HoCare

Innovative solutions for home care by strengthening quadruple-helix cooperation in regional innovation chains

3rd INTERNATIONAL THEMATIC WORKSHOP

"Bringing innovative Home Care solutions quicker to the market by using quadruple-helix approach"

Ljubljana, Litija, 7-8 June 2017

REPORT

Introduction

In the framework of the Interreg Europe Programme, the Development Centre of the Heart of Slovenia (DCHS) participates as a project partner in the implementation of the HoCare project in cooperation with partners from Cyprus, Hungary, Bulgaria, Romania, Lithuania, Portugal and Czech Republic.

The HoCare project aims to develop home care services and innovations based on the "Quadruple Helix" model, which provides a framework for cooperation of all the four stakeholders: the public sector, the business sector, the academic-research & innovation sector and the service users (patients, their family members, workplaces and healthcare institutions and their employees).

The objective of the HoCare project is to positively influence efficiency and impact of Structural Funds. It has additionally three thematic sub-objectives related to the natural generation of innovation for Home Care in regional innovation chains. The first sub-objective is to focus on generation of innovation through addressing unmet needs identified by stakeholder groups in quadruple helix model means by formal carers (i.e. hospitals, social houses, elderly houses) and informal carers (i.e. family members). The second sub-objective is to focus on generation of innovation through public driven innovation processes. The third sub-objective is to bring innovative Home Care solutions quicker to the market by using, again, quadruple helix approach.

The results will be achieved mainly thanks to 4 dimensional international policy learning processes. Initial content for it will be created by partners during Regional analysis, further investigated during 3 International Thematic Workshops which will formulate 30 transferable Good practices.

The **3rd International Thematic Workshop** with focus on "Bringing innovative Home Care solutions quicker to the market by using quadruple-helix approach" took place in **Ljubljana and Litija on 7tha and 8th June 2017.**

Locations of 3rd International Thematic Workshop in Slovenia:
- **Day 1: 7th June 2017: Telekom Slovenije, Ljubljana**
- **Day 2: 8th June 2017, Intergenerational centre Šmelc, Litija**

Organizational team:
Ana Savšek, Igor Košir, Anita Molka, Aleksandra Gradišek
Development Centre of the Heart of Slovenia

FIRST DAY – 7th June 2017:
Location: Telekom Slovenije, Ljubljana

Introduction of selected Slovenian good practice E-care with interactive discussion on successful implementation of IT support services of home care on national level and International Stakeholder Meeting

Telekom Slovenije hosted the 1st day of 3rd International Thematic workshop. The moderator of the day **Peter Pustatičnik**, Head of eCare and eHealth welcomed the participants and pointed out that Slovenia provides one of the friendliest environments for raising children and that he hopes that this conference will help to improve the environment for elderly people as well.

Opening Speeches of the first day of 3nd International Thematic Workshop were held by **Aleksandra Gradišek**, director of Development Centre of the Heart of Slovenia, **Andreja Črnak Meglič**, Sate Secretary in the Office of the Prime Minister and **Suzana Leben**, director of strategy and regulation in Telekom Slovenije.

Aleksandra Gradišek pointed out the importance of HoCare project and its stakeholders and presented the role of Development Centre of the Heart of Slovenia. In the Heart of Slovenia the fundamental purpose of interaction between municipalities is to increase the quality of life. To prepare and implement projects that improve the living conditions of all life periods, it is therefore at the heart of the work of Development Centre of the Heart of Slovenia. In the past, municipalities in the Heart of Slovenia have already been involved

in projects that have been working on innovative solutions for the elderly and are proud to be able to create solutions for more active, safer and better quality of life for the elderly. Among them, the WIDER project, which developed the Silver house model and the INNOVAGE project, under which a social-communication device for elderly people called Spero was developed (it was also presented on the 2nd day of the conference).

Peter Pustatičnik, Head of eCare and eHealth presented selected Slovenian good practice: **Intelligent Integrated Care and Home Care System (E-Care)**.

As an example of good practice in Slovenia, the E-Care Service was identified as an example of good practice, which was defined by the Ministry of Labor, Family, Social Affairs and Equal Opportunities as a social security service, and Telekom Slovenije issued a license for its implementation. E-care is a modular solution that effectively supports the elderly, people with disabilities, patients with chronic diseases, patients with severe operative procedures and people with dementia in a more independent stay at their home. 24 hours a day allows them to easily and quickly call for help in the event of a fall or sudden weakness and organization of assistance. E-care thus helps to prevent early departure from institutional care and ensures more effective use of social security resources for care.

E-care service (social service telecare) enables an active, independent and safe stay at home and the peace of mind for the relatives and is easy to use and adapted to user's needs. It doesn't have large interventions and is also affordable.

He pointed out that E-Care service is easily adapted to the needs of the user. It allows elderly to live independently in their home, as well as provides safety and assistance even when they can not initiate a help call due to their health condition. Keepers are constantly in touch with the closest, quick information in the event of a call for help and professional support from trained personnel at the assistance center. It also provides smoke detection (fire safety) and water spillage (flood protection), user application with graphical data display, ect. We are also preparing an upgrade with a smart lock, personalized medical TV channel (Med TV) and remote health services," explained Peter Pustatičnik.

The presentation of selected good practice was followed by **interactive discussion on successful implementation of IT support services of home care on national (Slovenian) level,** with an emphasis on reducing entry barriers. Participating speakers were:

- **Tatjana Buzeti**, Director of the Directorate for Long-Term Care from Ministry of Health, **Davor Dominkuš**, Head of the service and program development department and implementation of analyzes at the Directorate for Social Affairs, Ministry of Labor, Family, Social Affairs and Equal opportunities,
- **Marjan Sušelj**, General manager of the Health Insurance Institute of Slovenia
- **Dominika Oroszy,** M.D., advisor of the Medical director for quality management and Head of the Quality department at the University Medical Centre Ljubljana.
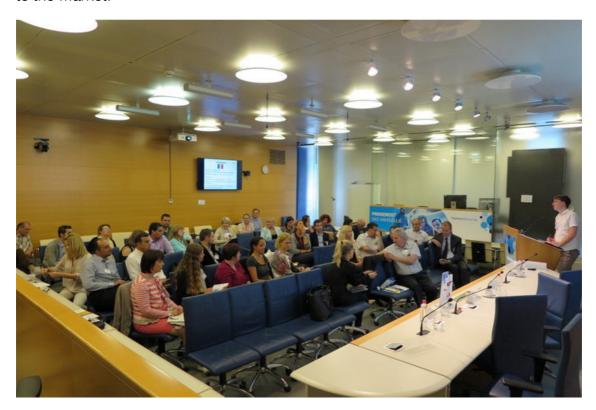
Second part of the workshop:

Meeting with stakeholders from Cyprus, Czech Republic, Bulgaria, Hungary, Lithuania, Portugal, Romania and Slovenia

The session was moderated by Michal Štefan, DEX Innovation centre from Czech Republic. Slides were prepared with the names of delegation for each country and each national delegation presented their participants at the workshop.

Later also their experiences, practices, ideas and needs were presented in form of quick info on current situation and good practices on bringing innovative solutions more quickly to the market.

SECOD DAY – 8th June 2017:
Location: Intergenerational Centre Šmelc, Litija

Mayor of Litija Municipality **Franci Rokavec** and director of Development Centre of the Heart of Slovenia **Aleksandra Gradišek** welcomed the participants. The morning part of the conference was moderated by **Ladeja Godina Košir**.

Afterwards the **Interactive moderated panel on needed actions of all stakeholders with purpose of creating accessible and quality home care services** was moderated by Igor Košir. The following speakers contributed to the discussion:

- **Franci Rokavec,** Mayor of Litija Municipality
- **Vida Lukač,** Director of Home for Elderly Tisje
- **Vesna Dolničar,** Faculty of Social Sciences
- **Peter Pustatičnik,** Telekom Slovenije
- **Simon Rener,** Institute Oreli, Kamnik

During the Coffee break the participants had the possibility to get to know selected **Slovenian good practices at the location.** The following good practices were presented and showed:

- **»SPERO« – social-communication device for elderly**
- **»IOCHAT« – communication system for healthcare domain**
- **»EkoSmart«- integrated health care services**

Press conference **was organized in parallel during the coffee break. Speakers at the press conference were:**

- **Aleksandra Gradišek,** director of Development Centre of the Heart of Slovenia
- **Željko Savič,** president of Local Action Group Heart of Slovenia
- **Franci Rokavec,** Mayor of Litija Municipality
- **Vida Lukač,** Director of Home for Elderly Tisje

Journalists from national media (TV Slovenia, Radio Slovenia) and local media (Radio 1 Geoss, ATV Signal) attended the press conference. The media coverage of the international thematic workshop was good: there were **40 articles** about the event published in different media.

Working groups:

Introduction to good practices to be discussed in working groups was made by Michal Stefan, DEX Innovation Center, coordinator of "Exchange of experience" work package in HoCare project.

Participants were distributed into 4 Interactive working groups:

1. 1st group – Good practice 1: **Wow!Systems: GRACE project** (facilitator: Michal Stefan)
2. 2nd group – Good practice 2: **CfP_EDOP- 121- (AICs)** - Supporting joint technological innovation of Accredited Innovation Clusters (facilitator: Edgaras Leichteris)
3. 3th group – Good practice 3: **IO-Chat** (facilitator: Eleftherios Loizou)
4. 4th group – Good practice 4: **EkoSmart** - e-care services (facilitator: Igor Košir)

Good practices were selected according to GP received, relevance of the topic for the workshop and the presence of owners of good practices at the event.

Conclusions of Working group 1: Good practice 1:
Wow!Systems: GRACE project
Facilitator: Michal Stefan

GRACE - (Guidance and Recovery Aging Care Environment) **(Madeira, Portugal)**

Strengths of this GP: overcoming the barriers of acceptance of technology by senior people by introducing jewellery with sensors that should bring emotional aspect to wearing it, platform usable also with other different wearables, great example of cooperation of quadruple-helix cooperation approach, clear business model, different solution for men (bracelet) and women (necklace).

Main weaknesses of this GP: a larger scale pilot of acceptance by people is necessary for cases when people don't know what the jewellery does and also to test how many % of people are ready to wear jewellery in this age group, privacy issues – some users are aware of what the jewellery monitors and some not based on the family members – but for some functionality users need to know what it does, acceptance and feasibility of the pricing for family members to buy the device and pay monthly fee needs to be tested also on the market – pilot needs to be done on this matter also, it replaces some of the activities and responsibilities of community nurses´ work, it could be built in a way that would complement the nurses and doctors with some important data about the people (further monitoring), perhaps easier for acceptance in towns and cosmopolitan areas

than in villages where people are not used to wear a jewellery, wholesale might be more difficult.

Comments regarding the transferability: the project has been funded until now with private money and not succeeded yet to get public finance, although funding from operational programme for a project like this is available for majority or all of the countries, no problem to transfer to other countries, the owner is willing to set up pilot projects in other countries also mainly to test acceptance and co-develop complementary aspects (alert functionality, other sensors, etc.), the project idea is directly in home care segment and using quadruple-helix cooperation for the development of it, now in prototype stage

Conclusions of Working group 2: Good practice 2:
CfP_EDOP- 121- (AICs) - Supporting joint technological innovation of Accredited Innovation Clusters
Facilitator: Edgaras Leichteris

The aim of the 2nd working group was to work on the one selected good practice case in the management/strategic focus of the OP. Target audience of the working group was managing authorities and other interested public or other representatives. The following countries were represented in the debate: Hungary (sharing good practice), Slovenia, Lithuania, Madeira, Romania, Bulgaria. Good practice selected was: **CfP_EDOP- 121- (AICs)** - Supporting joint technological innovation of Accredited Innovation Clusters.

Discussion:

1) A lot of attention have been paid to clarify the object of Hungarian GP and it's potential impact. Hungary has introduced the cluster schemes in last programming period. There was a call of around 40 mln EUR which was focused on the funding of accredited clusters. Accreditation was given by Ministry of Economy. The call was considered half success, there were some good projects, but in general some of the potential good clusters have not got funding, because of those accreditation restrictions. At the same time accredited clusters were not necessary showing best performance during the implementation of the projects. So Hungary changed the criteria and started focusing on function (i.e. funding R&D clusters) rather than the formal accreditation. Accredited clusters got additional points during the evaluation. That already improved the quantity of good cluster initiatives, including in health/homecare sectors in the current programming period and the call continues.

2) Other debating countries have reported similarities and differences with cluster funding:

a) **Lithuania** divides clusters into RDI (research, development, innovation) clusters and business clusters. Support is provided for both, but focus is on RDI. No formal accreditation is needed, but there is a long debate about accreditation and clusters are encouraged to have international accreditation. Lithuania struggled with too many cluster initiatives and now is heading towards focusing on fewer clusters and better internationalization. Establishment of formal accreditation might be one of the measures which needs to be considered.

b) **Bulgaria** reported similar problems to Lithuania. And explained that the accreditation they have introduced through agency under the ministry helped to lower the number of applications and increase the quality.

c) **Slovenia** reported about "umbrella" programme, which helps to have not only vertical connections between the members of one cluster, but also horizontal connections between different clusters. Further information is needed about the cluster schemes in Slovenia.

d) **Madeira** and **Romania** does not have specific cluster schemes and are focusing on cooperation projects. Romania is thinking about introduction of similar measures, so clustering practice from Hungary, Lithuania, Bulgaria can be valuable for them. Currently accreditation is made in Romania by private association and clusters are privately funded.

Presentation of the conclusions, next tasks and closure:

1) Most of the countries are interested in the further debate about accreditation of clusters in different countries. Two main questions need to be answered: who shall have a right in a country to accredit clusters and what criteria the one shall use in order to accredit them.

2) Countries are interested in developing some common position towards internationalization and cross-boarder clusters / value chains.

3) There is too little information about clusters in those countries related to healthcare/homecare sectors.

4) Preparing this good practice for a transfer and preparing cluster for further internationalization it will be good to see what cluster are active already in partner countries and related to healthcare/homecare sectors. What international links they already trying to develop.

5) Sometimes country/region can use existing cooperation schemes (like in Madeira) to facilitate cooperation and clustering without separate cluster support schemes. But that can help only for initial cooperation between one company and university, but becomes difficult if the scale is reached (i.e. 7 companies want to cooperate with university in one project).

6) Some countries might think about introduction of separate evaluation criteria, which will give some small preference to cluster in healthcare/homecare sectors.

Finally the group concluded that Hungarian good practice gives a lot of inspiration for other countries to rethink, improve or create their own schemes, but the focus shall be on learning from each other rather than transferring the particular one practice. Therefore this case will be difficult to transfer in full, but partial transfer is possible not only from Hungary, but from other countries who have similar schemes (Bulgaria, Lithuania, Slovenia) as well.

Conclusions of Working group 3: Good practice 3:
IO-Chat
Facilitator: Eleftherios Loizou

Objective:
The aim of the 3rd Interactive Working Group was the presentation and the analysis of one selected Good Practice in the area of Bringing innovative Home Care solutions quicker to the market by using quadruple-helix approach. The participants were experts coming from all Partners and their stakeholders representing mainly the public sector, as

well as other representatives from the academic community, the private sector and the civil society.

Short description of good practice:

IOCHAT (https://iochat.io/) is a communication system for different stakeholders in health / care domain. It is completely a self-hosted system under customer full control. All messages, screen shares, file shares are encrypted for the whole trip. Users' credentials and IP addresses are hidden for outside world. Sensitive conversation between care/medical professionals and patient is always run/stored at the destination organization select.

It supports multi user text, audio and video conference. You can do screen and file sharing. It has Multilanguage support. Now seven languages are supported. It is designed as a multi-platform for smartphones, tablets, PC and browsers, therefore users can select their most preferred device to use and are not pushed to use a new dedicated device, what can be a problem at elderly.

Medical and care professionals, informer carers and end-users use platform. Data protection issue is solved fully since hosting organization has total control over the system. System is intuitive and easy to use. Finally, the gap between strict data protection demand and simple and intuitive user demand is filled.

Main outcomes and conclusions:
The GP was further analyzed in detail by the owner of the practice, Mr. Jure Lampe, who also replied to the participants questions posed. The Working Group participants discussed and analyzed the GP. The analysis of the Good Practices produced the following results:

Strengths: Inclusiveness, cheap to develop, flexible system, safety of data protection, facilitating communication, securing provision of support to end users, creating a feeling of safety, securing anonymity.

Weaknesses: Difficult to use by IT illiterate persons (usually old people who are also the target group), limitation for use in rural or in sparsely populated areas with limited or no internet provisions, not suitable for disabled users, target group is just mentally healthy people, expensive in implementation.

Opportunities: Opens up the limited home environment, Boosts participation in supporting service provision, adjustable, could be used by governments for educational purposes

Threats: Focused on a target group for which the government does not aim its policies, limited sources for funding (mainly through research programmes or private investments)

Transferability: Interest was expressed by all participants; however it was decided that possibilities for transferring should be discussed firstly on local/regional/national level in each case.

Conclusions of Working group 4: Good practice 4:
E-care services: EKO SMART project
Facilitator: Igor Košir

Objective: The aim of the 4th Interactive Working Group was the discussion and the analysis of one selected Good Practice in the area of Bringing innovative Home Care solutions quicker to the market by using quadruple-helix approach with the strong focus on potential transferability of the GP. The participants were coming from Romania, Hungary, Cyprus, Bulgaria and Slovenia. They were representing all four helixes.

Main benefits the good practice can bring were summarised into 5 points:
- prevention (there can be significant decrease of injuries (or its severity) occurred – e.g. falls prevention)

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European Regional
Development Fund

Interreg
Europe
European Union | European Regional Development Fund

- Social talk (in the first place it is alternative channel to communication to the people filling lonely)
- Reduction of the General Practitioner's home visits
- Relatives filling safer
- Inclusion of volunteers to help elderly without relatives

It should be available to all population in need not only to elderly.

The service is complex for implementation, since it needs a lot of different stakeholders for its successful implementation. At least following stakeholders should be involved:
- Endusers organizations (NGO)
- Implementators (businesses having experiences in call centres and elderly care)
- R&D organizations (private and/or universities)
- Government (having support schemes for faster implementations – funding pilots, financial supporting schemes, clear national strategy)
- Doctors and medical organizations (giving credit to such a service)

Comments regarding the transferability:

The benefits of the GP are clear and generally accepted. The most problematic parts are sustainable business model and implementation nonfinancial and financial support.
These two issues has to be elaborated in detailed and ideally proved on pilots.
Technology is not the main issue. There are several technology vendors on the market.
Technology has to be simple to use, robust and having attractive design.
Country who is planning to implement it is crucial to find a national consensus between different stakeholders coming from national decision-making authorities on care, medical, financial and social area. It is wise to start a completely new national wide project.
Bolgaria commented there is no national funds available, since the ICT is not in the strategic focus. The change should occur first in the change of the strategic focus. Local funds cannot be used since local authorities has different areas for funds allocation.
Hungary see possible transferability through Internet service providers and/or security companies, who has to a certain extension similar business and such a service can be additional service to their current offering. The possible transferability should begin from privat/business helix.
Cyprus in terms of possible transferability to their county suggested starting with the action in the government helix where legislation framework has to be set in a way that all needed stakeholders agree and support GP and provide needed resources. Than private/business helix should take action and start offering services.

After lunch all participants had the possibility to attend **walk through Intergenerational center Šmelc and household community for elderly in Litija** – in the venue.

County tables: match-making workshop

Second part of working groups was organized as **"Country tables – match-making" workshop**. Each country provided at its table summaries of all Good Practices coming from their region from all 3 Themes so far. There were 8 tables: Cyprus, Czech Republic, Bulgaria, Hungary, Lithuania, Portugal, Romania and Slovenia.

Stakeholders and/or country representatives were around the table available to provide further info/discussion of the summarised good practices. Representatives of partners and stakeholders visited each other´s tables to find further interesting good practices not discussed yet in details within their working groups and to ask additional questions. The final aim was to get relevant strongest good practices and »couples« (Partner/country transferring a GP and partner/country implementing a GP). When match (or strong interest) happened providing partner/country was asked to fulfil small formular as a summary of the match-making process.

The match-making exercise enabled to find various additional couples between interested Good Practices and countries and initiate a process of verifying remaining information necessary for the transferability of the good practices. 22 good practices altogether gained further discussions and match-making identified during this exercise adding necessary inputs to all previous discussions during working group discussions in Madeira, Budapest and Slovenia Thematic workshops.

AGENDA

First day: Wednesday 7 June 2017
3rd INTERNATIONAL THEMATIC WORKSHOP
"Bringing innovative Home Care solutions quicker to the market by using quadruple-helix approach"
Location: LJUBLJANA
Venue: Telekom Slovenije
Address: Cigaletova ulica 17, 1000 Ljubljana, Slovenia (ground floor – Multimedia hall)

14.00 - 14.30
Registration of participants

14.30 - 14.40
Welcome Greetings:
- **Aleksandra Gradišek,** director od Development Centre of the Heart of Slovenia
- **Andreja Črnak Meglič,** State Secretary at Office of the Prime Minister
- **Suzana Leben,** Telekom Slovenije

14.40 - 15.40
Introduction of selected Slovenian good practice E-care: The smart system of integrated health care and home care in Slovenia (site visit on the location – Telekom Slovenije)
And interactive discussion on successful implementation of IT support services of home care on national level
(This part will be in Slovenian language – translation in English will be provided).

15.40 - 16.10
Coffee break and networking

16.10 - 17.30
Meeting with stakeholders from Cyprus, Czech Republic, Bulgaria, Hungary, Lithuania, Portugal, Romania and Slovenia
Short introductions of the stakeholders, their experiences, practices, ideas and needs, quick info on current situation and good practices on bringing innovative solutions more quickly to the market
Moderator: Michal Štefan (DEX-IC)

19.00 - 21.00
Dinner for partners and stakehodlers at the restaurant Vander

Second day: Thursday 8 June 2017
3rd INTERNATIONAL THEMATIC WORKSHOP

"Bringing innovative Home Care solutions quicker to the market by using quadruple-helix approach"
Location: LITIJA
Venue: Intergenerational Centre Šmelc ("Medgeneracijski center Šmelc")
Address: Ljubljanska cesta 3, Litija, Slovenia

9.00 - 9.30
Registration of participants *(ground floor)*

Auditorium hall in floor 3:
Moderator of morning part: Ladeja Godina Košir

9.30 - 9.45
Welcome Greetings:
- **Aleksandra Gradišek,** director od Development Centre of the Heart of Slovenia
- **Franci Rokavec,** Mayor of Litija Municipality

9.45 - 10.30
Interactive moderated panel on needed actions of all stakeholders with purpose of creating accessible and quality home care services
Speakers:
- **Franci Rokavec,** Mayor of Litija Municipality
- **Vida Lukač,** Director of Home for Elderly Tisje
- **Vesna Dolničar,** Faculty of Social Sciences
- **Peter Pustatičnik,** Telekom Slovenije
- **Simon Rener,** Institute Oreli, Kamnik

Moderator: Igor Košir
(The panel will be in Slovenian language – translation in English will be provided).

10.30 - 11.00
Coffee break for participants and presentation of Slovenian good practices at the location *(floor 3)*
- »SPERO« – social-communication device for elderly
- »IOCHAT« – communication system for healthcare domain
- »EkoSmart«- integrated health care services

Press Conference (parallel 10.30 – 11.00)

11.00 - 11.15

Auditorium hall in floor 3:

Intro to good practices to be discussed in working groups
Michal Stefan, DEX Innovation Center, coordinator of "Exchange of experience" work package in HoCare project

Distribution of participants into 4 Interactive working groups *(ground floor)*

11.15 – 12.45
Working groups: Part I.
1. 1st group – Good practice 1: **Wow!Systems: GRACE project** (facilitator: Silvia Stumpf)
2. 2nd group – Good practice 2: **CfP_EDOP- 121- (AICs)** - Supporting joint technological innovation of Accredited Innovation Clusters (facilitator: Edgaras Leichteris)
3. 3th group – Good practice 3: **IO-Chat** (facilitator: Eleftherios Loizou)
4. 4th group – Good practice 4: **EkoSmart** - e-care services (facilitator: Igor Košir)

12.45 - 14.00
Lunch and networking *(ground floor)*

13.30 – 14.00
Optional: Walk through Intergenerational center Šmelc and household community for elderly in Litija – in the venue (build in 2014)

Auditorium hall in floor 3:
14.00 - 15.30
Working groups: Part II.
"Country tables: match-making" workshop
(8 tables: Cyprus, Czech Republic, Bulgaria, Hungary, Lithuania, Portugal, Romania and Slovenia)

15.30 - 15.45
Coffee break **for participants after finishing working group discussions**

15.45 - 16.30
Presentation of the conclusions by moderator: Michal Stefan (DEX-IC) and working group moderators

17.00 - 20.00
Networking and dinner with local products at the venue in Litija
(hosted by Development Centre of the Heart of Slovenia)