D4.4 TRAINING MATERIALS ON SOCIAL, SUSTAINABLE, FRUGAL AND INCLUSIVE INNOVATION

The present deliverable aims to provide a general overview of social, sustainable, frugal and inclusive innovation and to illustrate the four types of innovation with practical examples. It further presents policy-relevant recommendations resulting from two international workshops organised as part of the Black Sea Horizon project and addressing the four types of innovation. The document is aimed to serve as training material for all interested in the topics of social, sustainable, frugal and inclusive innovation.
# TABLE OF CONTENT

- **DOCUMENT CONTROL SHEET** ........................................................................................................... 2
- **VERSIONING AND CONTRIBUTION HISTORY** .................................................................................. 2
- **TABLE OF CONTENT** ......................................................................................................................... 3
- **TABLES** ............................................................................................................................................. 5
- **LIST OF ABBREVIATIONS** .................................................................................................................... 5
- **EXECUTIVE SUMMARY** ....................................................................................................................... 6

## 1. INTRODUCTION ................................................................................................................................. 6

### 1.1. The Black Sea Horizon project ...................................................................................................... 6

### 1.2. BSH international workshops on social, sustainable, frugal and inclusive innovation .................. 7

## 2. INTERNATIONAL WORKSHOPS ON SOCIAL, SUSTAINABLE, FRUGAL AND INCLUSIVE INNOVATION IN THE BLACK SEA REGION .................................................................................. 8

### 2.1. Concept and applied methodology ................................................................................................. 8

### 2.2. Results from the international workshop in Sofia: a list of drivers, barriers, challenges and opportunities and a set of policy-relevant messages and recommendations .......................................................... 10

### 2.3. Results from the international workshop in Tbilisi: a priority list of policy-relevant messages and recommendations valid for the four types of innovation ... 14

## 3. SOCIAL, SUSTAINABLE, FRUGAL AND INCLUSIVE INNOVATION ........................................... 18

### 3.1. Social innovation ............................................................................................................................. 18

#### 3.1.1. Definition of social innovation (What is social innovation?) ...................................................... 19

#### 3.1.2. Examples of social innovation .................................................................................................... 22

### 3.2. Sustainable innovation .................................................................................................................... 23

#### 3.2.1. Definition of sustainable innovation ............................................................................................ 23

#### 3.2.2. Examples of sustainable innovation ............................................................................................ 25

### 3.3. Frugal Innovation ............................................................................................................................ 26

#### 3.3.1. Definition of frugal innovation (What is frugal innovation?) ...................................................... 26

#### 3.3.2. Examples of frugal innovation ..................................................................................................... 27
3.4. Inclusive Innovation .................................................................................................................. 29

3.4.1. Definition of inclusive innovation (What is inclusive innovation?) ......................... 29

3.4.2. Examples of inclusive innovation ....................................................................................... 31

4. CONCLUSIONS .......................................................................................................................... 32

REFERENCES ................................................................................................................................ 34

ANNEXES ....................................................................................................................................... 38

Annex A. Agenda of the workshop in Sofia .................................................................................. 38

Annex B. Agenda of the workshop in Tbilisi .............................................................................. 42

Annex C. Catalogue with practices/projects presented at the workshop in Sofia .................... 45

Annex D. Drivers, barriers, challenges and opportunities related to social, sustainable and frugal innovation .................................................................................................................. 60

Annex E. Policy-relevant messages and recommendations addressing social, sustainable and frugal innovation ................................................................................................................ 63
TABLES
Table 1: Recommendations ........................................................................................................... 14
Table 2: Policy-relevant messages and recommendations valid for social, sustainable, frugal and inclusive innovation ......................................................................................................................... 16

LIST OF ABBREVIATIONS

BS – Black Sea
BSH – Black Sea Horizon
EC – European Commission
EU – European Union
FP7 – Seventh Framework Programme
ICT – Information and Communications Technology
IT – Information Technology
NGO – Non-Governmental Organisation
OECD – Organisation for Economic Co-operation and Development
R&D – Research and Development
R&I – Research and Innovation
STI – Science, Technology and Innovation
UN – United Nations
EXECUTIVE SUMMARY

The present document provides a brief overview of four types of innovation that have been recently attracting the attention of researchers of innovation policy and practice: social innovation, sustainable innovation, frugal innovation and inclusive innovation. Each type of innovation is presented in a separate section, which includes definitions as well as examples of successful innovation practices. On that basis, it seeks to provide a basic understanding of the nature of these four types of innovation and the opportunities they offer.

This report comprises four chapters: The first chapter introduces the BSH project and provides brief information about two international workshops that were organised in Sofia and Tbilisi within the framework of the project. The second chapter provides further details on the two international workshops, including the overall concept, their objectives and the applied methodology and results. In the third chapter, the types of social, sustainable, frugal and inclusive innovation are portrayed along with successful practical examples. The last chapter presents concluding remarks on social, sustainable, frugal and inclusive innovations in the Black Sea region. Agendas of the two workshops, a catalogue of innovation practices presented at the workshop in Sofia, and the results from the two workshops are included in the Annexes to this report.

1. INTRODUCTION

1.1. The Black Sea Horizon project

Black Sea Horizon (BSH) is a European Union (EU) project funded under Horizon 2020, the EU’s Framework Programme for Research and Innovation. The project started in February 2015 and finished in the end of January 2018. It was a joint effort of 19 partners from 16 countries – Armenia, Austria, Azerbaijan, Bulgaria, France, Hungary, Georgia, Germany, Greece, Moldova, Poland, Portugal, Romania, Russia, Turkey, and Ukraine. Its major aim was to support the EU’s external relations with the Black Sea (BS) region by significantly contributing to ongoing bi-regional and regional Science, Technology and Innovation (STI) policy dialogues, and by increasing the
knowledge base about the EU’s external environment. It also sought to stimulate bi-regional STI cooperation and to strengthen the EU’s economic competitiveness as well as to contribute to the establishment of supportive framework conditions by facilitating the pooling of resources and by identifying challenging thematic areas for mutual STI cooperation.¹

The BSH project contributed to the policy dialogue between the EU and the BS region. It also implemented a series of activities to address the project’s specific goals. Various conferences, workshops, and webinars were organised within the framework of the project. In order to stimulate cooperation among innovation stakeholders from the Black Sea region, two international workshops addressing the topics of social, sustainable and frugal/inclusive innovations were organised in Sofia and Tbilisi in the end of 2017.

1.2. BSH international workshops on social, sustainable, frugal and inclusive innovation

Social, sustainable, frugal and inclusive innovations are still new social practices and as such are emerging topics in the scholarly discourse on innovation. Since these new types of innovation are not widely studied in the Black Sea region, promoting them was considered important in order to raise awareness on their nature and advantages on the one hand, and on the other hand – it was important to promote good innovation practices.

Two international workshops on social, sustainable and frugal/inclusive innovation were organised in the end of 2017 in Sofia and Tbilisi within the framework of the BSH project. The aim of the workshops was to promote these new types of innovation among representatives of the BS region and to raise awareness on their advantages and discuss collaboration opportunities among the targeted audiences of non-EU BS countries - companies, social entrepreneurs, civil society organisations, universities, NGOs, public authorities and agencies. The event in Sofia gave the opportunity to innovators and entrepreneurs to share their good innovation practices and to discuss related challenges, opportunities, drivers and barriers. Participants formulated policy-

¹ BSH official website: https://blacksea-horizon.eu/project
relevant messages and recommendations based on the discussions. The results from the Sofia workshop were presented to public authorities, NGOs, representatives of universities and agencies during the workshop in Tbilisi.

More detailed information on the overall concept of the two workshops and the generated results is presented in the second chapter of this report.

2. International Workshops on Social, Sustainable, Frugal and Inclusive Innovation in the Black Sea Region

2.1. Concept and applied methodology

The objective of the two workshops in Tbilisi and Sofia was to promote frugal/inclusive, sustainable and social innovation for further take-up in EU Black Sea region, as well as to raise awareness on their advantages and on collaboration opportunities among non-EU BS countries. The workshop in Sofia “Promotion of Social, Sustainable and Frugal Innovation in the Black Sea Region” took place on 2-3 November 2017, while the event in Tbilisi “Policy Guidelines for Social, Sustainable and Inclusive Innovation: the Black Sea Region Experience” was organised on 6-7 December 2017. Participants in the Sofia workshop were practitioners / owners / initiators of social, sustainable and frugal innovations, who presented their innovation practices, discussed their drivers, barriers, challenges and opportunities, and elaborated policy-relevant messages and recommendations. The results from the Sofia workshop (detailed presentation of the Sofia workshop results is given below under 2.2 Results from the international workshop in Sofia) served as input to the workshop in Tbilisi, which was attended mostly by policy makers in R&I. The participants in the Tbilisi workshop generated a priority list of policy recommendations, which they considered of high relevance to the Black Sea region.

Both events in Sofia and Tbilisi followed similar methodology and were organised around three sessions, one for each of the considered types of innovation. The sessions in Sofia included presentations and group work activity. The following successful innovation practices/projects were presented during the event in Sofia:

- Climate-KIC Accelerator (Bulgaria)
- Greencubator (Ukraine)
Lake Baikal Foundation for Environmental Applications and Research (Russia)
Whole Surplus (Turkey)
Social Shop “Ethnodesign” (Georgia)
NIKA Responsible Business Generation (Moldova)
PartNET Association
Social Innovation Hub (A-Hub) in Sofia and The NGO House (Bulgaria)
Social Innovation Lab (Azerbaijan)
Community Development through Social Entrepreneurship (Armenia)²
SI-DRIVE (Social Innovation: Driving Force of Social Change)³
CASI (Public Participation in Developing a Common Framework for the Assessment and Management of Sustainable Innovation)⁴
INDIGO POLICY (Support for the advancement of policy cooperation between India and Europe in Research and Innovation)⁵

After each block of presentations participants worked in break-out groups to identify drivers, barriers, challenges and opportunities and formulate policy-relevant recommendations for each of the three types of innovation. At the end of the workshop the participants voted for five innovation practices/projects from the ones being presented during the event, which they found most relevant to the Black Sea region and they considered important to be presented to policy makers in Tbilisi. The three cases that got the highest number of votes were Whole Surplus⁶ (Turkey), Social Innovation Lab⁷ (Azerbaijan) and Community Development through Social Entrepreneurship⁸ (Armenia).

“Fazla Gida” (Turkey). Fazla Gida or Whole Surplus (translated into English) develops technology solutions to help businesses recover value out of food surplus. It provides one-stop waste management platform which includes a unique marketplace for donating surplus inventories, recycling and reselling of surplus and data analytics for reducing waste at the source.

“Social Innovation Lab” (Azerbaijan) is a leading startup center in Baku that contributes to solving various business and social problems through innovative approaches to build sustainable business models. It aims to enable citizens in Azerbaijan to participate in achieving social and economic progress of the country through entrepreneurship.

“Community Development through Social Entrepreneurship” (Armenia) is a project, which contributes to the sustainable community development and to enhancing the capacities of civil

² More detailed information about the practices/projects could be found in Annex C Catalogue with practices/projects presented at the workshop in Sofia
³ https://www.si-drive.eu/
⁴ http://www.casi2020.eu/
⁵ https://indigoprojects.eu/about/indigo-policy/about
⁶ https://wholesurplus.com/
⁷ http://socialinnovationlab.az/
⁸ http://www.se.center/
The workshop in Tbilisi included three sessions as well, starting with presentations on social, sustainable and inclusive innovations, and followed by presentation of practical cases. Besides the three cases from Sofia, two additional Georgian cases were presented – Social Shop Ethnodesign\(^9\) and a case related to production of eco-friendly fuel (biodiesel) from waste cooking oil\(^10\) (Biodiesel Georgia Ltd). What followed were (i) presentations of the list of drivers, barriers, challenges and opportunities that were generated by participants in Sofia and (ii) policy-relevant messages and recommendations suggested by the Sofia workshop attendees. Participants discussed the policy-relevant messages and recommendations, elaborated on them and were invited to vote for a set of recommendations they found most relevant to the Black Sea region.

2.2. Results from the international workshop in Sofia: a list of drivers, barriers, challenges and opportunities and a set of policy-relevant messages and recommendations

In result of the dicussions and group work activities in Sofia, a list of drivers, barriers, challenges and opportunities for each of the three types of innovation was produced. The whole list is given in Annex D. After the end of the workshop, the results from each session were collected and a general list of drivers, barriers, opportunities and challenges applicable to the three types of innovation was produced.

The most common drivers\(^11\) that participants considered valid for the three types of innovation are:

- Cooperation and collaboration among stakeholders (allows to share experience and skills and to solve issues with joint efforts).
- The need to improve quality of life.

\(^9\) \url{http://crafts.ge/en}
\(^10\) \url{https://poweringthefuture.un.org/content/documents/pres/Ilia_State_University.pdf}
\(^11\) The drivers presented in this document are those suggested and agreed by the participants at the workshop in Sofia and no further revisions have been made by the authors of this report.
Global agendas (Horizon 2020 Societal Challenges\(^\text{12}\), Sustainable Development Goals\(^\text{13}\)) call for new types of innovation and new business models which will trigger 'economic development which is more inclusive'. \(^\text{14}\)

- Motivation to pursue social good and to create social value.
- Trend from globalisation to localisation (from global innovation to local innovation).
- Networking (exchange of ideas and good practices) and the use of ICT to facilitate communication and cooperation.
- Ethics and responsibility in research and innovation: research ethics, corporate social responsibility, new values in doing business and for community development.
- Empathy and community development.

With regard to barriers\(^\text{15}\) valid for all types of innovation discussed during the two workshops, the following emerged:


\(^{15}\) The barriers presented in this document are those suggested and agreed by the participants at the workshop in Sofia and no further revisions have been made by the authors of this report.
- Public policies still do not fully recognise social, sustainable and frugal innovations and have not introduced regional/municipal supporting measures targeting such innovation practices/projects.

- Social, sustainable and frugal innovations are still understudied in the Black Sea region which results in lack of understanding of their importance. This hinders identification and promotion of existing practices and leads to lack of awareness among local communities.

- Current education systems do not promote creativity and innovation to a sufficient extent.

The opportunities\textsuperscript{16} that participants identified as valid for the three types of innovation are:

- Creating the right set of conditions to facilitate the development of networks of practitioners keeping in mind the global perspectives for collaboration.

- Set up of networks/platforms that link up different type of actors: innovators with policy level actors; innovators with business; innovators with civil society; etc.

- Media and networks are channels to promote good practices and thus to ensure that successful examples reach more people, giving them the chance to get involved or motivating them to start similar initiatives in their communities.

- Given the strong participatory nature of social and sustainable innovation practices they have the potential to foster integration and social coherence in the local level.

- Crowdsourcing is a means to support the development of innovative practices and implementation of innovative projects.

- The wide use of ICT provides opportunities to reach and connect more people and to facilitate communication.

\textsuperscript{16} The opportunities presented in this document are those suggested and agreed by the participants at the workshop in Sofia and no further revisions have been made by the authors of this report.
The challenges that could be considered valid for the three types of innovation are:

- The goal of public engagement is not always immediately recognised by the participating publics – sometimes innovation initiatives and solutions require public engagement but it is of high importance to clearly communicate the purpose of the engagement from the very beginning.

- Lack of responsiveness of the target group towards the proposed initiatives (it could be due to unwillingness of targeted audience to respond/get involved in the development and implementation of innovative ideas; or due to lack of information about the existing initiatives).

- Building effective dialogue among relevant stakeholders.

- Insufficient cooperation and synergies within teams and within organisational networks.

- Measuring the impact of social, sustainable and inclusive innovations is not always possible.

- Accepting failures as normal events of the innovation process (not all innovations are successful but this should not stop practitioners from implementing their ideas).

- Adapting successful practices to different contexts is not always possible (what works in a specific context, region or country might not work in another context due to cultural differences, environment, traditions, etc.).

- Limited resources and expertise on the local level.

- Use of local/national funds to support innovation practices.

A list of policy-relevant messages and recommendations targeting local and national authorities, as well as researchers and science policy-makers was also generated. In general, participants emphasised on a few topics in their recommendations. They

17 The challenges presented in this document are those suggested and agreed by the participants at the workshop in Sofia and no further revisions have been made by the authors of this report.
assumed as crucial the collaboration between stakeholders in the field of innovation (innovators, researchers, civil society, etc.) and outlined the importance of supporting such collaborations by establishing platforms to facilitate cooperation and networking between innovators and stakeholders. The involvement of local communities (that are expected to be the beneficiaries of the innovation practices/projects) in designing/developing innovative solutions was also spelled out. In order to raise awareness on the existence of practices/projects in the field of social, sustainable and frugal innovation, participants suggested that success stories should be mapped and promoted among communities and innovators. Another important remark was that this is the responsibility of the local governments to introduce funding and support schemes to facilitate the development of local innovations and to ensure their long-term sustainability.

2.3. Results from the international workshop in Tbilisi: a priority list of policy-relevant messages and recommendations valid for the four types of innovation

The aim of the workshop in Tbilisi was to present the results generated by participants in the workshop in Sofia and to discuss the proposed policy-relevant messages. After the policy recommendations addressing social, sustainable and frugal innovation were presented, the participants in Tbilisi were invited to further elaborate on them and to give suggestions for including additional recommendations that address issues they considered important. Keeping in mind that the types of innovation in focus of the two workshops share common features, participants and organisers of the event assumed more effective to produce one list with recommendations valid for the four types of innovation considered. As a result, they produced a list of 16 policy-relevant recommendations applicable to the four types of innovation including recommendations from Sofia, as well as additional ones proposed in Tbilisi:

**Table 1: Recommendations**

<table>
<thead>
<tr>
<th>RECOMMENDATIONS (applicable to the three types of innovation):</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Support the establishment of platforms that facilitate cooperation/networking between innovators themselves and between innovators and businesses.</td>
</tr>
<tr>
<td>2. Involve local communities from the very beginning in designing/developing innovative solutions (bottom-up approach).</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>3.</td>
</tr>
<tr>
<td>4.</td>
</tr>
<tr>
<td>5.</td>
</tr>
<tr>
<td>6.</td>
</tr>
<tr>
<td>7.</td>
</tr>
<tr>
<td>8.</td>
</tr>
<tr>
<td>9.</td>
</tr>
<tr>
<td>10.</td>
</tr>
<tr>
<td>11.</td>
</tr>
<tr>
<td>12.</td>
</tr>
<tr>
<td>13.</td>
</tr>
<tr>
<td>14.</td>
</tr>
<tr>
<td>15.</td>
</tr>
<tr>
<td>16.</td>
</tr>
</tbody>
</table>

In order to generate a priority list with recommendations that participants find most important and relevant to the Black Sea region, they were invited to vote. Based on the

---

\(^{1}\) an internalized set of values and objectives that guide a person with regard to ethical behavior and decision-making (Source: [http://www.dictionary.com/browse/moral-compass](http://www.dictionary.com/browse/moral-compass))
voting the following priority list of policy-relevant messages and recommendations valid for the four types of innovation was produced:

**TABLE 2: POLICY-RELEVANT MESSAGES AND RECOMMENDATIONS VALID FOR SOCIAL, SUSTAINABLE, FRUGAL AND INCLUSIVE INNOVATION**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Local government to support and endorse local innovation practices by introducing efficient funding and support schemes and ensuring participation of local communities.</td>
</tr>
<tr>
<td>2.</td>
<td>Integrate innovation (including non-traditional types) in school curricula and government agendas.</td>
</tr>
<tr>
<td>3.</td>
<td>Successful practitioners (social, sustainable, frugal and inclusive innovation) need to be more actively involved in policy-decision making.</td>
</tr>
<tr>
<td>4.</td>
<td>Accept change and failure, develop and implement mechanisms for assessing impact.</td>
</tr>
<tr>
<td>5.</td>
<td>Adopt Responsible Research and Innovation (RRI) approach and embed it in regional Research and Innovation policy.</td>
</tr>
<tr>
<td>6.</td>
<td>Support the establishment of platforms that facilitate cooperation/networking between innovators themselves and between innovators and ordinary business.</td>
</tr>
<tr>
<td>7.</td>
<td>Involve local communities from the very beginning in designing/developing innovative solutions (bottom-up approach).</td>
</tr>
<tr>
<td>8.</td>
<td>Visualise the successes: promote success stories and give awards in order to stimulate innovators and raise awareness on good practices.</td>
</tr>
</tbody>
</table>

Based on the priority list of policy-relevant messages and recommendations that participants in Tbilisi produced and on their discussions, it could be stated that the introduction of efficient funding and support schemes is considered very important for the development and deployment of social, sustainable, frugal and inclusive innovations in the Black Sea region. Participants also emphasised the need to integrate innovation in school curricula and government agendas. Engaging successful practitioners in policy and decision making is also considered important. It is assumed that practitioners have observations on the environment they are operating in, know what the issues are and involving them in the decision making process could result in the introduction of more efficient policies and supporting schemes.
A message that emerged from the workshop in Sofia was that governments on national and local level hesitate to support innovative ideas because of the high risk of failure. Participants there agreed that not every innovation works out and brings the intended positive impact but also emphasised that the fear of failure should not hamper supporting creative ideas. In this line of thinking, they recommended governments to be more open to supporting innovative ideas and to overcome their risk-averse attitude towards new solutions that aim to solve social issues. Participants in Tbilisi agreed with the proposed recommendation and added that it is also important to develop and implement effective mechanisms for measuring the impact of social, sustainable, frugal and inclusive innovation.

Participants in Sofia and Tbilisi assumed as highly important the role of platforms facilitating innovation cooperation and networking in the Black Sea region. Although a few examples of such platforms were discussed during the two workshops (e.g. Social Innovation Hub in Moldova, A-Hub in Bulgaria, Greencubator in Ukraine) their number was assumed as insufficient and therefore it was emphasised that further support for development of such platforms should be provided.

Developing measures to allow and stimulate the involvement of local communities from the very beginning in designing/developing innovative solutions is seen as another topic of relevance to policy-makers. The bottom-up approach is assumed necessary in order to ensure that the innovative solutions developed will address existing needs and will be in favour of local communities.

A major concern shared by the participants during the two workshops was that successful initiatives/projects representing social, sustainable, frugal and inclusive innovation exist but they are not always recognised as such and due to lack of mapping and promotional activities people are not aware of them. Therefore, the promotion of successful cases in the field is seen as a valuable step in motivating innovators to disseminate (raise awareness on) good practices.

To conclude, the priority list of policy-relevant recommendations was the major result of the two workshops in Sofia and Tbilisi. It could be further exploited for the purposes of policy making in the field of social, sustainable, frugal and inclusive innovation and could also serve as an input in the development of future calls for research.
3. Social, Sustainable, Frugal and Inclusive Innovation

New global agendas such as the *Grand Societal Challenges* (Horizon 2020) and the *Sustainable Development Goals* are important steps in addressing the challenges the world is facing today, among which are widespread poverty, rising inequalities and disparities in opportunities, wealth and power of environmental degradation, resource scarcity and climate change risks. All these in turn could be perceived as opportunities to foster and support the emergence of new for the Black Sea region types of innovation such as social, sustainable, frugal and inclusive innovation.

The four types of innovation present real-life innovation practices that are not coherent with the types of innovation presented in the OSLO Manual (product, process, marketing and organizational innovation). They emerged in response to existing social issues and their overall objective is to create social value. Public engagement is a distinct feature of these new innovation types.

3.1. Social innovation

In recent years social innovations have provoked the interest of researchers, policy-makers and practitioners. Although there is still not a universally accepted and shared common definition of social innovation, there have been many successful initiatives implemented that could be classified as social innovation practices and that occur in variety of fields such as education, energy supply, environment, transport, poverty reduction, etc.

As discussed in the Policy Declaration of the SI-DRIVE project, social innovation start being actively promoted not only by researchers and practitioners but also by international organisations like the UN, the OECD and the World Bank. For example, the 17 Sustainable Development Goals developed by the UN and mentioned above as providing opportunities for developing social innovation consider social innovation as a key tool in achieving sustainable development. However, it could be noted that

---


despite the progress of social innovations in the recent time, there is still a lot to be done in order social innovation to move from the field of policy to the mainstream.  

3.1.1. Definition of social innovation (What is social innovation?)

Although a large number of varied definitions of social innovation exist, presenting the diversity of the concept, still there is no globally accepted definition of social innovation. In order to provide a basic understanding of social innovation, a few working definitions developed as part of EU FP7 funded projects are presented below. Examples of such projects and responding working definitions are:

  
  “Social innovation is focusing on social needs, co-creation, cross-sector fertilization, network-based learning, and governance as a new combination or new configuration of social practices developed in an intentional targeted manner with the goal of better satisfying or answering needs and problems than is possible on the basis of established practices.”

  
  “Social innovations are new solutions (products, services, models, markets, processes etc.) that simultaneously meet a social need (more effectively than existing solutions) and lead to new or improved capabilities and relationships and better use of assets and resources. In other words, social innovations are both good for society and enhance society’s capacity to act.”

- SIMPACT: Boosting the Impact of Social Innovation across Europe through Economic Underpinnings (http://www.simpact-project.eu/)
  
  “Social innovation refers to novel combinations of ideas and distinct forms of collaboration that transcend established institutional contexts with the effect of
empowering and (re)engaging vulnerable groups either in the process of social innovation or as a result of it.”

- SEiSMiC: Enable social innovation in European cities (http://www.seismicproject.eu)\(^\text{24}\) - The SEiSMiC project applies two definitions of social innovation as an attempt of a definition of social innovations:
  i) “The core of Social Innovation is the local development and the connection to territories. Social Innovation is seen as being important for improving the quality of life of people living in communities and therewith, to increase the welfare of the communities through “employment, consumption and/or participation, its expressed purpose being to provide solutions for individual and community problems.”
  ii) “Social Innovation ranges from promoting behavioural change of society for tackling greater challenges (e.g. climate change) to the necessity of society to act “because socially innovative actions, strategies, practices and processes arise whenever problems of poverty, exclusion, segregation and deprivation or opportunities for improving living conditions cannot find satisfying solutions in the ‘institutionalized field’ of public or private action.”


Social innovation is defined as “development and delivery of new ideas and solutions (products, services, models, markets, processes) at different socio-structural levels that intentionally seek to change power relations and improve human capabilities, as well as the processes via which these solutions are carried out.”\(^\text{25}\)
In their “Open Book of Social Innovation”, Murray, Caulier-Grice and Mulgan talk about social innovation as “new ideas (products, services and models) that simultaneously meet social needs (more effectively than alternatives) and create new social relationships or collaborations”. Authors assume that although the term “social innovation” is a new one, social innovation itself is not new since social innovation initiatives have been implemented throughout history. They claim that social innovation has become popular over the last decade due to its capacity to address pressing issues such as climate change, chronic diseases and widening inequality.26

In 2013, the European Commission (EC) published a “Guide to Social Innovation”27 where it provided the following description of social innovation:

“It [social innovation] represents new responses to pressing social demands, which affect the process of social interactions. It is aimed at improving human well-being. Social innovations are innovations that are social in both their ends and their means. They are innovations that are not only good for society but also enhance individuals’ capacity to act. They rely on the inventiveness of citizens, civil society organisations, local communities, businesses and public servants and services. They are an opportunity both for the public sector and for the markets, so that the products and services better satisfy individual but also collective aspirations.”

The guide further describes the social innovation process that, according to the EC, includes four key elements. It starts with identifying unmet or inadequately met social needs. The second step is the development of innovative solution that addresses the identified need. What follows is evaluation of the effectiveness of new solutions in meeting social needs. The final element is the scaling up of effective social innovations. In general, social innovations are assumed as a tool that helps to develop new responses to social needs in order to deliver better social outcomes.

In order to provide an overview of existing definitions of social innovation, the TEPSIE project conducted a literature review. The results argue that some of the existing definitions are very narrow and thus exclude many examples of social innovation.

---

initiatives, while others are very broad describing practices that are to a certain extent social but not particularly innovative. Authors of the report “Defining Social Innovation” 28 developed as part of the project claim that since social innovation is led by the practice, existing understandings, definitions and meanings related to the concept have been generated by practitioners doing things in innovative ways without thinking about them in an academic way. They ascribe the various definitions to the assumption that the practice of social innovation looks and feels different in different fields, sectors and continents and to the fact that social needs and contexts vary in different countries.

Based on analyses of another FP7 project that examines the typology of social innovation - SI-DRIVE - it could be concluded that lately social innovations are receiving growing attention worldwide but its potential is still unexploited. Although there is still not common and clear understanding of the term, an increasing number of social innovation initiatives start taking place and gain popularity, generating positive impact. 29

3.1.2. Examples of social innovation

Examples of social innovation initiatives could be as diverse as online platforms that provide opportunities for sharing, crowd funding initiatives, peer-to-peer learning, new models of medical care, etc. In general, social innovation can range from new products and services to new organisational forms and new business models.

A practical example of social innovation is the “Timurovtsy (Volunteers) of Information Society (Elimination of Computer Illiteracy)” project implemented in Russia. The main objective of the project is to eliminate computer illiteracy among vulnerable groups including unemployed citizens, unemployed mothers with children, people with disabilities, pensioners, etc. It provides educational courses led by young people that possess IT skills and are able to pass their knowledge to other people. The courses take place at schools, higher education institutions and libraries. The project helps old people and socially vulnerable groups to obtain basic IT knowledge and develop IT

28 http://siresearch.eu/sites/default/files/1.1%20Part%201%20-%20defining%20social%20innovation_0.pdf
skills, thus supporting overcoming digital inequalities. It also facilitates intergenerational communication.\(^\text{30}\)

Another example is JUMPIDO\(^\text{31}\) which is educational software for students at primary school. JUMPIDO offers a new way to learn mathematics through a set of educational games that makes children be physically active in the classroom. The innovative solution provides opportunity for children to work together, addresses their needs to be active and at the same time helps them to successfully master mathematics.

Examples of other social innovation practices and projects could be found in the catalogue that is available in Annex C in the end of the present document. Furthermore, social innovation examples in various fields such as environment, energy, education, health-care, employment, etc. are analysed in reports developed as part of the SI-DRIVE project and available at the project’s website: [https://www.si-drive.eu/](https://www.si-drive.eu/).

### 3.2. Sustainable innovation

As is the case with social innovation, the interest in sustainable innovation has increased lately due to the continuing global challenges related to the negative impacts of climate change, like desertification, water scarcity, pollution, critical raw materials scarcities, to name a few. Political, social and environmental issues force companies to work towards sustainability and address these issues by incorporating solutions that meet the needs of consumers and are socially and environmentally-friendly. Sustainable innovations are seen as providing solutions to the challenges and issues mentioned above and as helping understand and solve complex issues.\(^\text{32}\) However, sustainable innovations remain still under-researched, which need further investigation in order to understand their potential and advantages.

#### 3.2.1. Definition of sustainable innovation

The term *sustainable innovation* has been widely used in the last decade. According to an article of Boons et al. (2012) sustainable innovation could be defined as "*innovation that improves sustainability performance*" where such performance
includes ecological, economic, and social criteria." Since such criteria vary depending on the context, sustainable innovation is considered to have different meanings and characteristics in different contexts. Sustainable innovation is also defined as future-oriented innovation that includes social objectives, representing “a process where sustainability considerations (environmental, social, and financial) are integrated into company systems from idea generation through research and development and commercialisation.”

Another definition sketches sustainable innovations as “innovations in which the renewal or improvement of products, services, technological or organizational processes not only delivers and improves economic performance (sustain economic growth), but also an enhanced environmental (conserve the environment, minimize environmental impact and protect the natural environment) and social performance (improve quality of life and quality of employment) both in the short and long term.”

Carvalho and Barbieri (2012) describe sustainable innovation as “the introduction of products, production processes, management of business methods, new or significantly improved, that bring economic, social or environmental outcomes, considering the supply chain and compared with relevant alternatives.”

The CASI project (“Public Participation in Developing a Common Framework for the Assessment and Management of Sustainable Innovation”) which is a EU project funded under the FP7 programme also contributes to enhancing the general understanding of sustainable innovation by developing the following working definition: “Sustainable Innovation is any incremental or radical change in a socio-technical system leading to positive environmental, economic and social transformations without compromising the needs, welfare and wellbeing of current and future generations”.

Based on the various definitions provided above, it could be concluded that what distinguishes sustainable innovation from conventional innovation is that the former integrates simultaneously economic, environmental and social aspects. According to

34 https://ainfo.cnptia.embrapa.br/digital/bitstream/item/34218/1/AT10105.pdf
35 https://jotmi.org/index.php/GT/article/view/art258
the “Sustainable Innovation Report” developed by the Centre for Sustainable Design, it could be claimed that the major aim of sustainable innovation is to contribute to significant reductions in environmental impacts.

### 3.2.2. Examples of sustainable innovation

Although sustainable innovation is yet a developing field, there are successful examples that show its positive potential for achieving a sustainable future.

An example of a sustainable innovation initiative comes from Bulgaria, more precisely from a joint effort of BalBok Engineering (a Bulgarian private company) and Sofia Municipality. They have developed a solution for separate collection of hazardous waste from households (including mercury-containing devices, lacquers and varnishes). The core idea of the initiative is to ensure clean and safe urban environment. Its major advantage is the fact that waste could be collected directly from the homes of citizens by request from their side. The system offers a truly innovative service that did not exist before on national level and ensures compliance with national and European environmental legislation in the field of waste management. The result is the significant reduction of the footprint of hazardous waste on environment.

Another sustainable innovation example comes from Turkey. The “Energy Lady/Kid” is a project organised by the Energy Efficiency Association, aiming to raise awareness on energy efficiency among housewives and children. The project organises lectures in schools and homes in collaboration with local government authorities and introduces practical methods of energy saving such as “unplug your iron five minutes before you are done with ironing”. Other communication activities that are organised within the project are seminars and conferences as well as brochures with practical information on how to save energy through efficient use of electronic devices at home. It was measured that in result of the “Energy Lady/Kid” project, there was decrease in electricity bills per household per month.

The two examples presented above result in changing personal behaviour and developing new daily routines for efficient energy consumption.

---

Other examples of sustainable innovation could be found in Annex C.

### 3.3. Frugal Innovation

Frugal innovation is an emerging phenomenon and research in its field is still in a nascent stage. Literature addressing the demand for frugal innovation is most often focused on developing economies, but lately some smaller (but still significant) emerging markets within Europe are also being discussed as a fertile ground for frugal innovation development. It is argued that the reason behind the increasing demand for frugal innovation in developed markets is the reduction in consumer spending caused by growing poverty, the recession and long-term decoupling of economic growth and living standards. 39

In their study on frugal innovation in Europe, the innovation foundation Nesta and Fraunhofer Institute for Systems and Innovation Research ISI, support the claim that although frugal innovations are more common for developing economies, an increasing number of researchers and business leaders find it important for Europe as well. In their view “frugal innovation might offer new opportunities to make the most of European technological expertise, to address European societal challenges and to better meet customer needs in home markets”.40

#### 3.3.1. Definition of frugal innovation (What is frugal innovation?)

A commonly accepted understanding of frugal innovation is that it offers creative solutions to emerging problems and generates utility under unfavourable conditions. Its implementation and development in different contexts have led to diverse interpretations of the concept. According to some understandings, frugal innovation “generates products and services that provide a better value proposition for less affluent customers”. Those products and services are described as being affordable, functional and user-friendly. 41

Frugal innovations are also described as innovative products and services that seek to significantly lower the costs and target price-sensitive customers. Tiwari and Herstatt (2014) propose the following definition of frugal innovation: “new or significantly

---

39 Analysis of Foundations, Trends and Relevant Potentials in the field of Frugal Innovation
41 Analysis of Foundations, Trends and Relevant Potentials in the field of Frugal Innovation
improved products (both goods and services), processes, or marketing and organizational methods that seek to minimize the use of material and financial resources in the complete value chain (development, manufacturing, distribution, consumption, and disposal) with the objective of significantly reducing the total cost of ownership and/or usage while fulfilling or even exceeding certain pre-defined criteria of acceptable quality standards.”

The INDIGO POLICY project that aimed to enhance policy cooperation in the STI field between the EU and India touches upon the topic of frugal innovation as well. In its policy brief “Funding Frugal Innovation” frugal innovations are described as “the stripping of attributes of technologically sophisticated products, systems and services to make them cheaper without losing technical functionalities and therewith making them affordable for low income customers, either in low, middle or high-income countries.” They are also considered as inventions that contribute to meeting the needs of the poor population in developing countries and to solving emerging environmental and social issues.

Another source describes frugal innovations as a problem-oriented, creative approach to problem solving which takes into account specific local needs. With regard to the essence of the concept it should be noted that frugal innovations are distinguished from the science-driven innovation in a way that many frugal innovations are result of the recombination of existing knowledge and resources rather than generation of a new scientific knowledge that requires R&D investments. What should also be kept in mind is that frugal innovations should generate positive social and environmental outcomes, and should not be merely economically successful and profit driven but socio-economically desirable in a comprehensive sense.

3.3.2. Examples of frugal innovation

Examples of frugal innovation come from emerging as well as from developed economies. One of the most popular frugal innovation solutions is the Tata Nano car that was produced by Tata Motors for the Indian market and is sold for the price of

---

42 Frugal innovation and analogies
43 Granqvist, K. (2016). Policy brief: Funding frugal innovation
44 Analysis of Foundations, Trends and Relevant Potentials in the field of Frugal Innovation
USD 2,000. It is a low cost and affordable mode of transportation that provides opportunity for Indians to approach the standard of living of the developed world. The car was designed by making things smaller and lighter, removing superficial parts and using cheaper materials wherever possible while keeping in mind safety requirements and emission norms. Tata Nano is considered as an example of frugal innovation as it provides a low-cost, comfortable, fuel-efficient and safe option of transport for potential customers at the “bottom of the pyramid” (the largest, but poorest socio-economic group) in emerging markets.\textsuperscript{46}

Another example of frugal innovation in India is the Aravind Eyecare Hospital that tries to eliminate “needless blindness” and to make healthcare accessible for the poorest people in India. By decreasing the cost of a cataract surgery from USD 3,000 to USD 30, Aravind performs around 300,000 surgeries per year and gives opportunity to thousands of blind poor people to be operated. The core idea of Aravind is not to increase number of surgeons but to increase their productivity. The innovation presented provides “more from less for more and more people”. \textsuperscript{47}

A washing machine with a pedal system called GiraDora for only USD 40 is also an example of a frugal solution that has been developed for people in developing countries who cannot afford to buy an expensive washing machine. Besides its low-cost, the pedal-powered machine reduces the overall time of doing a load of laundry and uses less water than compared to hand washing. \textsuperscript{48}

Frugal innovations are taking place in European markets as well. An example is the Renault Logan car that was developed by Renault-Dacia using 50% less parts than a typical Renault vehicle and being yet spacious and specifically designed to meet the needs of low-income consumers in Eastern European markets. Soon it turned out that there is demand for such low-cost solutions in the Western European markets as well. This example demonstrates that demand for frugal solutions also exists in developed economies, not only in emerging markets. \textsuperscript{49}

\textsuperscript{46} http://mba.teipir.gr/files/Tata_Motors.pdf
\textsuperscript{47} http://www.mashelkar.com/work/articles/item/297-more-from-less-for-more-mlm/297-more-from-less-for-more-mlm
\textsuperscript{48} http://homestead-and-survival.com/giradora-pedal-powered-washer-needs-no-electricity-and-costs-only-40/
\textsuperscript{49} Analysis of Foundations, Trends and Relevant Potentials in the field of Frugal Innovation
The examples listed above prove the assumption supported by Nesta and Fraunhofer ISI that most frugal innovations are recombination of existing technologies for new purposes, rather than the development of an entirely novel technology.  

3.4. Inclusive Innovation

According to literature inclusive innovation is sometimes called frugal innovation and frugal innovation is a form of inclusive innovation. However, these are still two distinct concepts that deserve equal attention.

Recently, inclusive innovation started gaining momentum in emerging markets such as China and India, where it has become a policy priority. The concept emerged in developing countries where due to the high level of poverty a large part of the population could not take advantage of the benefits of technological advancement and what is more could even not satisfy their basic everyday needs (access to water, health care, etc.). Innovation in general could provide a solution to such issues and could enable affordable access to goods and services for the poor population.

3.4.1. Definition of inclusive innovation (What is inclusive innovation?)

Several definitions for inclusive innovation exist, some of them being the following:

- "Inclusive innovation refers to innovation that includes groups of people that are generally excluded from it. The group is generally the lowest income group, although it could also refer to gender, age groups, regions, ethnicities, industries, and so on."  

- "Inclusive innovation refers to the knowledge creation, acquisition, absorption and distribution efforts targeted directly at meeting the needs of the low-income or the base-of-the-pyramid (BoP) population. The focus of Inclusive Innovation is on delivering high performance products and services or high experience at ultra-low cost to the people whose needs are generally not addressed."
A compact working definition of the concept of inclusive innovation was provided by Dr Ramesh Mashelkar who is the former Director General of the Council of Scientific & Industrial Research (CSIR) in India:

“Inclusive innovation is any innovation that leads to affordable access of quality goods and services creating livelihood opportunities for the excluded population, primarily at the base of the pyramid, and on a long term sustainable basis with a significant outreach.“

The words in bold are the five key characteristics of inclusive innovation according to Dr. Mashelkar. Regarding those five characteristics he has emphasised that:

- “Affordable access” depends upon the income of individuals. Considering a situation of around 2.6 billion people in the world earning less than USD 2 per day, it would mean that inclusive innovation should be aimed at “ultra-low cost” goods and services which could be achieved through “extreme reduction” in both the costs of production and distribution.

- The “sustainable basis” highlights the importance of “affordable access” not being dependent on government subsidies or generous government procurement support systems but being market-based.

- The “quality goods and services creating livelihood opportunities” calls for recognising the basic rights of the people at the base of the pyramid and ensuring social and economic wellbeing and good quality life.

- The “excluded population” is a broad term and could include the poor, the disabled, the elderly, etc.

- In order to achieve a true inclusion of the excluded population, the inclusive innovation should reach a large scale among a significant portion of target population.
Moreover, inclusive innovation could be any kind of innovation – a technical innovation, an organisational innovation, a social innovation, a public policy innovation, etc.  

As a whole, the aim of inclusive innovation should not be to simply promote growth but to meet the needs and wants of the lower income groups by innovating in a way that increases their welfare. It promotes ensuring inclusive growth that does not exclude certain classes of society and aims to achieve a more equal distribution of income. Inclusiveness could be social, geographical as well as industrial. The essence of inclusive innovation is not only in providing cheap, affordable goods and services of good quality on a sustainable basis, but also in increasing the income of the lower social classes by providing job opportunities, higher wages, possibilities to educate their children, etc. 

In order to create “inclusive growth” it is necessary to move from the well-known strategy of getting more (performance) by using less (resources) for more (profit) and embrace a new paradigm that promotes achieving more (performance) by using less (resources) for more (people). This is called the MLM paradigm and aims to create such type of innovation that is not just cheap imitation version of rich country technologies that could be sold to poor people, but a high performance technology that is affordable for majority of people.

3.4.2. Examples of inclusive innovation

Similarly to frugal innovation, inclusive innovation does not always require new knowledge and new R&D. Inclusive innovation could be a result of recombining existing ideas and technologies in a novel way so that to make a product or a service that is affordable, accessible and applicable. For example, the Bharti AirTel private company that made a radical management innovation that resulted in low cost cell phone service in India, by outsourcing almost all functions of the company to vendors. This allowed

---

55 https://www.ipg.open.ac.uk/ipg_meeting.nsf/db831fc0968354b80257b8f09314544d7f6c6d5b45d680257b91007455dd/body/M3/GRA%20Inclusive%20Innovation.pdf?OpenElement
57 http://www.mashelkar.com/work/articles/item/297-more-from-less-for-more-mlm/297-more-from-less-for-more-mlm
Bharti to lower its costs while ensuring quality for customers and to offer the cheapest in the world mobile service with a price of USD 0.01 to USD 0.05 per minute. 58 59

Another example of inclusive innovation comes from Kenya, where KickStart (a social enterprise) tries to address poverty by developing innovations that enhance production, value addition and income generation. The MoneyMaker Irrigation Pump was developed in order to enable very poor smallholder farmers to increase productivity as well as household incomes and thus contribute to sustainable poverty reduction.60 The pump, that is lighter than existing alternatives, allows people to use their legs and body weight, instead of only their backs and shoulders, to pump water. Thus farmers are allowed to grow and sell crops year round which in turn increased their productivity and subsequently their incomes.61

There are also other inclusive innovation cases that have been implemented in emerging markets in variety of fields (agriculture, infrastructure and construction, manufacturing, services and government innovation).62 However, most of them have still not reached a large enough scale to make a significant impact.

4. Conclusions

The Horizon 2020 Grand Societal Challenges and the Sustainable Development Goals require mobilisation of efforts to end poverty in all forms, to fight inequalities and tackle climate change, and to address a set of social needs including education, health, social protection, and job opportunities. At the same time, they provide opportunities to foster and experiment with new forms of innovation such as social, sustainable, frugal and

---

58 https://www.nesta.org.uk/news/frugal-innovations/bharti-airtel
61 https://innovationpolicyplatform.org/sites/default/files/rdf_imported_documents/Inclusive%20innovation%202014.pdf
inclusive innovation and develop solutions that would ensure sustainable future for everyone.

Social, sustainable, frugal and inclusive innovations are still under-studied by researchers as societal phenomenon in the Black Sea region. Although variety of definitions for each type of innovation exists in literature, there is still not a commonly accepted understanding of what each of the four types of innovation is. A holistic framework encompassing the four concepts is also missing as is the presence of the concepts in the focus of current innovation policies in the region. However, there is an increasing number of social, sustainable, frugal and inclusive innovation practices and projects that start gaining popularity and inspire social entrepreneurs and innovators in the region.

The two workshops organised in Sofia and Tbilisi in the end of 2017 gave opportunity to a wide range of participants from the BS region including social entrepreneurs, researchers, policy-makers, representatives of companies, NGOs and civil society organisations, to be informed about good practices representing social, sustainable, frugal and inclusive innovation and to acquire basic knowledge on the essence of the four types of innovation. The workshops also served as an opportunity to disseminate successful innovation practices and projects from the BS region and thus to increase the level of awareness about the opportunities they bring. Participants at the two workshops came up with a list of policy-relevant messages that they considered important to be taken into account by policy-makers in the field of social, sustainable, frugal and inclusive innovation in order to create favourable environment for those types of innovation to develop in the region.

To conclude, social, sustainable, frugal and inclusive innovations are new topics in the BS region that are still not considered by policy as a tool to solve local issues and to contribute to the sustainable development of the region. However, there is an increasing number of successful examples of practices and projects in the field that start gaining popularity and generate positive impact on economy, society and environment. What is needed is for these practices and projects to be actively promoted in order to attract people to take part in them or to inspire people to start such initiatives in their own communities. Furthermore, policy support is also required in order to guarantee large scale implementation and achieving significant impact.
REFERENCES

A change in mindset triggered radical management innovation at Bharti Airtel, resulting in the cheapest mobile talk time in the world, at 1 US cent a minute (n.d.) Retrieved from: https://www.nesta.org.uk/news/frugal-innovations/bharti-airtel


BSH official website: https://blacksea-horizon.eu/project


CASI official website: http://www.casi2020.eu/


Community Development through Social Entrepreneurship official website: http://www.se.center/


**Georgian Heritage Crafts** official website [http://crafts.ge/en](http://crafts.ge/en)

**Granqvist, K.** (2016). Policy brief: Funding frugal innovation. Lessons on design and implementation of public funding schemes stimulating frugal innovation. INDIGO POLICY project.


**INDIGO POLICY** official website: [https://indigoprojects.eu/about/indigo-policy/about](https://indigoprojects.eu/about/indigo-policy/about)


SI-DRIVE official website: https://www.si-drive.eu/


Social Innovation Lab Azerbaijan official website: http://socialinnovationlab.az/


Whole Surplus official website: https://wholesurplus.com/
Annex A. Agenda of the workshop in Sofia

Black Sea Horizon International Workshop

“Promotion of Social, Sustainable and Frugal Innovation in the Black Sea Region”

Identifying and discussing challenges, drivers and barriers related to social, sustainable and frugal innovation and formulating policy-relevant messages/recommendations

Sofia, Bulgaria

2-3 November 2017

Venue: Best Western Premier Collection City Hotel, Sofia, Bulgaria (6 Stara Planina Str., Sofia 1000)

AGENDA

DAY 1: 2 November 2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00 - 09:30</td>
<td>Registration</td>
</tr>
<tr>
<td>09:30 - 10:00</td>
<td>Welcome and introduction to workshop</td>
</tr>
<tr>
<td></td>
<td>Welcome, review of agenda, introduction of participants</td>
</tr>
<tr>
<td></td>
<td>Zoya Damianova, Programme Director (ARC Fund, Bulgaria)</td>
</tr>
<tr>
<td></td>
<td>Introduction to the Black Sea Horizon project</td>
</tr>
<tr>
<td></td>
<td>Felix Gajdusek, BSH Project Coordinator, (ZSI, Austria)</td>
</tr>
<tr>
<td></td>
<td>Introduction to the Black Sea Cooperation Programme</td>
</tr>
<tr>
<td></td>
<td>Felix Gajdusek, BSH Project Coordinator, (ZSI, Austria)</td>
</tr>
<tr>
<td>10:00 – 13:15</td>
<td>SUSTAINABLE INNOVATION SESSION</td>
</tr>
<tr>
<td>10:00 – 10:30</td>
<td>Presentation of the CASI project and its results</td>
</tr>
<tr>
<td></td>
<td>Zoya Damianova, Programme Director (ARC Fund, Bulgaria)</td>
</tr>
<tr>
<td></td>
<td>(Presenting the concept of sustainable innovation – definition from the CASI project together with the results from the online survey; the mobilisation and mutual learning approach for collaborating with different groups of stakeholders)</td>
</tr>
<tr>
<td></td>
<td>Discussion of project results</td>
</tr>
<tr>
<td>Time</td>
<td>Session</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>10:30 – 11:00</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>11:00 – 12:00</td>
<td>Presenting cases of Sustainable Innovation</td>
</tr>
<tr>
<td></td>
<td>Participants present cases of sustainable innovation from their practice together with obstacles/challenges that they face.</td>
</tr>
<tr>
<td>11:00 – 11:10</td>
<td>Maria Alexandrova, Cleantech, Bulgaria:</td>
</tr>
<tr>
<td></td>
<td>Climate-KIC Accelerator Bulgaria</td>
</tr>
<tr>
<td>11:10 – 11:20</td>
<td>Olha Truten, Greencubator, Ukraine:</td>
</tr>
<tr>
<td></td>
<td>Ukrainian energy innovations network “Greencubator”</td>
</tr>
<tr>
<td>11:20 – 11:30</td>
<td>Questions and discussion</td>
</tr>
<tr>
<td>11:30 – 11:40</td>
<td>Anastasia Tsvetkova, Lake Baikal Foundation for Environmental Applications and Research, Russia:</td>
</tr>
<tr>
<td></td>
<td>Lake Baikal Foundation for Environmental Applications and Research and its practices</td>
</tr>
<tr>
<td>11:40 – 11:50</td>
<td>Olcay Silahlı, Whole Surplus, Turkey:</td>
</tr>
<tr>
<td></td>
<td>Surplus management system for retailers, wholesalers and manufacturers (Whole Surplus)</td>
</tr>
<tr>
<td>11:50 – 12:00</td>
<td>Questions and Discussion</td>
</tr>
<tr>
<td>12:00 – 12:15</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>12:15 – 13:15</td>
<td>Group work</td>
</tr>
<tr>
<td></td>
<td>In 2-3 break-out groups (5-6 persons per group) participants discuss drivers and barriers for all cases of sustainable innovation practices, as well as challenges and opportunities. Facilitators of the break-out groups are BSH partners. Based on the discussions the participants should come up with policy-relevant messages to different levels of governance. Each group presents its results.</td>
</tr>
<tr>
<td>13:15 - 14:15</td>
<td>LUNCH</td>
</tr>
<tr>
<td>14:15 – 17:15</td>
<td>FRUGAL INNOVATION SESSION</td>
</tr>
<tr>
<td>14:15 – 14:45</td>
<td>Presentation of the INNO INDIGO Policy project and its results</td>
</tr>
<tr>
<td></td>
<td>Felix Gajdusek, BSH Project Coordinator (ZSI, Austria)</td>
</tr>
<tr>
<td></td>
<td>(Presenting the concept of frugal innovation – definition from the INNO INDIGO Policy project, results from the project, examples of frugal innovation initiatives)</td>
</tr>
<tr>
<td>14:45 – 15:45</td>
<td>Discussion of project results</td>
</tr>
<tr>
<td>14:45 – 14:55</td>
<td>Presenting cases</td>
</tr>
<tr>
<td>14:55 – 15:05</td>
<td>Irina Mania, Georgian Heritage Crafts Association, Georgia:</td>
</tr>
<tr>
<td></td>
<td>Social Shop “Ethnodesign”</td>
</tr>
<tr>
<td>Time</td>
<td>Session</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>14:55 – 15:05</td>
<td>Viorica Serbusca, Nika Responsible Business Generation</td>
</tr>
<tr>
<td>15:25 – 15:45</td>
<td>Questions and Discussion</td>
</tr>
<tr>
<td>15:45 – 16:15</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>16:15 – 17:15</td>
<td>Group work</td>
</tr>
</tbody>
</table>

In 2-3 break-out groups (5-6 persons per group) participants discuss drivers and barriers for all cases of frugal innovation practices. Facilitators of the break-out groups are BSH partners. Based on the discussions the participants should come up with policy-relevant messages to different levels of governance.

Each group presents its results.

Outcomes of the session
- List of drivers and barriers, challenges and opportunities
- List of policy-relevant messages/recommendations based on the discussions

17:15 - 17:40 | Discussion: Reflections from the day                                    |

19:00 | Dinner: Restaurant “Staria Chinar” (71, Dondukov Blvd., Sofia)          |

**DAY 2: 3 November 2017**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:15 - 09:30</td>
<td>Registration</td>
</tr>
<tr>
<td>09:30 – 12:30</td>
<td>SOCIAL INNOVATION SESSION</td>
</tr>
<tr>
<td>09:30 – 10:00</td>
<td>Presentation of the SI-Drive project and its results</td>
</tr>
<tr>
<td></td>
<td>Antonius Schroeder, Project Coordinator (TUDO, Germany)</td>
</tr>
</tbody>
</table>

(Presenting the concept of social innovation – definition from the SI-Drive project, results from the mapping and analysis, “Atlas of Social Innovation”)

Discussion of project results

10:00 – 11:00 | Presenting cases of Social Innovation                                  |
<p>|              | Participants present cases of social innovation from their practice together with obstacles/challenges that they face. |
| 10:20 – 10:30| Questions and Discussion                                                |</p>
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30 – 10:40</td>
<td>Areg Tadevosyan, International Center for Intercultural Research, Learning and Dialogue, Armenia: &quot;Community Development through Social Entrepreneurship&quot; project</td>
</tr>
<tr>
<td>10:40 – 10:50</td>
<td>Ralitza Anguelova, BalBok Engineering, Bulgaria: System for separate collection and disposal of household hazardous waste on the territory of the Republic of Bulgaria, Bulgaria</td>
</tr>
<tr>
<td>10:50 – 11:00</td>
<td>Questions and Discussion</td>
</tr>
<tr>
<td>11:00 – 11:30</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>11:30 – 12:30</td>
<td>Group work: In 2-3 break-out groups (5-6 persons per group) participants discuss drivers and barriers for all cases of social innovation practices, as well as challenges and opportunities. Facilitators of the break-out groups are BSH partners. Based on the discussions the participants should come up with policy-relevant messages to different levels of governance. Each group presents its results. Outcomes of the session - List of drivers and barriers, challenges and opportunities - List of policy-relevant messages/recommendations based on the discussions</td>
</tr>
<tr>
<td>12:30 - 13:00</td>
<td>Discussion: - Reflections from the day - Choosing general policy-relevant messages/recommendations to be presented in Tbilisi Voting All participants vote for the case they like the most or find most interesting – the three cases with the most votes will be presented during the second workshop in Tbilisi.</td>
</tr>
<tr>
<td>13:00 - 14:00</td>
<td>LUNCH AND FAREWELL</td>
</tr>
</tbody>
</table>
Annex B.  Agenda of the workshop in Tbilisi

**Black Sea Horizon International Workshop**

“Policy guidelines for social, sustainable and inclusive innovation: the Black Sea region experience”

*Discussing drivers, barriers, challenges and opportunities related to social, sustainable and inclusive innovation and formulating policy-relevant messages/recommendations*

6 - 7 December 2017, Tbilisi, Georgia

**Venue**: Hotel Kalasi (25, Kote Apkhazi str., Tbilisi)

<table>
<thead>
<tr>
<th>1st day, 6 December 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>09:30 – 10:00</strong></td>
</tr>
<tr>
<td><strong>10:00 – 10:30</strong></td>
</tr>
<tr>
<td><strong>Desislava Asenova</strong> (ARC Fund, Bulgaria)</td>
</tr>
<tr>
<td><strong>Oleg Shatberashvili</strong> (ESIDG)</td>
</tr>
<tr>
<td><strong>Tour de table</strong> - Short presentation of participants</td>
</tr>
<tr>
<td><strong>10:30 – 10:45</strong></td>
</tr>
<tr>
<td><strong>Desislava Asenova</strong> (ARC Fund, Bulgaria)</td>
</tr>
<tr>
<td><strong>SESSION I: SUSTAINABLE INNOVATION</strong></td>
</tr>
<tr>
<td><strong>10:45 – 11:15</strong></td>
</tr>
<tr>
<td><strong>Konstantin Ivanov</strong>, <strong>CASI project</strong> (ARC Fund, Bulgaria)</td>
</tr>
<tr>
<td>Presenting the concept of sustainable innovation: definition from the CASI project together with the results from the online survey; the mobilization and mutual learning approach for collaborating with different groups of stakeholders.</td>
</tr>
<tr>
<td><strong>11:15 – 11:30</strong></td>
</tr>
<tr>
<td><strong>Olcay Silahli</strong>, Fazla Gida (Turkey): Fazla Gida (Whole Surplus): Surplus management system for retailers, wholesalers and manufacturers</td>
</tr>
<tr>
<td><strong>11:30 – 11:45</strong></td>
</tr>
</tbody>
</table>
Kakha Karchkhadze, Ilia University, Biodiesel Georgia Ltd (Georgia): Production of eco-friendly fuel: biodiesel from waste cooking oil

11:45 – 12:15 Coffee break

12:15 – 13:00 Discussion and identification of policy relevant-messages

Presentation of the sustainable innovation session results from the workshop in Sofia

Desislava Asenova (ARC Fund, Bulgaria)

Presenting a list of drivers, barriers, challenges and opportunities related to the concept of sustainable innovation as well as a list of policy-relevant messages/recommendations that were produced during the workshop “Promotion of social, sustainable and frugal innovation in the Black Sea region” (Sofia, 2-3 November, 2017)

Discussion of the results in Sofia and identification of new/additional policy-relevant messages/recommendations

Participants discuss the applicability of the Sofia workshop policy-relevant recommendations to their particular policy context. Based on their experience and national context, participants are invited to suggest new recommendations. The corrected/amended version of recommendations and messages to policy makers will be the outcome of the session.

13:00 – 14:00 LUNCH

SESSION II: INCLUSIVE INNOVATION

14:00 – 14:30 Presentation of the concept of inclusive innovation

Joseph Hochgerner (ZSI, Austria)

14:30 – 14:45 Case presentation

Irina Mania, Georgian Heritage Craft Association: Social Shop “Ethnodisign”

14:45 – 15:30 Discussion and identification of policy relevant-messages

Presentation of the results from the workshop in Sofia

Desislava Asenova (ARC Fund, Bulgaria)

Presenting a list of drivers, barriers, challenges and opportunities related to the concept of frugal innovation as well as a list of policy-relevant messages/recommendations that were produced during the workshop “Promotion of social, sustainable and frugal innovation in the Black Sea region” (Sofia, 2-3 November, 2017)

Discussion of recommendations and identification of new/additional policy-relevant messages/recommendations

Participants discuss the applicability of the Sofia workshop policy-relevant recommendations to their particular policy context. Based on their experience and national context, participants are invited to suggest new recommendations. The corrected/amended version of recommendations and messages to policy makers will be the outcome of the session.

15:30 – 16:00 Coffee break

16:00 – 16:30 Discussion of the results of the first day. Questions and answers.

19:00 Dinner (venue to be announced)
<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 - 9:45</td>
<td>Registration</td>
</tr>
<tr>
<td>9:45 – 10:15</td>
<td>Presentation of the social innovation concept</td>
</tr>
<tr>
<td></td>
<td><strong>Jeremy Millard</strong>, SI-Drive project (University of Bradford, United Kingdom)</td>
</tr>
<tr>
<td>10:15 – 10:30</td>
<td>Case presentation</td>
</tr>
<tr>
<td></td>
<td><strong>Jasur Hasanov</strong>, Social Innovation Lab (Azerbaijan): “Social Innovation Lab in Azerbaijan” and/or “BeBonobo”</td>
</tr>
<tr>
<td>10:30 – 10:45</td>
<td>Case presentation</td>
</tr>
<tr>
<td></td>
<td><strong>Areg Tadevosyan</strong>, International Center for Intercultural Research, Learning and Dialogue (Armenia): “Community Development through Social Entrepreneurship” project</td>
</tr>
<tr>
<td>10:45 – 11:10</td>
<td>Coffee break</td>
</tr>
<tr>
<td>11:10 – 11:40</td>
<td>Discussion and identification of policy relevant-messages</td>
</tr>
<tr>
<td></td>
<td>Presentation of the social innovation session results from the workshop in Sofia</td>
</tr>
<tr>
<td></td>
<td><strong>Desislava Asenova</strong> (ARC Fund, Bulgaria)</td>
</tr>
<tr>
<td></td>
<td>Presenting a list of drivers, barriers, challenges and opportunities related to the concept of frugal innovation as well as a list of policy-relevant messages/recommendations that were produced during the workshop “Promotion of social, sustainable and frugal innovation in the Black Sea region” (Sofia, 2-3 November, 2017)</td>
</tr>
<tr>
<td></td>
<td>Discussion of the results in Sofia and identification of new/additional policy - relevant messages/ recommendations</td>
</tr>
<tr>
<td></td>
<td>Participants discuss the applicability of the Sofia workshop policy-relevant recommendations to their particular policy context. Based on their experience and national context, participants are invited to suggest new recommendations. The corrected/amended version of recommendations and messages to policy makers will be the outcome of the session.</td>
</tr>
<tr>
<td>11:40 – 12:10</td>
<td>Discussion and outcomes of the workshop</td>
</tr>
<tr>
<td></td>
<td>Participants discuss the overall results of social, sustainable and inclusive innovation workshops in Sofia and Tbilisi, discuss and adopt the final recommendations.</td>
</tr>
<tr>
<td>12:10 – 12:30</td>
<td>Voting and priority list</td>
</tr>
<tr>
<td></td>
<td>When we have the final list of recommendations, participants will be invited to vote for the most important/ relevant to their countries and to the BS region. Based on the voting a priority list of policy-relevant messages and recommendations will be produced.</td>
</tr>
<tr>
<td>12:30</td>
<td>LUNCH</td>
</tr>
</tbody>
</table>
Annex C. Catalogue with practices/projects presented at the workshop in Sofia

Black Sea Horizon International Workshop

“Promotion of social, sustainable and frugal innovation in the Black Sea region”

Sofia, Bulgaria

2-3 November 2017

Name of the innovation practice/project and country of origin:

Social Entrepreneurship for Community Development (ARMENIA)

Link to the innovation practice/project:

www.se.center

Objectives of the innovation practice/project:

- Development of a blended learning curricula (face to face trainings and e-learning platform) for beginner Social Entrepreneurs and its testing for 27 participant groups/organisations.
- Establishment of 10 Social Enterprises in the disadvantaged communities in regions of Armenia.
- Development and realisation of a mentorship and coaching scheme for established Social Enterprises.

Short description of the innovation practice/project, achievements and/or impact:

- 60 community groups NGOs from disadvantaged regions of Armenia (mostly from rural communities) has taken part in SE introductory courses and got acquainted with the project.
- 27 Community groups and regional NGOs have taken part in a year-long educational process (e-learning and face-to-face) and developed their SE business plans.
- 10 Selected enterprises got funding for establishment of their start-ups and further consultancy and mentoring services.
- 500 Community groups and regional NGOs has taken part in a stand-alone e-course on Social Entrepreneurship.
Name of the innovation practice/project and country of origin:

Social Shop “Ethnodesign” (GEORGIA)

Link to the innovation practice/project:

https://www.facebook.com/ethnodesignsocialshop/

Objectives of the innovation practice/project:

“Ethnodesign” brings together unique pieces of Georgian handmade ethnic chic products created in the different regions of Georgia. The social shop was founded in 2016 to support the product development and marketing of handmade traditional crafts and employ the Georgian makers. The concept store aims to safeguard the local craft traditions through the innovative approach to the design.

Short description of the innovation practice/project, achievements and/or impact:

“Ethnodesign” has two shops – one in Tbilisi and the other in Vardzia Historic-Architectural Museum-Reserve. Both shops employ almost 200 craft makers and their young apprentices from different regions of Georgia, providing the economic profit for their families. Among the beneficiaries of “Ethnodesign” are IDPs, woman, youth, ethnical minorities, craft makers from the mountainous regions who sometimes have the little access to the modern design trends and market demands where “Ethnodesign” tries to keep them updated. Based on the permanent collaboration with the craft makers the quality and marketability of the products has improved, new product lines were created that are competitive on the local market. Synthesis of traditional and innovative design of the items became attractive for Georgian as well as the foreign customers that make “Ethnodesign” unique and innovative.
Name of the innovation practice/project and country of origin:

**Responsible Business Generation** (MOLDOVA)

Link to the innovation practice/project:

[https://www.facebook.com/ResponsibleBusinessGeneration/](https://www.facebook.com/ResponsibleBusinessGeneration/)

Objectives of the innovation practice/project:

- **Our dream** is to create a world with entrepreneurial core.
- **Novelty:** We inspire society to change the world through a responsible business behaviour!
- **Initiative:** To foster a more responsible society by developing a healthy entrepreneurial ecosystem.
- **Key:** Entrepreneurial ecosystem
- **Approach:** Entrepreneurship is a state of mind!

Our main goal is to have an ecosystem where local authorities support SMEs, community are engaged to sustain SME sector, enterprises collaborate between them, SMEs are dedicated to the local development, media knows how to explore the best practices in business and to highlight the SMEs problems.

Short description of the innovation practice/project, achievements and/or impact:

NIKA is promoting the RB concept among SMEs, start-ups, community and Government as an efficient business model and a competitive advantage.

Our main activities:
- Trainings/info days for SMEs and start-ups on RB concept, social and sustainable innovation;
- Expertise on local and central governmental policies on entrepreneurship (StartuPP LAB);
- Acceleration for start-ups;
- Responsible Business Gala.
Name of the innovation practice/project and country of origin:

**Lake Baikal Foundation for Environmental Applications and Research and its practices** (RUSSIA)

Link to the innovation practice/project:

[www.baikalfoundation.ru](http://www.baikalfoundation.ru)

Objectives of the innovation practice/project:

Preserving and developing of the Baikal natural territory and Lake Baikal by building an expert dialogue between the authorities, business, scientific community and society and proposing programs of comprehensive interaction to accomplish the mission.

Short description of the innovation practice/project, achievements and/or impact:

Foundation is the first organization that systematically drives the dialogue between different social groups in the aim of Lake Baikal protection. As a result, the Foundation supported “Point No1” Project of the Research Institute of Biology at Irkutsk State University and saved the world's longest monitoring of the lake that was under threat of closure. The Foundation also launched the “Baikal Initiative” contest to identify and support technological and applied research projects into Lake Baikal ecology and innovative developments that can be implemented in the area.
Name of the innovation practice/project and country of origin:

**Connection Deaf-Blind Support Foundation** (RUSSIA)\(^{63}\)

Link to the innovation practice/project:


Objectives of the innovation practice/project:

To promote systemic changes in the field of support and social integration of people with simultaneous impairment of vision and hearing.

Short description of the innovation practice/project, achievements and/or impact:

The foundation was established in 2014 with the goal to become an intermediary between the world of deaf-blind people and the world of people who can see and hear. The foundation’s multifaceted activities are aimed at developing and integrating successful solutions and practices that provide deaf-blind people with an opportunity for self-fulfillment, development and integration into the society. The foundation’s programs cover such topics as Informed society, Education and science, Social rehabilitation, and Regional development. The foundation runs its own program of supporting innovations for deafblind people. For example, it has brought to Russia a bionic eye transplant technology ([http://so-edinenie.org/en/infocentr/novosti/rehabilitation-of-a-patient-with-a-bionic-eye-began](http://so-edinenie.org/en/infocentr/novosti/rehabilitation-of-a-patient-with-a-bionic-eye-began)). Furthermore, together with Bauman Moscow State Technical University and Technologies of Opportunities Centre, the foundation is also a co-founder of the Creative space for assistive technology for the deaf-blind „Polygon”. The Center offers services to both deaf-blind people (opportunity to get acquainted with and to test specialized devices, training courses and master classes on using the devices) and researchers, developers and manufacturers (opportunity to represent their products and innovative solutions; to get feedback from the potential customers for further adjustment and improvement of devices; to secure potential orders; to obtain up-to-date information about modern assistive technologies and other devices).

\(^{63}\) This practice should have been presented in Sofia, but due to unexpected issues, a representative of the initiative could not attend the workshop. However, the authors of this report consider it an important and interesting practice to be included in the catalogue.
Name of the innovation practice/project and country of origin:

NGO "Ukrainian energy innovations network "Greencubator" (UKRAINE)

Link to the innovation practice/project:

http://greencubator.info/

Objectives of the innovation practice/project:

Our goal is to increase the number of green economy players in climate-positive sectors, help them grow, reach global and local competitiveness.

- Greencubator’s events and hackathons facilitated creation of some of the most successful Ukrainian green energy startups, such as Ecois.me, U-muni and several others.
- Greencubator’s community has contributed significantly to sustainable initiatives in the nonprofit sector and local communities.
- Greencubator created educational and awareness-raising programs for green businesses, media, and entrepreneurs.
- Ukrainian editions of “Startup City” book allowed mayors of many Ukrainian cities to explore the ecosystems that create opportunities for the cities.
- Greencubator currently serves as a project manager for EBRD and EU Climate Innovation Voucher project – a EUR 1 mln fund to support the developers and implementers of climate-friendly technologies in Ukraine.
- Greencubator’s civic lobby efforts allowed integration of inclusive and democratic energy markets principles into major energy legislation reforms including Law on the commercial accounting of energy resources, Law on ESKO services, recently adopted electricity market law, gas market law as well as some other key legislative initiatives.

Short description of the innovation practice/project, achievements and/or impact:

Greencubator is a platform for connecting energy talents and driving green entrepreneurship. We are ecosystem organization for sustainable entrepreneurship, low-carbon innovations and green economy development.
Name of the innovation practice/project and country of origin:

**Fazla Gıda (Whole Surplus) (TURKEY)**

Link to the innovation practice/project:

https://wholesurplus.com; https://www.fazlagida.com

Objectives of the innovation practice/project:

Fazla Gıda’s vision is to create a surplus management system that prevents food waste at every level of the value chain and collect data for source reduction smart system suggestions to tackle with climate change.

Short description of the innovation practice/project, achievements and/or impact:

Fazla Gıda creates technology solutions to help businesses recover value out of food surplus. We provide one-stop waste management platform which includes a unique marketplace for donating surplus inventories, recycling and reselling of surplus and data analytics for reducing waste at the source. Fazla Gıda is invested by 500 Startups and is a Techstars alumni company. Also, chosen as one of the 9 participants of Accelerate 2030 by UNDP.
Name of the innovation practice/project and country of origin:

**Climate-KIC Accelerator (BULGARIA)**

Link to the innovation practice/project:


Objectives of the innovation practice/project:

**Stage Two: Business Validation**

The second stage of the Accelerator helps move startups with a well-formulated business model to the next phase: validation and customer acquisition. Teams can now focus on acquiring their first customers and an iterative process of business model validation whilst receiving continuing support from expert coaches and mentors and participating in programme activities and workshops. These more mature startups will be able to display their ventures in several internal and external showcase events growing their individual network.

Short description of the innovation practice/project, achievements and/or impact:

Climate-KIC Accelerator is the largest European entrepreneurial initiative for clean technologies to tackle climate change. It is held by the Cleantech Bulgaria NGO and is supported by the European Institute of Innovation and Technology. The format of Climate-KIC Accelerator is open to start-up companies at an advanced stage of development but also for those who do not have a ready-made project but have studied the market well and are ready to start their business during the 14 weeks of the program. Ideas offering sustainable energy solutions, innovations to tackle pollution and climate change, purification systems, etc. will be assessed.
Name of the innovation practice/project and country of origin:

**NGO House and A HUB (BULGARIA)**

Link to the innovation practice/project:

www.ngohouse.bg ; www.a-hub.bg

Objectives of the innovation practice/project:

“NGO House” is a new initiative to support the CSOs by providing them shared working space. The social purpose of the House is to combine the opportunity for flexible conditions for hiring an office by non-governmental organization and the building of community in which the NGO actors can meet and share ideas. In this way, the NGO House aims to address two main problems faced by CSOs: lack of financial resources to build their own infrastructure (equipped office, consumables and overheads), as well as the need of administrative capacity building.

A HUB is the first Hub for social innovations in Sofia that opened its doors in April 2017. The mission of the Hub is to provide a place for joint initiatives between NGOs and businesses aimed at creating social change and improving the environment in which we all live.

The Hub aims to maintain an accessible environment for dialogue and long-term partnerships between businesses, the civil sector, institutions, universities and society.
Name of the innovation practice/project and country of origin:

PartNET Association – Partnership for Sustainable Development – Acting for Social Innovations and progress in Education, Health and Tourism sectors (ROMANIA)

Social innovations - In the field of education

- POCU/ Priority Axis (PA) 6: "Education and Competencies/ program: MOTIVATED TEACHERS IN DEFAVORED SCHOOLS: “INO-PRO - INNOvation and PROgress for Quality and Inclusive School Education in Dambovita County” ID 104753, Dambovita County, Romania;
- POCU/ Priority Axis (PA) 6: "Education and Competencies/ program: MOTIVATED TEACHERS IN DEFAVORED SCHOOLS: “E-PROFI - Education through Innovative Training Programs for Qualified and Motivated Human Resources in Suceava County" ID 107116, Suceava County, Romania;
- POCU/ Priority Axis (PA) 6: "Education and Competencies/ program: MOTIVATED TEACHERS IN DEFAVORED SCHOOLS: „InFORMA – Educational programs for teachers from disadvantaged schools in Bacau County” ID 106405, Bacau County, Romania;
- POCU/ Priority Axis (PA) 6: "Education and Competencies/ program "SCHOOL FOR ALL": “PRO-EDU - Innovative customized PROgrams according to EDUcational needs” ID 107117, Suceava County, Romania;

Social innovations - In the health sector

- SOPHRD Strategic Project - “SALVA – Chance for an active life” ID 140221, Bucharest-Ipov, South-West, South-East, North-East region, Romania, Project was completed in 2015;
- POCU/ Priority Axis (PA) 4, program: training medical staff involved in the implementation of priority health programs: “Fight for life! Improving medical staff skills from emergency services in the areas of: cardiovascular disease, cancer, diabetes and endocrine diseases” ID 109152, Project with national coverage, Romania
- POCU/ Priority Axis (PA) 4, program: training medical staff involved in the implementation of priority health programs: “Increasing the multidisciplinary competencies of medical staff in order to improve the quality of life of children with rare diseases” ID 108207,
  - Project with national coverage, Romania
- POCU/ Priority Axis (PA) 4, program: training medical staff involved in the implementation of priority health programs: “Competence and quality in priority medical services through specific training of medical staff in the field of infectious diseases” ID 108129
  - Project with national coverage, Romania
- POCU/ Priority Axis (PA) 4, program: training medical staff involved in the implementation of priority health programs: “EndoMIP - Improving the competence of professionals in the medical sector in endocrinology for the prevention of..."
diseases with a population impact” ID 108124, Project with national coverage, Romania

- POCU/ Priority Axis (PA) 4, program: training medical staff involved in the implementation of priority health programs: “I CARE - Improving the Competence Level of Human Resource Oncology” ID 108211, Project with national coverage, Romania

Social innovations - In the field of rural development and tourism

- POCU/ Priority Axis (PA) 3: Jobs for all, program: “Romania Start Up Nation” - “DARE TO START! - Developing Entrepreneurship through Educated Human Resources” ID 104118, South-Muntenia Region, Romania
- SOPHRD Strategic Project - "Strategic Instruments for Occupation in Tourism Industry" - http://www.instrateg-turism.ro/ ID 58276, Romania. This project, through the innovative tools created, was selected as a successful case within OIPOSDRU BI and was published in the "Success Stories" magazine.
- INTERREG V-A Romania-Bulgaria Programme – “D-TOUR - Building Tourism capacities in the Danube area” Romania; Bulgaria

Link to the innovation practice/project:

- http://gis.partnet.ro/tour/map/ - Geographic Information Software (GIS) (Project "Strategic tools for employment in the tourism industry") - This system is used to create, store, analyze, and process spatially distributed information through a computerized process, providing two types of information: a graphical one, indicating the spatial distribution of the studied elements (map) and the other as a database to store attributes associated with these items (e.g., landmarks, accommodation structures, rates, facilities, history, photos, road distances, etc.). This working tool has been developed for the operationalization of the newly created occupation, the Travel Agent for thematic circuits.
- www.salvactiv.ro - IT Platform - Developed for the exchange of experience between beneficiaries of SALVA project, as well as between beneficiaries and social organizations, economic agents, specialists. Active measures such as: counseling, personalized assistance, support and training to get a job. Active forum in the online environment, accessible at all times, bringing together target group members and organizations in the economic and social environment to respond to identified problems; (Project “SALVA – Chance to an active life” ID 140221)
- Virtual gateway for a job in the tourism industry - www.portal-job-turism.ro

Objectives of the innovation practice/project:

Social innovation according to the definitions is considered a "new way of doing things - with the explicit purpose of responding to a social need." Social innovation, as it was addressed in the past exercise through the Operational Program Human Resources Development 2007-
2013, as well as in the new financial exercise 2014-2020, which Romania has implemented and implements, is the new ideas that transform policies and local development practices.

PartNET Association - PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT has developed over the years strategic projects through which it has created and implemented mechanisms, innovative tools, economic development programs, educational and formative programs, programs for social, cultural and vocational development as well as environmental development, contributing to a sustainable economic, social and cultural development at local, regional and national level in urban and rural areas.

Short description of the innovation practice/project, achievements and/or impact:

- From the point of view of social innovation, the strategic project POSDRU 58276 "Strategic tools for employment in the tourism industry" it was developed a gateway to the labor market called "Virtual gateway for a job in the tourism industry", which contains updated information on job offers and their conditions for employment in the field. People looking for a job can access this tool online, 24 hours/7, identifying job vacancies, salary levels, requirements of employers and others. This tool facilitates the integration of information and thus it reduces the time to identify and occupy a job. It is an interactive tool, open to economic actors, policy makers and people looking for a job.

- With the same spirit were created the development projects "TOURISTIC CRAFTSMAN - Integration of handicraft skills in local tourism - alternative to revitalize the countryside", and "Entrepreneurial initiatives for rural development". The TOURISTIC CRAFTSMAN was aimed at improving skills in handicraft or in tourism activity by integrating them locally or regionally. The human resource will become more informed, trained, adapted to economic environment and tourism context both locally and regionally as well as art and craft traditions capitalization. The project offers real possibilities for employment in order to obtain income that can ensure a minimum level of decent living for themselves and their families. The qualification of 980 beneficiaries in local crafts and 336 beneficiaries in tourism trades was achieved:
  - Tour operator on thematic circuits;
  - Worker in the farmhouse;
  - Tourist guest worker.

Through this project crafts were promoted in the tourist units (hostels) and a portal was created for the promotion of craft products in each county.

- Two of the key requirements for interpreting the process of transformation of the economic and social environment from the point of view of innovation, sustainable development and improvement of the quality of life were first of all social innovation through tourism and, second, the idea of uniting trades handicrafts with tourism promotion. The value of Romania's tourism potential, characterized by the variety and harmony of reliefs, the diversity of natural and anthropic tourist attractions, as well as the existence of uniquely unique resources, places Romania among the most favored countries, having the possibility of practicing a "complete tourism".

- Also on the line of innovation and development, technology transfer, sustainable development and interregional approach, the D-TOUR - Building Tourism Capacity Project in the Danube area proposes objectives to build and improve training capacities in the Danube; tourism area in order to promote sustainable and attractive tourism, using strategic vocational training, a new D-Tour Agent (D-Tour), providing innovative tools (D-Tour GIS), increasing labor market occupation and enhancing skills of people in handicrafts, art talents, creating PPPs for D-Tour Stops, D-Tour Centers, and so be
integrated into a new concept of cross-border thematic tourism. The implementation of this project is given by the emerging market in Danube area tourism.

- "SALVA – Chance for an active life", which had as a general objective the development of innovative psycho-medical-social tools, such as personalized training courses to facilitate the access to education of 800 persons from vulnerable groups, depending on the affection of each, people affected by serious chronic illnesses that affect their professional and social lives - cancer, especially breast, cervical, prostate, hepatitis, HIV / AIDS, and 100 drug addicts. Thus, through the activities of information, counseling, training to develop self-confidence, including through art therapy, mediation, training, the project addressed social innovation and sustainable development in a bidirectional relationship, through positive effects on people's lives from the target group, making a "chance at ACTIVE LIFE" and at the same time conducting campaigns to promote a healthy lifestyle, regular health checks, prevention of the risk of illness and fight against drug use; conducting campaigns to inform the general public and employers of the problems faced by the target group regarding access to the labor market. Thus, through its activities, SALVA offered to the target group an innovative psycho-social-therapeutic service incorporating the following results:

- 4 campaigns to promote a healthy lifestyle, regular health controls, disease prevention and drug control prevention in the four regions of the project: Bucharest-Ifov, South-West, South-East, North-Est, with the participation of aprox. 3000 people;
- Creating a Mobile Diagnostic Unit - performing aprox. 3,000 free tests for HIV / AIDS, breast cancer and uterine cancer;
- 4 Social Inclusion Centers (CIS SALVA) developed;
- Developing a Good Practice Guide for social and professional integration of people affected by diseases that influence their professional and social life (eg HIV / AIDS, cancer, etc.) and drug addicts;

- Have increased the level of self-confidence of people;
- Reduced fear of employers' perception of them;
- Improved inter and intra group relationships;
- Positively influenced participants' attitudes in solving daily tasks;
- Helped identifying their own role and personal potential within the team.

The project aimed to a harmonizing personal and professional life, using innovative customized methods and strategies according to the patient's affection. SALVA helped both employers and target group members to give a new look to society.

In the medical sector, PartNET Association implements 5 projects with public institutes and hospitals that have as a general objective the improvement of the competences level of 5000 medical professionals from 8 development regions of Romania involved in emergency medical services in one of the following fields: cardiovascular, cancer, diabetes, rare diseases, infectious and endocrine diseases by training the medical professionals involved in the implementation of priority health programs:

- **Fight for life! Improving the skills of medical staff from emergency services in the following areas: cardiovascular diseases, cancer, diabetes and endocrine diseases ID 109152**;
- **Increase the multidisciplinary skills of medical staff in order to improve the quality of life of children with rare diseases ID 108207**
- **Competence and quality in the priority medical services by specific training of the medical professionals in the field of infectious diseases ID 108129**
The performance of the health system is one of the main stones of the growth and development of a society, because the health of the population directly influences productivity. In order to accelerate access to affordable, sustainable and high-quality medical services, it is necessary to increase the competence of professionals in the medical sector.

These projects propose to develop the skills of specialists involved in priority health programs using innovative tools:

- Educational activities, developed according to the strategic priorities at the sectorial level and the specific profile and needs of the target group, which will ensure the development / updating of the specific knowledge, skills and abilities necessary for the exercise of the medical profession at a level of performance and quality standards;
- Upgrading existing programs / developing new training programs in accordance with the identified needs - 6 continuous medical education programs.
- Developing clinical simulations according to the specific needs in the field and new generation equipment necessary for operationalization and optimal functioning of the hospital activity;
- International congresses and exchanges of best practices in order to develop the competencies of the medical specialists.

Also, in the educational field, 4 projects approved and implemented in these period of programing phase, aiming to increase the quality of educational services, reducing the early drop out school leaving by creating opportunities, training and motivating and training the teachers:

- “PRO-EDU - Innovative customized PROgrams according to EDUcational needs”;
- “INO-PRO - INNOvation and PROgress for Quality and Inclusive School Education in Dambovita County” ID 104753;
- “E-PROFI - Education through Innovative Training Programs for Qualified and Motivated Human Resources in Suceava County” ID 107116
- “InFORMA – Educational programs for staff from disadvantaged schools in Bacau County”

These projects use the following tools, promoting an active learning with innovative methods adapted to European standards, a collaboration between teachers - pupils - parents in order to achieve a common goal, a quality education, centered on pupils' needs and adapted to the European system:

- Development of strategic partnerships through joint initiatives in order to improve the educational system - 3 educational workshops / partnerships will be organized to develop human resources in pre-university education, quality assurance in education and the transfer of pedagogical know-how.
- Developing an Creative Interactive Center to give children support in order to access a quality and inclusive educational path.
Creating and promoting a superhero character having the role to promote the prevention of early drop out school leaving and promoting equal access to pre-school, primary and secondary quality education, the non-discrimination of children belonging to the Roma minority and with disabilities, and the promotion of social inclusion and school values.

20 comic series will contain the adventures of the superhero and will have as a starting point the following themes: parental participation in childcare and early childhood education (IETC), the importance of education and equitable and full participation of children in compulsory education, non-discrimination, the overcoming of prejudices, social, religious or ethnic tolerance, social involvement, civic responsibility, changing behaviors influenced by social standards and determining attitudes such as stigmatization of vulnerable groups, strengthening the role of the school in the community.

Continuous training of teaching staff and development of didactic competencies, representing a social model that can generate a certain level of quality in education such as "Interactive teaching-learning methods" training programs; "School education partnership - family - community"; "Creativity and Innovation in the Instructive-Educational Process", "Conflict Mediation in the School Environment", "Communication, Negotiation, Mediation"; "Multimedia in education", continuous training programs and development of didactic competences;

Thus, through the activities and tools applied, the projects will contribute to increase the quality of the educational system in the target schools by developing human resources for approximately 900 teachers, solving the causes of the early school dropout and reducing the school abandonment rate by implementing measures aimed at improve trigger factors.

At the same time, 1100 pre-school and school children with special educational needs or disabilities will benefit from increased access to and participation in education, training, education and guidance. In this activity, they will receive an ante-preschool kit to motivate them to come back every day, taking into account that most children at this age are reluctant to take part in social activities, being accustomed only to the presence of the family.

Moreover, the parents of these children will benefit from parental counseling services in order to support them in adapting children to the needs of the group and the kindergarten, optimizing the child-child, child-educator, kindergarten-family relationship, with the purpose of preventing and diminishing factors that lead to failure in adapting, training, development learning and behavioral, disorders, counseling family and parents to prevent and reduce psychological discomfort in child development issues, psychological observation and testing , encouragement and guidance to create a family environment that will provide the child with optimum physical and mental comfort, normal physical development and good health.

A minimum of 100,000 people (pre-school, pre-school and school children, parents) will be informed about the importance of early education and the completion of compulsory education on the importance and benefits of parental participation in early childhood care and education - preschool, preschool and school.

The proposed projects will generate multiplier effects not only within schools but also across the community, positively affecting not only children and young people but also their families.
## Annex D. Drivers, barriers, challenges and opportunities related to social, sustainable and frugal innovation

### SUSTAINABLE INNOVATION

#### Drivers:
- External societal threats – environmental changes and challenges are a potential driving force
- Existing good practices and their positive impact
- Established hubs and co-working spaces for cooperation and collaboration between stakeholders
- Recognising the importance of support from society in solving environmental challenges
- New agendas - Sustainable development goals and Grand societal challenges

#### Barriers:
- Lack of collaboration across policy sectors which is an important prerequisite in order to address complex sustainability issues
- Sustainable development is still not widely recognised in the region
- Lack of wider public awareness on sustainability that would stimulate more holistic thinking on sustainability issues
- Lack of enough regional/municipal programmes to support sustainable innovation
- There is not a universal definition of sustainable innovation which is a barrier for establishing or starting sustainable innovation initiatives
- Lack of funding

#### Challenges:
- The goal of public engagement is not always immediately recognised by the participating public
- Expertise – lack of professional background and missing suitable skillsets related to the concept of sustainable development
- Sustainable development is still not a very well-known and researched concept
- Insufficient cooperation and synergies within networks
- Lack of long-term vision and commitment – to achieve sustainability and impact, a long-term commitment is necessary
- Limited resources and limited expertise on local level

#### Opportunities:
- Creating the right set of conditions for networks of practitioners to flourish, keeping in mind the global perspectives for collaboration
- Collect and promote good practices through networks/use of media
- Know-how exchange on regional level
- Education – universities as good examples of sustainable innovation development and promotion
- Emerging societal concerns and needs
## FRUGAL INNOVATION

### Drivers:
- The need to improve quality of life
- The need to provide low-cost solutions to local problems
- Social needs and the creative ideas that could address them
- Empathy and community

### Barriers:
- Current education system does not do enough to stimulate creativity
- Difficult to find and learn about local initiatives in rural areas and among disadvantaged communities

### Challenges:
- Scaling up can be very difficult to do with lower profit margins; solutions will only develop the required impact when delivered or produced at large scale
- Mobilising publics/communities of users and including them in frugal innovation development and promotion
- Making solutions favourable and aligning them with public visions
- Lack of responsibility towards proposed initiatives
- Social exclusion and low level of education
- Communication between target groups and initiators could be difficult

### Opportunities:
- Reaching up new markets – especially emerging markets
- Inclusive innovations are localized and contextualized – can foster integration and social coherence
- Large target groups in emerging markets
- Local funds

## SOCIAL INNOVATION

### Drivers:
- Personal and organizational motivation to pursue social good and social value
- Trend from globalisation to localization
- Networking – exchange of ideas and successful good practices
- Use of ICT for networking
- Ethics – individuals with different ethical views and perceptions than the majority who want to do something positive and valuable
- Empowerment as a necessary ingredient of the social innovation process

### Barriers:
- Lack of understanding and awareness on the social innovation concept
- Limitations of the education system that does not promote creativity and innovativeness to a sufficient extent
- Lack of social innovation regulation framework
<table>
<thead>
<tr>
<th>Challenges:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Building effective dialogue among stakeholders</td>
<td></td>
</tr>
<tr>
<td>• Lack of awareness/information about existing opportunities to develop social innovation initiatives</td>
<td></td>
</tr>
<tr>
<td>• Measuring the impact of social innovation</td>
<td></td>
</tr>
<tr>
<td>• Limited ICT skills</td>
<td></td>
</tr>
<tr>
<td>• Unwillingness to take risks and resistance to change</td>
<td></td>
</tr>
<tr>
<td>• Replicating and adapting successful practices to different context could sometimes be difficult</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Stakeholder cooperation</td>
<td></td>
</tr>
<tr>
<td>• ICT</td>
<td></td>
</tr>
<tr>
<td>• Engaging different publics in crowdsourcing for innovation projects</td>
<td></td>
</tr>
<tr>
<td>• Media</td>
<td></td>
</tr>
</tbody>
</table>
Annex E.  Policy-relevant messages and recommendations addressing social, sustainable and frugal innovation

### SUSTAINABLE INNOVATION

- Shifting expectations from innovation – support local innovations and local-local synergies
- Accept failure and support more innovative practices and projects
- Policy support for sustainable innovation should unfold on two levels: i) providing support for starting the initiatives/projects; ii) supporting long-term sustainability of initiatives/projects
- Map and collect good practices, disseminate and promote them
- Support and inspire collaboration between industry, NGOs, sustainable innovation practitioners, researchers and innovators
- Overcome distrust between policy-makers, businesses and civil society in order to establish constructive dialogue and foster cooperation
- Include sustainable innovation in school curriculum

### FRUGAL INNOVATION

- Create incentives to the public to get involved in solutions generation/management
- Stimulate platforms to encourage cooperation between NGOs and enterprises
- Facilitating ways to explore and map societal needs, elaborate those in collaboration with people on the ground in order to ensure products are ethically sound, desirable and sustainable
- Government should monitor local communities, identify their problems and try to address them through innovative solutions
- Involve local communities in designing/developing innovative solutions (bottom-up approach)
- Stimulate creative skills
- Visualise the successes: create visibility of success stories and give awards in order to stimulate innovators and to raise awareness on good practices
- Further research in the field of inclusive innovation is needed

### SOCIAL INNOVATION

- Social innovation should be recognised as a driver for social change or a tool to solve social problems
- Introduce more effective mechanisms for monitoring the impact of social innovation through existing experiences such as social innovation labs or other established platforms
- Successful social innovation practitioners need to be more actively involved in policy decisions-making
- Government should develop a clear framework/vision of what social innovation is
- Establish platforms that facilitate collaboration/networking between social innovators themselves as well as between social innovators and ordinary business
- Resistance to change needs to be overcome through promotion of successful practices
- Social innovation initiatives need to be supported and endorsed by the local governments, which can provide support schemes and ensure participation of local communities