TRANS2CARE. Working plans: consciousness and perspectives

The project started on 1st April 2011 and will end on 30th September 2014.
The project received a budget of € 2,611,118 from the Italy-Slovenia 2007-2013 Cross-border Cooperation Programme.
Seven universities and research institutions, five hospitals and a center for technology transfer distributed over the Programme area constitute the 'Interregional network for innovation and technology transfer for health improvement", which will continuously develop new protocols and biotechnological devices for the prevention, early diagnosis and treatment of neurodegenerative, cardiovascular, orthopaedic and oncological diseases.

WHY IS IT STRATEGIC?

The high and heterogeneous technical and scientific skills of team managers ensure the cohesion of the partnership and the project's quality in its three main phases: network set-up, network's operational implementation, its consolidation and enlargement.
The identification of targeted goals, which will at every working stage and level ensure the integrated action of partners, is of crucial importance. An increased efficiency depends on a considerable amount of management capacity. The partnership cohesion and its operational efficiency will attract new partners, including industrial, and new sources of funding. These elements will have a positive impact on the cross-border area, not only in socio-economic terms, but also in terms of an integration model to imitate.

TRANS2CARE

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TRANS2CARE

- Lead Partner
  Università degli Studi di Trieste
- Project Partner 1
  Kemijski Inštitut Ljubljana
- Project Partner 2
  Scuola Internazionale Superiore
  di Studi Avanzati
- Project Partner 3
  Univerza v Novi Gorici
- Project Partner 4
  Università di Ferrara
- Project Partner 5
  Treviso Tecnologia
- Project Partner 6
  Splošna Bolnišnica Dr. Franca Derganca
- Project Partner 7
  Università Ca' Foscari di Venezia
- Project Partner 8
  Università di Udine
- Project Partner 9
  IRCCS Burlo Garofalo
- Project Partner 10
  Zavod Republike Slovenije
  Za Transfuzijsko Medicino
- Project Partner 11
  Ortopedska Bolnišnica Valdoltra
- Project Partner 12
  Univerza na Primorskem
  Fakulteta za Vede o Zdravju

Figure 1: List of project partners and their location in the Programme area.

trans2care NETWORK

Figure 2: Roles within the partnership.

5 healtcare institutions + **1** tech-transfer company + **7** research institutions

Zavod Republike Slovenije za transfuzijsko medicino
Blood Transfusion Centre of Slovenia

Treviso Tecnologia
AZIENDA SPECIALE PER L'INNOVAZIONE
Camera di Commercio Treviso

UNIVERSITÀ DEGLI STUDI DI TRIESTE

BURLO

università di ferrara
DA SEICENTO ANNI GUARDIAMO AVANTI.

SPLOŠNA BOLNIŠNICA
Dr. F. DERGANC
NOVA GORICA

Kemijski inštitut
National Institute of Chemistry Slovenia

Università Ca'Foscari Venezia

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EXPERTISES	EXPERTISES
gastroenterology	applied chemistry
cardiology	biocompatible materials
orthopedy	biochemistry
immunology	molecular biology
cancer	genetics
	neurosciences

WORKING PLANS: CONSCIOUSNESS AND PERSPECTIVES

It is our intent to illustrate the 'structural" characteristics of the project, rather than its content. The structural characteristics analysis should help us to grasp its strategic nature, in order to apply it, if necessary, to other scientific or socioeconomic projects, which may widely differ from our TRANS2CARE.
The analysis is based on the following question: how does TRANS2CARE interpret the notion of strategic?
Besides the formal requirements of the public call, such as the number and geographical distribution of partners, duration and budget, are there any original operational aspects, which contribute to the strategic nature of the project?
Firstly, we will analyse the project's working plans in order to single out the expected strategic operational aspects.

A) SETTING UP THE NETWORK

The preliminary stages of the network set-up were:

1 Study of the Italy-Slovenia 2007-2013 Operational Programme.

Under Section 2 the Operational Programme points out the reference framework:

- 'Research and development are key factors in the creation of an economic environment" (p. 32);
- 'In the Programme area, universities provide a wide range of courses, covering the major disciplines ... omissis ... it should not be difficult to develop cooperation projects between universities that teach the same subjects and deal with the same fields of interest and research projects. In this perspective, it is desirable that more or less recent universities of the Programme area are able to enhance the bilateral cooperation. '(p. 34);
- 'The health sector, both in Italy and in Slovenia, takes us a large proportion of GDP devoted to public spending." (p. 35).
- Under Section 4 - Programme strategy, several policy objectives of the Priority axis no. 2 - Competitiveness and knowledge-based society are identified; the University of Trieste and its partners could contribute to achieving them:
- 'The improvement of research and technological innovation and the strengthening of cooperation between universities, research centers and businesses are the prerequisite to enhance the competitiveness of the Programme area. Considering the rich potential of scientific and research- and innovation-oriented center in the Programme area, it is important to support the technology transfer between companies and research institutions, to promote the adoption of innovative 'highly technological" solutions and especially to foster the creation of networks between Italian and Slovenian R&TD." (p. 63);
- 'To ensure the development of valuable human resources in the Programme area, actions need to be supported by joint interventions of professional training aimed,

among other things, at retraining workers and promoting the integration of qualified personnel into the cross-border labour market. By doing so, it will be possible to optimally use the results of research and technological innovation activities, while contributing at the same time to prevent the so-called 'brain drain." (p. 64);
- 'The health and social sectors are the key elements for ensuring an increase in the quality of life in the Programme area." (p. 67).

2 Conceiving the project idea:

Create a cross-border network of universities, research centers, hospitals and company specialized in technology transfer with the objective of sharing technical-scintific skills and applying them to the development of innovative health products and services. The main actors of the project idea are supported by 14 highly qualified researchers.

3 Haring the project idea with colleagues, the so-called team managers, be longing to 13 different institutions, and two-stage networking: informal agreements between colleagues, and formal agreements between institutions.

CONSCIOUSNESS

The data summarized in the table below chronologically mark the network achievements:

Achievement	Phase	Date	Type of agreement
1. Expression of interes	Call no. 1/2008	01.12.2008	Letter of intent
2. Project proposal	Call no. 1/2009	10.09.2009	Letter of intent
3. Admission to funding	List scrolling	10.03.2011	-
4. Beginning of activities	Activities begin	01.04.2011	Informal agreement
5. Signing of the partner-ship agreement	-	22.04.2011	Partnership agreement
6. Delivery of first report	-	10.11.2011	-
7. Kick-off event	-	21.11.2011	-

It should be noted that without any funds, the network has been stable for twenty-nine months (from 01.12.2008 to 22.04.2011). In addition, partners informally agreed the start the activities (01.04.2011) before signing the partnership contract (22.04.2011).

Which are the factors of stability?

1. The quality of the people, expressed through various competences:
    a. High scientific and cultural skills;

b. Ability to share their scientific expertise, despite the fact that high specialization inevitably involves a lack in communication;
c. Willingness to interact with different people with different ethnic, linguistic, cultural, social background, or even with people not known before (curiosity as a tolerance factor for individual growth).

2. The quality of the project idea, due to two elements:
   a. Good correspondence to the Operational Programme: the project resisted the 'stress tests" of the multiple stages of evaluation;
   b. An optimal solution to overcome the inherent limit to the full utilization of the individual scientific-technological potential: sharing and complementary use of human resources and infrastructure, in order to build up a suitable operating mass to achieve otherwise unattainable goals;
   c. The team managers forecasted that by operating as a network, partners would achieve the project objectives (project feasibility).
3. A technical language: English. A century ago it was German, two centuries ago, Latin.

PERSPECTIVES

If the network has resisted for such a long period of time without funds, it will probably be strengthened when funds will be allocated, not only to achieve the project objectives, but also to enable related initiatives, for example in first, second and third level training, or identifying new research contexts and promoting knowledge transfer.
Thus, quality and stability are two sides of the same coin, key reference features for other projects, other programmes, other contexts.

B) OPERATION OF THE NETWORK

When the funds will be allocated the project will provide the following:

1. Networking: for sharing objectives, knowledge and skills through:
   a. Information and communication technologies (e-mail, website and content management system);
   b. Meetings (on average 1/month);
   c. Exchanges of researchers.
2. Training of researchers: to expand their technology skills and promote the acquisition of essential skills for self-sustainability of research and self-employment (continuous search for sources of funding, creation of employment opportunities);
3. Management: to ensure and/or increase productivity:
   a. Promptly perform the activities, which are necessary to achieve the objectives;
   b. Coordinate the activities in order to increase its efficiency and effectiveness.
4. Administration & reporting: to ensure traceability of project costs, and the correspondence between costs and their reimbursement to the partners.

CONSCIOUSNESS

The objectives

At this stage the most critical task is to keep partners focused on the project's objectives. Specifically allocated funds may trigger a paradoxical reaction: funds may be used in a manner that is different from the purposes of the project and disconnected from the activities of the partners. This is obvious, since every partner has some ongoing activities and these indiscriminately need any available financial resources.

To avoid this risk, it is necessary to identify common goals that are achievable over a short period of time. One of the major factors of cohesion will be the achievement of results over a short period of time, as a result of the synergies created between workgroups. Thus, project activities must be carefully studied and their scientific and management aspects coordinated. Our project is born and grows with careful scientific planning, together with a careful management control.

Management

Among various university projects, this one stands out due to the strategic importance of its management. By entrusting the management to an external company we have given an added value to the project, since we have fostered the creation of an interface between the team managers, who work in publicly funded non-profit organizations, and the corporate funded company personnel responsible for the project management. This synergy of two completely different mentalities becomes a factor of success, because it creates a trans-disciplinary collaboration.

The training of researchers

The project's ambition is to instill in the minds of the newly-recruited researchers, who until recently have been committed to learning scientific concepts and methods, which are increasingly more sophisticated and intellectually challenging, the importance of acquiring complementary skills, mainly of a managerial nature, in order to optimize not only their technical and scientific productivity, but also to actually transfer their knowledge and technology to biomedical companies, which have to generate profits for their financial sustainability.

Administrative and management tasks

In the first seven months the administrative and reporting tasks absorbed enormous energies. Why? Albeit with a few exceptions, the scientific and health partners do not have the practical experience to manage a complex project in terms of partners, thoroughness and rigidity of financial reporting standards and obligation to implement unusual activity for scientific bodies, such as those of the Work Package no. 8 - Communication (to non specialized or sectoral areas).

The public funds granted to these institutions are generally insignificant and also sporadic. The scientific and cultural quality may have been marginally affected, because,

at the same time, the spread of the internet and the freedom of access to information and data, and the implementation of digital technologies for communication between colleagues (e-mail, video conferencing, etc.), has allowed to mitigate the damage: a certain productivity at no cost has been allowed by computer networks. The cohesion of the partnership during the months in which it did not receive any funding has been maintained thanks to these infrastructures.

However, these public bodies, which are constantly required to adopt a "corporate" mentality, are not at all prepared to leave their simple "cover-the-operating-costs" mentality, which requires minimum management and long-term vision skills.

By receiving additional funds, public bodies were given the opportunity to make much more challenging financial investments, not only from an administrative point of view, but also from an intellectual point of view, since they had to stake that these funds would have made them achieve important results: it was the first time for many of us.

We can start by analysing the most common tasks that university administrative departments usually tackle first: recruitment of contract personnel for "research support". Initially, the desired funds were intended to recruit highly qualified personnel not only for "research support" (in accordance with Italian Law n. 165/01), but also for the "future sustainability of research." This is a delicate operation. The collaboration lasts far more than normal (36 months) and the need for high qualification and motivation is correspondingly higher than normal. It comes to writing a public notice of selection (call) by adopting a completely different mindset, bearing in mind that qualified candidates can be attracted simply by writing only a couple of specific sentences. Paradoxically, the strategic approach of the project is implemented through simple acts, such as few simple sentences, and during the candidates' selection process, by focusing on the intuition of the selection committee.

In order to write down public notices for the selection of highly specialised external consultants, our administration department had to learn new skills and unusual administrative procedures, such as tenders.

Even more unusual was the creation of our own visual identity and website.

The involvement by gender

The table below summarizes the gender participation in the project:

CATEGORY	FEMALE		MALE		TOT
	N	%	N	%	N
Team managers	7	54	6	46	13
Project managers	1	33	2	66	3
Researchers	10	71	4	29	14
Total	18	60	12	40	30

The data indicate that women and men are equally balanced in the project, if we consider the senior members. Instead, in the category of researchers, there is a clear predominance of women, without any selection criteria beeing adopted for the benefit of women (as suggested by the OP, p. 114). This situation reflects the high level of expertise of young women and is in line with Eurostat data relating to the percentage rate of higher education among the population aged 30-34 years, recognized in 2010 by Eurostat[1] as shown in table below:

Tertiary educational attainment by sex, age group 30-34 (% of group)		
	ITALY	SLOVENIA
TOTAL	19,8	34,8
MALE	15,5	26,4
FEMALE	24,2	44

Both in Italy and in Slovenia younger women are more educated.

PERSPECTIVES

Actually, the most important perspective is not the achievement of the project objectives, which must be achieved in any case. The most important perspective is the achievement of the objectives in a shorter time than expected, thanks to a prudent selection of intermediate goals (which should be achievable) and the optimization of activities. By doing so, we understand that the planning of activities could free up time and human resources, which could in turn start identifying other elements for the innovation and consolidation of the network.
For this reason, the mix of administration and management and scientific-technological activities, which will fully affect the researchers, should provide them with the opportunity to develop the habit of planning work and forecasting results. This is precisely what defines a strategic approach.
Administration and management experiences are a typically strategic added value, which may attract new partners, new funding opportunities and thereby ensure the sustainability of the network and the applicability of this model in other areas.
This project contributes to balance the presence of women in the highly qualified labour market. If all female researchers, who have joined the network, will continue in their professional commitment, within 5 to 10 years after the end of the project they will have the qualifications and skills to meet leadership roles.

[1] http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&plugin=1&language=en&pcode=t2020_41

C) CONSOLIDATION AND EXTENSION OF THE NETWORK

Once fully developed, the network will trigger new activities included in Work Package no. 7:

ACTIVITY NO.1	Animation campaign aimed at including new members
ACTIVITY NO.2	New collaborations between industry, health professionals and academies
ACTIVITY NO.3	Programs for the integration of young researches into companies
ACTIVITY NO.4	Participation to tenders for the future support of the network
ACTIVITY NO.5	Spin-off/Start-up

With these five activities, the network will try different approaches to ensure its existence in conditions of full efficiency. The network aims to become a reference point for attracting financial, human and technological resources.

CONSCIOUSNESS

The biggest challenge is to cooperate closely with the biomedical industry. This is a double challenge, which involves: a) verification of the applicability and potential profitability of the basic knowledge generated within the network, b), verification of the (academic) basic research system's ability to intercept the innovation and competitiveness needs of industries and position itself as a reference that can offer scientific and technological solutions to health and sanitary needs.
This will not be a "deadly embrace", because from the activity plan we can expect the setting-up of (strategic) partnerships with other research institutes and universities, aimed at creating consortia to participate in public tenders that offer financial support to basic or applied research carried out at universities.
Within the network there is a strong awareness that knowledge base and study and research methodologies, and also strategies for the acquisition of financial resources, are the authentic socio-economic characteristics of university.

PERSPECTIVES

These future collaborations will allow the optimal use of the knowledge and skills acquired within the network. In the terminal phase of the project, the collaboration with companies will be of fundamental importance for achieving an operational critical mass, as the setting up of the network with 13 project partners has been in the beginning. Therefore, we will achieve the objective of the Operational Programme, i.e. the transfer of highly qualified, university-trained human resources to the industrial sector, which will foster innovation by leveraging on human capital.

CONCLUSIONS

In reviewing the arguments exposed, the primordial strategic element is constituted by the competences of the participants and not by their study or cultural affinities. It is the competences that enable people with different cultural backgrounds to listen to each other, not the sound of familiar words or concepts or languages. At the same time, it is the diversity of skills that made us identify a distant, ambitious and unifying (thus strategic) goal: transfer our knowledge to young researchers and enable them to work. This objective is the only thing that brings together people, whose daily life is impossible to share, due to the strong specialization of their respective knowledge. The project idea is broad, strongly supported and in accordance with the Operational Programme, and has withstood the test of time without specific funding.

In the implementation phase, it appears strategic that two or preferably more partners jointly identify common and 'reachable" goals and achieve them in a short time, as expected when genuine synergies are being implemented. In the implementation phase we should reverse the perspective: only achievable objectives can demonstrate the value of sharing skills and maintaining the functionality of the network.

The introduction of shared methods for the management of project activities, ranging from the identification of objectives, synergies and perspectives, to the planning of activities, is new to the projects carried out by universities. The management objective is to optimize the complementarity of skills and infrastructures, promote time-planning and freeing up time for future planning and innovations testing.

At the same time, by adopting new management and administrative skills the network will acquire essential operational competences to access additional sources of funding for future sustainability. These funds could be procured both through partnerships with companies and participation to public calls.

Finding financial resources is a strategic factor of cohesion for a partnership.