoring of Bodø2024	ISBN 978-82-7456-861-7	ISSN 2535-2733
	Number of pages and attachments 24	
Keywords (in Norwegian, if applicable)	Keywords Culture Evaluation Social Audit Bodø2024 Nordland	
Author(s)/project team members Anatoli Bourmistrov; Oliver Henk; Olga Iermolenko; Lars Kolvereid; Veronika Vakulenko; Evgueni Vinogradov; Bjørn Willy Åmo	Project Monitor 2024: Evaluation of Bodø as European Capital of Culture	
Client(s) European Commission; Bodø2024	Client reference	

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Project owner (name/sign.)
Anatoli Bourmistrov

- The publication has been assessed according to current academic standards, national guidelines for research ethics, and guidelines for research data management at Nord University.

- No self-interest or situations exist that may influence the assessment of the contents in this publication, e.g. commercial interests in the topic of the publication.

Internal quality assurer appointed by the Dean (name/sign.)
Dr Beatriz Garcia (16 March 2023)

Date 17/4-23	Dean (name /sign.) Gry Aalsos

Introduction

In September 2019, the city of Bodø was awarded European Capital of Culture (ECoC) status for 2024 in support of the Bodø 2024 project. Bodø 2024 is a large-scale cultural development project with the potential to expand into an overall community development project not only for Bodø but also for Nordland County, of which Bodø is the capital. According to the guidelines of the European Commission (EC), the organizer of ECoC project (Bodø 2024 IKS) is also responsible for evaluating it. To ensure an independent evaluation, Bodø 2024 has entered into a strategic cooperation agreement with Nord University for the evaluation and monitoring of the project. Through this agreement, the Management and Accounting for Organizational Adaptation in Changing Environments (MACE) research group in the university's Business School has been given the academic responsibility for implementing monitoring and evaluation of Bodø 2024 in accordance with the guidelines for cities' evaluations of the results of their ECoC projects (European Commission, 2018).

1. Purposes of the evaluation and monitoring of Bodø 2024 (Project Monitor 2024)

ECoCs were established as an intergovernmental European initiative in 1985. Since then, more than sixty cities have been awarded ECoC status. The ECoC concept is considered a powerful tool for cultural development because it is thought to provide unprecedented opportunities to catalyse urban development and change. The raison d'etre for this initiative includes promoting European values and advancing European collaboration and cultural relations. In addition, the preparation for and implementation of ECoC cultural programs during the title year is expected to stimulate positive social and economic development in the city.

Until recently, however, ECoC evaluations have been rather fragmented, focusing on the reporting of positive and tangible economic impacts (Langen and Garcia, 2008; Nermond et al., 2021). To harmonize the evaluation of achievements resulting from the initiative, since 2018, the EC has strengthened the requirements of the evaluation component for ECoC status and issued a special set of guidelines specifying a minimum set of indicators to be used when evaluating the socioeconomic impacts of ECoCs (European Commission, 2018).

Given this knowledge, the evaluation team has chosen an approach to the evaluation and monitoring of Bodø 2024 regarding the effects of the title year based on the required EC evaluation framework (European Commission, 2018) as well as other research models. This approach will improve understanding of the potential influence of cultural events such as those associated with ECoCs on urban and regional development. A key question for the evaluation is *whether Bodø 2024 has been able to deliver the intended benefits of ECoC status and, if so, how efficiently*. This inception report, then, describes the conceptual foundations for the monitoring and evaluation of Bodø 2024 (the project Monitor 2024).

2. Evaluation method and approach: Inception and ways to overcome the evaluation challenges

The evaluation team has been working since August 2021 to develop the conceptual model for the evaluation described in this inception report. Our approach has been to use systematic methods to assess how the long-term sociocultural impacts of ECoC status, both tangible and intangible, can be measured. This approach to evaluation and monitoring is both descriptive and explanatory. The evaluation part is based on the EC's descriptive framework and is meant to map changes in the ECoC's objectives laid out in that framework (European Commission, 2018). The explanatory part of the evaluation, on the other hand, is based on two theoretical models that enable researchers to test hypotheses regarding the existence of relationships for how and why the Bodø 2024 program has or has not influenced urban and regional development using both cross-sectional and longitudinal data. The first model evaluation is based on the influence of the demand and supply of culture on "cultural vibrancy", a "creative economy", and the "enabling environment" of the ECoC. The aim of the second evaluation model is to create a digital twin of Bodø 2024 from the perspective of so-called agent-based modelling. These approaches are described in more detail presently.

During the design of the evaluation system, the team experienced three main challenges. The first was a "congruence challenge". The basic purpose of the evaluation is to draw conclusions about whether cultural events during the title year have contributed to the achievement of the purposes and goals of Bodø 2024. To do so, the comparison between the baseline pre-evaluation before the title year and the post-title-year will need to be congruent. In other words, the same indicators should be used to arrive at a conclusion as to whether these indicators have changed and whether that change can be attributed to ECoC activities. To enable a congruent comparison, the system of indicators for measurements to be developed prior to the first baseline data are collected in terms of Bodø 2024. At the same time, the system cannot be completed until all of the indicators related to the outputs, outcomes, and impacts are tested to ensure that data are available for each. The basic problem here is that most of the data related to evaluating various aspects of cultural development may not be readily available in existing databases. The assessment of certain kinds of data requires the development of novel methods. For example, questionnaires and telephone surveys usually serve to assess the benefits of ECoC status for various types of stakeholders, but these methods are not necessarily optimal for assessing the direct impacts of a project because the beneficiaries are selected randomly. Thus, the composition of the respondents in the pre-evaluation data would differ from that in the post-evaluation data. To solve this problem, the evaluation team has proposed new ideas, including the establishment of a jury, the "People's Jury", made up of residents of Bodø and elsewhere in Nordland. These stakeholders will be randomly chosen (or will volunteer) and must make a long-term commitment to sit on the jury for the entire period of the evaluation. The members of the jury will be asked periodically to make various kinds of evaluations based on regular questionnaires and, possibly, focus-group interviews. This channel for data collection seems superior to traditional questionnaires and telephone surveys because the stakeholders have access to the data, the use of which can be better controlled. However, the group will consider whether it will be necessary to complete,

in addition, traditional surveys to complement surveys from the People's Jury with responses from a control group.

The second challenge in designing the evaluation relates to "correspondence". The design of each locality's ECoC is unique in terms of the events and cultural program. Accordingly, Bodø 2024 needs to be evaluated in terms of its unique objectives as well as the EC's hierarchy of goals. For that purpose, we had to develop separate sets of indicators for those goals and those of Bodø. We then tried to determine whether any of the indicators corresponded with any of the others and, if so, which. The findings from this stage will allow us to assess whether the events during the title year may have contributed to the furtherance of Bodø 2024's aims as opposed to the EC's purposes and goals for the larger ECoC program.

Third, we faced an "optimal data challenge". Clearly, the evaluation of an ECoC is a complex task requiring a large set of indicators and data, and the scope of the data correlates positively with the opportunities for evaluation. However, the high costs involved in accessing and collecting data, especially data from third parties, create a dilemma regarding how much should be collected given the budget constraints. This optimization problem can only be solved through an interactive process of constantly balancing the availability and cost of data against their relevance for evaluation that starts with a wide scope of data and narrows down to data that are not only relevant but also economically feasible to collect.

In the following discussion, we describe the solutions that the evaluation team found to these challenges.

2.1 Overview of the evaluation based on the EC's descriptive framework

The descriptive part of the Bodø 2024 evaluation is structured around an assessment of the key performance indicators (KPIs) that the EC (2018) framework suggests for evaluating ECoCs in terms of the SMART (specific, measurable, achievable, relevant, and timed) principles. Going back and forth between the suggested KPIs and possible data sources in Norway, the evaluation team worked through all of them to select specific indicators for the three sets of objectives that can serve to evaluate Bodø 2024: operational objectives (OOs), special objectives (SO), and general objectives (GOs). This part of the evaluation also includes Bodø 2024's own objectives (BSO). Appendix 1 presents the overall evaluation framework for the collection and analysis of the data.

Our team has identified some 80 potential KPIs for the evaluation and monitoring of Bodø 2024. We have also identified sources of data for each indicator, including publicly available data (e.g., analysis of media), data that must be purchased (e.g., information from telecommunication providers), and data to be collected by the evaluation team (e.g., surveys of the People's Jury).

We will also collect relevant data during the title year of 2024, especially from cultural events associated with the Bodø 2024 program, which represent the largest group of data to be gathered. The project team has identified four types of projects: 1) cultural, 2) artistic, 3)

capacity-building, and 4) communication. We plan to establish a comprehensive database system to collect data about these projects in both the initial (application) phase and the reporting phase (see Appendix 2).

2.2 Conceptual approach to the explanatory evaluation model

Our model for evaluating the effects of the title year for Bodø was inspired by the concept of social auditing. This form of auditing measures the effectiveness of activities, programs, and projects from the perspectives of multiple stakeholders and assesses their long-term objectives and impact on the public welfare and society generally (Owen et al., 2000).

Social auditing is not a novel practice (Humble, 1973). The approach came into wide use through the circulation of participatory governance tools built on stakeholder engagement and designed to define and reflect stakeholders' interests regarding the outputs, outcomes, and impacts of initiatives and thus manifests the principles of openness and democracy (Humphrey and Owen, 2000). This versatile accountability mechanism for multiple-stakeholder engagement has often served to enhance civil engagement in public spending (McNeil and Malena, 2010) and has been applied in a variety of other settings. Thus, for example, Hill et al. (2001), using a dialogic approach, found that social auditing practices were being used in primary health care, and Chawla (2020) described social auditing as a micro-practice for achieving citizen-based accountability in the context of a social security program. Moreover, social auditing is used internationally to evaluate cross-national projects guided by influential international organizations (e.g., the World Bank and the INTOSAI Capacity Building Committee). However, no previous research has explored the use of social auditing in the evaluation of ECoCs.

For these reasons, we use social auditing as a system for developing, measuring, assessing, and reporting the impact of the Bodø 2024 project activities on society and the public welfare. In social auditing, the "audit" part plays the dominant role in determining how the evaluation process is conducted, as in performance auditing. The "social" part adds a unique flavour to the auditing procedure by focusing on why and for whom the audit is being conducted and involving the stakeholders or beneficiaries directly at multiple stages of the audit, thereby enhancing dialogue and engagement. All of the stakeholders are considered to be active change agents in evaluating the social impact of the projects undertaken as part of Bodø 2024 so as to assure its relevance to beneficiaries in accountable and transparent ways.

On the down side, a social auditing system can rapidly become unwieldy since it must address the challenges associated with a wide range of users/stakeholders. This situation is typical of large societal transformation projects such as Bodø 2024. Not only are multiple types of stakeholders (e.g., governmental bodies, various groups of beneficiaries, funding bodies, and social action groups) to be expected in social auditing, but the nature of the stakeholders' interests also plays an important role in the design of a social auditing system. For instance, stakeholders may have competing or conflicting interests that affect the selection of the criteria for the auditing (Adams and Evans, 2004).

Table 1 presents an overview of the groups of stakeholders engaged in the Bodø 2024 project based on the approach of Wilson et al. (2010) and the assumed needs and means of communication with them based on an analysis of the available information from applications and current discussions in the media. As a tool, social auditing provides an arena for interactions among the members of the Bodø 2024 project team, the participants, the organizers, and the Nord University research team that is evaluating the program (Monitor 2024).

Table 1. A basic analysis of stakeholder groups for Bodø 2024.

A stakeholder group	Assumed interests in Bodø 2024	Relevant information	Means of communication with the group	Data-collection methods
Local citizens	Improved quality of life and level of well-being (i.e., citizen satisfaction)	Information about impacts of Bodø 2024 events; scenarios for local development	Home page, social media, traditional media; web-page visualizations	Interviews, People's Jury, analysis of media; surveys
Cultural professionals and institutions	Improved cultural appreciation, reputation, and/or cultural development	Demand for cultural opportunities and capacity-building (social/physical)	Home page; social media, stakeholder meetings	Interviews with participants in Bodø 2024 projects; focus groups
Local businesses	Increased demand for and/or consumption of products and services	Business opportunities associated with Bodø 2024 and how they are materialized	Business trend analysis; business development index	Publicly available information (e.g. statistics); interviews and surveys
Governments (local, regional, and national)	Effects of culture on regional development	Cost-benefit analysis	Periodic reports; web-page visualizations	Publicly available information (e.g. statistics); interviews and surveys
Bodø 2024 IKS	Justification of efforts and use of resources in Bodø 2024	Analysis of the achievement of the objectives for Bodø 2024	Periodic reports; web-page visualizations	Social audit assessments through engagement key stakeholders
The European Commission	Achievement by Bodø 2024 of the ECoC objectives	Analysis of the achievement of the objectives (EU framework)	Periodic reports	Evaluation meetings

Social auditing, especially in the context of major societal transformation, relies on the articulation and use of the theory of change (ToC). ToC is a conceptual framework represented as causal links among multileveled outcomes designed to explain how and why an initiative can bring about a desired change (Clark, 2019; Clark and Grimaldi, 2013). Social auditing, complemented by ToC, can enhance the accountability of initiatives through assessment of their successes and/or failures. To develop an initial explanatory evaluation model for Bodø 2024, we translated the core strategic objectives into evaluation objectives guided by ToC. This theory thus played a crucial role as in for our social auditing system approach through the

construction of "event-outcome-impact" links and enabling of the assessment of multi-level objectives.

Bodø submitted its application for ECoC status in 2019. The preparation of the application was coordinated and involved many stakeholders who contributed to its various features. To present its plan for evaluation in the application, the research team made its own translation of ToC and discussed certain aspects of the plan with the Bodø 2024 management team. We arrived at the following visualization of the change theory (see Figure 2).
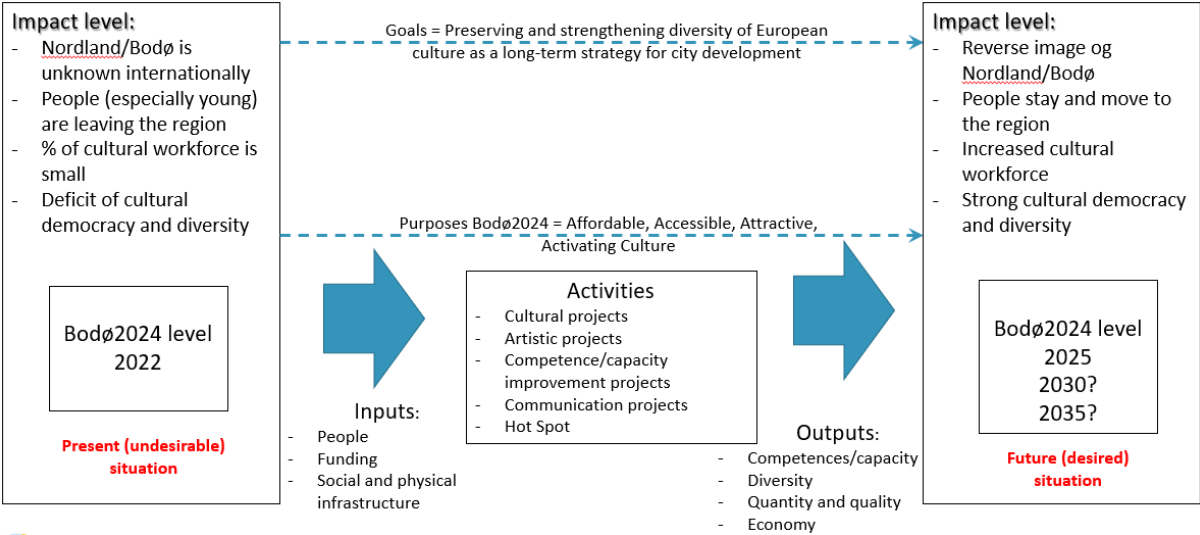

Figure 1. Theory of Change for Bodø 2024

ToC was needed at the start of the design of a holistic explanatory evaluation system to enable the assessment and measurement of particularly significant outputs, outcomes, and impacts of the title year project. ToC is consistent with the aforementioned SMART principles (again, specific, measurable, achievable, relevant, and timed) that the EC has set forth for the assessment of ECoC initiatives. The ToC toolkit enables the holistic visualization of a sequence of events that leads to a desired outcome and will also produce a narrative overview that brings together the context and the ECoC project, the relevant stakeholders, and their networks to ensure the communication and co-production of key strategies as well as their continuous monitoring and rigorous assessment.

2.3. Evaluation Model 1: Bodø 2024 ECoC from the perspectives of "cultural vibrancy",
"creative economy", and "enabling environment"

"People move because of work; people stay because of culture"
(discussions within the project group)

<u>Our understanding of culture and art in cities</u>

Our project group, in cooperation with our colleagues from other departments and with research interests, has examined the questions of what culture is and how it can be measured in depth and from many angles. These questions are difficult to answer because the work

involved in culture cannot be reduced to a single statistic that can be recorded and analysed. Instead, the sector consists of a multitude of qualities and actors producing what we broadly call "culture". Culture is, on the one hand, a system of ideas, concepts, values, and rules – in short, beliefs of various sorts – and, on the other, a system of behaviours, activities, and resource exploitation – that is, practices (Goodenough, 1966). Culture includes the basic assumptions, communication styles, values, and attitudes that are presumed to govern human behaviour (Taras, Rowney, and Steel, 2009), and discussions of it tend to relate to nations or regions (Askegaard and Madsen, 1995). Culture is often expressed as a kind of identity and characterized by a set of practices, values, and norms. Cultural identity is, accordingly, expressed through institutions, practices, and artifacts (Heersmink, 2021). As such, it is a lens through which individuals perceive the world. On the other hand, cultural activities reinforce the relational bond between people and their communities. This reinforcement may occur individually or collectively and be intended or unconscious, unstructured or organized. Therefore, we focused on organized behaviours and activities that address a community. From this perspective, Bodø 2024 is an orchestrated effort to enhance culture and cultural activities.

Art is also closely related to the concept of culture, of which it is a manifestation, but we have not yet identified a clear definition of either concept or its relationship to the other. The closest that we have come is to such definitions to conclude that "art" should be understood within a cultural context and as a cultural practice (Fokt, 2017). That which is regarded as art depends on the community in which it is created, and this judgement is the prerogative of those who belong to the community and, thus, have the competence to make such assessments (Currie, 2010). We did identify several traits that may potentially help to define the concept of "art":

- *Art is an ongoing discussion, not a definite answer.*
- *Art is a feeling; the words that describe it are fluid (not set in stone).*
- *Art continues. Things change, but art remains, and people choose to stay in a city because of it.*
- *Art is about stories (narratives).*

The attempt to define these concepts may be the greatest challenge facing the evaluation project. While this short discourse illustrates the qualitative and subjective nature of arts and culture, in order to say something about the changes that may occur as a result of Bodø 2024, we had to find ways to quantify the concepts. In doing so, we perceived a need for a new definition of the term "culture" in the local context of Bodø 2024. Through our discussions, we soon discovered that several ideas and characteristics of the cultural sector appeared to be considerably easier to capture through data-collection methods at various points in time. In particular, it appeared to us that "culture" is the outcome of the interplay of the "demand for culture" for which members of the general public – in this case, the residents of cities – are asking and to the supply of which various actors in the sector can contribute.

Supply and demand and the interplay of these factors are measurable aspects of the concept of "culture" and, therefore, useful for our evaluation. At the same time, culture is individual and something that "just happens" in urban areas (Montalto et al., 2019). It depends on many environmental factors, such as proximity to academic, cultural, and research centres, the availability of technological enablers, the presence of successful entrepreneurs, government regulations and incentives that facilitate creativity, and amenities that make a place interesting and worth calling home and help entrepreneurs to develop and practise their skills there (World Economic Forum, 2016). Inherently, the multitude of factors that influence "culture" and the economy that this concept includes necessitate having a comparable framework in place to enable the analysis of various aspects of culture worldwide. Using data from the European Union's newly established Cultural and Creative Cities Monitor (CCCM), Montalto et al. (2019) were the first to address this issue, arguing that the cultural sector is defined by three distinct dimensions: "cultural vibrancy", "creative economy", and "enabling environment".

1. The first dimension, **cultural vibrancy**, relates to various cultural facilities and activities and public participation. Thus, it is defined as "evidence of creating, disseminating, validating, and supporting arts and culture as a dimension of everyday life in communities" (Jackson et al., 2006, p. 4).

2. The second dimension, **creative economy**, relates to the connections between culture and urban economic activities. As such, this measure takes into account "how well culture contributes to a city's economy" (Montalto et al., 2019, p. 170).

3. The third dimension, **enabling environment**, relates to the conditions that cities offer for the cultural sector. Favourable conditions, such as beneficial rules and regulations, public incentives, proximity to high-quality universities, and diversity are thought to contribute to an environment in which culture can thrive and enhance both the economy and the living conditions for urban residents (Van der Borg et al., 2005).

Montalto et al. (2019) suggested that the combination of these three dimensions would enable researchers to evaluate culture in cities on a reliable and comparable basis that can be tested by the EC. We believe that this framework provides a solid basis for our evaluation of the ECoC project in Bodø because it makes the concept of culture more "graspable" and adequately captures the range of ideas that we have been discussing with colleagues from many fields.

The integration of our overall research model with the evaluation framework suggested by Montalto et al. (2019) led us to the research model shown in Figure 2.
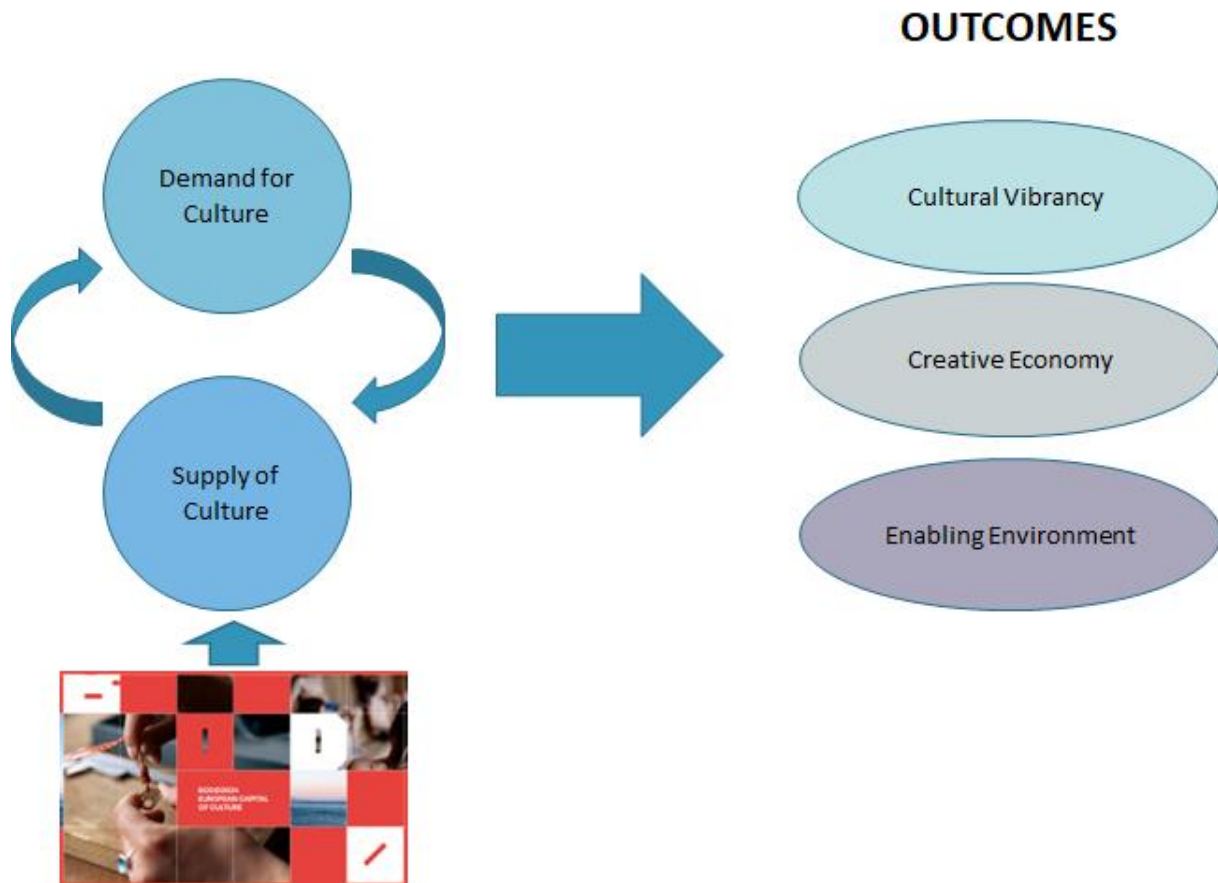
Figure 2. Research model for evaluating Bodø 2024

It is important to acknowledge that this framework is rather broad and that there is still a need to define indicators for measuring its various dimensions. To achieve this goal, Montalto et al. (2019), in developing their cultural city index, split distinguished nine subcategories within their three dimensions. However, through our discussions within the project group, we found that we can diverge from those subcategories in several ways to accommodate the requirements stipulated by the EC in its guidelines for evaluation. In particular, we considered it unnecessary to include a subcategory for "patents and intellectual property" in our model because it would be challenging to measure within the Bodø 2024 framework and the EC provides few relevant indicators. Further, the specific local and peripheral geographic conditions of Bodø made a measure of "local and international connections" redundant, as such connections would by nature not change within the framework of the ECoC project. Infrastructure projects in Norway are currently undergoing a long-term development phase involving decisions about the advisability and feasibility of further investment in improvement of the existing connections. The construction of a new airport in Bodø, for example, is expected to extend well beyond 2024. On the other hand, it is, of course, possible to count directly, for example, the number of flights that connect Bodø with other countries.

The full list of indicators will be finalized in spring 2023 in relation to work on the baseline report.

2.4. Evaluation Model 2: a "digital twin" of Bodø 2024

The second evaluation model will be developed based on agent-based modelling (ABM) and used to simulate and test the range of socioeconomic effects that Bodø 2024 may have on the region. ABM is "a form of computational modelling whereby a phenomenon is modelled in terms of agents and their interactions", with an "agent" being defined as "an autonomous computational individual or object with particular properties and actions" (Wilensky and Rand, 2015, p. 1).

Over the past twenty years, a convergence of developments – the increasing complexity of science, the "data deluge", and advances in information technologies – has triggered a paradigm shift in the understanding of complex social systems and their evolution. Beyond shedding new light on social dynamics, the emerging research area of computational social science (CSS) is providing a new rationale for a scientifically grounded and effective policy design (Dabbaghian and Mago, 2014; Jackson, 2014; Lettieri, 2016; Levitt, 2012). From a theoretical and epistemological point of view (Benthall, 2016; Goebel et al., 2009), CSS, as the "integrated, interdisciplinary pursuit of social inquiry with emphasis on information processing and through the medium of advanced computation" (Cioffi-Revilla, 2010), is grounded in a scientific perspective in which multiple research traditions flow into one.

ABM supplements equation-based models (regressions, SEM, etc.), allowing researchers to make, for example, reasonably realistic digital copies of every citizen, organization, and building in a municipality and then run a simulation based on intuitively understandable rules of interaction. Equation-based (socioeconomic) models, such as the regressions built by national statistics offices, are well-established and widely accepted because they deliver robust predictions based on large samples. ABM is in broad use in the natural sciences and is gradually finding acceptance in the socioeconomic field, mainly as a result of improved access to open data and the growing computational power available to practitioners.

The advantages of ABM over equation-based methods include:

- the capacity to predict tipping points and emergence (new effects that are not reducible to the sum of the parts of the original data),
- the relative ease with which network effects and individual learning and adaptation can be integrated,
- the relative ease with which individual decision-making and bounded rationality can be taken into account,
- the relative ease with which heterogenic agents can be handled,
- functionality at the individual and local levels and less dependence on large samples, and
- the representation of people as individuals rather than aggregated populations or functions, which is important for the empowerment of and communication of results to the end-users.

In this project, the basic idea is to create a sort of "digital twin" of Bodø 2024 in the form of a simulation program that will attempt to model the effects of culture on individual agents' behaviours. Next, the program will be employed in relation to existing software to develop possible scenarios for the possible impacts of Bodø 2024 on the region and local society. Such scenarios will be developed prior to the title year so as to indicate potential courses of action and their assumed impacts. After the completion of Bodø 2024, the actual data can be used to refine the agent-based model that was developed for the project. We plan to develop and disseminate two scenarios prior to Bodø 2024its inception at the beginning of 2024, one interpreting Bodø 2024 as a success and the other interpreting it as a fiasco from the perspectives of various impacts. Communicating these scenarios can be an important strategy for informing all of the stakeholders about the most important factors in the outcome of the project and how they can manipulate these factors to maximise positive outcomes.

2.5 Visualization work within the scope of Monitor 2024.

The aim of Monitor 2024 is to provide periodic reminders to the members of the stakeholder groups that we have identified that the evaluation and monitoring work is taking place and of our need for their feedback in order to make progress. Thus, we will communicate at intervals information of particular interest to these stakeholders. For this purpose Montor2024 will have a dedicated web-page on which we will make all of these periodic reports available to the public and that can be used to share the value created as well as the challenges experienced in relation to Bodø 2024. This will include narratives and quotations from Bodø 2024 participants and experts (including members of the reference group). In addition, up-to-date statistical data relevant to the project will be visualized in the form of an interactive online console based on the Power BI tool and made publicly available. We also plan regular stakeholder engagement interactions, such as focus group interview meetings with local businesses, workshops with cultural workers, and dissemination rounds with members of the People's Jury. Regular meetings with Bodø 2024 will be also necessary to inform management about the most important developments.

3. Data-collection strategies

To capture the changes in the cultural sector that the Bodø 2024 program will induce in the Nordland area, it is necessary to have access to a wide range of data. As mentioned, the cultural sector consists of various actors, activities, and environments that need to be evaluated. At the same time, most of the members of our project group have been influenced by the literature on management control and performance measurement. This combination of factors inspired the data-collection plan described here, which is based on the KPIs that are suitable for capturing as much of the cultural sector as possible while holding the costs of data collection to an acceptable level.

3.1 Selection of KPIs for ECoC/Bodø 2024

In the beginning, it was natural for us to work out KPIs that could capture culture so that we can measure changes in that sector. Fortunately, many potential indicators that should be evaluated during the program have been presented by the EC in its evaluation guidelines. To make these indicators more accessible for evaluation, the guidelines include a section in which they are linked to the main objectives that the EC seeks to achieve with ECoC projects. Therefore, the guidelines describe in detail the indicators that can capture a certain objective and even extend this knowledge using certain data sources that might facilitate achievement of this goal. The following illustration shows the EC's objectives and their hierarchy (European Commission, 2018, p. 7):

General Objectives								
Safeguard and promote the diversity of cultures in Europe, highlight the common features they share, increase citizens' sense of belonging to a common cultural space (GO1), and foster the contribution of culture to the long-term development of cities (GO2)								
Specific Objectives (SO)								
SO1: Enhance the range, diversity and European dimension of the cultural offering in cities, including through transnational co-operation		SO2: Widen access to and participation in culture		SO3: Strengthen the capacity of the cultural sector and its links with other sectors		SO4: Raise the international profile of cities through culture		
Operational Objectives								
Stimulate extensive cultural programmes of high artistic quality	Ensure cultural programmes feature a strong European dimension and transnational co-operation	Involve a wide range of citizens and stakeholders in preparing and implementing the cultural programme	Create new opportunities for a wide range of citizens to attend or participate in cultural events	Improve cultural infra-structure	Develop the skills, capacity and governance of the cultural sector	Stimulate partnership and co-operation with other sectors	Promote the city and its cultural pro-gramme	Improve the inter-national outlook of residents

However, while the guidelines provide a detailed overview of the indicators to be used during the evaluation, interestingly, they include examples only for the Specific and General Objectives, while the Operational Objectives, which are the most immediate effects of the program, are not elaborated and, therefore, require closer attention and individual assessment by the universities that conduct evaluations. To complicate the situation further, some of the indicators that the EC guidelines suggest, such as "increased citizens' awareness", and "citizens' participation and engagement", are used repeatedly for several categories under both the general and the specific objectives. In addition, several indicators are insufficiently specific to use for the analysis because they include either several aspects that should be grouped under a single indicator (such as "Quantity, quality and sustainability of the schemes and programs supporting professional development of cultural managers and

artists") or phrases that leave unclear what the unit of analysis should be (such as "Sustained multi-sector partnership for cultural governance").

Therefore, to operationalize these indicators, it was necessary to analyse each carefully and create a list of those that are measurable and useful for analysis. This list was then supplemented with the indicators that were meaningful for measuring each of the General Objectives that the EC suggests for the ECoC project as well as the objectives that Bodø 2024 set in its application. While some of those objectives are similar, still new indicators had to be created.

The full list of indicators will be finalized in spring 2023. The following table presents the objectives of Bodø 2024 (Bodø 2024 European Capital of Culture: Application, p. 9):

Nr	Strategic Objectives	Goals
1	To reverse the image of Nordland – internally and externally	More attractive and exciting to visit, and to study, work, and stay in
2	To widen the production base for culture	More producing, co-producing, and cross-working
3	To connect with groups still not engaged	Addressing issues like diversity, mental health, and isolation
4	To make better use of unusual spaces	New cultural areas and venues, driven by where people live
5	To create a connected web of "hotspots" especially for young people	Facilities are improved to create a strong and widely recognized cultural region
6	To make our cultural offer more international	More international collaborations. Better links with European artists and institutions
7	To improve the careers and opportunities for cultural professionals	A major capacity-building focus, which improves skills and experience and creates jobs
8	To address freedom of expression	With our democratic experience, include freedom of expression in future cultural events

3.2 Selection of the data sources and data-collection method (qualitative and quantitative)

Having worked out a set of indicators that can effectively measure and describe the cultural sector in Nordland and the impact of Bodø 2024 on it, the second step is to identify sources that can be used to collect data.

Given that the evaluation will utilize a wide range of data, it is necessary to collect it in various ways based on its type and availability at given points during the evaluation. For instance, several indicators capture qualitative data, such as awareness of the cultural offerings or motivations for participating in them. These indicators are likely to change during the ECoC program. Previous ECoC evaluations for other cities captured this type of data through telephone interviews and surveys involving randomly selected individuals at various points in

time. This type of data collection, however, is inherently flawed because it is based on the assumption that all of the residents reacted to the programs in the same way and had the same motivations and feelings. To avoid this pitfall in our evaluation and to enhance our ability to capture the changes resulting from the program through these indicators, we plan to utilize a jury of residents (the aforementioned People's Jury), which we will follow over the course of the program. This data source has the advantage that we can ask the same people questions repeatedly over time so that we can draw reliable conclusions about the progressive influence of the program on the participants.

A national survey conducted biennially by the Norwegian Agency for Public and Financial Management (DFØ) can serve to establish a control group of residents of Norway living in regions other than Nordland. This "study of residents" (*innbyggerundersøkelse*) measures the behaviour of close to 10,000 individuals in relation to many areas of public life, including culture. By design, our study will not provide in-depth assessments of cultural perceptions but, rather, will indicate whether the general perceptions of culture in Norway outside Nordland differ from those of the residents of that county over the period of study from 2021 to 2025.

Other indicators relate to media outlets and can be captured through such social media platforms as Google Trends, Facebook, and Twitter as well as through the local, national, and international press coverage. The Monitor 2024 project has contracted with Telia to access the Telia Crowd Insights service for the period from 2019 to 2024. This service, which provides information about the movements of people based on anonymized and aggregated mobile traffic data from its networks using a GDPR-compliant method, will allow us to assess where users of mobile phones spend time, the kinds of trips that people take, and their movements along various routes across Nordland in relation to the events of Bodø 2024.

We will also make use of indicators that relate to the quality of the art that is presented before, during, and after the program. Given that arts and culture take many forms, we consider it necessary to involve experts in the field whom we can interview in focus groups. We will carefully select the members of this focus group to ensure that they are not otherwise involved in the program and, thus, can objectively judge the quality of the artistic production associated with Bodø 2024.

A final source of quantitative information is the statistical data that we can retrieve from the program's external stakeholders, such as the municipalities, tax authorities, tourist agencies, and the university.

We will also collect qualitative data through structured text analysis (e.g., of media texts and municipal strategies) as well as interviews. We are interested in collecting narratives and stories from Bodø 2024 participants and associated projects to access the thoughts of a range of individuals about the spirit of Bodø 2024, the value that it adds to the county and region, the new windows of opportunity that it has created, and so on. We will use the People's Jury to recruit members for the focus groups, which can be organized at various hotspots in Nordland.

3.3 The importance of the Bodø 2024 projects as sources of data

Bodø 2024 is a large-scale, year-long program that will offer numerous cultural and artistic projects and events. The projects will form a portfolio of activities that, upon completion, we expect to contribute to the achievement of the identified aims of Bodø 2024. Accordingly, we consider the projects and events themselves to be a source of information valuable for evaluating the performance of the ECoC.

These projects need to be followed closely to obtain as much data as possible relating to the planned and completed activities. Toward this end, we have designed an online Nettskjema survey form to be filled out by all of the project applicants (see Appendix 2). The survey consists of eight key blocks, specifically, the title, responsible party, partners in the project, main activities performed, timeframe, location of performed activities, intended results upon completion, and sources of funding. Taken together, this information will help us to gather and systematize data about the planned activities and to communicate with a wide range of engaged stakeholders. We will also encourage all of the project managers to submit a report after completion of their projects to determine whether there were any deviations from the activities as they were planned and, if so, the reasons for them. The final report will clarify for us whether new innovations and new networks were created beyond those that were originally planned.

Beginning in spring 2023, we will start test-registration of the projects. We will allocate resources to troubleshoot the registration forms and are considering setting up a helpdesk for those who encounter challenges when filling out the forms.

3.4 Rational for the timing

Previous research on ECoCs has distinguished four categories of data collection (Tiers 1–4) depending on the type of data required and the availability of the data throughout the program (Jackson et al., 2006). Given that our main plan for the evaluation is to measure any changes resulting from the program, we needed to follow a similar strategy based on the availability of data at the various stages of the program. Therefore, we need to collect some types of data before the actual program commences, including mostly qualitative data relating to the awareness and perceptions of cultural offerings that will become unavailable or will be flawed once the program starts in 2024. We have highlighted this type of data (Tiers 3-4; Jackson et al., 2006) in red in Appendix 1.

There are also publicly available data, the collection of which before the program starts in 2024 is less urgent. This type of data relates largely to the actual program of Bodø 2024 and is highlighted in yellow in Appendix 1.

Finally, some data are publicly available at all times during the evaluation process, such as media output and statistics about the local municipalities. These data are available now and will remain available during and after the Bodø 2024 program and, since they are recorded, will not change over time. We have highlighted this type of data in green in Appendix 1.

3.5 Data management plan/NSD approval

Especially since some of the suggested collection methods require large amounts of data and numerous data sources, we will take precautions to ensure the privacy and security of the information that we collect in accordance with the GDPR. We will be particularly careful in this regard with the suggested qualitative data collected through interviews, observations, the jury of residents, and the expert panels so as to protect the identity of the respondents. Specifically, we will develop a detailed management plan for the handling, storage, and use of the data. Moreover, we have, in accordance with the national regulations for data protection, applied for and received approval from the Norwegian Centre for Research Data (NSD/Sikt) to use the most-protected form of data storage, which is known as TSD.

4. Timeline for evaluation

The data for the selected indicators will be collected as follows:

- Fall 2022/Spring 2023: collection of the "base-line" data and development of the agent-based simulation model (ABM) relating to culture
- Spring/Fall 2023: application of the ABM to Bodø 2024, including the production of the Bodø 2024 scenarios
- Fall 2023: collection of "pre-title year" data
- Spring/fall 2024: collection of "title-year" data
- Spring 2025: collection of "post-title year" data

Figure 4 below shows the schedule for delivery of the reports by the evaluation team.
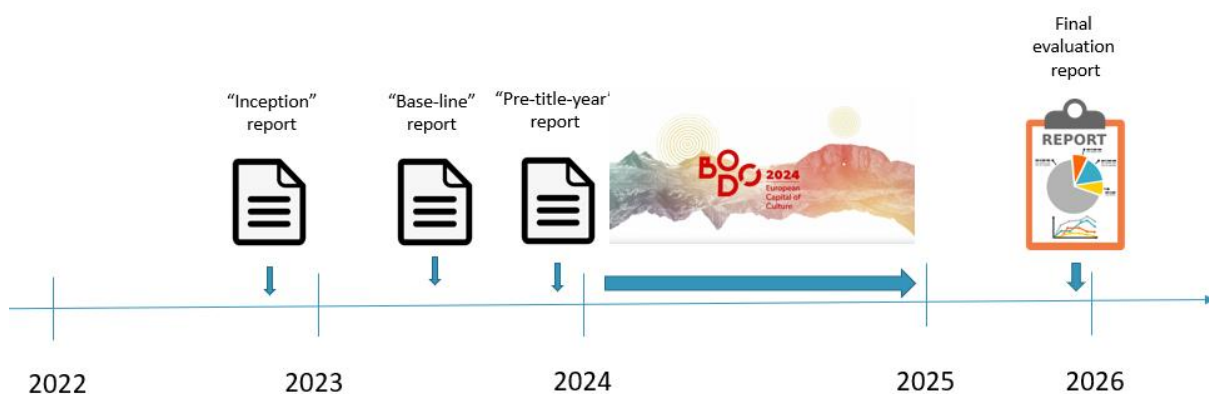

**Figure 4. Timeline for the evaluation reports**

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Appendix 1: The overall evaluation framework for data collection and analysis
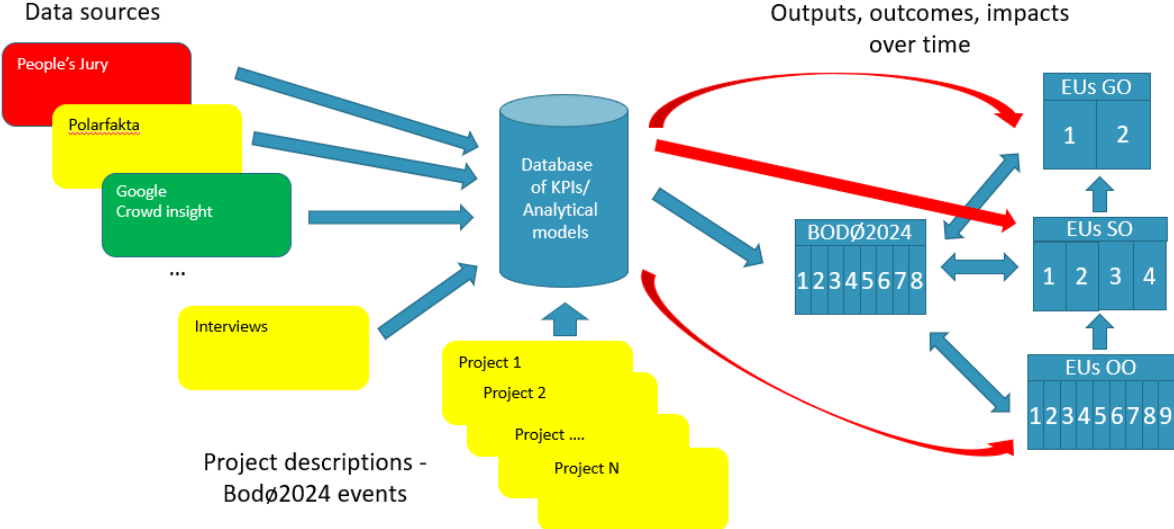
Colour codes for the timing of data collection:

 : publicly available at any given point in the evaluation process

 : usually related to the Bodø 2024 program itself in 2024

 : will change over time and must be collected as soon as possible

Appendix 2: Nettskjema registration survey

Nettskjema for descriptions of Bodø 2024 projects

1) **Title**

2) **Responsible persons** – name(s), email(s), position(s)

    2.1. Who initiated the project?

    2.2. How many employees (full-time, part-time, annual basis) have you employed for the project?

    2.3. Are there any positions announced for the project (full-/part-time)? If so, how many jobseekers do you expect?

3) **Partners** (local/international; internal/other sectors)

    3.1. Number of local partners

    3.2. Number of international partners

    3.3. Number of partners from other sectors

4) **Main idea/activity**

    4.1. Number of events (including for specific groups and/or young people)

    4.2. Are events organized internationally or locally?

    4.3. Rate the level of European diversity (multicultural quality) of the events.

    4.4. Do you focus on any European themes?

    4.5. Do you work on improving cultural governance?

    4.6. Does your project deal with controversial issues?

    4.7. How unusual is your project?

    4.8. How many people are involved in producing your project?

    4.9. To what degree do you encourage engagement with and participation by audiences?

    4.10. Number of local residents involved in events abroad

    4.11. Number of local residents involved in events locally

    4.12. Number of students/pupils involved

    4.13. Number of young people and degree to which they are engaged

    4.14. Number of less-engaged people

    4.15. Number of volunteers

    4.16. Does your project work on capacity-building? If so, for whom is this capacity being built? How many people are participating in this aspect of your project?

    4.17. Do you engage with cultural professionals? If so, how many? What is their age, gender, and national background?

    4.18. Do you use already existing cultural places and spaces or create new ones?

    4.19. Are any hotspots included? If so, how many, and how are they distributed geographically?

4.20. Is cultural heritage part of your project? If so, how are you using it? Is it linked to innovation?

5) Timeframe

5.1. Planned start and finish dates

6) Place

6.1. In which place/city/location will you organize the project?

6.2. Do you plan to engage with audiences from other cities?

6.3. Rate the level of accessibility: are parking, streaming opportunities, and/or wheel-chair access available?

6.4. Are you conducting the project in any unusual place(s)?

7) Intended results

7.1. Who is the main audience? What are the gender makeup and cultural background of this audience?

7.2. Is your project expected to create new jobs?

7.3. What is an intended result or effect of your project?

8) Funding

8.1. Who is/are the funding entity or entities?

8.2. How much does each entity contribute in the budget estimate? How much is the in-kind contribution?

8.3. Will you use schemes to encourage engagement? If so, specify them.

8.4. Have you received scholarships encouraging international mobility? If so, specify.

8.5. Do you use money for investments in physical or social infrastructure? If so, specify.

Click on [V] Agreement to provide a report upon completion of your project.