Enhancing the bilateral S&T Partnership with Ukraine

Deliverable Title	**D1.2 – Follow up and updating of several case studies of good cooperation practice in S&T - five top best practices**
Deliverable Lead:	ZSI – Centre for Social Innovation
Related Work-package:	WP1 – Information, dissemination and awareness raising
Related Task:	Task 1.1 – Information gathering on S&T and innovation activities in and with Ukraine
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Duration:	36 months

Abstract	This is the updated version of the deliverable 1.2 and it presents the 5 best practices identified in the S&T cooperation framework between the European Union and Ukraine as resulting from two surveys conducted in 2010 and 2011.

Project funded by the European Commission under the International Cooperation activity of the Capacities Programme of the 7th European Framework Programme for RTD (FP7).

Versioning and Contribution History

Version	Date	Modification reason	Modified by
v.01	15/04/2010	Linked document: Identification of 10 particular good cooperation practices as a result of an on-line survey among 800 EU-UKR projects	Désirée Pecarz, Katharina Handler (ZSI)
v.02	01/04– 31/05 2011	Linked Document: Survey among the 10 best practices to follow up cooperation	Désirée Pecarz - ZSI
v.03	24/06/2011	First version of Document	Désirée Pecarz - ZSI
v.04		Revision	
v.05	21/02/2011	Final Version	Klaus Schuch - ZSI

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1 SUMMARY

This deliverable summarises 5 best practices identified within the EU – Ukraine scientific and technological cooperation framework.

It updates and improves the previous deliverable version titled: "Identification and analysis of several case studies of good cooperation practice in S&T – the methodological approach", and it is moreover linked with the following other documents:

1. "*Ten particular good cooperation practices in EU-Ukraine S&T cooperation*" which were identified by means of a large survey on barriers and benefits of mutual cooperation in April 2010,
2. "*10 questions to identify the 5 best cooperation practices*" which is a questionnaire submitted to the previously mentioned 10 cases in the period April – May 2011, as well as on the
3. Replies to the *"10 questions! Questionnaire"* that were received.

Respondents were not as many as expected even if some reminders were sent and the survey was prolonged until end of May. However some important information derives from the analysis of data while 5 projects can be moreover considered as the 5 top best practices.

The top cases identified are the case studies 1, 3, 7[1], 10 and 6 according to the classification proposed in the document "*Ten particular good cooperation practices in EU-Ukraine S&T cooperation*". These cases show highest scores regarding to the actual or shortly expected impact of research collaborations on the internal organisational capacity and performances, present the highest number of scientific products, the highest scientific impact in terms of knowledge and network creation which is immediately followed by a higher industry – academia cooperation, an increased S&T reputation and image and a better understanding of key S&T areas. They moreover show highest probability to lead to additional impacts (also socio-economic) in the future. All these projects were not only able to continue their collaboration but also managed to attract additional funding in the range from 10.000 to 30.000€.

[1] Questionnaire on case study 7 was received after the deadline. Therfore, the comparative analytical results shown in this deliverable in sections 3.2 and 4.1 do not take into account this case study, which, however, is highlighted as good practice example in section 4.2.

2 INTRODUCTION TO THE DOCUMENT AND TO THE METHODOLOGICAL APPROACH

2.1 First D 1.2 Version: methodological survey approach and first results (Activity done in 2009 and 2010)

The *D 1.2 "Identification and analysis of several case studies of good cooperation practice in S&T – the methodological survey approach"*[2] was developed by end 2009 and summarizes the methodological approach followed to identify 10 cases of particular good cooperation practice in EU-Ukraine S&T cooperation. Four steps were envisaged:

- Firstly, to identify as many EU- Ukraine S&T cooperation initiatives as possible, comprising also the relevant contact details of the involved parties at both levels
- To conduct a survey on mutual benefits and hindering factors in EU- Ukraine S&T cooperation among the parties above described
- To analyse the survey results in order to identify 10 cases of particular good cooperation practice in EU- Ukraine S&T cooperation
- To describe such cases by means of a user-friendly format.

The deliverable finally contained the list of 426 EU- Ukraine S&T cooperation initiatives (FP6, FP7, STCU, COST, INTAS, and NATO) and involved actors to be contacted and the questionnaire elaborated for the on-line survey, as well as a template for describing each of the 10 case studies finally identified.

In line with the methodology, an on-line survey was launch on 15th September 2009 while 10 cases of particular good cooperation practice were finally selected and described in 2010 in the complementary document: *D 1.2 - Ten particular good cooperation practices in EU-Ukraine S&T cooperation (*Milestone 10).

2.2 Second D 1.2 Version: identification of 5 top best practices for promotion through the S&T Gate UKR.EU (Activity in 2011)

This second version of D 1.2 *"Follow up and updating of the several case studies of good cooperation practice in S&T – 5 top best practices"* was developed in the period February – June 2011 with the final scope to:

1. provide some additional evaluation concerning the follow up of the 10 good cooperation projects, and
2. identify the best 5 cases in terms of outcomes, impact, sustainability, and continuation and improvement of collaboration.

[2] This deliverable is closely connected also with the BILAT-UKR D 2.2: "Inventory of Good Cooperation Practice: list of relevant projects with contact details of the main European and Ukrainian involved partners".

All the actors involved in the 10 good cooperation practices were contacted and asked to answer a questionnaire (April – May 2011) in order to be further assessed in terms of impact and follow up of activities.

Based on the received replies, the five cases presented in chapter 4 were selected and briefly depicted. They will be shortly also promoted on-line through the S&T Gate UKR.EU - the portal dedicated to the identification and analysis of the S&T Potential of EU-Ukraine Cooperation (www.st-gateukr.eu/).

3 2011 SURVEY: 10 QUESTIONS FOR 5 TOP BEST CASES

3.1 The Questionnaire content

Ten questions were considered appropriate to investigate the follow up of the collaboration initiatives identified in 2010 through a qualitative and a quantitative data analysis.

The questionnaire was focused on any possible

- changes in organisational capabilities and performances,
- commercial opportunities generated by the R&D activity implemented during the project,
- current or expected outputs as a result of he project activity,
- scientific and socio-economic impacts,
- follow-up initiatives and attraction of new funding,
- implemented actions to foster sustainability of project results.

In parallel, the involved respondents were also asked to provide their view about any improvements achieved in respect of an ex-ante scenario as well as their personal opinion on the reason why their collaboration would be worth to be mentioned as one of the 5 best cases in terms of sustainable impact and development of scientific collaboration and/or networking.

Hereinafter all the 10 questions are listed to provide the full picture of the 2011 survey:

Q 1 – How would you classify the goals of your collaborative initiative? Please also rate the actual/expected changes in your organizational capabilities, performance, and behaviour as a result of your participation in the project.

Goals	**Actual or expected change in your organizational capabilities, performance or behaviour** **Minor 1 2 3 4 5 Major**	**Importance of European Collaboration** **Minor 1 2 3 4 5 Major**
Knowledge-oriented Goals (to improve the knowledge base of your organization)		
Exploitation-oriented Goals (to improve exploitation potential and commercial return)		
Network-oriented Goals (to improve networking abilities and establish new links)		

Strategic Management Goals (to improve strategic management of RTD resources)		
Other (please specify:……		

Q 2 – Considering the ex-ante scenario (i.e. the situation as before your collaboration started), can you briefly describe the improvements achieved thanks to your initiative? Please make reference also to the geographical dimension when answering

…… …….. (max 150 words)

Q 3 – Did your project generate any outcome in terms of commercial opportunity resulting from the R&D activity implemented under the funded project or also outside this specific project?

YES	
NO	
I do not know	
N.A	

If you answered YES, please specify (for example: a prototype, a business plan, a market validation, new IP, a new process, product or service, etc):

……

If you answered NO, please indicate whether any significant return is expected in future:

Negligible commercial return to date						Significant commercial return to date
Negligible commercial return expected in future						Significant commercial return expected in future

Q 4 – Please, provide actual data or estimate the following outputs. Leave blank when not relevant or no further outputs are expected.

Output	**Current number of outputs**	**Number of expected further outputs (in 3-10 years)**
Publications in limited distribution (e.g. conference papers, policy documents, etc)		
Publications in refereed journals		
Other publications for widespread distribution		
Outputs made available electronically (CD ROMs, reports via web, etc)		
Public presentations		
Patents application/granted		

Copyrights, trademarks, licences, etc.		
Resultant products, services or processes		
New tools or techniques		
Qualifications gained by personnel as a result of the project (PhDs, etc)		
Other, please specify:		

Q 5 – Please indicate whether any of the following scientific impacts occurred or are likely to occur as a result of your participation in the project. Leave blank if not relevant

Impacts	**Relevance of the impact to the project** **Minor 1 2 3 4 5 Major**	**Scale of actual achievements and impacts** **Minor 1 2 3 4 5 Major**	**Scale of expected impacts 3-10 Years after Project end** **Minor 1 2 3 4 5 Major**
Produced new knowledge			
Accelerated or broaden RTD			
Gain deeper understanding in core S&T areas			
Enhanced skills of RTD staff			
Re-orientation of organisation RTD's portfolio towards longer-term RTD			
Gained access to complementary sources of expertise, know how or technologies			
Formed new research partnerships and networks			
Improved cooperation with firms, or with universities/research institutions			
Gained follow-on entry into other programs, RTD or other business			

collaborations in the private sector			
Enhanced reputation and image of the organisation			
Gained opportunity to work in other organisations abroad			
Learned to work in new markets			
Developed/Improved products, services, processes, tools, etc.			
Other, please specify:			

Q 6 – Please indicate the relative scale of the following possible socio - economic impacts as a result of your participation in the project. Also indicate the likelihood of future impacts. Leave blank if not relevant, or when no further impacts are expected.

Impacts	**Scale of actual impacts** **Minor 1 2 3 4 5 Major**	**Likelihood of future impacts** **Minor 1 2 3 4 5 Major**
Entry into new markets or new geographical zones		
Increased Productivity		
Increased competitiveness		
Improved financial viability		
Cost general reduction		
Expand products/services range		
Improved innovation performance		
Establishment of standards		
Improved employment situation at local/national level		
Improved employment situation at regional/ EU level		
Improved economic development and growth at local /national level		
Improved economic		

development and growth at regional /EU level		
Improved inputs to policy formation		
Improved cohesion among EU		
Implementation of Community goals		
Other, please specify:		

Q 7– Was your project followed up by another initiative? Will it have a follow up?

	Yes
	No
	I don't know

If, yes, please specifiy which kind of follow up by using the following table (more than one answer allowed)

	Commercial
	Scientific
	Networking
	Other (please specify) .....

Q 8– Did the project attract funding other than the project budget? (Please consider funds received for activities that are complementary to those of the project and/or funding to be used after the end of the project)

	Yes
	No
	I don't know

If yes, please indicate what kind of funding and if possible indicate also the amount:

	Euros
Public funding	
Private funding	

Q 9– What crucial activities have you undertaken, either during the project lifespan or immediately after its end, to foster the sustainability of your project's results? As you know, sustainability should permit that project results can continue to deliver benefits to the target group, sector or system also after the public funding.

	Activity	**Briefly describe**
	Setting of clear criteria for sustainability (setting of a rational planned strategy for sustainability)	
	Promotion of new projects or other-than-EU-support opportunities between consortium partners	
	Lobbying own organisation to secure main resources	
	Monitoring and identification of alternative, also local sources, for funding the activities after project end	
	Formal involvement of target groups and end-users in project activities	
	Be attentive to dissemination practices to the right public. Base own communication plan on a detailed analysis	
	Try to get political support and support by authorities, at local, regional, national, EU levels	
	Integration in existing national/international networks and associations	
	Other, please specify:	

Q 10 – Finally, please can you briefly explain why we should consider your collaboration worth to be mentioned as one of the 5 best cases in terms of sustainable impact and development of scientific collaboration and/or networking?

……
…….. (max 150 words)

3.2 Respondent base

A total of 10 initiatives[3] corresponding to 20 involved leaders/main partner organisations from the EU or the Ukraine were contacted via e-mail and asked to participate in the 2011 survey on follow up and impact of their set-up mutual collaborations.
Although the survey was kept open for 2 months, and several reminders were sent, only 6 initiatives and 7 organisations sent their answers (respectively the 60% and the 35% of the total)[4]. The majority of respondents are moreover from the Ukrainian side. Only two European organisations sent indeed their contribution (29% out of all respondents).

Fig 1: Initiatives and organisations participating in the 2011 survey

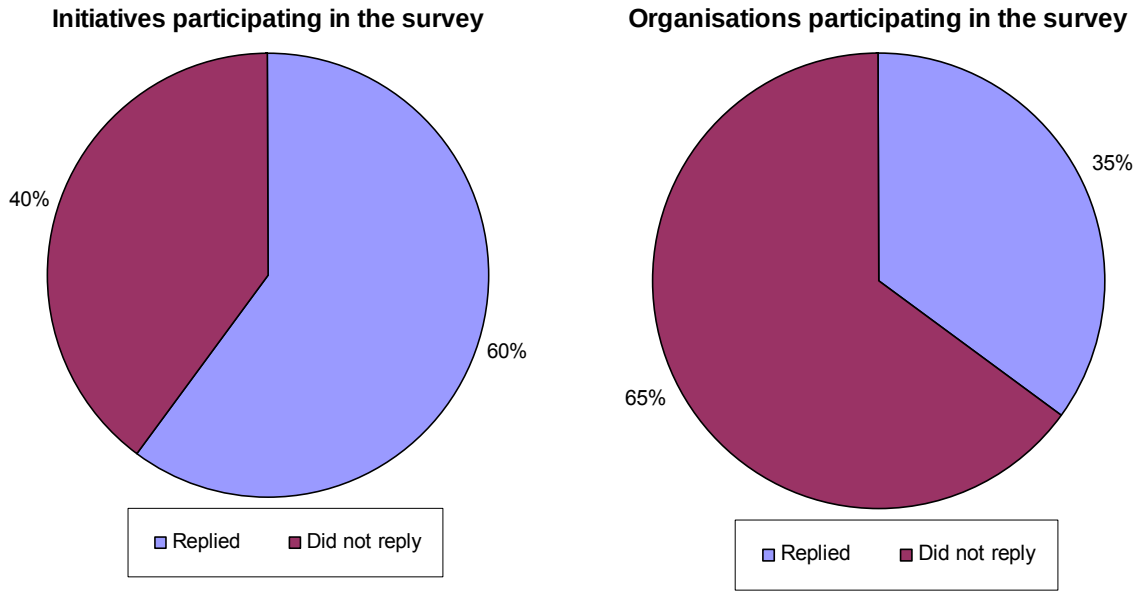
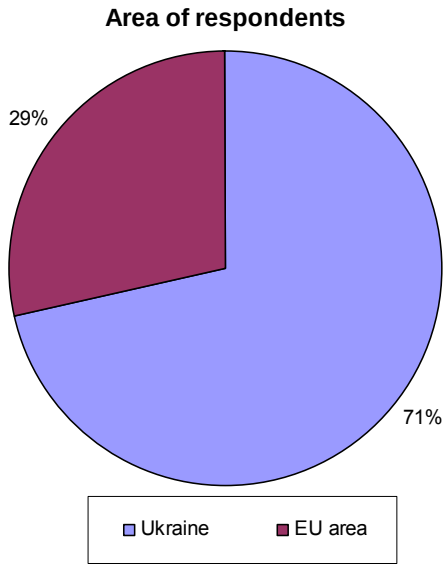


Fig 2: Geographical area of respondents



[3] As described in the document "Ten particular good cooperation practices in EU – Ukraine S&T"
[4] After the deadline another case study (no 7) responded, whose answers are not included in this section.

When it comes to the type of projects that responded to the questionnaire, 66% of all respondents were either from an INTAS or a STCU collaboration initiative. The rest of respondents are represented either by an FP7 or an FP6 project.
While analysing the organisations that contributed to the survey, about the 40% of them are research organisations within the NASU while 30% are either Universities or other types of not-for-profit research institutes.

Fig. 3: Type of project respondents

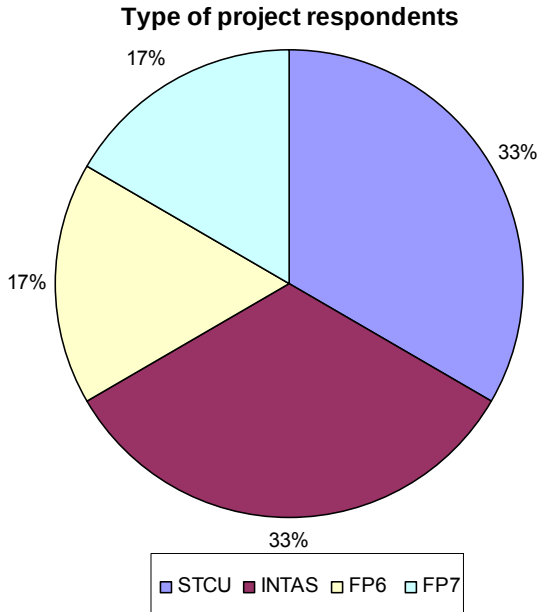
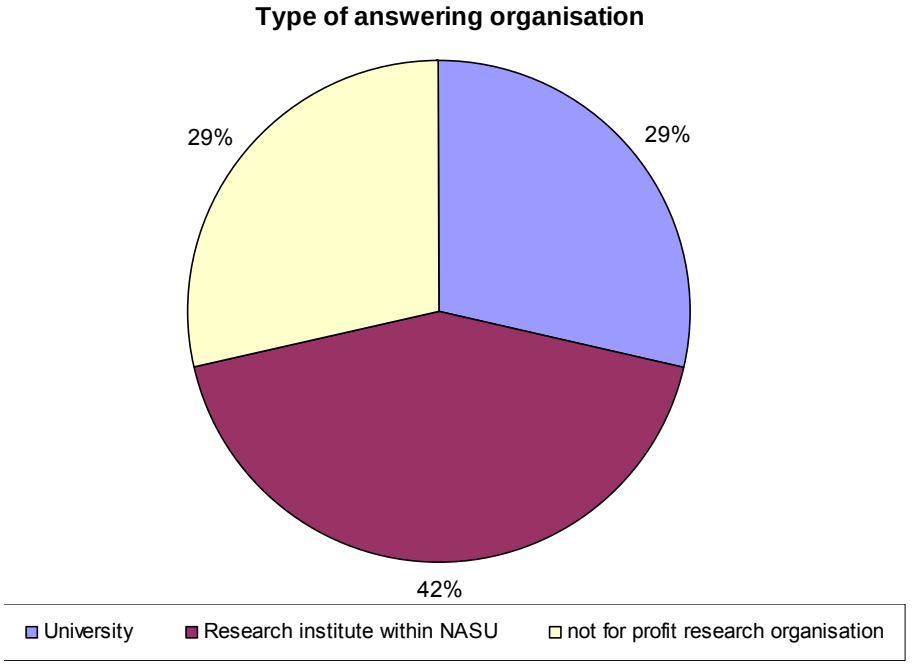


Fig.4: type of organisation respondents

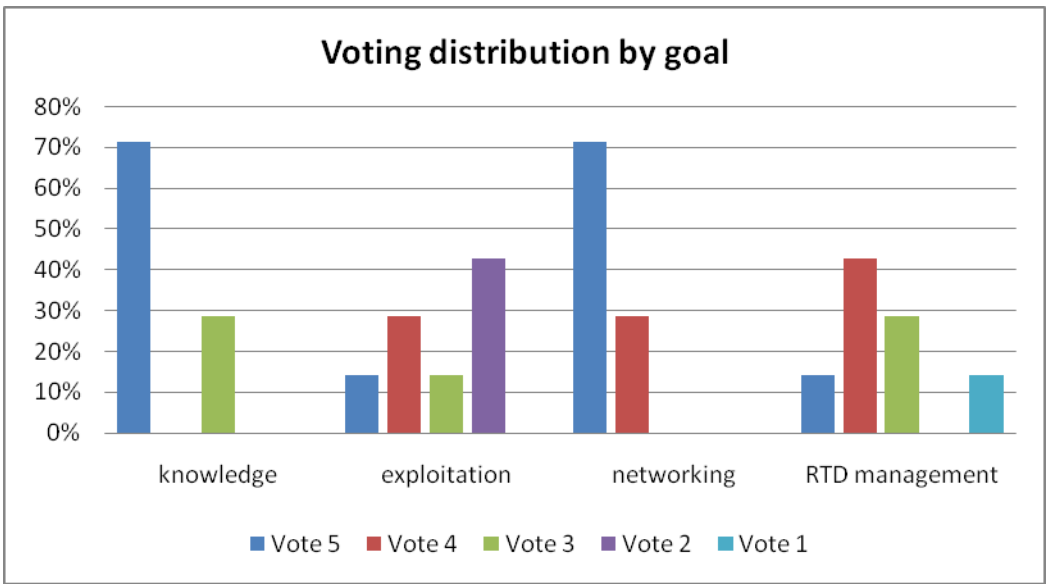


4 RESULTS OF SURVEY AND IDENTIFICATION OF THE 5 TOP BEST PRACTICES

4.1 Analysis of answers

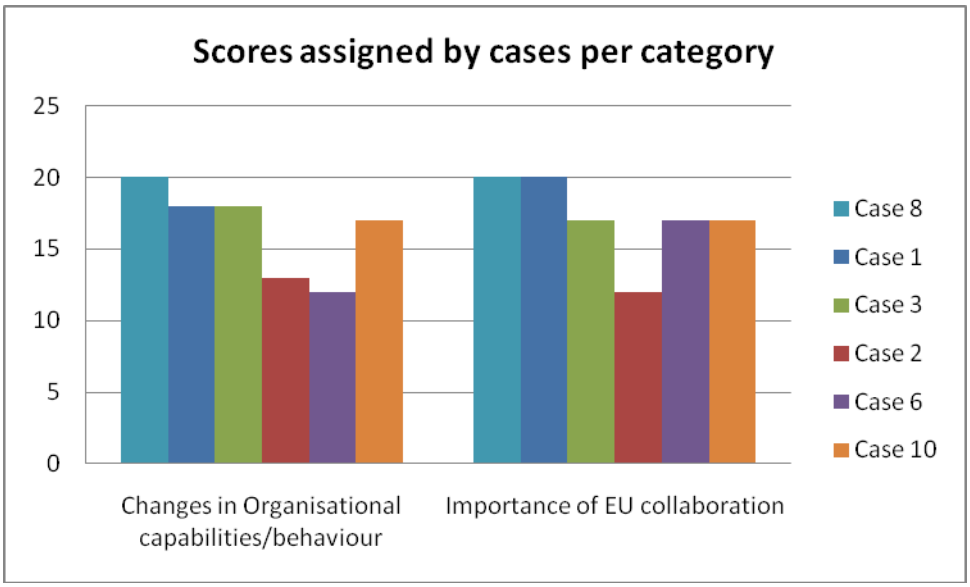
- **Classification of collaborations' goals and rating of changes in organizational capabilities, performance, and behaviour as result of EU-UKR collaboration.**
  - Respondents were asked to classify the goals of their collaboration by choosing among 4 different possibilities (namely improving: 1) organisation's knowledge, 2) exploitation potential and commercial return, 3) networking abilities and new links, and 4) strategic management of RTD resources) and by assigning a score from 1 (minor) to 5 (major). Four out of 7 organisations (71%) claimed as major goals the increase of own knowledge and networking capability. Nevertheless good expectation was reported also towards the enhancement of organisations' strategic management of RTD resource (43% of organisations).

Fig 4: Type of project respondents



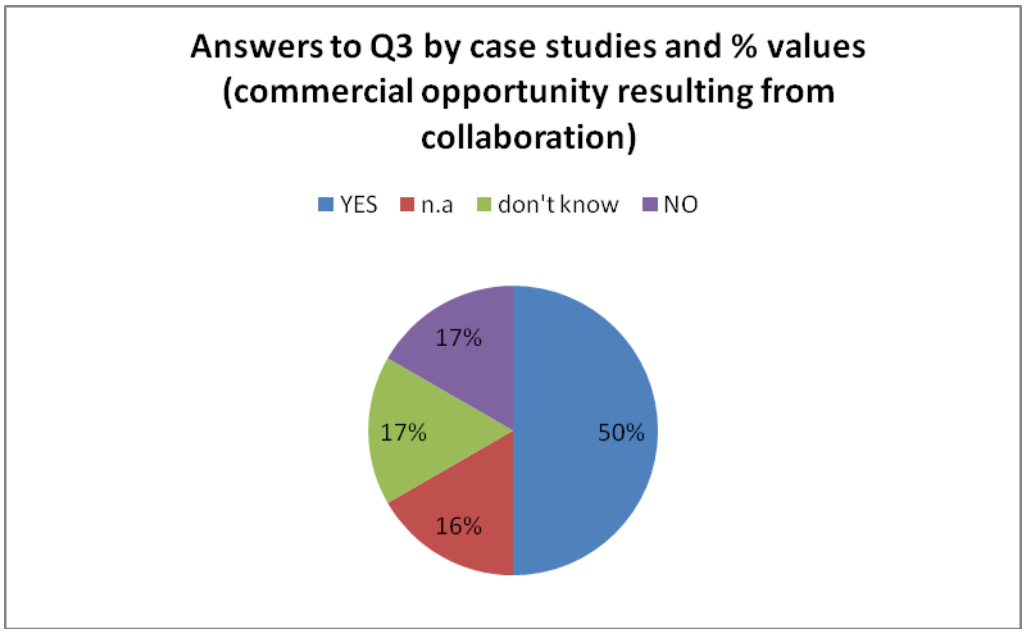
  - Coherently, major occurred or expected changes in the organisational capabilities were reported under the above mentioned goals, while the EU dimension of the collaboration was considered of high importance in their achievement. With reference to these 2 categories, the respondents could assign from 5 to 20 scores per each of them, for a total of 40 points representing the highest level of both changes and importance of EU collaboration reported. Generally, all the cooperation cases evaluated as moderate to high both the organisational changes and the link and importance of their EU collaboration (total score was comprised from 21 to 40). The Cases with highest scores are respectively Case 8 (FP6 project), 1 (STCU) and 3 (FP7) as listed in the Annex.

Fig 4: Assigned scores per categories and cooperation cases



- **Generation of any outcomes in terms of commercial opportunity.**
  - Respondents were asked whether their project generated any outcomes in terms of commercial opportunity and to provide some more explanation about. 50% of them expressed a positive answer and these were especially: Cases 1 (STCU), 3 (FP7), and 10 (INTAS). These 3 cases were able to develop new methods/processes improving the quality of existing products or their production costs or of new IT programs.

Fig 5: Generation of commercial opportunities resulting from collaboration



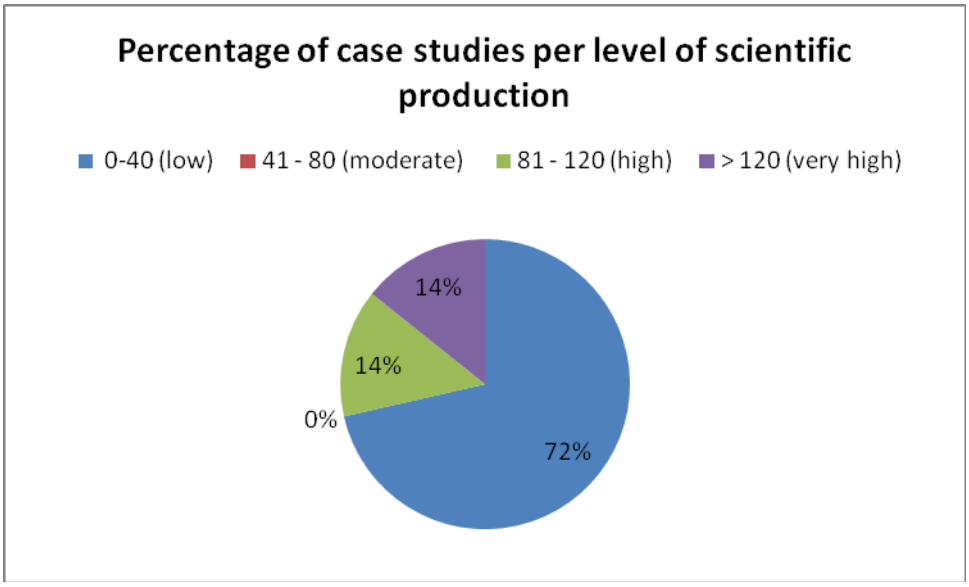
- **Generation of scientific outputs and scientific impacts.**

  - Ten categories of scientific outputs were listed and respondents were asked to provide actual data or future estimations about those outputs generated/expected as a consequence of the mutual collaboration. Some of the listed scientific outputs were for instance: publications in referred journals, copyrights, patents, qualifications gained by personnel participating in collaboration, etc.

    All cases have led to scientific outputs, but except Case 3 and Case 8 (which results to be the most successful with a total number of scientific outputs respectively of 267 and 93), all others show a low production in scientific terms. The lowest number of outputs was reported by Case 2 (18).

    Moreover only Cases 1, 3 and 8 expect also additional future outputs.

Fig 6: Generation of scientific outputs



  - Thirteen categories of scientific impacts were provided, and respondents were asked to choose out of them and to rank their choice from 1 to 5. Impacts related to new knowledge acquired, to a deeper S&T understanding in core areas, to the creation of new networks/partnerships as well as to the improvement to collaboration university/industry as well as to the possibility to make an international work experience were reported by 100% of organisations.

    Among the impacts showing the highest scores are those related to knowledge and network creation, which are immediately followed by high industry–academia cooperation, an increased S&T reputation and a better understanding of key S&T areas.

    Cases 1, 3 and 8 show an impact in each of the listed categories, followed by Case 10 showing 11 out of 13 impacts.

    Cases reporting the highest impact per category are respectively in order: Case 8, 3, 1 and 10. These are also the cases that report that the majority of impacts have already been achieved while expecting also a further impact improvement in the next 3 to 10 years.

Fig 7: Most relevant scientific impacts

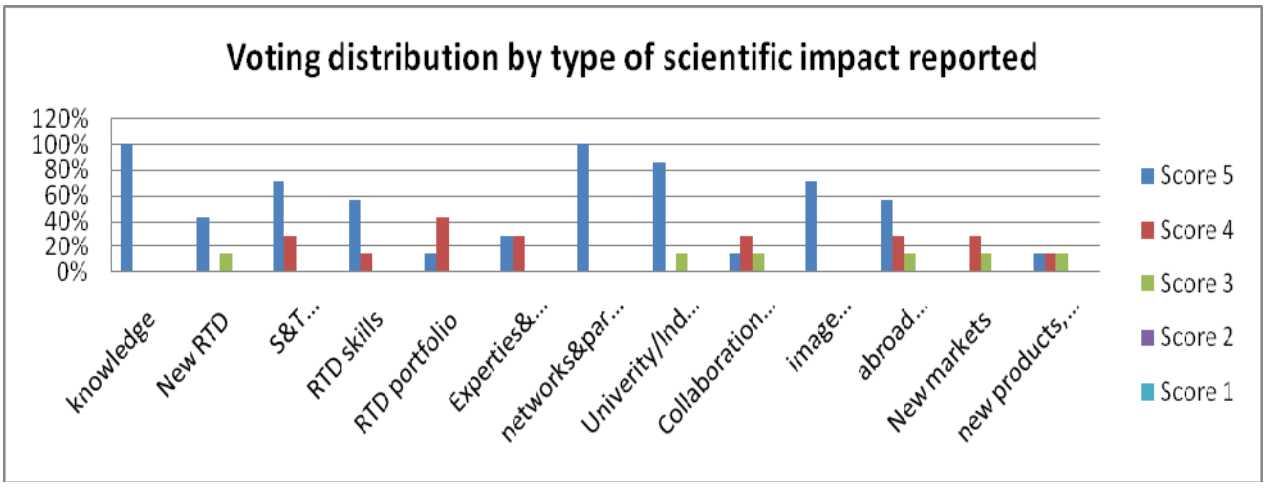
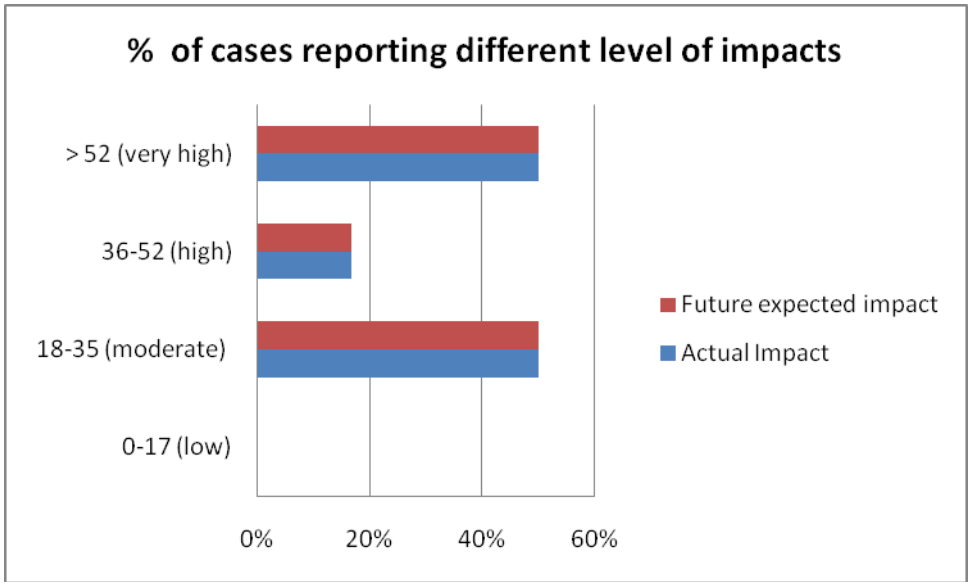


Fig 8: Scientific impacts per level and time frame

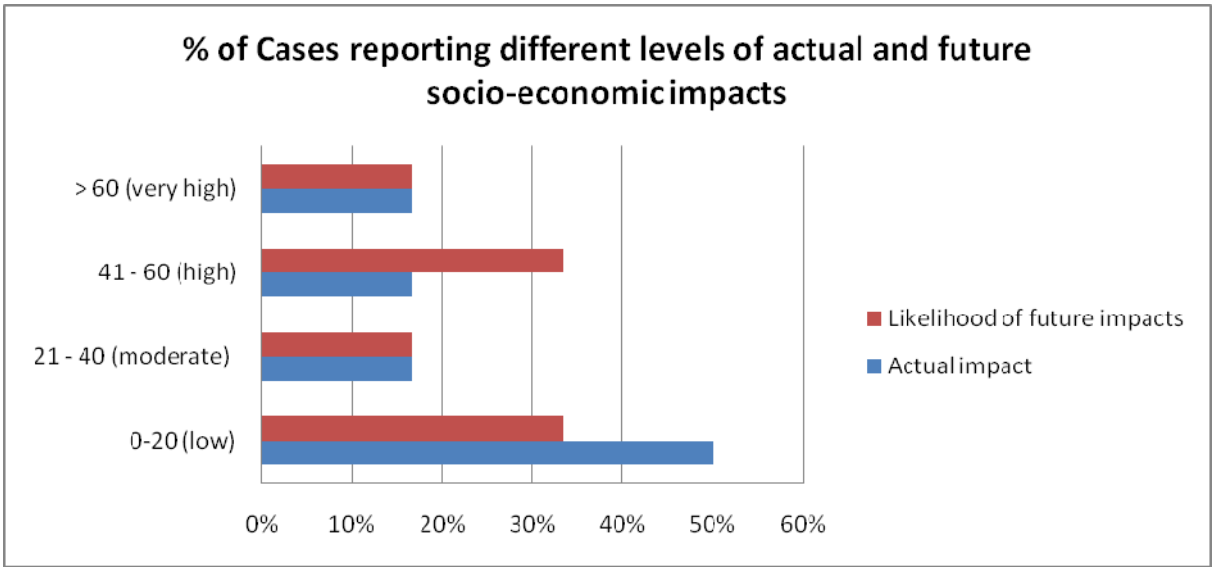


- **Generation of socio-economic impacts.**
  - Similarly to the scientific impact, also some possible socio economic impacts were put forward to respondents who could choose out of them the appropriate ones and provide a rating. Some examples of proposed impacts are: increase of productivity or competitiveness, improvement in innovation capability, establishment of standards, improved economic development at local, regional or national level, etc.

    None of the impacts shows a common acceptance by the side of all respondents. As far as the actual impacts are concerned, the impacts mostly shared by organisations are in order: implementation of Community goals, improved innovation performances, increased competitiveness. They are immediately followed by improved cohesion among EU as well as better financial viability.

Cases 1, 3 and 6 score highest as for the number of achieved socio-economic impacts. They moreover claim the highest probability to lead to additional impacts in the future. Also case no. 8 is pretty much confident to lead to relevant socio-economic impacts in the future.

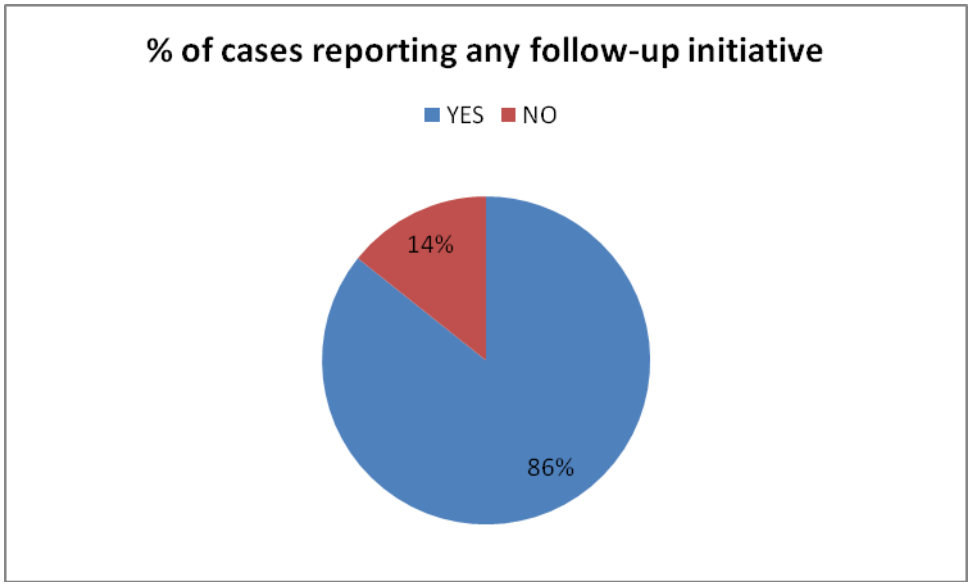
Fig 9: Generation of socio economic impacts



Follow-up and attraction of additional funding

- Respondents were asked to provide information on whether their collaboration had any follow up or not. They had to indicate also the type of further initiative started and whether they were able to attract additional funding other than the project budget. The following figures clearly show the responses obtained.

Fig 10: Generation of follow–up initiatives and type of follow -up



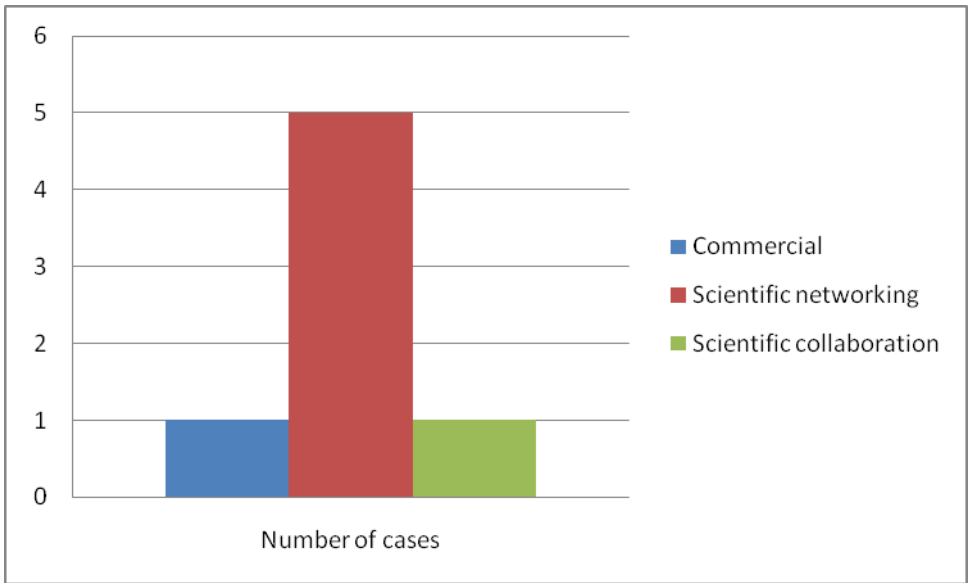
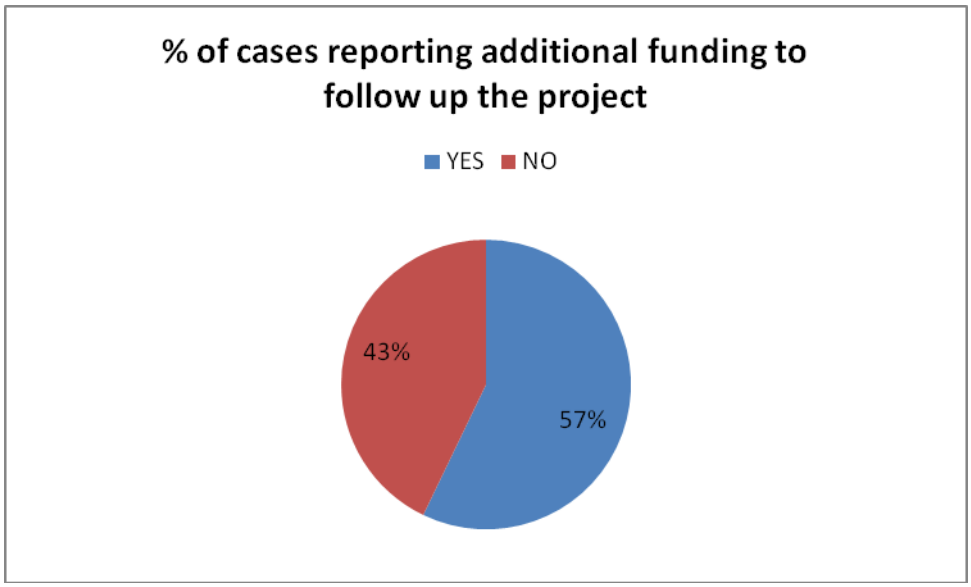


Fig 11: Funding attraction



Cases 1, 3, 6, 8 and 10 attracted funding from 10.000 to 30.000€.

Fostering sustainability

- In order to asses whether projects' results are able to continue to deliver benefits to the target group, sector or system also after the public funding, respondents were questioned about any activity (already implemented or shortly to be implemented) fostering sustainability. Respondents could choose among a list of commonly implemented sustainability actions as well as propose own ideas.

  Cases 1, 3 and 8 claimed to have implemented many actions fostering sustainability, as for instance: lobbying own organisations to secure resources, identification of alternative funding sources, involvement of target groups and end users in project activities, set up a clear dissemination strategy with clear target, attempt to get

political support as well as to enter existing networks and associations at local, national, international levels.

4.2 The FIVE top best practices

Based upon the survey results as mentioned in the previous chapter as well as on a more qualitative evaluation of few other questions included in the 2011 questionnaire, the 5 top best practices are presented hereinafter in alphabetical order, by using a short user-friendly format for further promotion on the S&T Gate UKR.EU - the portal dedicated to the identification and analysis of the S&T Potential of EU-Ukraine Cooperation (www.st-gateukr.eu/).

The 5 best top cases identified are the case studies 1, 3, 8, 10 and 6 according to the classification proposed in the document "Ten particular good cooperation practices in EU-Ukraine S&T cooperation". These cases show highest scores regarding to the actual or shortly expected impact of research collaborations on the internal organisational capacity and performances, present the highest number of scientific products, the highest scientific impact in terms of knowledge and network creation which is immediately followed by a higher industry – academia cooperation, an increased S&T reputation and image and a better understanding of key S&T areas. They moreover show highest probability to lead to additional impacts (also socio-economic) in the future. All these projects were not only able to continue their collaboration but also managed to attract additional funding in the range from 10.000 to 30.000€.

The FIVE TOP BEST PRACTICES
in EU-Ukraine S&T cooperation

Applying the GRID-technology for making complex calculations in the condensed matter physics and nanophysics

(STCU)

Project contribution to the S&T scenario and reason for being chosen among the 5 top best practices

The mutual cooperation was successful in scientific terms and turned out to be essential for achieving the project results as it improved quality and relevance of project outcomes which would not have been possible at such an extent in a national setting only. Main important impacts refer to the access to complementary knowledge/ specific material or special research infrastructure, Improvement of skills for working in international project consortia, establishing new partnerships for future international research cooperation as well as gaining in prestige and reputation but also insight into other scientific culture (and ways to organize research).

Although this initiative was not able to attract further funding for continuing research, some follow up is guaranteed in terms of scientific networking.

Key project details	
Project type	Collaborative research project
Research field	Nanosciences, Nanotechnologies, Materials and new Production Technologies
Project Coordinator	Ole K. Andersen

Ukrainian Partner	Max-Planck-Institute FKF - Germany oka@fkf.mpg.de Clemens Laubschat TU Dresden (University of Technology Dresden) - Germany laubschat@physik.tu-dresden.de Victor Antonov G.V. Kurdyumov Institute for Metal Physics - Kyiv, Ukraine Tel: 380(44)424-55-15 antonov@imp.kiev.ua
Project total value	- proportion of the project's budget carried out by Ukrainian partner: 21%-40% - volume of the entire project under scrutiny: 500.001- 1000.000€

The FIVE TOP BEST PRACTICES
in EU-Ukraine S&T cooperation

COMPOSITUM -Hybrid Nanocomposites and their applications

(FP7 - PEOPLE)

Project contribution to the S&T scenario and reasons for being chosen among the 5 top best practices

The main research objectives of this 4-years long joint project are

(i) to synthesise and characterise new hybrid composite and functionalised nanomaterials based on oxides, carbons, polymers, natural minerals and spent materials; (ii) to study their interaction with biological objects and environmental systems; (iii) to elucidate the role of interfacial phenomena in these systems; (iv) to study structure-properties relationship of nanocomposites in specific applications; (v) to evaluate performance of novel nanocomposites in biological media, environmental systems and specific industrial applications.

A large set of new nanomaterials (with commercial potential) was synthesized and characterized under this project. The project results were published in several dozens of joint papers in international journals and about 90 joint presentations were done at international conferences.

The NASU team has been developing contacts with the EC research teams in terms of reciprocal visits, joint publications and conference presentations for already 10-15 years. However, cooperation was strongly improved under the project with regard to both quantity and quality of achieved results, publications, conference presentations, development and research of novel materials, accessibility of researchers to equipment at host organisations, and familiarization of new methods. Moreover, many young scientists could improve their own skills thanks to long term grants at the Western team institutions.

This project is an excellent base for future cooperation between all teams involved in the project and several new proposals were prepared for future cooperative investigations. Several commercial companies take and will take part in this cooperation.

This project was listed as a success story during the Polish EU Council presidency by the Polish NCP: http://en.kpk.gov.pl/index.php?option=com_sobi2&sobi2Task=sobi2Details&catid=45&sobi2Id=97&Itemid=142&lang=en

Key project details	
Project type	Mobility oriented project, FP7 - PEOPLE
Research field	Nanosciences, Nanotechnologies, Materials and new Production Technologies

Project Coordinator	Coordinator Dr J. Skubiszewska-Zięba, Maria Curie-Skłodowska University (MCSU), Faculty of Chemistry *Address:* pl. Marii Curie Skłodowskiej 3 20-031 Lublin , Poland Telephone: +48 81 537 5678 Email: jskubisz@o2.pl http://www.umcs.lublin.pl
Ukrainian Partner	Mr. Vladimir M. Gun'ko Chuiko Institute of Surface Chemistry of National Academy of Sciences of Ukraine 17, General Naumov Street Kyiv 3164, Ukraine Tel:+44 38044 4229627 Fax:+44 38044 4243567 Email: vlad_gunko@ukr.net
Project total value	- project's budget carried out by Ukrainian partner: 41%- 60% - volume of the entire project under scrutiny: 200.001- 500.000 €

The FIVE TOP BEST PRACTICES
in EU-Ukraine S&T cooperation

DEVELOPMENT OF NEW DESIGN MEDICAL STENTS AND THEIR MANUFACTURING USING LASER RADIATION

(STCU project 3350)

Project contribution to the S&T scenario and reason for being chosen among the 5 top best practices

The project proposed a unified technological chain of stents manufacturing:
o Manufacturing of tubular workpiece with given properties
o Numerical calculations of stent's design
o Equipment and technological process of laser stent cutting;
o Final polishing of stents;
o Process control schemes.

The developed technology and equipment make it possible to manufacture medical implants out of metal work pieces with the outer diameter ranging from 1.2 to 6 mm and overall length up to 150 mm by means of direct laser cutting and (for the first time in the world practice) laser milling. The developed technology also allows creating "pockets" for drug's deposition on the stent's walls.

In general, the development of new stents designs and laser processes for their manufacturing is a very noble human challenge because cardio-vascular diseases are nowadays the 1st killer in the world, especially in Ukraine.

Before being funded and having the opportunity to cooperate with the Twent University (Netherlands), the Laser Technology Research Institute at the National Technical University of Ukraine could only boost a general experience in laser technology development linked with the medicine and medical instrumentation manufacturing.

Yet, thanks to this STCU project the Institute had the chance to widen applications and to develop micromachining and even laser processing at nanoscale. It could moreover upgrade their research at a higher geographical dimension, through participation in international laser conferences and congresses.

Key project details	
Project type	Collaborative research project

Research field	Nanosciences, Nanotechnologies, Materials and new Production Technologies
Project Coordinator	Johan Meijer University of Twent, Netherlands P.O. Box 217, Netherlands Tel: 01131(53)4892527 - E-mail: J.Meijer@ctw.utwente.nl
Ukrainian Partner	Volodymyr Kovalenko Laser Technology Research Institute at the National Technical University of Ukraine "Kyiv Polytechnical Institute", Kyiv, Ukraine Tel: 380(44)236-02-77 - E-mail: kovinvst@kpi.kiev.ua,
Project total value	- project budget carried out by Ukrainian partner: 81%- 100% - volume of the entire project under scrutiny: 0 - 200.000 €

The FIVE TOP BEST PRACTICES
in EU-Ukraine S&T cooperation

PESI - A Pan-European species-directories infrastructure

(FP7)

Project contribution to the S&T scenario and reason for being chosen among the 5 top best practices

PESI provides standardised and authoritative taxonomic information by integrating and securing Europe's taxonomically authoritative species name registers and nomenclators (name databases) that underpin the management of biodiversity in Europe.

PESI defines and coordinates strategies to enhance the quality and reliability of European biodiversity information by integrating the infrastructural components of four major community networks on taxonomic indexing into a joint work programme. This will result in functional knowledge networks of taxonomic experts and regional focal points, which will collaborate on the establishment of standardised and authoritative taxonomic (meta-) data. In addition PESI will coordinate the integration and synchronisation of the European taxonomic information systems into a joint e-infrastructure and the set up of a common user-interface disseminating the pan-European checklists and associated user-services results.

The organisation of national and regional focal point networks as projected not only assures the efficient access to local expertise, but is also important for the synergistic promotion of taxonomic standards throughout Europe, for instance to liaison with national governmental bodies on the implementation of European biodiversity legislations. In addition PESI will start with the geographic expansion of the European expertise networks to eventually cover the entire Palaearctic biogeographic region.

PESI supports international efforts on the development of a 'Global Names Architecture' by building a common intelligent name-matching device in consultation with the principal initiatives (GBIF, TDWG, EoL, SpeciesBase). PESI contributes the development of a unified cross-reference system and provides of high quality taxonomic standards. PESI will further involve the Europe-based nomenclatural services and link the planned joint European taxonomic e-infrastructures middle-layer to the global e-gateway.

Key project details

Research field	Environment (including Climate Change and sustainability research) cross-cutting area: co-ordination of research activities
Project Coordinator	UNIVERSITEIT VAN AMSTERDAM SPUI 21 Postbus 19268 1012WX AMSTERDAM - NETHERLANDS Dr Yde de Jong Phone: +31-(0)20-525 71 91 Fax: +31-(0)20-525 77 80 Email: Y.S.D.M.deJong@uva.nl http://www.yjong.net/

Ukrainian Partner	Dr. Juliana Kouwenberg Phone: +31-(0)20-525 77 82 Email: kouwenberg@uva.nl http://www.eu-nomen.eu/pesi/about-pesi A.O. KOVALEVSKIY INSTITUTE OF BIOLOGY OF SOUTHERN SEAS Headquarters 2 Nakhimov av., 99011 Sevastopol, Crimea 99011 - Ukraina Dr Vladymyrov, Vladimir Phone: +38-(0)503-25 10 35 Fax: +38-(0)692-55 78 13 Email: v.vladymyrov@ibss.org.ua ; v.vladymyrov@gmail.com non-profit research organisation with 251- 500 employees more than 20 years of professional experience in international cooperation projects STATE MUSEUM OF NATURAL HISTORY, NATIONAL ACADEMY OF SCIENCES OF UKRAINE Teatralna Str., 18, 79008, L'viv - Ukraina Rizun, Volodymyr Phone: +380-(0)322-72 89 17 Fax: +380-(0)322-72 89 17 Email: rizun@museum.lviv.net
Project total value	- 0%- 5% of the project's budget carried out by Ukrainian partner - volume of the entire project under scrutiny: 1.000.001- 3.000.000 €

The FIVE TOP BEST PRACTICES
in EU-Ukraine S&T cooperation

The Medicinal Leech (Hirudo spp.), Famous and Unknown: Taxonomy, Conservation, and Medical Applications

(INTAS)

Project contribution to the S&T scenario and reason for being chosen among the 5 top best practices

The project aimed at exploring the biology, phylogeny, and conservation of recently discovered and re-discovered species of the famous, yet poorly known medicinal leech.

Its objectives were:

(1) to analyse both phylogenetic relationships between the species of the genus Hirudo and phylogeographic patterns within the species;

(2) to elucidate specific ecological requirements and the geographical distribution of different Hirudo species;

(3) to find specific reproductive and developmental differences and to test the leeches for hybridisation;

(4) to identify proteins in the medicinal leech saliva, and explore the possibility of obtaining recombinant proteins by cloning;

(5) to propose a strategy for the conservation of the endangered species of the medicinal leech.

The project brought together a team composed by rather scattered labs and research groups studying medicinal leeches from various aspects.

The EU-Ukraine cooperation was very successful in scientific terms and was essential for achieving the project results and to ensuring good impacts vs. money spent. Furthermore the bilateral S&T cooperation EU - Ukraine gives a tremendous stimulus for the transition of the Ukrainian science to a level of international standards.

The cooperation with Ukrainian partners improved quality and relevance of project outcomes which would not have been possible at such an extent in a national setting only. The synergy generated by the collaboration helped fill large gaps in knowledge and improved the expertise in some areas by 100%,

All collaborating teams have significantly improved their international publication record and impact; moreover NIS teams significantly improved their equipment and expertise on new scientific methods.

Contacts and cooperation developed during the project will continue after the project has finished since other networks between EU and Ukraine were built due to the project.

Key project details	
Project type	Collaborative research project
Research field	Food, Agriculture and Fisheries, Biotechnology
Project Coordinator	University of Ljubljana - Biotechnical Faculty Jamnikarjeva, 101 SL-1000 Ljubljana - Slovenia Peter Trontelj Tel: 386 1 4233388 Fax: 386 1 2573390 Email: peter.trontelj@bf.uni-lj.si More information can be found at http://cordis.europa.eu/search/index.cfm?fuseaction=proj.document&PJ_RCN=9948659
Ukrainian Partner	Karazin Kharkiv State University Faculty of Biology, Department of Zoology and Animal Ecology Svoboda Square, 4 - 61077 Kharkiv - Ukraine Sergiy Utyevskiy Tel: 380 57 7075172 Fax: 380 057 7051248 Email: sutevsk@univer.kharkov.ua
Project total value	- 41%- 60% f the project's budget carried out by Ukrainian partner - volume of the entire project under scrutiny: 0- 200.000 €

5 CONCLUSIONS AND NEXT STEPS

In order to come up with the identification of 5 best practices within the EU – Ukraine scientific and technological cooperation framework, a short survey was conducted in 2011 among 10 collaboration research projects that already proved to be good cooperation practices.

The 5 best top cases show highest scores regarding to the actual or shortly expected impact of research collaborations on the internal organisational capacity and performances. Generally speaking these cases claim to have a high number of scientific products (Case study 3[5] reports 267 outputs among publications, patents, copyrights, presentations, etc) as well as to be able to exploit some of them also in commercial terms. Cases 1, 3 and 6 score highest as for the number of achieved socio-economic impacts. Moreover, they claim the highest probability to lead to additional impacts in the future. When it comes to the scientific impact for the participating organisations, the impacts showing the highest scores are related to knowledge and network creation which is immediately followed by a higher industry – academia

[5] As classified in the document "Ten particolar good cooperation practices in EU – Ukraine S&T cooperation" – For more information refer to the Annex.

cooperation, an increased S&T reputation and a better understanding of key S&T areas. The Case studies reporting the highest impact per category are respectively in order: Case 8, 3, 1 and 10. As far as the socio-economic impact is concerned, Cases 1, 3 and 6 score highest and claim the highest probability to lead to additional impacts in the future. Case studies 1, 3, 6, 8 and 10 were not only able to continue their collaboration but also managed to attract funding from 10.000 to 30.000€.

With reference to the general analysis of EU-S&T collaboration in terms of impact, follow up and actions implemented to foster sustainability of results, the situation is promising.

71% of all replying organisations claimed as major achievement of their collaboration the increase of own knowledge and networking capability, immediately followed by other achievements such as the enhancement of organisations' strategic management of RTD resource (43% of organisations). Organisations moreover reported they had also changes in their organisational capability and performance in correspondence to these objectives affected through the collaboration.

When asked about any possible arising commercial output, organisations replied positively in 50% of the cases as they were able to develop new methods/processes improving the quality of existing products or their production costs or even new IT programs.

All respondents claimed to have scientific outputs resulting from the collaboration. Generally speaking, however, the claimed scientific production was not very encouraging in absolute terms even if some organisations expect future improvements with this regard.

Benefits in terms of new S&T knowledge acquired, deeper understanding in core areas, creation of new networks/partnerships as well as improvement of collaboration between university/industry was reported by all organisations.

The funded projects led finally to some impacts and benefits also in socio-economic terms. Projects served mostly to put into action the Community goals, improve innovation performances, and increase competitiveness. These impacts are immediately followed by an improved cohesion among EU countries as well as by better financial viability.

So as to foster that project' results are able to continue to deliver benefits to the target group, sector or system also after the public funding, many projects carried out a set of appropriate follow-up initiatives. Thanks also to these initiatives, 86% of all projects were followed up by other commercial, networking or scientific collaborations, and 57% of them were able to attract additional funds for continuing their research activity.

The respondents of the identified 5 top best cases were contacted at the end of the project in order to obtain their permission for publication of the project fact sheets (as presented in chapter 4) on the S&T Gate UKR.EU - the portal dedicated to the identification and analysis of the S&T Potential of EU-Ukraine Cooperation (www.st-gateukr.eu/). It is expected that www.st-gateukr.eu/ will publish a selection of these fact sheets in 2012.

6 ANNEX

6.1 Ten particular good cooperation practices in EU – Ukraine S&T

Ten particular good cooperation practices in EU-Ukraine S&T cooperation

Linked Deliverable Title	**D 1.2 – Identification and analysis of "particular good cooperation practice in S&T"**
Deliverable Lead:	ZSI – Centre for Social Innovation
Related Work package:	WP1 – Information, dissemination and awareness raising
Related Task:	Task 1.1 – Information gathering on S&T and innovation activities in and with Ukraine
Author(s):	Désirée Pecarz, Katharina Handler (ZSI)
Dissemination level:	Public
Due submission date:	28/02/2010
Actual submission:	15/04/2010
Project Number	222712
Start date of Project:	01/09/2008

Preamble	An on-line survey was carried out in autumn 2009 and more than 800 European and Ukrainian organisations were invited to participate as being either coordinators or partners in a joint multilateral or bilateral project funded under the following programs: FP6, FP7, STCU, COST, INTAS or NATO. The survey has explored the mutual benefits as well as the hindering factors in EU-Ukraine science and technology (S&T) cooperation, and made available a comprehensive information base to be further analysed for identifying particular best practices. The survey was base on the questionnaire presented in the first version of the D 1.2. Out of all the received responses, a total of 10 case studies were eventually identified, and are hereinafter described as case studies depicting mutual benefits, barriers and the lessons learnt in the specific EU-Ukrainian S&T cooperation experience.

Case study 1 - "Development of new design medical stents and their manufacturing using laser radiation"

Project identification data	
Funding programme	STCU
Project brief description and objective	The project proposed a unified technological chain of stents manufacturing: o Manufacturing of tubular workpiece with given properties o Numerical calculations of stent's design o Equipment and technological process of laser stent cutting; o Final polishing of stents; o Process control schemes. The developed technology and equipment make it possible to manufacture medical implants out of metal work pieces with the outer diameter ranging from 1.2 to 6 mm and overall length up to 150 mm by means of direct laser cutting and (for the first time in the world practice) laser milling. The developed technology also allows to create "pockets" for drug's deposition oh the stent' s walls.
Project type	Collaborative research project
Research field	Nanosciences, Nanotechnologies, Materials and new Production Technologies Cross cutting area: Research for policy support
Project Coordinator (full contact details, brief description of the type of organisation and number of employee)	Johan Meijer University of Twent, Netherlands P.O. Box 217 Netherlands 01131(53)4892527 J.Meijer@ctw.utwente.nl
Ukrainian Partner (full contact details, brief description of the type of organisation and number of employee)	Volodymyr Kovalenko Laser Technology Research Institute at the National Technical University of Ukraine "Kyiv Polytechnical Institute" Kyiv, Ukraine 380(44)236-02-77 - kovinvst@ntu-kpi.kiev.ua, kovinvst@sovamua.com, anyakin@ukr.net higher education/university with 11- 50 employees More than 20 years of professional experience in international cooperation projects
Project total value	proportion of the project's budget carried out by Ukrainian partner: 81%- 100% volume of the entire project under scrutiny: 0- 200.000 €

Main strengths of this cooperation experience	
The project would have not been possible without international collaboration. Such cooperation is improving the understanding between our countries, promotes more close integration of Ukraine into Europian community and helps to keep the political and economic stability on the continent.	
Mutual Benefits	
Main beneficiary	The proportion between parts was balanced
Rating of personal learning gain	in terms of project management: very high in terms of scientific progress: very high
Rating of institutional learning gain	in terms of project management: very high in terms of scientific progress: very high

Other benefits	The EU-Ukraine cooperation was very successful in scientific terms and essential for achieving the project results. The cooperation with Ukraine-partners improved quality and relevance of project outcomes which would not have been possible at such an extent in a national setting only. Contacts and cooperation developed during the project will continue after the project has finished since the project was also used to build other networks between the EU and Ukraine
Barriers	
Personal factors	Some problems with the language skills were the only barrier mentioned.
Administrative factors	The following barriers were underlined: difficulty to understand the participation rules and procedures, complicated project submission procedures, Difficult co-financial obligation, unfavourable accounting and financial rules, Problematic tax regimes; Difficult to understand programmatic objectives of the call for proposals; Complex and time consuming reporting procedures: Quite
Capacity of involved institutions (Ukrainian partner)	It was mentioned that: financial gain is too negligible; adequate research infrastructures are lacking; skilled accounting professionals for meeting the requirement of multilateral/international projects are lacking as well as adequate professional assistance in project management. A further barrier is that international cooperation is not recognised as formal criteria for scientific promotion of individual scientists.
National situation	The picture is as follows: Ukraine is lacking industrial partners and companies for research cooperation and are thus not attractive as cooperation partner, there are difficulties with researcher's mobility exchange (legal rules and procedures), Lobbying skills of country at the level of EU administration (with other national governments) are rather low and there is low national openness to international collaboration. Further there appears a lack of financial support from government for international cooperation and underinvestment in science and technology in general.
Scientific excellence	On scientific basis there is mentioned a lack of networking and lack of appropriate research equipment in my country

Issues causing/ creating difficulties in cooperation
Minor problems linked to the legal, financial, information flow, visa permission, and custom aspects. Some difficulty is caused by: Cooperation with the EU/Ukraine research team due to the differences in management approaches/cultures and the lack of support from parent organization; complexities of decision making; dependency on deliverables of project partners; communication and exchange of information; reporting requirements and deadlines; substantial travel and other costs; intellectual property issues. Further the command of English is considered as problem for the majority of national participants.

Concrete impact of the project on teams, laboratory and institutes
• Opening the way for long-term and more ambitious projects. • Helping to further submit projects under the EU framework programme and/or other national and international programmes • General contribution to the scientific career of scientists • Contributing to the establishment of equipment and techniques matching international

standards:

- Helping to reach or consolidate the state of the art in research in our specific thematic field
- Bringing new ideas and ways of thinking
- Access to complementary knowledge/ specific material or special research infrastructure
- Insight into other scientific culture(s)
- Access to other markets
- Insight into other ways to organize research
- Improved skills for working in international project consortia
- Establishing new partnerships for future international research cooperation
- Presentation(s) at international conferences
- Application of international patent(s)
- Gain in prestige and reputation
- Higher impact factor of publication
- Production of new knowledge which cannot be achieved within the national framework only
- Development or improvements of standards and regulations
- Development of new/improved products, processes, services

Main lessons learnt
No answer

Case study 2 – "High Field multifrequency EPR and ODEPR study of the deep intrinsic defects in semi-insulating 6H and 4H SiC material"

Project identification data	
Funding programme	INTAS
Project brief description and objective	n.a
Project type	Collaborative research project
Research field	Nanosciences, Nanotechnologies, Materials and new Production Technologies cross-cutting area: co-ordination of research activities
Project Coordinator (full contact details, brief description of the type of organisation and number of employee)	Universität Paderborn - Physics Warburger Strasse - D-33098 Paderborn - Germany Siegmund Greulich-Weber Tel: 49 5251 602740 Fax: 49 5251 602740 Email: greulich-weber@physik.upb.de
Ukrainian Partner (full contact details, brief description of the type of organisation and number of employee)	Institute of Semiconductor Physics of NASU Department of semiconductor heterostructure Prospekt Nauki, 45 - 03028 Kyiv - Ukraine Ekaterina Kalabukhova Tel: 380 44 2360971 Fax: 380 44 2434893 Email: katia@i.kiev.ua Employees: 251- 500 persons 16 – 20 years of professional experience in international cooperation projects
Project total value	proportion of the project's budget carried out by Ukrainian partner: 21%- 40% volume of the entire project under scrutiny: 0- 200.000 €

Main strengths of this cooperation experience	
A national project design would never have produced the same good results	
Mutual Benefits	
Main beneficiary	The proportion was balanced
Rating of personal learning gain	in terms of project management: very high in terms of scientific progress: very high
Rating of institutional learning gain	in terms of project management: very high in terms of scientific progress: very high
Other benefits	The EU-Ukraine cooperation was very successful in scientific terms and was essential for achieving the project results. The cooperation with Ukraine-partners improved quality and relevance of project outcomes which would not have been possible at such an extent in a national setting only. Contacts and cooperation developed during the project will continue after the project has finished.
Barriers	
Personal factors	No personal factors were considered as important barrier.
Administrative factors	The following administrative barriers were considered: Shortage of proposal preparation time; Difficulty to understand programmatic objectives of the call for proposals; Difficulty to understand the participation rules and procedures; Complex and time consuming reporting

	procedures; Changes in project-objectives, deliverables, budget or partners difficult to resolve
Capacity of involved institutions (Ukrainian partner)	There are du barriers mentioned regarding to the capacity of the Ukrainian institution: There is a lack of competent scientific collaborators and international cooperation is not recognised as a formal criteria for scientific promotion of individual scientist.
National situation	At national level the main barriers are linked to: lack of industrial partners and companies for research cooperation; lack of financial support from government for international cooperation; lobbying skills of the country at the level of EU administration (with other national governments) are rather low; underinvestment in science and technology in general. Furthermore the national economy and technology do not benefit from international cooperation and there are difficulties with researcher's mobility exchange (legal rules and procedures.
Scientific excellence	The main barriers related to scientific excellence are the lack of critical mass of researchers for conducting internationally accepted research, the lack of appropriate research equipment in my country and the lack of networking.

Issues causing/ creating difficulties in cooperation
Minor financial problems. Dependency on deliverables of project partners and lack of support from parent organisation caused some difficulty.

Concrete impact of the project on teams, laboratory and institutes
Very important: • Opening the way for long-term and more ambitious projects • Helping to further submit projects under the EU framework programme and/or other national and international programmes • General contribution to the scientific career of scientists • Helping to reach or consolidate the state of the art in research in our specific thematic field • Bringing new ideas and ways of thinking • Access to complementary knowledge/ specific material or special research infrastructure • Higher impact factor of publication • Production of new knowledge which cannot be achieved within the national framework only: • Development or improvements of standards and regulations • Exchange of personnel • Insight into other scientific culture(s) • Access to other markets • Insight into other ways to organize research • Improved skills for working in international project consortia • Establishing new partnerships for future international research cooperation • Presentation(s) at international conferences • Gain in prestige and reputation Quite important: • Contributing to the establishment of equipment and techniques matching international standards • Development of new/improved products, processes, services

Main lessons learnt

It is always good to work in a big project in which many international teams are involed.

Case study 3 – "COMPOSITUM -Hybrid Nanocomposites and their applications"

Project identification data	
Funding programme	FP7 - PEOPLE
Project brief description and objective	The main research objectives of the 4-year joint programme are: (i) to synthesise and characterise new hybrid composite and functionalised nanomaterials based on oxides, carbons, polymers, natural minerals and spent materials; (ii) to study their interaction with biological objects and environmental systems; (iii) to elucidate the role of interfacial phenomena in these systems; (iv) to study structure-properties relationship of nanocomposites in specific applications; (v) to evaluate performance of novel nanocomposites in biological media, environmental systems and specific industrial applications.
Project type	Mobility oriented project
Research field	Nanosciences, Nanotechnologies, Materials and new Production Technologies Cross-cutting area: Development of research/innovation policies
Project Coordinator (full contact details, brief description of the type of organisation and number of employee)	Coordinator Dr J. Skubiszewska-Zięba, Maria Curie-Skłodowska University (MCSU), Lublin, Poland, represented by the Faculty of Chemistry team. MCSU was founded 60 years ago, and it has currently 428 professors and habilitated doctors, and 1286 academic teachers with doctor's and master's degrees who are engaged in both research and teaching activities. With 34,000 students it is the largest university in Eastern Poland. The University conducts teaching and research at 10 faculties, 30 institutes/departments and four Research Centres. The Faculty of Chemistry has the highest rating in scientific research granted by the State Committee for Scientific Research.
Ukrainian Partner (full contact details, brief description of the type of organisation and number of employee)	non-profit research organisation with 251- 500 persons 16 – 20 years of professional experience in international cooperation projects Regular Partner vlad_gunko@ukr.net
Project total value	project's budget carried out by Ukrainian partner: 41%- 60% volume of the entire project under scrutiny: 200.001- 500.000 €

Main strengths of this cooperation experience	
The project would have not been possible without international collaboration. Idea and experience exchange between colleagues form different countries are mutual benefits for all participants.	
Mutual Benefits	
Main beneficiary	The proportion was balanced
Rating of personal learning gain	in terms of project management: quite high in terms of scientific progress: very high
Rating of institutional learning gain	in terms of project management: quite high in terms of scientific progress: very high
Other benefits	The EU-Ukraine cooperation was very successful in scientific terms and was essential for achieving the project results.

	The cooperation with Ukraine-partners improved quality and relevance of project outcomes which would not have been possible at such an extent in a national setting only. Contacts and cooperation developed during the project will continue after the project has finished since the project was used to build other networks between the EU and Ukraine.
Barriers	
Personal factors	Only language problems were mentioned as personal barriers.
Administrative factors	Administrative factors occurred as follows: Difficulty to understand the participation rules and procedures; complicated project submission procedure; difficulty co-financial obligation for my institution; unfavourable accounting and financial rules; problematic tax regimes; complex and time consuming reporting procedures; payment delays by funding organisation.
Capacity of involved institutions	No problems concerning the capacity of the involved institutions were mentioned.
National situation	On national basis lobbying skills at the level of EU administration (with other national governments) are rather low. There is assessed a lack of financial support from government for international cooperation and underinvestment in science and technology in general.
Scientific excellence	No barriers on the basis of scientific excellence were mentioned.

Issues causing/ creating difficulties in cooperation
Minor problems are linked to a lack of information, IPR and related exploitation, communication with the coordinator and with partners. Some difficulty was caused by: Size of the consortium; complexities of decision making; substantial travel and other costs; overspending of other partners. any other problems: Too large portion (~50%) of industrial partners should be under preparation of large projects under 7FP, as well as under 6FP.

Concrete impact of the project on teams, laboratory and institutes
Very important • Opening the way for long-term and more ambitious projects • Helping to further submit projects under the EU framework programme and/or other national and international programmes • General contribution to the scientific career of scientists • Contributing to the establishment of equipment and techniques matching international standards • Helping to reach or consolidate the state of the art in research in our specific thematic field • Bringing new ideas and ways of thinking • Access to complementary knowledge/ specific material or special research infrastructure • Insight into other scientific culture(s) • Improved skills for working in international project consortia • Establishing new partnerships for future international research cooperation Presentation(s) at international conferences Quite important • Higher impact factor of publication

- Production of new knowledge which cannot be achieved within the national framework only
- Development or improvements of standards and regulations
- Development of new/improved products, processes, services
- Exchange of personnel
- Access to other markets
- Insight into other ways to organize research
- Application of international patent(s)
- Gain in prestige and reputation

Main lessons learnt
People in all countries are more close to anther than they differ, especially in the field of science; therefore, it is very easy to find a common language. The preparation of joint projects leads to diminution of residual barriers between scientists from different countries.

Case study 4 – “"Side population" cells in endocrine glands and transplantation them to animals with hormonal insufficiency”

Project identification data	
Funding programme	STCU
Project brief description and objective	n.a
Project type	Collaborative research project
Research field	Health (including biotechnology for health) Cross-cutting area: Co-ordination of research activities
Project Collaborateur	Colin Green Northwick Park Institute for Medical Research -U. K. + 44(20)88693265 - s.jenks@ic.ac.uk Barry Fuller Royal Free University College School of Medicine - U. K.
Ukrainian Partner	Evgen Legach Institute for Problems of Cryobiology and Cryomedicine Kharkiv, Ukraine 380(38-057)373-30-07 -evlegach@yahoo.com Research Institute with 51- 250 persons 6- 10 years of professional experience in international cooperation projects
Project total value	proportion of the project’s budget carried out: 41%- 60% [volume of the entire project under scrutiny: 0- 200.000 €

Main strengths of this cooperation experience	
A national project design would not have been possible at such an extent in the national framework only	
Mutual Benefits	
Main beneficiary	The project benefited mainly the Ukrainian partner
Rating of personal learning gain	Average in terms of project management and scientific progress.
Rating of institutional learning gain	Average in terms of project management and scientific progress.
Other benefits	The EU-Ukraine cooperation revealed very successful in scientific terms and for achieving the project results. The cooperation with Ukraine-partners improved quality and relevance of project outcomes which would not have been possible at such an extent in a national setting only. Contacts and cooperation developed during the project will continue after the project has finished since the project served for building other networks between the EU and Ukraine.
Barriers	
Personal factors	Very important resulted the following personal barriers: Personal interest of project partners towards international collaboration; Economic situation of project partners; Language skills
Administrative factors	Very important were considered the following aspects: Shortage of proposal preparation time; Difficult to understand programmatic objectives of the call for proposals; Difficult to understand the participation rules and procedures, and the

	complicated project submission procedure as well as the difficulty created by the co-financial obligation for Ukrainian institution and the complex and time consuming reporting procedures.
Capacity of involved institutions (Ukrainian partner)	Information and communication technology (ICT) capacities were considered not sufficient and this was the main barrier related to the capacities of the Ukrainian Institution. Further competent scientific collaborators as well as greater importance given to international cooperation would have been welcomed.
National situation	At national level the main barriers are linked to: difficulties with researcher's mobility exchange (legal rules and procedures), low overall international reputation and scientific "image" and lack of financial support from government for international cooperation
Scientific excellence	In the country the main barrier related to scientific excellence is the lack of appropriate research equipment

Issues causing/ creating difficulties in cooperation
nothing

Concrete impact of the project on teams, laboratory and institutes
• Opening the way for long-term and more ambitious projects • Helping to further submit projects under the EU framework programme and/or other national and international programmes • General contribution to the scientific career of scientists • Contributing to the establishment of equipment and techniques matching international standards • Helping to reach or consolidate the state of the art in research in our specific thematic field • Bringing new ideas and ways of thinking • Access to complementary knowledge/ specific material or special research infrastructure • Higher impact factor of publication • Production of new knowledge which cannot be achieved within the national framework only • Development or improvements of standards and regulations • Development of new/improved products, processes, services • Improved skills for working in international project consortia • Establishing new partnerships for future international research cooperation • Presentation(s) at international conferences • Application of international patent(s)

Main lessons learnt
We should work like a beaver to reach success

Case study 5 – „Development of Marine Oil Spills/slicks Satellite monitoring System elements targeting the Black/Caspian/Kara/Barents Seas“ (DEMOSSS)

Project identification data	
Funding programme	INTAS
Project brief description and objective	n.a.
Project type	Specific project for SMEs
Research field	Environment (including Climate Change and sustainability research) Cross-cutting area: Development of research/innovation policies
Project Coordinator	Nansen Environmental and Remote Sensing Center (NERSC) - Polar and Environmental Remote Sensing Department Thormøhlensgate, 47 - N-5006 Bergen - Norway Stein Sandven Tel: 47 55 20 58 00 Fax: 47 55 20 58 01 Email: Stein.Sandven@nersc.no
Ukrainian Partner	Marine Hydrophysical Institute, Remote Sensing Department Kapitanskaya, 2 - 99011 Sevastopol - Ukraine Vladimir Malinovsky Tel: 380 692 545065 Fax: 380 692 554253 Email: vladimir.malinovsky@gmail.com non-profit research organisation with more than 500 employees 11 – 15 years of professional experience in international cooperation
Project total value	proportion of the project's budget carried out: 21%- 40% volume of the entire project under scrutiny: 0- 200.000 €

Main strengths of this cooperation experience	
A national project design would never have produced the same good results	
Mutual Benefits	
Main beneficiary	Main beneficiary of the project were the EU partners.
Rating of personal learning gain	in terms of project management: very high in terms of scientific progress: very high
Rating of institutional learning gain	in terms of project management: very high in terms of scientific progress: very high
Other benefits	The EU-Ukraine cooperation was very successful in scientific terms and essential for achieving the project results. Contacts and cooperation developed during the project will continue after the project has finished since the project was also used to other networks between the EU and Ukraine.
Barriers	
Personal factors	Very important resulted the following personal barriers: Age distribution of the project consortium; Personal interest of project partners towards international collaboration Gender distribution of the project consortium was considered as quite important
Administrative factors	Very important resulted the following administrative barriers:

	Shortage of proposal preparation time; Difficult co-financial obligation for my institution; Problematic tax regimes; Payment delays by funding organisation. Complicated project submission procedures and unfavourable accounting and financial rules were considered quite important.
Capacity of involved institutions (Ukrainian partner)	Financial gain from international cooperation for the Ukrainian institution and for the Ukrainian research team is considered too negligible. A further problem is that occupation with other priorities within the Ukrainian institution (e.g. teaching activities) is taking scientists away from international cooperation.
National situation	At national level the main barriers are linked to: lacking of industrial partners and companies for research cooperation; national economy and technology, which do not benefit from international cooperation; lack of financial support from government for international cooperation; low Ukrainian lobbying skills at the level of EU administration (with other national governments). Furthermore the Ukraine is considered suffering from parochialism and having low national openness to international collaboration as well as suffering from underinvestment in science and technology in general.
Scientific excellence	In the country the main barriers related to scientific excellence are the lack of appropriate research equipment and the lack of networking

Issues causing/ creating difficulties in cooperation
There were stated big financial problems and minor IPR and related exploitation problems as well as minor problems linked to the lack of information. Substantial travel and other costs caused a lot of difficulty, overspending of other partners caused some difficulty

Concrete impact of the project on teams, laboratory and institutes
Very important: • Opening the way for long-term and more ambitious projects • Helping to further submit projects under the EU framework programme and/or other national and international programmes • General contribution to the scientific career of scientists • Helping to reach or consolidate the state of the art in research in our specific thematic field • Bringing new ideas and ways of thinking • Higher impact factor of publication • Production of new knowledge which cannot be achieved within the national framework only • Development of new/improved products, processes, services: • Exchange of personnel: • Insight into other scientific culture(s) • Insight into other ways to organize research • Improved skills for working in international project consortia • Establishing new partnerships for future international research cooperation Quite important: • Presentation(s) at international conferences • Application of international patent(s). • Gain in prestige and reputation • Development or improvements of standards and regulations • Access to complementary knowledge/ specific material or special research infrastructure

- Access to other markets

Main lessons learnt
n.a.

Case study 6 – Applying the GRID-technology for making complex calculations in the condensed matter physics and nanophysics

Project identification data	
Funding programme	STCU
Project brief description and objective	n.a.
Project type	Collaborative research project
Research field	Nanosciences, Nanotechnologies, Materials and new Production Technologies
Project Colaborateur	Ole K. Andersen Max-Planck-Institute FKF - Germany oka@fkf.mpg.de Clemens Laubschat TU Dresden (University of Technology Dresden) - Germany laubschat@physik.tu-dresden.de
Ukrainian Partner	Victor Antonov G.V. Kurdyumov Institute for Metal Physics - Kyiv, Ukraine 380(44)424-55-15 antonov@imp.kiev.ua non-profit research organisation with 251- 500 employees More than 20 years of professional experience in international cooperation projects
Project total value	proportion of the project's budget carried out by Ukrainian partner: 21%- 40% volume of the entire project under scrutiny: 500.001-1000.000€

Main strengths of this cooperation experience	
A national project design would never have produced the same good results.	
Mutual Benefits	
Main beneficiary	The proportion was balanced.
Rating of personal learning gain	in terms of project management: quite high in terms of scientific progress: very high
Rating of institutional learning gain	in terms of project management: quite high in terms of scientific progress: very high
Other benefits	The EU-Ukraine cooperation was very successful in scientific terms and was essential for achieving the project results. The cooperation with Ukraine-partners improved quality and relevance of project outcomes which would not have been possible at such an extent in a national setting only. Contacts and cooperation developed during the project will continue after the project has finished.
Barriers	
Personal factors	On the personal basis the age distribution and the gender distribution of the project consortium as well as personal interest of project partners towards international collaboration were considered as barriers.
Administrative factors	Administrative barriers were mentioned as follows: Difficulty to understand the participation rules and procedures; complicated project submission procedure; difficulty co-financial obligation for my institution; unfavourable

	accounting and financial rules; payment delays by funding organisation.
Capacity of involved institutions	The capacity of institutions seems to be a problematic issue since several barriers were considered by the Ukrainian partner: Institution does not provide adequate professional and advisory support to international cooperation; international cooperation is not of strategic interest to my institution; institution lacks skilled accounting professionals for meeting the requirements of multilateral/international projects and does not provide adequate professional assistance in project management; there is a lack of competent scientific collaborators at my institution; occupation with other priorities within my institution (e.g. teaching activities) is taking scientists away from international cooperation; financial gain for me and my research team is too negligible; lack of appropriate non-scientific facilities and of adequate research infrastructure; information and communication technology (ICT) capacities are not sufficient; international cooperation is not recognised as a formal criteria for scientific promotion of individual scientist.
National situation	On the national basis several barriers are mentioned as well: Lack of industrial partners and companies for research cooperation and are thus not attractive as cooperation partner; national economy and technology do not benefit from international cooperation; difficulties with researcher's mobility exchange (legal rules and procedures); lobbying skills of country at the level of EU administration (with other national governments) are rather low; country has low overall international reputation and scientific "image"; low national openness to international collaboration; lack of financial support from government for international cooperation); underinvestment in science and technology in general.
Scientific excellence	On the basis of scientific excellence there is mentioned a lack of internationally recognised scientists who can compete in the international research arena) I fully agree and a lack of critical mass of researchers for conducting internationally accepted research. Further there is considered a lack of appropriate research equipment as well as a lack of networking.

Issues causing/ creating difficulties in cooperation
Big problems in obtaining visa permissions to go abroad. Some difficulty was caused by: Cooperation with the EU/Ukraine research team; reporting requirements and deadlines; substantial travel and other costs; intellectual property issues; overspending of other partners.

Concrete impact of the project on teams, laboratory and institutes
Very important: • General contribution to the scientific career of scientists • Bringing new ideas and ways of thinking • Access to complementary knowledge/ specific material or special research infrastructure • Higher impact factor of publication • Production of new knowledge which cannot be achieved within the national framework only

- Development or improvements of standards and regulations
- Insight into other scientific culture(s)
- Insight into other ways to organize research
- Improved skills for working in international project consortia
- Establishing new partnerships for future international research cooperation
- Gain in prestige and reputation

Quite important:

- Opening the way for long-term and more ambitious projects
- Helping to further submit projects under the EU framework programme and/or other national and international programmes
- Contributing to the establishment of equipment and techniques matching international standards
- Helping to reach or consolidate the state of the art in research in our specific thematic field
- Development of new/improved products, processes, services
- Exchange of personnel
- Presentation(s) at international conferences
- Application of international patent(s)

Main lessons learnt
n.a.

Case study 7 - „PESI - A Pan-European species-directories infrastructure"

Project identification data	
Funding programme	FP7
Project brief description and objective	PESI provides standardised and authoritative taxonomic information by integrating and securing Europe's taxonomically authoritative species name registers and nomenclators (name databases) that underpin the management of biodiversity in Europe. PESI defines and coordinates strategies to enhance the quality and reliability of European biodiversity information by integrating the infrastructural components of four major community networks on taxonomic indexing into a joint work programme. This will result in functional knowledge networks of taxonomic experts and regional focal points, which will collaborate on the establishment of standardised and authoritative taxonomic (meta-) data. In addition PESI will coordinate the integration and synchronisation of the European taxonomic information systems into a joint e-infrastructure and the set up of a common user-interface disseminating the pan-European checklists and associated user-services results. The organisation of national and regional focal point networks as projected not only assures the efficient access to local expertise, but is also important for the synergistic promotion of taxonomic standards throughout Europe, for instance to liaison with national governmental bodies on the implementation of European biodiversity legislations. In addition PESI will start with the geographic expansion of the European expertise networks to eventually cover the entire Palaearctic biogeographic region. PESI supports international efforts on the development of a 'Global Names Architecture' by building a common intelligent name-matching device in consultation with the principal initiatives (GBIF, TDWG, EoL, SpeciesBase). PESI contributes the development of a unified cross-reference system and provides of high quality taxonomic standards. PESI will further involve the Europe-based nomenclatural services and link the planned joint European taxonomic e-infrastructures middle-layer to the global e-gateway.
Project type	Specific action to promote research infrastructures
Research field	Environment (including Climate Change and sustainability research) Cross cutting area: Co-ordination of research activities
Project Coordinator (full contact details, brief description of the type of organisation and number of employee)	UNIVERSITEIT VAN AMSTERDAM SPUI 21 Postbus 19268 1012WX AMSTERDAM - NETHERLANDS Dr de Jong, Yde Phone: +31-(0)20-525 71 91 Fax: +31-(0)20-525 77 80 Email: Y.S.D.M.deJong@uva.nl http://www.yjong.net/ dr. Kouwenberg, Juliana Phone: +31-(0)20-525 77 82 Email: kouwenberg@uva.nl
Ukrainian Partner (full contact details, brief description of the type of organisation and number of employee)	A.O. KOVALEVSKIY INSTITUTE OF BIOLOGY OF SOUTHERN SEAS Headquarters 2 Nakhimov av., 99011 Sevastopol, Crimea 99011 - Ukraina Dr Vladymyrov, Vladimir Phone: +38-(0)503-25 10 35 Fax: +38-(0)692-55 78 13

	Email: v.vladymyrov@ibss.org.ua ; v.vladymyrov@gmail.com non-profit research organisation with 251- 500 employees more than 20 years of professional experience in international cooperation projects STATE MUSEUM OF NATURAL HISTORY, NATIONAL ACADEMY OF SCIENCES OF UKRAINE Teatralna Str., 18, 79008, L'viv - Ukraina Rizun, Volodymyr Phone: +380-(0)322-72 89 17 Fax: +380-(0)322-72 89 17 Email: rizun@museum.lviv.net
Project total value	proportion of the project's budget carried out by Ukrainian partner: 0%- 5% volume of the entire project under scrutiny: 1000.001-3.000.000 €

Main strengths of this cooperation experience	
The project would have not been possible without international collaboration.	
Mutual Benefits	
Main beneficiary	The main beneficiaries were the Ukrainian partners
Rating of personal learning gain	in terms of project management: very high in terms of scientific progress: quite high
Rating of institutional learning gain	in terms of project management: very high in terms of scientific progress: quite high
Other benefits	The EU-Ukraine cooperation was very successful in scientific terms and was essential for achieving the project results. The cooperation with Ukraine-partners improved quality and relevance of project outcomes which would not have been possible at such an extent in a national setting only. Contacts and cooperation developed during the project will continue after the project has finished since the project was used to build other networks between the EU and Ukraine
Barriers	
Personal factors	The most important personal barriers were the language skills of the project partner. Further personal interests of project partners towards international collaboration and the economic situation of project partners towards international collaboration were mentioned as barriers.
Administrative factors	Unfavourable accounting and financial rules were considered as most important administrative barrier. Further barriers on administrative basis are as follows: Difficulty to understand programmatic objectives of the call for proposals; difficulty to understand the participation rules and procedures; difficult co-financial obligation for my institution; problematic tax regimes; payment delays by funding organisation
Capacity of involved institutions	International cooperation is not considered of strategic interest to institution and therefore the institution does not provide adequate professional and advisory support to international cooperation and international cooperation is not recognised as formal criteria for scientific promotion of individual scientist. Further the institution lacks skilled accounting professionals for meeting the requirements of multilateral/international projects.

National situation	On the national basis there are mentioned difficulties with researcher's mobility exchange (legal rules and procedures), low international reputation and scientific image due to low national openness to international collaboration and lack of financial support from government for international cooperation. Lobbying skills of the country at the level of EU administration (with other national governments) and investment in science and technology in general are rather low.
Scientific excellence	There is considered a lack of critical mass of researchers for conducting internationally accepted research.

Issues causing/ creating difficulties in cooperation
Big problems linked to legal aspects and obtaining visa permission to go abroad. Minor problems linked to finances and communication with the coordinator, Issues caused some difficulty: Size of the consortium; Complexities of decision making; Substantial travel and other costs; Lack of support from parent organization; Quality of outputs

Concrete impact of the project on teams, laboratory and institutes
Very important • Opening the way for long-term and more ambitious projects • Bringing new ideas and ways of thinking: Very important • Access to complementary knowledge/ specific material or special research infrastructure • Development or improvements of standards and regulations • Development of new/improved products, processes, services • Insight into other ways to organize research • Improved skills for working in international project consortia • Establishing new partnerships for future international research cooperation • Gain in prestige and reputation Quite important: • Helping to further submit projects under the EU framework programme and/or other national and international programmes • General contribution to the scientific career of scientists • Contributing to the establishment of equipment and techniques matching international standards • Helping to reach or consolidate the state of the art in research in our specific thematic field • Higher impact factor of publication • Production of new knowledge which cannot be achieved within the national framework only • Exchange of personnel • Insight into other scientific culture(s) • Access to other markets) • Presentation(s) at international conferences) • Application of international patent(s))

Main lessons learnt
n.a.

Case study 8 – SOFC600 "Demonstration of SOFC stack technology for operation at 600C"

Project identification data	
Funding programme	FP6
Project brief description and objective	The objective of this proposal for an Integrated Project is the development of stack components for the operation of SOFC systems at 600oC. Reducing the operating temperature to this level will have a great impact on lifetime and costs of SOFC system, thereby facilitating the commercial introduction of clean and efficient SOFC technology for combined heat and power generation in society, as well as auxiliary power for transport applications. The emphasis of the project is on the basic research and development of materials and processes for producing advanced stack components at low costs. The major components that the project works on are anodes, cathodes and electrolytes, as well as the integration of these components into cells. Furthermore, interconnect materials and contact materials will be evaluated and developed. For achieving the performance targets, nano-sized materials and electrode structures materials are considered essential and therefore the development of such materials is also addressed by the project. The significantly lower operating temperature compared to state-of-the-art SOFC technology enables the use of new sealing options for stacks, which will be developed in the project. Development will be aiming at components for hydrogen containing fuels (e.g. reformatted compositions) and for internal reforming SOFC fuelled with natural gas. The validation of the technology developed will be by operation of short stacks
Project type	consortium
Research field	Non-nuclear Energy cross-cutting area: co-ordination of research activities
Project Coordinator	ENERGIEONDERZOEK CENTRUM NEDERLAND UNIT FUEL CELL TECHNOLOGY Westerduinweg 3 PO Box 1 - NETHERLANDS RIETVELD, Bert (Mr) Tel: +31-224564452 Fax: +31-224564965
Ukrainian Partner (full contact details, brief description of the type of organisation and number of employee)	INSTITUTE FOR PROBLEMS OF MATERIALS SCIENCE - UKRANIAN ACADEMY OF SCIENCES www.ipms.kiev.ua Prof. Oleksandr Vasylyev - vasilev@ipms.kiev.ua non-profit research organisation with more than 500 employees More than 20 years experience in international cooperation projects
Project total value	0%- 5% of the project's budget carried out by Ukrainian partner volume of the entire project under scrutiny: 1000.001-3.000.000 €

Main strengths of this cooperation experience
A national project design would never have produced the same good results

Mutual Benefits	
Main beneficiary	All Europe
Rating of personal learning gain	in terms of project management: very high in terms of scientific progress: very high
Rating of institutional learning gain	in terms of project management: very high in terms of scientific progress: very high
Other benefits	The EU-Ukraine cooperation was very successful in scientific terms and was essential for achieving the project results. The cooperation with Ukraine-partners improved quality and relevance of the project outcomes which would not have been possible at such an extent in a national setting only. Contacts and cooperation developed during the project will continue after the project has finished since the project was used to build other networks between the EU and Ukraine. The bilateral S&T cooperation EU - Ukraine promotes the creation of new science & technology fields in Ukraine like, e.g., R&T unit on solid oxide fuel cells.
Barriers	
Personal factors	The economic situation of project partners towards international collaboration was the only barrier mentioned on personal basis.
Administrative factors	Administrative factors have not been considered as important barriers.
Capacity of involved institutions (Ukrainian partner)	Financial gain from international cooperation for the Ukrainian institution and for the Ukrainian research team is considered too negligible. Also the lack of appropriate non-scientific facilities and adequate research infrastructure was seen as barriers. The information and communication technology (ICT) capacities were considered not sufficient
National situation	At national level the main barriers are linked to: lacking of industrial partners and companies for research cooperation; national economy and technology, which do not benefit from international cooperation; lack of financial support from government for international cooperation; difficulties with researcher's mobility exchange (legal rules and procedures) Furthermore the Ukraine is considered suffering from parochialism and having low national openness to international collaboration.
Scientific excellence	In the country the main barriers related to scientific excellence are the lack of appropriate research equipment and the lack of networking.

Issues causing/ creating difficulties in cooperation
Big problems with finances, customs and in obtaining visa permissions to go abroad Cooperation with the EU/Ukraine research team caused some difficulty due to the differences in management approaches/. Furthermore the dependency on deliverables of project partners caused a lot of difficulty as well as substantial travel and other costs, lack of support from parent organization and overspending of other partners. Some difficulty was causes by Intellectual property issues A main other problem was a great lack of funding. The exchange by samples must be simplified and organized in Ukraine like in EU countries.

Concrete impact of the project on teams, laboratory and institutes
• Opening the way for long-term and more ambitious projects • Helping to further submit projects under the EU framework programme and/or other national and international programmes • General contribution to the scientific career of scientists • Contributing to the establishment of equipment and techniques matching international standards • Helping to reach or consolidate the state of the art in research in our specific thematic field • Bringing new ideas and ways of thinking • Access to complementary knowledge/ specific material or special research infrastructure • Higher impact factor of publication • Production of new knowledge which cannot be achieved within the national framework only • Development or improvements of standards and regulations • Development of new/improved products, processes, services • Exchange of personnel • Insight into other scientific culture(s) • Access to other markets • Insight into other ways to organize research • Improved skills for working in international project consortia • Establishing new partnerships for future international research cooperation • Presentation(s) at international conferences • Application of international patent(s) • Gain in prestige and reputation

Main lessons learnt
n.a.

Case study 9 – Design and manufacture of heat pipes on the bases of metal-fiber capillary structures with improved thermophysical characteristics for temperature control systems of the prospective space vehicles.

Project identification data	
Funding programme	INTAS
Project brief description and objective	n.a.
Project type	Collaborative research project
Research field	Nanosciences, Nanotechnologies, Materials and new Production Technologies Cross-cutting area: co-ordination of research activities
Project Coordinator	Université Libre de Bruxelles Microgravity Research Center Avenue F.D. Roosevelt, 50 B-1050 Brussels - Belgium Jean-Claude Legros Tel: 32 2 6503141 Fax: 32 2 6503126 Email: jclegros@ulb.ac.be
Ukrainian Partner	I.N. Frantsevich Institute for Problems of Materials Science of the National Academy of Siences of U Department of Powder Metallurgy Krzhyzhanovsky, 3 03680 Kyiv - Ukraine Anatoliy Kostornov Tel: 380 44 4240427 Fax: 380 44 4242131 Email: agkost@ipms.kiev.ua
Project total value	volume of the entire project under scrutiny: More than 3.000.000 €

Main strengths of this cooperation experience	
A national project design would never have produced the same good results	
Mutual Benefits	
Main beneficiary	The Ukrainian partner(s)
Rating of personal learning gain	in terms of project management: quite high in terms of scientific progress: very high
Rating of institutional learning gain	in terms of project management: quite high in terms of scientific progress: very high
Other benefits	The EU-Ukraine cooperation was very successful in scientific terms and was essential for achieving the project results. The cooperation with Ukraine-partners improved quality and relevance of project outcomes which would not have been possible at such an extent in a national setting only. Contacts and cooperation developed during the project will continue after the project has finished since new networks between the EU and Ukraine were built.
Barriers	
Personal factors	Language skills of project partners were considered as not very important barrier. All other personal factors were not important at all.

Administrative factors	No barriers linked to administrative factors were mentioned.
Capacity of involved institutions	No barriers linked to the capacity of involved institutions were mentioned.
National situation	No barriers linked to the national situation were mentioned.
Scientific excellence	No barriers linked to scientific excellence were mentioned.

Issues causing/ creating difficulties in cooperation
Minor problem concerning language barriers and communication problems with partners. Communication and exchange of information caused some difficulty

Concrete impact of the project on teams, laboratory and institutes
Very important: • Opening the way for long-term and more ambitious projects • Helping to further submit projects under the EU framework programme and/or other national and international programmes • General contribution to the scientific career of scientists • Contributing to the establishment of equipment and techniques matching international standards • Helping to reach or consolidate the state of the art in research in our specific thematic field • Bringing new ideas and ways of thinking • Access to complementary knowledge/ specific material or special research infrastructure • Higher impact factor of publication • Production of new knowledge which cannot be achieved within the national framework only • Development or improvements of standards and regulations • Development of new/improved products, processes, services • Exchange of personnel • Insight into other scientific culture(s) • Access to other markets • Insight into other ways to organize research • Improved skills for working in international project consortia • Establishing new partnerships for future international research cooperation • Gain in prestige and reputation Quite important: • Presentation(s) at international conferences • Application of international patent(s)

Main lessons learnt
The experience within the project was considered very well and was leading to more grant applications.

Case study 10 – The Medicinal Leech (Hirudo spp.), Famous and Unknown: Taxonomy, Conservation, and Medical Applications

Project identification data	
Funding programme	INTAS
Project brief description and objective	n.a.
Project type	Collaborative research project
Research field	Food, Agriculture and Fisheries, Biotechnology
Project Coordinator	University of Ljubljana - Biotechnical Faculty Jamnikarjeva, 101 SL-1000 Ljubljana - Slovenia Peter Trontelj Tel: 386 1 4233388 Fax: 386 1 2573390 Email: peter.trontelj@bf.uni-lj.si
Ukrainian Partner (full contact details, brief description of the type of organisation and number of employee)	Karazin Kharkiv State University Faculty of Biology, Department of Zoology and Animal Ecology Svoboda Square, 4 - 61077 Kharkiv - Ukraine Sergiy Utyevskiy Tel: 380 57 7075172 Fax: 380 057 7051248 Email: sutevsk@univer.kharkov.ua higher education/university with more than 500 employees 6-10 years of professional experience in international cooperation projects
Project total value	41%- 60% f the project's budget carried out by Ukrainian partner volume of the entire project under scrutiny: 0- 200.000 €

Main strengths of this cooperation experience	
Current FP7 calls are difficult to understand in terms of rules and application procedure. FP7 does not appear targeted at the cooperation with East European countries. Often EU partners are not interested in reading multipage information packages. In my opinion, INTAS was the best institution to create favourable conditions for EU-Ukraine partnership. The experience and approaches of INTAS should be employed in the current FP7 practices	
Mutual Benefits	
Main beneficiary	The Ukrainian partner(s)
Rating of personal learning gain	in terms of project management: very high in terms of scientific progress: very high
Rating of institutional learning gain	in terms of project management: very high in terms of scientific progress: very high
Other benefits	The EU-Ukraine cooperation was very successful in scientific terms and was essential for achieving the project results. The cooperation with Ukraine-partners improved quality and relevance of project outcomes which would not have been possible at such an extent in a national setting only Contacts and cooperation developed during the project will continue after the project has finished since other networks between EU and Ukraine were built due to the project. Furthermore the bilateral S&T cooperation EU - Ukraine gives a tremendous stimulus for the transition of the Ukrainian science to a level of international standards

Barriers	
Personal factors	No significant barriers linked to the personal sphere of parties were mentioned
Administrative factors	Payment delays by funding organisation were considered as quite important barrier.
Capacity of involved institutions	The main institutional barriers were linked to not providing adequate professional and advisory support to international cooperation as well as adequate professional assistance in project management and to the lack of skilled accounting professionals for meeting the requirements of multilateral/international projects: Further institutional barriers were: International cooperation is not of strategic interest to institution; Occupation with other priorities within my institution (e.g. teaching activities) is taking scientists away from international cooperation; Financial gain from international cooperation for my institution is too negligible; Lack of appropriate non-scientific facilities; Lack of adequate research infrastructure; Information and communication technology (ICT) capacities are not sufficient; International cooperation is not recognised as a formal criteria for scientific promotion of individual scientist
National situation	At national level the main barrier is linked to difficulties with researcher's mobility exchange (legal rules and procedures). Further barriers are: Lobbying skills of the country at the level of EU administration (with other national governments) are considered rather low; suffering from parochialism - low national openness to international collaboration; Lack of financial support from government for international cooperation; Underinvestment in science and technology in general
Scientific excellence	In the country the main barrier related to scientific excellence is the lack of appropriate research equipment.

Issues causing/ creating difficulties in cooperation
Minor problems linked to finances and to obtaining visa permissions to go abroad Substantial travel and other costs caused some difficulty

Concrete impact of the project on teams, laboratory and institutes
Very important: • Helping to further submit projects under the EU framework programme and/or other national and international programmes • General contribution to the scientific career of scientistsContributing to the establishment of equipment and techniques matching international standards • Helping to reach or consolidate the state of the art in research in our specific thematic field • Bringing new ideas and ways of thinking • Higher impact factor of publication • Production of new knowledge which cannot be achieved within the national framework only • Exchange of personnel • Insight into other scientific culture(s) • Insight into other ways to organize research • Improved skills for working in international project consortia

- Establishing new partnerships for future international research cooperation:
- Presentation(s) at international conferences

Quite important:

- Opening the way for long-term and more ambitious projects
- Access to complementary knowledge/ specific material or special research infrastructure
- Development or improvements of standards and regulations
- Development of new/improved products, processes, services
- Access to other markets
- Gain in prestige and reputation

Main lessons learnt
The main lessons learnt are effective methods of research management and preparing manuscripts for international peer-reviewed journals.