PROJECT FABLAB

LOGICAL FRAMEWORK MATRIX – LFM

Wider Objective: *What is the overall broader objective, to which the project will contribute?* • To develop environment that stimulates engineering creativitity, entrepreneuiral activities & fosters youth employability via Uni -business-industry networking on fablab platforms	***Indicators of progress:*** *What are the key indicators related to the wider objective?* • innovation and entrepreneural support activities encrease; • developed fablab infrastructure; • developed academia-business network	***How indicators will be measured:*** *What are the sources of information on these indicators?* • report on number of campanies involved; • fablab network web-portal; • report on number of people involved • number of MoUs signed	
Specific Project Objective/s: *What are the specific objectives, which the project shall achieve?* • To establish 5 PC Uni fablabs; • To develop teaching methodology& courses & upgrade PC HEIs curricula • To develop Uni -business-industry network infrastructure for youth innovation entrepreneurship support	**Indicators of progress:** *What are the quantitative and qualitative indicators showing whether and to what extent the project's specific objectives are achieved?* • 5 fablabs established in PCs; • 5 fablab courses+eLearning materials • 2 test trainings for students&LLL; • engg curricula modernization; • EU&PC+business, industry network	**How indicators will be measured:** *What are the sources of information that exist and can be collected? What are the methods required to get this information?* • HEI documentation; • 5 printed training packages, • open access data baseof eLearning tools; • reports/feedbacks;	**Assumptions & risks:** *What are the factors and conditions not under the direct control of the project, which are necessary to achieve these objectives? What risks have to be considered?* • opennes of universites for innovations and restructuring; • teach./stud./LLL long for creative learning/teaching tools; • uni, buss., indust.netwrk. interest
Outputs (tangible) and Outcomes (intangible): • *Please provide the list of concrete DELIVERABLES - outputs/outcomes (**grouped in Workpackages**), leading to the specific objective/s.:* WP1:1.1.EU&PCs fablab experience analys-d; 1.2PC adm. staff train. by EU; 1.3 proj. web-portal launch.; WP2:2.1 PC partner network created; 2.2. 5 fablabs created; WP3:3.1PC teach. staff train. by EU;3.2 train. packgs devel.;3.3Stud./LLL test train.; 3.4 Engg curri-cula modernised; P4:4.1 QP devel.; 4.2 int&ext evaluat.; WP5: 5.1 D&S strateg. devel.; 5.2 D&S activities; 5.5 EU&PC+business,indust. network; WP6: 6.1 proj. coord.&oper. mngt; 6.2 proj. financial mngt; 6.3 fablab mngt.	**Indicators of progress:** *What are the indicators to measure whether and to what extent the project achieves the envisaged results and effects?* • PC&EU fablabs experience review; • 2 PC admin trainings held; • 2 admin. staff form each PC trained; • web-portal hosting; • contacts with partners established; • 5 working fablabs in PCs; • 4 PC teachers trainings held; • 4 teachers from each PC trained; • 5 coursebooks, eLearning tools; • 20+ students/LLL trained; • 15+ D&S activities in each fablab; • D&S activities in EU; • MoUs btw EU&PC+business, industry	**How indicators will be measured:** *What are the sources of information on these indicators?* • report on experience analysis; • report on admin. staff training; • web-portal for project network update regularly; • number of MoUs with PC partners; • fablab concept/documents, HEI registers, equipment invoices; • report on teachers training; • 5 coursebooks for each fablab print.; • open access foreLearning mater.; • reports on students/LLL trainings; • int/ext. quality control reports; • reports on the activities organized; • number of MoUs signed;.	**Assumptions & risks:** *What external factors and conditions must be realised to obtain the expected outcomes and results on schedule?* • EU suffic. fablab domainexperience and PCspre-cond. for fablab creation; • authorities, public bodies, business and industry ready to support fablabs; • Society ready to use fablab facilities. • Lack of univer./indus. interest overcome by involv. of decision makers as associated partners; • Stud./teach./LLL long for creative learning/teaching tools; • authorities support innov. devel.; • SC and the Coordinator are experienced in problem solving; • Partners ready to cooperate timely.

Activities: *What are the key activities to be carried out (**grouped in Workpackages**) and in what sequence in order to produce the expected results?*	***Inputs:*** *What inputs are required to implement these activities, e.g. staff time, equipment, mobilities, publications etc.?*		**Assumptions, risks and pre-conditions:** *What pre-conditions are required before the project starts? What conditions outside the project's direct control have to be present for the implementation of the planned activities?*
• WP1:1.1.EU&PC fablab experience analysis. 1.2.PC admin. staff training by EU. 1.3.Project web-portal launch. • WP2:2.1.PC partner network creation. 2.2.Fablabs concept formulation. 2.3.Fablab constituent docs devel.&approval on Uni level. 2.4.Fablab infrastructure allocation. 2.5.Equipment purchase. 2.6.Fablab network web-portal. • WP3: 3.1.PC teachers trainings by EU. 3.2.Teaching methodology devel. 3.3eLearning materials devel.3.4.Students/LLL test trainings. 3.5.Engg. curricula modernization. • WP4: 4.1.QP devel.4.2.Int/ext.evaluation. • WP5: 5.1.D&S strategy devel. 5.2.D&S activities conduct. 5.3.EU&PC+ bussiness /industry network devel. • WP6: 6.1. Coordination mngt. 6.2.Financial mngt. 6.3.Fablab mngt.	• WP1:Staff:12 days(ds) P1,12 ds P2,9 ds P3,9 ds P4,12 ds P5,12 ds P6,9 ds P7,69 ds P8,24 ds P9,44 ds P10,14 ds P11,14 ds P12,14 ds P13;Mobility:24 flows(av.5 ds) • WP2: Staff: 90 ds P8; 70 ds P9; 80 ds P10; 70 ds P11; 70 ds P12; 70 ds P13. Equipment: P8,P9,P11,P12,P13 • WP3: Staff:33 ds P1,36 ds P2,33 ds P3,33 ds P4,7 ds P5,7 ds P6,7 ds P7,210 ds P8,163 ds P9,173 ds P10,123 ds P11,123 ds P12,123 ds P13;Mobility:47 flows(av.5 ds) • WP4 Staff:12 ds P1,12 ds P2,10 ds P3,24 ds P4,10 ds P5,10 ds P6,10 ds P7,36 ds P8,36 ds P9,18 ds P10,18 ds P11,18 ds P12,18 ds P13;Mobility:34 flows(av.4-5 ds) • WP5 Staff:8 ds P1,8 ds P2,24 ds P3,24 ds P4,8 ds P5,8 ds P6,8 ds P7,60 ds P8,60 ds P9,50 ds P10,40 ds P11,40 ds P12,40 ds P13;Mobility:22 flows(av.4-5 ds) • WP6 Staff:382 ds P1,70 ds P2,66 ds P3,66 ds P4,36 ds P5,36 ds P6,36 ds P7,120 ds P8,66 ds P9,36 ds P10,95 ds P11,66 ds P12,66 ds P13;Mobility:24 flows(av. 4 ds)		• Sufficient EU partners experience in setting up fablabs; • willingness of PC univerity staff to participate in learning activities; • readiness of business, industry and local/regional/national authorities to collaborate; • opennes of university administration to innovations and restructuring; • openness of educational systems of PC universities; • society at large interest in project activities; • existance of elements of networking and information exchange between academia, business, industry, authorities; • uni, publ. bodies, business ready for networking; • delays in funds access; • interruptions in communication between partners.

LOGICAL FRAMEWORK MATRIX – LFM

Wider Objective: *What is the overall broader objective, to which the project will contribute?* • Increasing the attractiveness of the Higher Education Area, strengthening the integration of education, research and innovation; strengthening of internationalisation of higher education systems in accordance with the main provisions of the Bologna Process.	***Indicators of progress:*** *What are the key indicators related to the wider objective?* • A comprehensive internationalization strategies in higher education, research and innovation and the approaches to its harmonization at EU and Partner Countries (Armenia, Belarus, Russia).	***How indicators will be measured:*** *What are the sources of information on these indicators?* • implementation models of internationalization strategies • Tool-kits for harmonization of internalization strategies in the EU member states and Russian Federation, Belarus and Armenia. • Reports of implementation of internalization strategies models at national levels	
Specific Project Objective/s: *What are the specific objectives, which the project shall achieve?* 1. Conducting of a comprehensive research of internationalization level at higher education in the countries involved 2. Development of implementation models of internationalization strategies. 3. Training and professional development of HEI administrative staff 4. Establishment of expert network for internationalization in higher education; • 5. Development of Internationalization Action Plans for HEIs; • 6. Development of recommendations for harmonization of internalization strategies in the EU and RU, BY and AM.	**Indicators of progress:** *What are the quantitative and qualitative indicators showing whether and to what extent the project's specific objectives are achieved?* • Results of research of internationalization level at higher education in the countries involved; • Framework of a Comprehensive internationalization strategy • Tool kits for harmonization of internationalization strategy in EU and Partner Countries • Retraining programs for HEI administrative staff • Expert network for internationalization in higher education • Implementation of Pilot Internationalization Action Plans in HEIs • Adaptation of recommendations for harmonization of internalization strategies at national levels	**How indicators will be measured:** *What are the sources of information that exist and can be collected? What are the methods required to get this information?* • analytical materials of research of internationalization level at higher education • Description of Framework of a Comprehensive internationalization strategy • Recommendations for harmonization of internalization strategies for national ministries • Retraining programs, qualified staff • Number of experts, network activity (materials and events) • Report of Implementation of Pilot Internationalization Action Plans in HEIs • Adaptation of internationalization strategies at PCs HEIs	**Assumptions & risks:** *What are the factors and conditions not under the direct control of the project, which are necessary to achieve these objectives? What risks have to be considered?* • High level internationalization in EU universities and PCs; high motivation & commitment of project participants • Willingness of senior administrative staff with decision-making capacity; • Willingness of administrative and academic staff at PC universities to participate at training activities

Outputs (tangible) and Outcomes (intangible): • *Please provide the list of concrete DELIVERABLES - outputs/outcomes (**grouped in Workpackages**), leading to the specific objective/s.:* • WP1 Methodology development • 1.1. Methodological workshop on in-depth analysis • 1.2. Questionnaire Development • • WP2 Survey and document analysis • 2.1 Desk and field study of EU HEIs best practice • 2.2 Study of EU and National policies in education, research, invitation • 2.3 Interviewing and data collecting • 2.4 SWOT analysis • • WP3 Development of Framework of a Comprehensive internationalization strategy • 3.1 Development of a Framework and Action Plans by project partners • 3.2 Approval of Action Plans by HEIs Administration, regional authorities, National Ministry • 3.3 Implementation of Pilot Internationalization Action Plans of HEIs • 3.4 Staff up-skilling in management •	**Indicators of progress:** *What are the indicators to measure whether and to what extent the project achieves the envisaged results and effects?* 1.1 Workshop on in-depth analysis in Seville 1.2 Methodological workshop on questionnaire drafting in Birmingham 2.1 Study visits to USE, AstonU, ATEITN, 2.2 Analysis of EU&national policy in education, research, invitation 2.3 Survey 2.4 Workshop on SWOT analysis. 3.1 Methodological workshop in Minsk on Internationalisation Action Plans development. 3.2 Presenting and discussing of the Internationalisation Action plans 3.3. Progress seminar on piloting of Internationalization Action Plans 3.4. 5 Retraining sessions PCs HEIs	**How indicators will be measured:** *What are the sources of information on these indicators?* 1.1 the paper on in-depth analysis together with minutes of the discussion. 1.2. Methodological materials. 2.1 report of study visits 2.2 Analytical materials 2.3 Survey results of interviewing 2.4 E-book of analytical materials 3.1 Draft of Internationalisation Action Plans. 3.2.3.3. PC HEIs reports on piloting of the Action Plans of Internationalisation 3.4 joint programs of training courses.	**Assumptions & risks:** *What external factors and conditions must be realised to obtain the expected outcomes and results on schedule?* WP1 Assumptions High motivation & commitment of project participants Interest of partner country staff in the preparation of methodological materials WP2 Assumptions Collection large amount of information Risks Difficulties in collecting data WP3 Assumptions • High motivation & commitment of project participants • Willingness of senior administrative staff with decision-making capacity • Willingness of administrative and academic staff at PC universities to participate at training activities • Risks • Problems in adaptation and approval of the university level. • WP4 Assumptions • High level internationalization in EU universities and PCs; • High level of expert

• WP4 Tool kits for harmonization of internationalization strategy in higher education, research and innovation in EU and Partner Countries • 4.1. Drafting tool kits for harmonization of internationalization strategy • 4.2 Approval of the developed tool kits by an Expert Board • • WP5 Quality Control Plan • 5.1 Quality Control Action Plan • 5.2 Internal Evaluation • 5.3. External Evaluation • 5.4 Project Expert Board • 5.5 Inter- Project Coaching • WP6 Dissemination & Exploitation • 6.1 Project Information Materials • 6.2 Project public events • 6.3. Expert Community for Internationalisation of Higher education • 6.4 Development & signing of collaboration agreements between partner universities • WP7 Project management • 7.1. Overall Management &	4.1 Methodological workshop 4.2 Presentation of the drafted tool kits to the Expert Board 5.1 Quality control 5.2 Evaluation by Quality Control Committee 5.3 External evaluation independent experts 5.4 Evaluation of analytical materials 5.5 Peer-review and consultations with the current ongoing Tempus & Erasmus plus projects 6.1 Development & dissemination of Project`s Materials including a Project Book, Project Homepage 6.2 Final conference, Reports on public events 6.3 On-line list of representatives 6.4 Collaboration agreements between partner universities 7.1.Steering Committee (SC) set up; Agreements between partners signed	4.1 Programme and minutes of the methodological workshop 4.2 Final version of "Tool kits for harmonization of internationalization strategy 5.1 project QC plan with specific results 5.2 Quality Report of the project 5.3 Mid-term evaluation and final evaluation reports. 5.4 Reports and recommendations in correspondence with the Project Work and QC plan. 6.1 Project Book published; project marketing package published Publishing Newsletter and creating an address database of HEIs and persons interested 6.2 Number of visitors; protocol for the updates and maintainance 6.3 Collaboration agreements between partner universities 6.4 Conference programme, Promo stands & presentation corners 7.1 SC mission & working principles 7.2 Updated workplan; mid-term	• Risks • Low level of contribution from the external parties- the HEIs other than project partners • WP5 Assumptions • Smooth work among PCs HEIs • Good communication process • Risks Universities willingness to reveal information • • WP6 Assumptions • Various dissemination mechanisms; • Interest of the target groups; • High motivation & commitment of project participants (enforced through involvement of senior decision-makers) and will to share their edge with third parties • Risks Untimely dissemination of the information • Dissemination plan will be developed in advance. • Political instability or change in political structures • • WP7 Assumptions • Senior Partner university management staff supports the project and is eager to help to resolve appearing problems; • Good communications and disposition of all PCs HEIs • Risks: Changes in financial systems of beneficiaries could happen

Reporting • 7.2. Contractual issues and Project Progress Reports • 7.3. Coordination Meetings 7.4. Day-to-day administration of the Project	7.2.Regular Project management efficiently implemented • 7.3. coordinating meetings implemented	reports to EACEA every 6 months • 7.3 Minutes of coordinating meetings	
Activities: *What are the key activities to be carried out (**grouped in Workpackages**) and in what sequence in order to produce the expected results?* WP1 Methodology development 1.1 Workshop on in-depth analysis in Seville 1.2 Methodological workshop on questionnaire drafting in Birmingham WP2 Survey and document analysis 2.1 Study visit to EU partners 2.2 Conducted analysis on internationalization level 2.3 Survey (interviewing of 3 target groups) 2.4 The SWOT analysis by 4 sides (EU, RU, BY, AM) WP3 Development of Framework of a Comprehensive internationalization strategy 3.1 The Methodological workshop in Minsk on Internationalisation Action Plans development. 3.2 Presenting and discussing of the Internationalisation Action plans.	***Inputs:*** *What inputs are required to implement these activities, e.g. staff time, equipment, mobilities, publications etc.?* • 1.1 Mobility: 2 persons from each partner HEI and ICISTE, 3 persons from coordinator and co-coordinator for the 3-days. 1 representative from each PC Ministry. • 1.2 Mobility: 2 persons from each partner HEI + 1 from ICISTE for 2-days • Staff: 543 days partners; • 2.1 Study visit I Mobility: 2 persons from each partner HEI + 2 from ICISTE, 3 persons from coordinator and co-coordinator for 3-days. • Study visit II Mobility 2 persons from each partner HEI + 1 from ICISTE for 3-days • Study visit III Mobility 2 persons from each partner HEI + 1 from ICISTE for 3-days • 2.4 Mobility: 2 persons from each partner HEI + 1 from ICISTE for the 3 days. 1 representative from PC		**Assumptions, risks and pre-conditions:** *What pre-conditions are required before the project starts? What conditions outside the project's direct control have to be present for the implementation of the planned activities?* • The regulatory framework in partner countries has to allow university to modify the existing structures and establishing of new ones • All partner organizations must have sufficient Internet connectivity and access opportunities for communication • Basic language skills making possible effective mobility, training, experience exchange (at least, for key personnel), timely communication and reporting • PC HEIs have highly extended contacts in other regional HEIs, authority bodies and other stakeholders to provide their awareness of project information services and participation at the events •

3.3. Progress seminar 3.4 Five Retraining sessions WP4 Tool kits for harmonization of internationalization strategy in EU and Partner Countries 4.1 Methodological workshop in Voronezh. Skype, e-mail and phone connection. 4.2 Presentation of the drafted tool kits to the Expert Board WP5 Quality Control Plan 5.1 Quality control 5.2 Evaluation of the project implementation process by QCC 5.3 External evaluation by independent experts 5.4 Evaluation of analytical materials 5.5 Peer-review and consultations with the current ongoing Tempus & Erasmus plus projects WP6 Dissemination & Exploitation 6.1 Development & dissemination of Project`s Materials (Project Book, project marketing package; Project Homepage 6.2. Final conference in Moscow 6.3.Creation of the Expert Community for Internationalisation of Higher education 6.4 collaboration agreements between partner universities WP7 Project management 7.1 Regular reporting. 7.2 Meetings in Brussels in December 2015. 7.3 A kick-off meeting and 8 coordinating meetings	Ministres • Staff: 560 days partners • 3.1 Mobility: 2 persons from each partner HEI, 3 persons from the team of coordinator and co-coordinator + 1 from ICISTE for the 2 days. 1 representative from PC Ministries • 3.3 Mobility: 2 persons from each partner HEI, 3 persons from the team of coordinator and co-coordinator + 1 from ICISTE • 3.4 Mobility Five Retraining sessions №1. Participants for each : 2 persons from each partner HEI, 3 persons from the team of coordinator and co-coordinator (US and VSU) + 1 from ICISTE for 2 days • Staff 738 days partners • 4.1 2 persons from each partner HEI + 1 from ICISTE + 1 representative from each PC Ministry (who will participate only at the Workshop and the Coordinating meeting, without training) for 2 days. • Staff: 335 days partners • 5.2 2 persons from each partner HEI and ICISTE, 3 persons from the team of coordinator and co-coordinator (US and VSU) for 1 days. 1 representative from each PC Ministry will take part only in a Kick-off meeting and the workshop. • Staff 400 days partners, • WP6. Staff 749 days partners • WP7. Staff 681 days partners		

• 7.4 Day-to-day Project administration. Organization of Project activities on institutional level.	•		

PROJECT PHYSICS

LOGICAL FRAMEWORK MATRIX – LFM

Wider Objective: *What is the overall broader objective, to which the project will contribute?* • To upgrade curricula in the four universities of Belarus according to Bologna practices in physical science in the field of electrical technologies, to enhance the quality and relevance of education by modernising study programs, focusing on the use of ICT, and through networking activities to meet the labour market needs.	***Indicators of progress:*** *What are the key indicators related to the wider objective?* • Developed, tested and formally approved curricula and study materials in accordance to labour market needs basing on Bologna practices; • Developed didactic materials (e-Books, guides for laboratory works, lecture synopsises, etc.) for upgrading master-level education in the field of physical sciences (functional nanomaterials, photonics, applied physics, etc.); • Readiness for transition from existing "5 plus 1" to a new training system "4 plus 2" (4 years for bachelors and 2 years for master students study)	***How indicators will be measured:*** *What are the sources of information on these indicators?* • University's registries (educational plans and programs). Interim and final evaluation reports, including feedback from students, teachers, student's governance and also industry and Non-Governmental Organisations representatives	
Specific Project Objective/s: *What are the specific objectives, which the project shall achieve?* • To develop modern master programs in the field of functional nanomaterials, photonics and applied physics, which respects principles of the Bologna process, and to implement it at four Belorussian universities; • To develop and update courses and teaching materials for two master-level model (standard) educational programs for specialities Functional nanomaterials and Photonics; • To improve teachers' qualifications and skills;	**Indicators of progress:** *What are the quantitative and qualitative indicators showing whether and to what extent the project's specific objectives are achieved?* • Number of developed didactic materials (guides for laboratory works, lecture synopsises, etc.) for upgrading master-level education in the field of physical sciences (functional nanomaterials, photonics, applied physics, etc.) adjusted to labour market needs, validated and accredited by the universities of Belarus. • Number of developed / upgraded curricular (model education plans and	**How indicators will be measured:** *What are the sources of information that exist and can be collected? What are the methods required to get this information?* • University's registries (educational plans and programs). • Interim and final evaluation reports, including feedback from students, teachers, student's governance and also industry and NGOs representatives. • Validated didactic and methodological materials, user guides for the created practical/virtual laboratories; • e-Books on line, curricula, courses,	**Assumptions & risks:** *What are the factors and conditions not under the direct control of the project, which are necessary to achieve these objectives? What risks have to be considered?* • Socio-economic and political stability. • Education reform/modernisation and formation of new possibilities/conditions for enhancement of education in the participants' countries and first of all in Belorussia due to: • widening am access (mobility) for students and teaching staff of Belorussia;

• To improve teachers/students skills in practical English; • To enhance Belarusian academic staff competences for teaching of developed courses in English; • To implement modern technical infrastructure for teaching and learning. • To develop innovative ICT based teaching and learning environment; • To bring the Higher Education Institutions of Belarusian closer to the Labour Market needs. • To bring the Higher Education Institutions (HEIs) of Belarus closer to Bologna system principles. • • To introduce faculty to the ICT skills that are required for new graduates to break their way into the industries and scientific institutions.	model education programs) validated and accredited by Responsible Body – Ministry of Education of Belarus. • Number of units of new equipment / software for practical / virtual laboratories; • Number of developed e-Books for training of master-students in the field of physical sciences (functional nanomaterials, photonics, applied physiscs, etc.); • Number of master-students/academic-staff trained in the field of physical sciences (functional nanomaterials, photonics, applied physics, etc.); • Number of PC staff/master-students/academic-staff trained in the field of ICT-based teaching/learning environment. • Number of students trained according to new courses/study programs during testing period; • Developed innovative teaching/learning environment: Web pages address of Joint Web Electronic Library, virtual / on line laboratory environment, distance lectures environment. • Number of training courses uploaded in Electronic Library.	guides for laboratory works, lecture synopsises, etc. uploaded in Electronic Library.	• -raising the level of academic/teacher staff's skill; • additional opportunities for dissemination of knowledge /experience among Belorussian Universities; • Involvement industry representatives that encourages to bring training programs closer to the market needs. • Close cooperation between universities and Ministry of Education of Belorussia that promotes better understanding the practical way of transition from 5+1 to 4+2 system, and encourages smoother accreditation of developed training programs. • Risks: • 1.Degradation of socio-economic state in Belorussia, spoiling of relationships with EU countries. • 2.Belarussian government agencies bureaucracy that may significantly delay access of Belorussian partners to finance. • 3.Mismatch of feasible results of reforms/modernizations due to partial incompatibilities of educational regulations in the Belorussia and EU countries. • 4.Lack of EU language skills in Belorussia university' target groups. • Risk 1 does not depend on the participants, but on the international

			commitment of Belorussia governments to allow implementing the project. • Risk 2 could be minimized by Partner Agreement, which envisages financing purchase of equipment by leading partner. A special financing conditions in PA to reduce risk of payments delay will be included. • Risk 3 will be minimized by the exchange of knowledge, experience and information in the declared field between the partners; • Risk 4 will be minimized by use of the English language as the main communication tool and presentation of most documents (in particular, on the web page) in two languages – English and Russian; also selection of relevant persons from target groups.
Outputs (tangible) and Outcomes (intangible): • *Please provide the list of concrete DELIVERABLES - outputs/outcomes (**grouped in Workpackages**), leading to the specific objective/s.:* WP1 Preparation 1.1. Ex-Ante Evaluation Reports 1.2. Studies and a Report on curricula, needed to the labour market WP2 Development and modernizing of curricula 2.1.Developed and translated to teaching language master-level study programs and courses for specialities functional nanomaterials and	**Indicators of progress:** *What are the indicators to measure whether and to what extent the project achieves the envisaged results and effects?* • WP1 Preparation • 1.1.Study report on adjusted list of curricula to be developed and modernised in the project. • WP2 Development and modernizing of curricula • 2.1.The number of teaching materials developed: lecture notes/synopsises, , descriptions/manuals of laboratory works, courses books, etc.	**How indicators will be measured:** *What are the sources of information on these indicators?* • WP1 Preparation • 1.1.Project partners Ex Ante Evaluation Reports, Studies and workshops (WS1) • • WP2 Development and modernizing of curricula • 2.1.Partners' reports with attachment of developed teaching materials: lecture notes/synopsises, presentations, materials for lectures, descriptions/manuals of laboratory works, students' books, etc.	**Assumptions & risks:** *What external factors and conditions must be realised to obtain the expected outcomes and results on schedule?* • All partners involvement from the beginning of the project, professional association's representatives, Ministry and professional association's representatives. Industry representatives interest in the project outcomes. • Unconformity/incompatibility of teaching/learning approaches (curricula, educational plans and programs, didactic materials, etc.) and tools (equipment/soft) in the

photonics. 2.2.Master-level study Standard Programs accreditation in the Ministry of Education of Belorussia 2.3.Five electronic courses e-Books by the declared directions 2.4.The master-level courses tested during one year 2.5.Master-level study courses accreditation in Belorussian universities 2.6.Documents for master-level curricula accreditation in the Ministry of Education 2.7.Teacher staff improved professional and practical English skill. 2.8.Belarus universities readiness for transition from existing system to new "4 plus 2" system WP3 Development of innovative ICT based teaching and learning environment 3.1. Creation of e-Library for e-Books, synopses and teaching /didactic materials; 3.2. Development of virtual /on line laboratory and virtual environment for distance learning WP4 Quality Plan 4.1.Quality Control System Setup 4.2.Ability to respond to the challenges and risks	• 2.2.The number of Standard master-level programs with ECTS system' application, accredited in the Ministry of Education. • 2.3.The number of validated / tested during one year master-level courses • 2.4.The number of study programs for master-level courses descriptions • WP3 Development of innovative ICT based teaching and learning environment • 3.1.E-Library • 3.2.The number of teaching/didactic materials uploaded to e-Library • 3.3.Virtual laboratory for student training, the instruction for its on-line usage • • WP4 Quality Plan • 4.1.Project Manual - a summary of rules, methods and tools for the project implementation. • • WP5 Dissemination & exploitation • 5.1.The number of issued information/ promotional materials • 5.2.The number of participants in	• 2.2.Partners reports with attachment of education curricula's descriptions copy • 2.3.Partners reports with attachment of study programs descriptions and copy of courses • 2.4.Partners reports on new curricular testing with feedback from teaching staff, master-students, Ministry' officers and entrepreneurs (professional associations, enterprises, etc.) involved in teaching of students and curricular modernisation. • WP3 Development of innovative ICT based teaching and learning environment • 3.1.Partners reports with attachment of developed teaching materials: lecture notes, materials for lectures, descriptions of laboratory works, students books, and the instruction for ICT tools usage. • • WP4 Quality Plan • 4.1.Interim and Final Quality Reports from partners • • • WP5 Dissemination & exploitation • 5.1.Partners' reports with the attachments of information and promotion materials prepared,	partners' universities; • Acquisition of infrastructure (equipment and soft for labs), will be made timely despite the bureaucracy. • Risks • 1. Incomplete experience of the partners' universities staff needed to implement the planned deliverables. • 2. Unconformity/incompatibility of teaching/learning approaches (curricula, educational programs, didactic materials, etc.) and equipment/tools in the partners' universities; • 3. Accreditation of the new curriculum might not be granted by the Ministry of Education of Belarus • 1. The risk 1 will be minimized by the knowledge/ experience/ information exchange in the declared field between the partners' universities staff. • 2. The risk 2 will be minimized by the development of compatible/ unified teaching/ learning methods, didactic materials and purchasing and upgrading educational equipment/ hardware /software for training in the declared field. • 3. The risk 3 will be minimized by Ministry of Education involvement in the project activities from the beginning of the project, information and feedback sharing among partners.

WP5 Dissemination & exploitation 5.1.Information and promotional materials; 5.2.Information sessions for target groups. 5.3.Project Web Portal. 5.4.Recommendations for new master-level programs introduction in Belarusian universities beyond the project. 5.5.Double-sided agreements for cooperation during the project and beyond. 5.6.Readiness to master programs 2nd year testing beyond the project WP6 Management 6.1.Detailed Project Activity Schedule (Gantt chart including mail stones and deliverables); 6.2.Agreements between LP and partners about obligations, financial sustainability, etc. 6.3.Purchased equipment, hardware/ software	information sessions • 5.3.The number of informative articles and publications in media (press releases, press conferences, 5.4.publications and presentation at conferences, interviews for TV and radio) • 5.5.Launched and updated web portal • 5.6.The number of Double-sided partners agreements for cooperation between project partners during and beyond the project • 5.7.Recommendations for new master-level programs introduction in Belarusian universities beyond the project. • • WP6 Management • 6.1.The Milestones achieved in the Project Activity Schedule • 6.2.The number and terms of obligations fulfilled according to Partner agreements • 6.3.The number of MC meetings. • 6.4.Procurement procedures and delivery of equipment.	informative articles published • 5.2.Sessions attendance lists • 5.3.Dissemination events participants polling forms about their satisfaction and events relevance. • 5.4.Partner' reports with the copies of Double-sided partners agreements. • WP6 Management • 6.1.Interim and Final Management reports from partners • 6.2.The minutes and copies of presentations made at MC meeting, workshops, and project coordination meetings; • 6.3.Meetings Attendance lists with signatures. • 6.4.Bookkeeping documents (invoices, etc.)	
Activities: *What are the key activities to be carried out (**grouped in Workpackages**) and in what sequence in order to produce the expected results?* • WP1 Preparation • 1.1.The study of compatibilities of educational regulations • 1.2.Ex-Ante reports • 1.3.Studies to define specific needs of the labour market. • 1.4.Report on studies.	***Inputs:*** *What inputs are required to implement these activities, e.g. staff time, equipment, mobilities, publications etc.?* • WP1 Preparation • Teacher/ researcher staff time: 26 days in total for RTU (Latvia), 17 days for BSU, 14 days for each EU and BY university, 6 days for each NGO • Administrative staff time: RTU – 8 days, other partners – 2 days		**Assumptions, risks and pre-conditions:** *What pre-conditions are required before the project starts? What conditions outside the project's direct control have to be present for the implementation of the planned activities?* • Pre-conditions: • Labour market needs and the needs of reformation of high education in Belorussia have been assumed and properly evaluated (verified in

• 1.5.WS1 in Minsk • • WP2 Development and modernizing of curricula • 2.1.Development lecture synopsis, compatible teaching (didactic) materials in English and translation to teaching languages for Belarusian universities • 2.2.Academic/teaching /technician staff training on curricula topics, ICT tools and English languages skill • 2.3.Workshops for curricula development: WS2 – WS9 • 2.4.Students training • 2.5.Master study Standard Programmes accreditation in the Ministry of Education • 2.6.The 1st year testing of two-year master programs • 2.7.Preparation of curricula, for accreditation in Belarussian universities during the project and in Ministry of Education beyond the project • 2.8.Measuring of a feedback • • WP3 Development of innovative ICT based teaching and learning environment • 3.1.Development of on-distance learning and teaching methodologies, focusing on ICT • 3.2.Creation of single eLibrary • 3.3.Development of virtual	5 flows to WS1, 2 persons x 4 days. WP2 Development and modernizing of curricula - Equipment for physical labs BSU, YKGSU, GSU, BSTU. Teacher/ trainer/ /researcher staff time: 220 days for BSU, RTU - 184, 164 days for each EU university, KU Leuven 188 days, 130 days for each BY university, 36 days for each NGO. (4 x 4=16) flows BY to EU staff trainings with 7 days; (2 x 4 = 8) BY flows 7 days to KU Leuven for professional English language. (2 x 3=6) flows EU to Ostend, 7 days. (2 x 4 = 8) flows BY-BY, 7 days. Mobilities for 7 workshops,1 participant, 4 days including travel. (4 x 4) flows BY universities to Ku Leuven for English language training. (8 pers x 4 univers x 7days) 6 flows BY-EU students training 7 days. WP3 Development of innovative ICT based teaching and learning environment Hardware and software for virtual environment. Web design subcontractor work. Teacher/ trainer/ researcher staff time: 30 days KU Leuven, 24 days UCY, 12 days for EU and BY universities.		planning stage) • Relevant experience/expertise available (verified in planning stage); • Equipment and hardware/software are available to procure; • Mobility for both staff and Master students is feasible, • • Assumptions: • Interest of university lecturers in workshops and trainings aiming at the improvement of professional and multidisciplinary skills; • High interest academic staff within and outside the consortium; • Interest of academic staff to new training materials and ICT tools in the master students training; • The industry that presents nanomaterials, photonics and other fields of applied physics is interested in curricular reform in Belarusian universities. • • Risks: • The low interest of managers and academics/ teaching staff of universities in joint activities and/or trainings; • Tight time schedule of work professionals. • Long tendering procedures for purchase of equipment, hardware/ software. •

laboratory • 3.4.Workshop on ICT environment tools • • WP4 Quality plan • 4.1.Development of Project Manual. • 4.2.Circulation and archiving correspondence • 4.3.Following up the project progress, corrective actions • 4.4.Developing forms for reporting. • 4.5.Creating and maintenance of archive. • • WP5 Dissemination & exploitation • 5.1.Press conferences, press realises, leaflets, posters, TV and radio, social media, project logo • 5.2.Project website • 5.3.Seminar for stakeholders • 5.4.Information sessions • 5.5.Final conference • 5.6.Double-sided agreements. • 5.7.Preparation to 2nd year master programs testing beyond the project • 5.8.Conference papers and presentations • • WP6 Management • 6.1.Accepting Project Schedule, Quality Plan • 6.2.MC meetings • 6.3.Partner Agreements signing • 6.4.Administrative and financial	Mobilities to WS8: 7x2 pers., 4 days. WP4 Quality plan Manager time: 18 days RTU, 12 days each University, 6 days NGOs. Teacher/ trainer/ researcher staff time: 6 days RTU Administrative staff: 18 days RTU, 6 days all HEIs, 4 days NGOs. WP5 Dissemination & exploitation Teacher researcher staff: RTU 32 days, UCY 30 days, BSU: 24; 18 for other HEIs, 4 days for NGOs. Mobilities: HEIs: 3 pers., 3 days; NGOs: 1 pers., 3 days; MEBR: 2 pers., 3 days. WP6 Management Managers: RTU 316 days, HEIs 72 days, NGOs 36 days. Teacher/ trainer/ researcher staff: RTU 72 days. Technician staff: RTU 108 days, BY HEIs 8 days. Administrative staff: RTU 48 days,		

management • 6.5.Reporting • 6.6.Purchasing of Equipment • 6.7.Project Audit	HEIs 24 days. Mobilities for Kick-off and 6 MC meetings: 10 partners, 1 pers., 3 days.		

3. LOGICAL FRAMEWORK MATRIX – LFM-PICASA

Wider Objective: *What is the overall broader objective, to which the project will contribute?* • To promote recognition of Eastern Neighbouring Area HE systems- Armenian, Georgia, Belarus and Ukraine - through development and integration of internationalization dimensions into structural and cultural components of HEIs management.	**Indicators of progress:** *What are the key indicators related to the wider objective?* • The HEIs in the consortium have effective mechanisms in place for internationalization and recognition • The structural and cultural components are revised to integrate internationalization elements at the level of academic programmes, research, HEI's profile and individual initiatives • National policies and regulatory frameworks are revised to enable internationalization and recognition	**How indicators will be measured:** *What are the sources of information on these indicators?* • Decrees of the respective Academic Councils and Governing Boards on adoption of new strategies and policies on internationalization • Criteria and measures for quality assessment of internationalization adopted at national and HEIs levels • University reports on the achievements with internationalization • National reports of Armenia, Georgia, Ukraine, Belarus on the developments in higher education • Stocktaking report of Armenia, Georgia, Ukraine, and Belarus on implementation of Bologna action lines submitted to the Ministerial meeting in Yerevan in 2015.	
Specific Project Objective/s: *What are the specific objectives, which the project shall achieve?* • To integrate international dimension into the teaching, learning and research functions of universities through developing and implementing respective policies and procedures; • To develop internationalization elements for operationalization of curricula, scholar and student exchange and technical cooperation of the universities; • To identify and develop new skills, attitudes and knowledge in students, faculty and staff to promote internationalization; • To promote development of ethos and	**Indicators of progress:** *What are the quantitative and qualitative indicators showing whether and to what extent the project's specific objectives are achieved?* • 15 universities in the Eastern Neighbourhood partnership area have policies and procedures on internationalizing teaching, learning and research • 2 academic programmes at 15 universities will be revised to integrate internationalization dimensions and enable student and scholar exchange • New skills, attitudes and knowledge will be instilled in the faculty and international relation officer (IROs) from 15 universities • Through embedding quality criteria and	**How indicators will be measured:** *What are the sources of information that exist and can be collected? What are the methods required to get this information?* • The normative documents promoting internationalization at teaching, learning and research levels adopted by the HEIs • The revised academic programmes are adopted by the respective Academic Councils • Feedback of the EU experts on the newly developed policies and procedures, curricula • Feedback of the trainees and their supervisors on the effectiveness of the trainings • Quality criteria and measures for internationalization adopted at national and	**Assumptions & risks:** *What are the factors and conditions not under the direct control of the project, which are necessary to achieve these objectives? What risks have to be considered?* *Factors and conditions* • Positive attitude of the partner HEIs senior management staff and students towards the achievement of the project objectives; • Positive attitude of the key stakeholders towards objectives and readiness to network and interact; • Capacity of the EU partner HEIs experts to transfer good internationalization practices *Risks*

culture that values and supports intercultural and international perspectives, initiatives and their quality assurance (MINT approach).	measures for internationalization the ethos and culture of HEIs will become more receptive to intercultural and international perspective and initiatives.	HEIs levels • Report on external evaluation of HEIs internationalization	• Personnel changes in the partners' management bodies that could slow the implementation schedule; • Inability of partners to react quickly and implement tasks promptly due to heavy decision-making procedures; • Inability of all the experts assigned by each partners HEI to participate in the project during the whole duration; • Unavailability of key stakeholders and refusal to cooperate
Outputs (tangible) and Outcomes (intangible): • *Please provide the list of concrete DELIVERABLES - outputs/outcomes (**grouped in Workpackages**), leading to the specific objective/s.:* **WP1: Institutional capacity building** 1.1 Training packages for IRO and academic staff 1.2 Trained IRO and academic staff 1.3 Revised functions and roles of IRO 1.4 Purchased and installed equipment and software **WP2: Development of internationalization framework for HEIs** 2.1. Concept paper on internationalization of HEIs 2.2. New strategies and policies on internationalization 2.3. Handbook for QA of internationalization 2.4. In-house trainings as a multiplier tool	**Indicators of progress:** *What are the indicators to measure whether and to what extent the project achieves the envisaged results and effects?* **WP1: Institutional capacity building** • Two training packages published and made available on the web-site • 3 IRO staff and 3 academic staff from each HEI is trained • The functions and roles of 15 IRO offices are revised and operationalized • 15 IRO offices are fully equipped and necessary software for maintaining a database on international dimensions is in place **WP2: Development of internationalization framework** • Benchmarking results have revealed the development prospects • New internationalization strategies and policies fit well with the HEIs missions, profile and overall developmental strategies • The policies and procedures for developing academic programmes include internationalization principles	**How indicators will be measured:** *What are the sources of information on these indicators?* **WP1: Institutional capacity building** • Two training packages are made available on the web-site • Feedback of the trainees on the quality and effects of the trainings; feedback of EU experts on the developed trainings and their delivery • Normative documents adopted at each HEI • Track records of installed equipment at each HEI; documentation for tendering procedure **WP2: Development of internationalization framework** • Report on benchmarking published on the web-site; feedback of EU experts • External evaluation report • External evaluation report on academic programmes • Records on student and staff mobility; feedback of the students and staff	**Assumptions & risks:** *What external factors and conditions must be realised to obtain the expected outcomes and results on schedule?* *Assumptions* • Willingness of the project partners to contribute to the implementation of project activities. • Stability and viability of the project consortium • Active participation of the target groups in the implementation of the project activities • High quality of the information and research materials • Support for the project concept and ideas on behalf of academia and key HE stakeholders involved in the project activities • Proper selection of best experts and subcontractors for the most efficient execution of the planned WPs *Risks*

WP3: Operationalization of internationalization 3.1. Revised 2 academic programmes per HEI 3.2. New approaches to internationalization 3.3. Report on self-evaluation of internationalization 3.4. In-house workshops **WP4: Quality Control and Monitoring (QCM)** 4.1. Quality control and monitoring plan and tools 4.2. Report on WPs achievements 4.3. Annual monitoring reports by the grantholder and EU partners 4.4. Audit report on factual findings **WP5: Dissemination** 5.1. Project web-site 5.2. Brochures and Guidelines on Internationalization 5.3. Raised awareness through two annual conferences and mass media **WP6: Sustainability** 6.1. Adoption of internationalization framework by HEIs 6.2. Adoption of internationalization frameworks by governments 6.3. External evaluation of internationalization against MINT **WP7: Management of the project**	• Policies and procedures for student and staff mobility are in place and are operationalized through HEIs regulatory frameworks • Clearly set policies and procedures for promoting internationalization of research • Quality assurance of internationalization is in place and is functional **WP3: Operationalization of internationalization** • 2 academic programmes per HEI are fully in line with internationalization principles • The scholars are guided by the new internationalization policies in their research activities • The new internationalization approaches are evaluated against the new quality assurance criteria and procedures by external QA agencies **WP4: Quality Control and Monitoring** • Quality control and monitoring plan is in place and the tools are applied • The reports demonstrate successful implementation of the project objectives • Annual monitoring demonstrate the achievements and provide recommendations for further improvement • Reports to EACEA are approved because of the high quality of performance **WP5: Dissemination** • The project web-site is fully operational and disseminates the necessary information and knowledge in timely manner • The stakeholders are informed on the project achievements • The Guidelines are applied by a broader audience outside the consortium	• Records of research activities • The internal quality assurance manual of HEIs has clear mechanisms on QA of internationalization **WP3: Operationalization of internationalization** • External evaluation reports, feedback of EU partners; feedback of students • Records on research activities, feedback of the scholars, international partners • Feedback of students, scholars, IRO officers • Self-assessment reports on internationalization at HEIs **WP4: Quality Control and Monitoring** • The QCM plan and tools are available on the web-site • Feedback of the EU partners, WP leaders, HEIs • The recommendations are published on the website • Reports to EACEA **WP5: Dissemination** • The web-site URL and its link on all the partners' web-sites; feedback of the users • Published brochures; feedback of stakeholders	• Personnel changes in the partners' management bodies that could slow the implementation schedule; • Inability of partners to react quickly and implement tasks promptly due to heavy decision-making procedures; • Inability of all the experts assigned by each partners HEI to participate in the project during the whole duration; • Unavailability of key stakeholders and refusal to cooperate; • The existing legal and regulatory frameworks of the partner countries might impede the adoption of the new strategies at national levels • Radical changes in the policies of the PCs • Unforeseen events causing obstacles for the project implementation.

7.1. Efficient & effective project implementation 7.2. Project coordination methods 7.3. Operational and financial management	• Awareness raising is at high level through annual conferences and mass media (150 people at each conference) **WP6: Sustainability** • The internationalization strategies are operationalized • The internationalization policies are adopted by institutions outside the consortium • HEIs have special financial allocations for internationalization promotion • The external evaluation report shows considerable changes in the culture and ethos of the universities **WP7: Management of the project** • The project objectives are fully implemented • The project work-plans are successful • The external financial audit has revealed an effective management of the project	• Published Guidelines and soft version uploaded on the web-site; feedback of the implementers • Feedback of the participants on the impact of the conferences, conference materials, news releases **WP6: Sustainability** • Decrees of HEIs • Normative regulations at national level • Budget projections and allocation for internationalization • Reports of external evaluators **WP7: Management of the project** • Reports of WP leaders • Annual reports on project implementation • Track records on financial, operational and technical management of the project; financial audit reports	
Activities: *What are the key activities to be carried out (**grouped in Workpackages**) and in what sequence in order to produce the expected results?* **WP1: Institutional capacity building** 1.1.1.Set up a working group to develop a training package 1.1.2.Development of a training package for academic staff 1.1.3.Development of a training package for training administrative staff on internationalization 1.2.1.Training administrative staff 1.2.2.Training academic staff 1.3.1.Revision of the functions and role of international affairs unit to embed the new internationalization strategies and policies 1.4.1.Purchase of equipment and software	**Inputs:** *What inputs are required to implement these activities, e.g. staff time, equipment, mobilities, publications etc.?* **WP1: Institutional capacity building** 1.1.1.None 1.1.2.Staff costs, co-financing 1.1.3.Staff costs, co-financing 1.2.1.Travel costs, costs of stay, staff costs, co-financing, printing and publishing, other costs 1.2.2.Travel costs, costs of stay, staff costs, co-financing, printing and publishing, other costs 1.3.1.Staff costs, co-financing 1.4.1.Equipment cost, co-financing		**Assumptions, risks and pre-conditions:** *What pre-conditions are required before the project starts? What conditions outside the project's direct control have to be present for the implementation of the planned activities?* *Pre-conditions* • Established consortium of partner organisations; • Project participation supported and validated by the institutions' senior management ; • Good operational and financial capacity of all project partners; • Preliminary research conducted on the needs of the target groups. • The grantholder is well aware of the EACEA regulations and those of partner countries to ensure smooth financial

WP2: Development of internationalization framework 2.1.1.Setting up a working group to develop the internationalization framework 2.1.2.Benchmarking of approaches to internationalization 2.1.3.Inter-project coaching with ICAEN - 516663 2.2.1.Development of internationalization strategies and policies 2.2.2.Workshop for developing strategies and policies 2.2.3.Revision of policies on academic programme development in line with internationalization principles 2.2.4.Development of policies and procedures for study abroad and student and staff mobility 2.2.5.Development of policies and criteria for research and scholarly collaboration 2.3.1.Development of indicators, criteria and procedures for quality assurance of internationalization (MINT) 2.4.1.In-house trainings **WP3: Operationalization of internationalization** 3.1.1.Identification of 2 academic programmes to revise in line with the new internationalization policies 3.1.2. Revision of the identified academic programmes 3.1.3.Workshop for revision of academic programmes 3.2.1.Embedding the new	**WP2: Development of internationalization framework** 2.1.1.None 2.1.2.Staff costs, co-financing 2.1.3.Other costs 2.2.1.Staff costs, co-financing, printing and publishing 2.2.2.Travel costs, costs of stay, printing and publishing, staff costs, other costs, co-financing 2.2.3.Staff costs, co-financing 2.2.4.Staff costs, co-financing 2.2.5.Staff costs, co-financing 2.3.1.Staff costs, co-financing 2.4.1.Staff costs. co-financing, travel costs, costs of stay, printing and publishing, other costs **WP3: Operationalization of internationalization** 3.1.1.None 3.1.2.Staff costs, co-financing 3.1.3.Travel costs, costs of stay, printing and publishing, staff costs, other costs, co-financing 3.2.1.Staff costs, co-financing 3.3.1.Staff costs, co-financing, printing and publishing		management • The grantholder establishes a strong team to execute the project to best of the standards *Conditions outside the direct control* • Stable political and economic environment in the partner countries; • Support of HE modernization processes on national level in the partner countries; • Stable social and labour market conditions in the partner countries. • Internationalization is on the priority agenda of the partner countries

internationalization criteria in research and scholarly collaboration 3.3.1.Evaluation of the newly adopted approaches to internationalization against the new quality assurance criteria and procedures 3.4.1.In-house workshops for dissemination of internationalization strategies	3.4.1.Staff costs, co-financing, printing and publishing, travel costs, costs of stay, other costs		
WP4: Quality Control and Monitoring 4.1.1.Development of quality control and monitoring plan and tools 4.2.1.Report on WPs achievements 4.3.1.Annual monitoring by the grantholder and EU partners 4.4.1.External audit for factual findings	**WP4: Quality Control and Monitoring** 4.1.1.Staff costs, co-financing 4.2.1.Staff costs, co-financing 4.3.1.Travel costs, costs of stay, staff costs, co-financing 4.4.1.Other costs		
WP5: Dissemination 5.1.1. Development and maintenance of project web-site 5.2.1.Brochures on project achievements 5.2.2.Guidelines on Internationalization Methodology and its Quality Assurance 5.3.1.Two annual conferences 5.3.2.Raising awareness via media	**WP5: Dissemination** 5.1.1.Other costs, staff costs 5.2.1.Staff costs, co-financing, printing and publishing, other costs 5.2.2.Staff costs, co-financing, other costs, printing and publishing 5.3.1.Travel costs, costs of stay, printing and publishing, co-financing, other costs 5.3.2.Other costs, staff costs		
WP6: Sustainability 6.1.1.Adoption of internationalization strategies and policies by the HEIs Academic Councils 6.1.2.Financial allocations on the part of universities for internationalization 6.2.1.Adoption of the internationalization policies at national level for application at	**WP6: Sustainability** 6.1.1.None 6.1.2.Staff costs, co-financing 6.2.1.None 6.3.1.Staff costs, travel costs, costs of stay, co-financing		

HEIs system level 6.3.1.External evaluation of internationalization **WP7: Management of the project** 7.1.1.Establishment of Project Governing Board (PGB) 7.1.2.Regular meetings of the PGB 7.1.3.Establishment of project executive team 7.1.4.Establishment of Project Management Committees (PMC) at each PC university 7.2.1.Monthly meetings of the PMC 7.2.2.Kick-off meeting 7.2.3.Coordination meetings for each workpackage 7.3.1.Financial management of the project 7.3.2.Daily operational and technical management of the project	**WP7: Management of the project** 7.1.1. None 7.1.2.None 7.1.3.None 7.1.4.None 7.2.1.None 7.2.2.Travel costs, costs of stay, staff costs, printing and publishing, other costs, co-financing 7.2.3. Travel costs, costs of stay, printing and publishing, other costs, co-financing 7.3.1. Staff costs, co-financing, other costs 7.3.2.Staff costs, co-financing		

3. LOGICAL FRAMEWORK MATRIX – LFM

Wider Objective: • To enhance innovation policy and entrepreneurship activity in PCs by improvement of creativity, competitiveness and employability of Universities (HEIs) graduates and increase cooperation between HEIs, innovation and investment companies for knowledge commercialization	**Indicators of progress:** • innovation and investment activity in PCs increased • inter-university RSC established academic and administrative staff in PC HEIs trained • cooperation between HEIs and enterprises in PCs enhanced	**How indicators will be measured:** • reports and statistics on numbers of companies and innovation products at PCs • web-sites of inter-university RSC, international and local printed and electronic mass media • cooperation agreements and joint projects reports	
Specific Project Objective/s: • Developing inter-university Regional Start-up Centers (RSC) and cooperation network between consortium members based on international academic and professional experience as a tool to implement innovative ideas and technologies • Modernising engineering and computer science (CS) study programs and creating methodology & training courses for improvement of creativity and competence in innovations development, presentation & promotion (IDP) • Establishing system of training for trainers and Life Long Learning (LLL) trainees, and retraining in the field of innovation policy development in PCs	**Indicators of progress:** • Statute of four inter-university RSC • 22 units participating in the cooperation network • Web-portal for all participating units • Number of the projects and links in the database • Number of teachers and administrative personnel trained • 5 training courses and 5 sets to teaching materials for engineering and computer science	**How indicators will be measured:** • Rector's order, HR documentation • number of new partnership agreements • web-portal and database statistics • capacity and constant update of WEB-site's contents • own surveys • training certificates • project reports • textbooks and e-components for each developed course, modernized HEI curricula	**Assumptions & risks:** • Political and economic stability in PC and associated changes in innovative and engineering policy • Changing EU visa policies • Major delays in accessing the funds
Outputs (tangible) and Outcomes (intangible): **WP1 (DEV)** 1.1. Concept of Start-up centres created 1.2. Start-up Centres developers in PC's trained 1.3. Constituent documents & structure of RSC developed 1.4. Four inter-university RSCs in PCs created 1.5. Web-portal for RSCs network launched **WP2 (DEV)** 2.1. Teaching methodology for IDP courses developed 2.2. Teachers and students of PC HEIs trained in PCs 2.3. Engineering and CS curricula modernized **WP3 (DEV)** 3.1. Interactive e-learning platform launched 3.2. E-learning components for 5 IDP courses developed 3.3. E-courses & e-forum for various trainees organized **WP4 (DEV)** 4.1. System for training for trainers developed 4.2. Coaches for the LLL system trained 4.3. Crash Tests for Start-up projects developed **WP5 (QPLN)** 5.1. Program for project evaluation developed 5.2. Internal project quality assessment performed 5.3. External project quality assessment performed **WP6 (DISS)** 6.1. Program for SUCSID project dissemination developed	**Indicators of progress:** • review of best practices on RSC creation and functioning • operational structure of RSC • business-process's scheme of RSC • four working RSCs in PCs • web-portal hosting • curricula for courses • textbook for each developed course • 5 teachers and 20 students from each PC HEIs enrolled in pilot training • modernized PC HEIs curricula • e-learning platform for project activities & courses • e-components for each developed course • 5 webinars published • discussion forum worked • program and teaching materials for training for trainers • 2 trainers from each PC HEIs were trained at EU Universities and EU companies • 5 pilot seminars in the frames of LLL in each RSC • quality plan approved and implemented, internal and external reviews • leaflet and promotional materials disseminated, list of target organisations published, dissemination seminars and	**How indicators will be measured:** • report • HEI's documentation • web-portal statistics, registered domain name • PC HEIs publishing reports • training Certificates for students, trainers and LLL participants • official PC Ministry of Education documents • e-learning platform statistics • web-based teaching materials • training certificates for trainers • PC HEIs publishing reports, web-based teaching materials • package of agreements signed • number of stakeholders involved in training and retraining in PC universities • project report • number of updated course and e-components • project Work Plan and progress reports	**Assumptions & risks:** • Students, teachers, LLL, enterprises are willing and able to participate in innovation activities • Enterprises are ready to support RSC financially after the end of project lifetime • PC HEIs reach an agreement on developed curriculum and speciality selection • Lack of interest from university authorities' and administrative staff in restructuring which can be overcome by involving decision makers into project activities • Interactive and distant learning approaches used at PC HEIs and supported by intensive training for dissemination of e-learning experience • PC HEIs' administration & educational authorities committed to the project goals and interested to create and

6.2. Dissemination e-activities in PCs organized 6.3. IDP courses dissemination seminars and workshops **WP7 (EXP)** 7.1. IIA network for innovations support developed 7.2. SUCSID project sustainability program developed 7.3. University-Business contacts strengthened **WP8 (MNGT)** 8.1. SUCSID project coordination performed 8.2. Project financial management performed	workshops organized • interactive network for 22 units organised • number of new network members from industry • long-term plan to ensure the project implementation and continuation • distribution of tasks among partners settled • regular management and steering group meetings and reports to control project activities and budget		support contacts with industry • Consortium members will be willing to cooperate • Lack of mobility & interest of HEIs alumni is critical for success of dissemination • IIA Network can be created and maintained • Changing in EU and PC visa policies
Activities: • **WP1 (DEV)** • 1.1. Analysing Start-up Centres experience in EU & PC • 1.2. Organizing seminars in EU for PC consortium members involved in RSCs creation • 1.3. Developing constituent documents and operational structure of RSC • 1.4. Creating 4 inter-university Start-up centres in PCs • 1.5. Developing WEB-portal for Start-Up Centers network • **WP2 (DEV)** • 2.1. Developing teaching methodology for IDP courses • 2.2. Pilot training of 20 students from each PC HEIs • 2.3. Modernizing existing engineering and CS study programs • **WP3 (DEV)** • 3.1. Installing web-based e-learning platform • 3.2. Developing E-learning components for 5 IDP courses • 3.3. Participation of academics, professionals and students in e-activity • **WP4 (DEV)** • 4.1. Developing methodology, program and teaching materials for LLL of engineering and CS professionals and experts • 4.2. Delivering intensive training course by EU partners for PC trainers in EU • 4.3. Verifying business projects presented in Start-up centres • **WP5 (QPLN)** • 5.1. Developing program for project evaluation • 5.2. Monitoring and assessing IDP courses implementation in PC • 5.3. Evaluating Start-up centres activities assessment by students and industry practitioners • **WP6 (DISS)** • 6.1. Creating program for project dissemination • 6.2. Organizing dissemination webinars for academic and non-academic partners in EU&PC • 6.3. Organizing dissemination workshops, seminars and conferences in PC • **WP 7 (EXP)** • 7.1. Improving IIA Network for SUCSID project • 7.2. Creating program for SUCSID project sustainability • 7.3. Strengthening contacts between universities and businesses • **WP8 (MNGT)** • 8.1. Providing operational project management • 8.2. Providing operational financial management and administration control	**Inputs:** • **WP1** Staff costs: Cat.1 – 0 days, Cat.2 – 264 days, Cat.3 – 106 days, Cat. 4 – 208 days; Travels: PC=>EU 36, 252 days; P&P; Equipment for BY, MD, UA HEIs • **WP2** Staff costs: Cat.1 – 0 days, Cat.2 – 560 days, Cat.3 – 14 days, Cat. 4 – 166 days; Travels: EU=>PC 24, 114 days; P&P; Equipment for BY, MD, UA HEIs; Other: translation • **WP3** Staff costs: Cat.1 – 0 days, Cat.2 – 252 days, Cat.3 – 18 days, Cat. 4 – 4 days; Travels: PC=>PC 8, 32 days; P&P; Equipment for BY, MD, UA HEIs • **WP4** Staff costs: Cat.1 – 0 days, Cat.2 – 363 days, Cat.3 – 28 days, Cat. 4 – 60 days; Travels: PC=>EU 36, 252 days; EU=>PC 28, 133 days; PC=>PC 12, 48 days; P&P; Other: translation, training courses • **WP5** Staff costs: Cat.1 – 0 days, Cat.2 – 219 days, Cat.3 – 0 days, Cat. 4 – 234 days; Travels: EU=>PC 31, 145 days; PC=>PC 9, 36 days; P&P; Other: external audit, translation • **WP6** Staff costs: Cat.1 – 0 days, Cat.2 – 214 days, Cat.3 – 28 days, Cat. 4 – 48 days; Travel costs and costs of stay: PC=>PC 46, 184 days; P&P; Equipment for BY, MD, UA HEIs; Other: translation • **WP7** Staff costs: Cat.1 – 0 days, Cat.2 – 207 days, Cat.3 – 0 days, Cat. 4 – 240 days; Travels: PC=> EU 12, 48 days; EU=>PC 21, 84 days; EU=>EU 31, 124 days; P&P • **WP8** Staff costs: Cat.1 – 282 days, Cat.2 – 0 days, Cat.3 – 0 days, Cat. 4 – 564 days; Travels: PC=> EU 15, 60 days; EU=>PC 7, 28 days; EU=>EU 6, 24 days; PC=>PC 12, 48 days; Other: Bankers' charges, post & phone		**Assumptions, risks and pre-conditions:** • Interest of teachers, professionals, administrative staff to taking part in project activities • PC HEIS' administration and educational authorities are committed to the project goals • Sufficient language skills and willingness to improve them • Willingness to travel abroad for exchange visits and training • Functional coordination team from PC and EU set up in time • The results of discussions and assessment are disseminated • The time schedule of deliverables are planned and all interim activities and meetings held in time