HoCare

Interreg Europe

SUPPORTING JOINT TECHNOLOGICAL INNOVATION OF ACCREDITED INNOVATION CLUSTERS

GOOD PRACTICE - PROJECT

European Union
European Regional
Development Fund

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Introduction to the Good Practice

In Hungary there is a room for development in enhancing the cooperation between the business and research sector. One of the key success factor is the cluster itself as the Accredited Innovation Clusters (AIC) can contribute to strengthen the technology transfer. Among the cluster members are universities, research institutions, large companies, micro and small and medium sized enterprises with significant innovation and growth potential.
During the programming period 2007-2013 the Ministry for National Economy of Hungary introduced a new instrument to strengthen the cooperation between business and research sector. The aim was to give dedicated support for catalyzing cooperation, implementing joint R&I, technical and service development projects between enterprises, universities, clusters alongside a value chain. The call has a general focus, it was dedicated neither to only the health-care sector, nor any specific market or field.
31 projects were supported between 2007- 2013. 201 cluster members participated in the projects, the number of the clusters in one project was 5,4 (the minimum was 3). 70% of the projects were implemented among SMEs, 22% among SMEs and large enterprises, 8% among enterprises and research institutions. 42.5 m EUR grant (36.2 m EUR, 85%, EDRF) was allocated to AIC members. The project must have been be implemented in Hungary with the exception of the Central Hungarian region.

Problem:

The budget allocated for the AICs was rather few comparing to the demand. There were 71 applications (applying for 99 m EUR). The call, therefore, was available between 2008 and 2011. There was no target sector. However, there was a strong requirement that only AIC members were allowed to participate/apply. In this way the whole action was dedicated to those who had already joined to a few existing accredited innovation clusters. Unfortunately neither the membership nor the number of these AICs increased considerably during 2008-2011 (even during 2007-2013).

Solution:

The Economic Development and Innovation Operational Program (EDIOP) follows the EDOP during the 2014-2020. The call: 'EDIOP-2.2.1 Supporting R+I cooperation for competitiveness and excellence' replaced the above mentioned EDOP-1.2.1.
Main modification: Not just the AIC members can apply for the call for proposal, but an advantage can be at the selection procedure if the members of the consortia are also members of an Accredited Cluster.
The new call is open between 30.11.2015 – 30.11.2017, with total budget 161mEUR. During the first year of the operation of call EDIOP-2.2.1 there were 32 applications (133.7 m EUR) and 22 contracts (84.15 m EUR).
Opportunity: During 2017 new budget is likely to be allocated to this purpose and the call likely goes on till 2020. The Managing Authority is open to consider recommendation aiming improving efficiency and effectiveness of the call and the granting scheme.

Impact:

The modification described above resulted in increasing the winning rate from 31/71 up to 22/32. However, the aim (settled in the RIS3 and the concept of the strategic development of industry) targeting on concentrating on the development of strategic sectors such as health industry is still waiting to be implemented in EDIOP and this specific call.

1. Relevancy of the GP project

The "Relevancy of the GP project" section provides quick check and definition of its relevancy in regards to HoCare project objectives.

Good practice of quadruple-helix cooperation in R&I?	Yes, this GP project includes good practices of quadruple-helix cooperation in R&I
Good practice of delivery of Home Care R&I?	No, this GP project does not include good practices of delivery of Home Care R&I.
If not in Home Care R&I, description and proof of its potential for transferability to delivery of Home Care R&I	The GP consisted of calls for proposals in the framework of Economic Development OP (EDOP-121) which were supporting joint technological innovation of Accredited Innovation Clusters (AIC). The calls were open to foster R+D+I cooperation and strengthen technology transfer among cluster members (SMEs, other enterprises, HEIs and other organizations) and cluster management. Project selection was based on requiring a buiness case built on real and unmet needs and key challenges and problems that the common R+D+I activites tackled. The calls were open for enterprises operating in the area of science and technology or on bio- and medical markets. In accordance with the significane of health and heath related industries in the Hungarian R+D+I sector in general, a lot of approved projects aimed to implement R+D+I activities delivering new solutions and enabling developing new or renewed products in pharmasutical and health sectior (medicines, technology, e/m/tele-health, diagnosis, prevention, therapy and rehabilitation). Although the calls were focusing on R+D+I cooperation and techtransfer in general, the successful projects implementing health or health related R+D+I proved that the practise could be used to set up projects specifically in the home care segment, involving hospitals and other formal caregivers, informal care providers and patients and their associations in the innovation ecosoystem. Despite the AIC system had no focus on homecare, it brought business, researchers/HEIs, public and end-users together to cooperate in innovation (or at least fosters them to come together to do so) in order to deliver new, renewed or enhanced procucts and services. Therefore it can be transferred to other regions.
Generation of innovation in home care through answering unmet needs identified by formal or informal healthcare providers?	Yes, this GP project includes good practices of innovation through answering unmet needs.
Generation of innovation in home care through public driven innovation?	No, this GP project does not include good practices of public driven innovation.
Generation of innovation	Yes, this GP project includes good practices of innovation via cooperation for

in home care via quadruple-helix cooperation for quicker delivery to the market?	quicker delivery to the market.

2. Quick overview of the Good Practice (GP) project

The "Quick overview of the GP project" section provides initial overview of the good practice project (GP project) and enables readers to see if this GP project idea is relevant for possible transfer to their organization potential innovation activities.

Name of the GP project	Supporting joint technological innovation of Accredited Innovation Clusters
Region of origin of GP project	Hungary
5 keywords that best describe the content of the GP project	cluster, quadruple-helix, unmet needs of buyers delivery&transfer of innovation OP-support, transferable to homecare value chains and/or other regions
Relevant **Operational Programme name through which the GP project has been funded** (+ also in local language in brackets)	Economic Development OP (EDOP) Measure/Call: EDOP-121 Supporting joint technological innovation of Accredited Innovation Clusters *(Gazdaságfejlesztési Operatív Program, GOP-121 Akkreditált innovatív klaszterek támogatása komponens/pályázati felhívás)*
Relevant **support programme / intervention area name** of the GP project **through which it was funded** (+ also in local language in brackets)	New Széchenyi Plan (NSP) – Calls for proposals linked to NSP indirectly, originally designed and run under the New Hungary Development Plan 2007-2013 *(Új Széchenyi Terv - közvetett kapcsolódású pályázati konstrukciók - Új Magyarország fejlesztési terv 2007-2013)*
Single or multiple recipients of the GP project?	multiple recipients
Type of lead recipient (SME, LME, research centre, innovation centre, network/association, university/school, municipality, other public body, other (specify)	Lead applicants/recipients/partner (LP) were enterprises. Only a member of an Accredited Innovation Cluster (AIC) could be LP. However, there were certain requirements that LPs had to meet (e.g. own resources/own capital rate had to be min 200%).
Types of participating partners (list all participating partner types. E.g.: hospital, social house, senior house, patient association, networks, SMEs, LMEs, research	Enterprises operating in the area of science and technology or on bio- and medical markets. Other partners (researchers/HEIs, hodpitals, public and end-users) could be involved during the execution of the approved projekts. Threngthening the cooperation among the applicant(s) and AIC management and other AIC members (enterprises, HEIs and other entities) in technological innovation activities delivering new, renewed or enhanced procucts and services, was one of

actors, business supporting organizations, public institutions/regulators, other (specify)	the primary goals of the call.
Summary of the good practice	In Hungary there is a room for development in enhancing the cooperation between the business and research sector. One of the key success factor is the cluster itself as the Accredited Innovation Clusters (AIC) can contribute to strengthen the technology transfer. Among the cluster members are universities, research institutions, large companies, micro and small and medium sized enterprises with significant innovation and growth potential. During the programming period 2007-2013 the Ministry for National Economy of Hungary introduced a new instrument to strengthen the cooperation between business and research sector. The aim was to give dedicated support for catalysing cooperation, implementing joint R&I, technical and service development projects between enterprises, universities, clusters alongside a value chain. The call has a general focus, it was dedicated neither to only the health-care sector, nor any specific market or field. 31 projects were supported between 2007- 2013. 201 cluster members participated in the projects, the number of the clusters in one project was 5,4 (the minimum was 3). 70% of the projects were implemented among SMEs, 22% among SMEs and large enterprises, 8% among enterprises and research institutions. 42.5 m EUR grant (36.2 m EUR, 85%, EDRF) was allocated to AIC members. The project must have been be implemented in Hungary with the exception of the Central Hungarian region. The whole process was catalysed by the system of accrediting innovation clusters and supporting the joint technological innovation of cluster members, however, the budget allocated for the call for them was rather few comparing to the demand. There was no target sector, however, there was a strong requirement that only AIC members were allowed to apply for the grant. Although there were no requirements or benefits for Quadruple Helix cooperation, the cluster scheme fostered the actors to explore the advantages in co-operation. Therefore, the accreditation system could be replaced by defining requirements or benefits for Quadruple Helix cooperation and the learnings of the project may be transferred to other fields (e.g. Homecare) or regions.

3. Transferability

The “Transferability” section provides more detailed review of strengths and weaknesses of this GP project including description of necessary basic conditions for region and leading organization to potentially transfer it. At the end of the section, the key threats in the successful transfer open up possibility to focus on specific relevant issues important for the successful transfer.

Strengths and weaknesses of the project

What are the GP project	There was a common understanding about the goals and the objectives of the

strengths? Why it was funded?	calls and the measure laid down in the Economic Development OP. The calls were dedicated to strengthen Accredited Innovation Clusters (AIC) by facilitating cooperation among cluster management and members, and foster innovation activities executed by them to improve competitiveness of AIC members. The accreditation system preselected the range of the applicants. This provided a better focus on enterprises who were ready and able to cooperate with each other and other partners alongside a well-defined value chain (including end-users, buyers, vendors, HEIs and other stakeholders in their ecosystem). Despite the range of the target sectors was too wide, in accordance with the priority development areas in the Hungarian R+D+I policy in general, there was a strong focus on 4 market sections (natural science, technology and the bio- and medical markets). Selection criteria and administrative requirements were acceptable to the applicants, so there was a bigger demand for the grant offered by the calls than the budget allocated.
What are the **key weaknesses of the GP project**?	On the one hand, from the perspective of homecare, the range of the target sectors was too wide. Enterprises operating in the area of science and technology or on bio- and medical markets could apply for grants. On the other hand, there was a strong requirement that only AIC members were allowed to apply. Therefore, care providers were eligible applicants if they were AIC member enterprises. (However the approved applicants were able to cooperate with them.) Preparing, executing, maintaining and expanding or replicating innovation activities driven by unmet needs of the users were only indirectly expected by the Managing Authority. The innovation should have been laid on real market needs according to the selection criteria of the call. The MA was looking for marketable products and services (to be developed or further developed by the innovation).

Basic conditions for successful transfer

Why is this GP project transferable? – innovation, impact, financial, legal, and timeframe aspects	Learnings & transferability: Despite AIC system does not insist on QHC, it brings business, researchers/HEIs, public and end-users together to cooperate in innovation (or at least fosters them to come together to do so). Therefore it can be transferred to other regions. Quadruple-helix: Although there were no requirements or benefits for Quadruple Helix cooperation, the cluster scheme fostered the actors to explore the advantages in co-operation. Therefore, the accreditation system could be replaced by defining requirements or benefits for Quadruple Helix cooperation and the learnings of the project may be transferred to other fields (e.g. Homecare) or regions. Despite the AIC system had no focus on homecare, it brought business, researchers/HEIs, public and end-users together to cooperate in innovation (or at least fosters them to come together to do so) in order to deliver new, renewed

	or enhanced procucts and services. The call for proposals EDOP-121 aimed to promote industrial and experimental development activities to be utilized in the economy, which, in a cluster framework, were implemented in close innovation cooperation between enterprises or universities/research institutions and enterprises. The call did not contained preconditions and/or evaluation criteria directly focusing on quadruple-helix cooperation (QHC), however, approved projects were based on the involvement of other stakeholders, such as users/end-users. The action provided support for the establishment of modern research infrastructure, patent registration, and in some special areas, ensures support in order to establish resupply options for useable knowledge. An integrated element of the supported projects was the intention of future market utilization. Therefore, practically it was necessary to involve the end-users and authorities (public) in the early stage of the innovation cooperation. In addition public has at least to significant roles in the AIC system. On the one hand the whole system of accrediting and granting innovation clusters was developed by central government (as a key public player). On the other hand local governments are involved (sometimes they are initiators) of the cluster entering the system. Quicker to the market: ”Bringing innovative Home Care solutions quicker to the market by using quadruple-helix approach” - The action provided support for the establishment of modern research infrastructure, patent registration, and in some special areas, ensures support in order to establish resupply options for useable knowledge. An integrated element of the supported projects was the intention of future market utilization. - AIC system brings together (or at least fosters) business and researchers/HEIs to cooperate and involve public and end-users in the cooperation. Public driven innovation: The system of Accredited Innovation Clusters (AIC) - developed and subsidized by central government – has helped to apply the “innovation ecosystem buy-in” approach, which fosters identifying key stakeholders and paves the way to satisfy their unmet needs. Key players having familiar interests appears alongside one of the four branches of the quadruple helix. Offering grants to AICs can be an efficient (public) driver of innovation (innovation cooperation). Cooperation - among cluster members, cluster management and university as partners – helped to define real and unmet needs, problems and markets, which paved the way for innovation by using and further developing existing knowledge and technologies. The whole process was catalysed by the system of accrediting innovation clusters and supporting the joint technological innovation of cluster members, however, the budget allocated for the call for them was rather few comparing to the demand. The range of the target sectors was fairly wide, enterprises operating in the area of science and technology or on bio- and medical markets could apply for grants. However, there was a strong requirement that only AIC members were allowed to apply.

What are the **basic conditions the region needs to have** to be successful in transferring this good practise?	The region should have: – an accreditation system to preselect clusters, innovative companies ready to cooperate with their stakeholders – a programme (e.g. an ESIF operational programme or national one) that has appropriate institutional setup and due financial resources to accept an action and open a call for supporting clusters and/or cluster members – existing clusters (in health or homecare) with active management – cluster members ready to cooperate with all sides of the quadruple helix
What are the **basic conditions the leading recipient from the region needs to have** to be successful in transferring this good practice?	The main decision making bodies of the programme (e.g. an ESIF operational programme or national one), that may finance call for supporting clusters, should agree on the transfer, if the programme need not to be modified. In case the programme should be modified to be able to integrate granting clusters, a consensus among all interested parties is required.

Key threats in GP project transfer

What are the **key potential threats for the GP project transfer?**	– Clusters (networks and/or managements) are week, and members are not really interested in cooperation; – Evaluation and selection criteria of the call do not really prefer quadruple helix cooperation, detection and satisfaction of unmet needs; – Evaluation and contracting periods are longer than the market would appreciate concerning the transfer of innovation to daily production and supply and/or service provision. – Call budget and selection criteria do not meet (e.g. less/more eligible applicants then the call budget allows).

4. Description of the GP project

The "Description of the GP project" section provides more detailed information on the Good Practice project (GP project) and enables readers to get further detailed inspiration and easy ready-to-use information for possible innovation transfer to other project applications. This includes: tackled problem, time length of the GP project, objectives, phases, activities and deliverables of the GP project, its main innovation and target group.

Description of the tackled problem

What was the **problem / challenge tackled** by the project?	The budget allocated for the AICs was rather few comparing to the demand. There were 71 applications (applying for 99 m EUR). The call, therefore, was available between 2008 and 2011. There was no target sector. However, there was a strong requirement that only AIC members were allowed to participate/apply. In this way the whole action was dedicated to those who had already joined to a few existing accredited innovation clusters. Unfortunately neither the membership nor the number of these AICs increased considerably during 2008-2011 (even during 2007-2013).

What were the **reasons for the problem?**	The call for proposals EDOP-121 was an action embedded in Priority Axis 2 (PA2). The focus areas of this priority axis had been defined to meet following needs unmet so far: • the low level of the domestic corporate R&D and innovation activities, • under-utilization of existing capacities and results, • missing or weak cooperation among the actors of the R&D&I procedure. The call belonged to the actions of the 2nd measure (sub-priority) of PA2: "Support of innovation clusters and innovation/technology parks". The measure's objective was to establish accredited 65 innovation pole clusters, and further development of such clusters to make them "internationally visible", as well as establishment or development of concentrated innovation and technology infrastructure (research and innovation service and competence centres), which primarily operates on a business basis, and which, besides co-operation, supports networking activities. The measure aimed to support joint R&D projects to be implemented by innovation clusters or member companies of such clusters. A prerequisite of the assistance was passing quality control and accreditation of high quality clusters.

Time length of the GP project

What was the **time length** of the GP project in months?	The calls were open 4 years (2008 – 2011). After selection and contracting projects were implemented till 2013 and maintained till 2017.

Objectives of the GP project

Describe the **overall and specific objectives** of the GP project	The call for proposals EDOP-121 aimed to promote industrial and experimental development activities to be utilized in the economy, which, in a cluster framework, were implemented in close innovation cooperation between enterprises or universities/research institutions and enterprises. The call did not contained preconditions and/or evaluation criteria directly focusing on quadruple-helix cooperation (QHC), however, approved projects were based on the involvement of other stakeholders, such as users/end-users. The action provided support for the establishment of modern research infrastructure, patent registration, and in some special areas, ensures support in order to establish resupply options for useable knowledge. An integrated element of the supported projects was the intention of future market utilization. Therefore, practically it was necessary to involve the end-users and authorities (public) in the early stage of the innovation cooperation. In addition public has at least to significant roles in the AIC system. On the one hand the whole system of accrediting and granting innovation clusters was developed by central government (as a key public player). On the other hand local governments are involved (sometimes they are initiators) of the cluster entering the system.

Phases, activities and deliverables

List all **main phases** of the	– Public consultation of the draft call

GP project including their time length	– The Monitoring Committee of the OP and the Government approved the call – Application, evaluation and contracting periods of the call – Project implementation and maintenance period
List and describe all **main activities** that were implemented by the GP project	– Public consultation – Approval of the call – Call opening, evaluation of applications and contracting with beneficiaries – Monitoring project implementation and maintenance
List all **main deliverables** of the GP project	– 31 projects were supported between 2007- 2013. – 201 cluster members participated in the projects, – the number of the clusters in one project was 5,4 (the minimum was 3). – 70% of the projects were implemented among SMEs, – 22% among SMEs and large enterprises, – 8% among enterprises and research institutions.

Main innovation of the GP project

What was the **main innovation** of the GP project?	**Solution:** The Economic Development and Innovation Operational Program (EDIOP) follows the EDOP during the 2014-2020. The call: 'EDIOP-2.2.1 Supporting R+I cooperation for competitiveness and excellence' replaced the above mentioned EDOP-1.2.1. Main modification: Not just the AIC members can apply for the call for proposal, but an advantage can be at the selection procedure if the members of the consortia are also members of an Accredited Cluster. The new call is open between 30.11.2015 – 30.11.2017, with total budget 161mEUR. During the first year of the operation of call EDIOP-2.2.1 there were 32 applications (133.7 m EUR) and 22 contracts (84.15 m EUR).

Target group of the project

Who was the main **target group** of the GP project? (SME, LME, research organization, university, public institution, healthcare provider, business supporting organization, other (specify)	Clusters (AICs), cluster members: e.g. SMEs/LMEs, research organizations, universities, public organizations,
Describe the main target group	Players of health industry or homecare market did not get extra priority, however, it was communicated generally that the OP was looking for applications/projects from the pillar sectors such as health industry.

5. Impact

The "Impact" section provides more detailed information on the effect of the GP project implementation and dissemination of major outputs.

Impact

What was the level of **geographical impact** of the GP project? (village, city, county, country, international, other (specify)	county, country, international
What were the final **impact indicators including their quantification**?	N/A
Describe the **changes resulted from the project** activities	**The modification described above resulted in increasing the winning rate from 31/71 up to 22/32. However, the aim (settled in the RIS3 and the concept of the strategic development of industry) targeting on concentrating on the development of strategic sectors such as health industry is still waiting to be implemented in EDIOP and this specific call.** Cluster members managed to solve the problem by innovating and developing new, simple, cost effective and environment friendly solutions and products, and successfully stabilized and increased their domestic and export markets. The project paved the way for additional applications for OP grants and implementation of new projects of the cluster members and their partners. Improving diagnostic capacities and capabilities of the smaller formal and informal healthcare providers opens doors for easier access to cure, care and rehabilitation services.

Dissemination of outputs

Describe **dissemination activities** of the project outputs carried out during the GP project	Articles, Conferences, Training and education curses

6. Risks

The "Risks" section provides more detailed review of potential risks of this GP project implementation including their defined mitigation strategies to eliminate them.

Describe **risks involved** in implementing this GP project including their **mitigation strategies**	-sustainability of operation after minimum 5 years sustaining period ends because of weak financial conditions of the SMEs to finance IP, marketing and investment costs -access to clinics and SMEs being difficult in some regions and for some partners

	due to local situation and weak networks

7. Budget

The "Budget" section provides more detailed review of costs regarding the project implementation as well as operational sustainability after its end. In addition, if relevant, public tenders within the project and additional generated incomes by the project are showed and explained.

Budget

What was the **overall budget** of the project **in EUR**?	42.5 m EUR grant (36.2 m EUR, 85%, EDRF)
List relevant **budget lines of the project including their % share** from total budget	N/A

Additional income generated by the project

Did the project create any **additional income**?	yes, the GP project generated additional income
If yes, specify **which type of income and what amount in EUR?**	N/A

Public tender

Did the project include any **public tender**?	no, the project did not include a public tender
If yes, specify **what kind of contract** (specific contract, general contract, other)	N/A
If yes, specify in **what amount** in EUR	N/A
Describe the **public tender subject**	N/A

Financial sustainability after GP project end

Was there an **operational financial sustainability plan** in the project **after its end**?	yes, the GP project included an operational financial sustainability plan

If yes, specify **where the operational funds** after project end **came from?**	From the beneficiaries' budget (sales)
If yes, specify the **amount of operational funds** in EUR	N/A

8. Other information

In this section, specific additional information about the GP project could be revealed.

Please describe **any other relevant information about this GP project** (if relevant)	https://www.palyazat.gov.hu/doc/2693

9. Information gathered by …

The information about this good practise (GP) project has been gathered for the purpose of the HoCare project (Interreg Europe Programme) by the following organization:

Region	Hungary
Organization name(s) (+ in local language in brackets)	National Healthcare Service Center (ÁEEK)
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