



Erasmus+

KA2: Cooperation for innovation and the exchange of good practices - Knowledge Alliances

Application Form

Call: EAC/A02/2019

Deadline: 26.02.2020 (17:00 CET, Brussels time)

Knowledge Alliances

DETAILED PROJECT DESCRIPTION

(To be attached to the eForm)

EN Version 2019

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PART 0. Project summary and involvement in previous relevant projects

0.1. Please provide a short summary of the main features and outputs of your project (Recommended limit 2000 characters) - Please bear in mind that your short summary may be published on EC or/and EACEA websites and dissemination tools.

Systematic Innovation Methodologies (SIM) are the basis of important cross-sectional skills not only in engineering and technical professions, but increasingly also for the middle management. Such skills have a significant influence on the cultural-technical development potential of companies. TRIZ¹ as an important such methodology that was developed in Eastern Europe over the past 50 years has meanwhile been used successfully in large companies around the world (Samsung, Posco, Siemens, Schaeffler and others). Its anchoring in academic teaching and research as well as its application in SME in the EU area is still weak compared to Asian industrialized nations as South Korea, China, Japan.

This Knowledge Alliance **aims to**

1. **build up** a strong networking structure of already successful teaching and training SIM in HEI at different EU locations and in different forms of HEI (**focus A**),
2. **set up and develop** a consulting and participation structure for this training infrastructure by companies from

within the EU that are aware of the potential of SIM for their strategic development (**focus B**),

3. **organise interoperation** between these two networks, to get practical input for the development of corresponding curricula on the one hand and on the other hand, to offer challenging operational tasks for training and further development of the students,

4. **include experience** in inter-company training of selected Eastern European partners, which are particularly strongly acting in the Asian region,

5. **further expand** these networks with *additional partners*, and

6. **support other HEI's** in setting up appropriate training and further education offers.

The **overall focus of the project** is on strengthening the innovative power of EU companies by establishing and expanding corresponding structures of training and further education in close and sustainable cooperation with entrepreneurial structures and inter-industrial organisations as e.g. the Chambers of Commerce and Industry.

(2018 characters)

0.2. Involvement in previous relevant projects

If your proposal is based on the results of one or more previous projects/networks, please provide precise references to this/these project(s)/network(s) in the table below.

Please add tables as necessary.

Reference number			
Project / network dates <i>(year started and completed)</i>		Programme or initiative	
Title of the project / network			
Coordinating organisation			
Website	http://		
Password / login if necessary for website			
<i>Please summarise the project/network outcomes and describe (a) how the new proposal seeks to build on them and, (b) how ownership / copyright issues are to be dealt with (limit 500 characters)</i>			

PART I. Project relevance

I.1. Why has the consortium decided to undertake this project?

I.1.1 Please outline the purpose behind your project, clearly analysing the specific needs or problems/challenges, which the project intends to address. (Recommended limit 3000 characters)

The imparting of knowledge and skills in the field of SIM has a growing importance as a cross-sectional qualification, not only in engineering and computer science studies, in order to develop the skill for systematic analysis of complex contradictional situations in everyday professional life and to develop innovative solutions. The systematic dissemination of such methodologies already plays an important role in training in Asia (China, South Korea, Japan), for example in the framework of the MEOTM program² of nationwide coordinated training of engineers in these methodologies in China. Such activities are coordinated worldwide by the international TRIZ organization MA TRIZ³ and in Europe by ETRIA⁴.

The preparation of the application has shown that European industrial companies do still insufficiently recognise the strategic importance of skills in that area, in particular for engineering and technical staff and in the middle management. Since such “investments in education“ are equally difficult to represent in return-on-investment accounts, considerable efforts are required to make structural progress here. The need for corresponding engagements is more recognised at the level of comprehensive industrial organization structures (such as the Chambers of Commerce and Industry – CCI) – see the LoI of the CCI Heilbronn – rather than at the level of individual companies. At the corporate level, the need for action is also recognised more in large companies than in SMEs.

The proposed project aims to take the networking of these teaching and research activities at different European locations as well as its recognition and support by industrial companies to a new level.

(2001 characters)

I.1.2 Please explain how the project proposal fits into the objectives of the participating organisations and European policies in the fields of education and training. (Recommended limit 3000 characters)

The project strongly relates to the aims

- stimulate entrepreneurship and entrepreneurial skills of higher education teaching staff and company staff;
- facilitate the exchange, flow and co-creation of knowledge

formulated in the Programme Guide (p. 133), and acts towards “developing entrepreneurial mind-set and skills“ in the three dimensions listed in the Programme Guide.

(527 characters)

I.1.3 Please explain how the expected results, outputs and outcomes will meet the identified needs. (Recommended limit 1500 characters)

² TRIZCON 2017.

Runhua Tan. TRIZ, the development and dissemination in industries in China. Proceedings

³ <https://matriz.org>

⁴ <http://etria.eu/portal/>

I.2. Analysis of the subject area (current state of the art) and innovative character

Please explain how the needs analysis has been carried out. Please indicate what the project is offering that is new and different. Please also indicate what the main innovative elements of the method(s), result(s), approach(es), etc. are. (Recommended limit 3000 characters)

- Survey Sustainable Education in Inventive Problem Solving with TRIZ and Knowledge-Based Innovation at Universities. Proceedings of the 8th International TRIZ Future Conference, TFC 2018, Strasbourg, France. 9 authors (including full partners Livotov and Cavallucci) explain the situation of academic curricula in the area under consideration.
- Survey TRIZ already 35 years in the Czech Republic. Proceedings of the 8th International TRIZ Future Conference, TFC 2015, Strasbourg, France. 3 authors (including full partner Bušov) explain TRIZ teaching needs and experience at several technical universities in the Czech Republic since 1996 (Brno, Prague, Liberec, Pilsen, Ostrava, Zilina, Kosice).
- Talks with experts at the international conferences TRIZ Developer Summit (June 2019, Minsk), TRIZ-Fest (September 2019, Heilbronn), TRIZ Future (October 2019, Marrakesh).
- “TRIZ ... must be capable of supporting innovation in all the new and emerging technologies and methodologies of the 21st century: AI, big data, design thinking, sustainability, IoT, new approaches to education, and so forth“. (Valeri Souchkov in his Report on the TRIZFest 2019)

I.3. Aims and objectives

I.3.1 Please define the specific aims and objectives of the project and how these will address the problems and challenges identified in sections I.1 and I.2. Also indicate how the project will contribute to achieve the objectives of the Knowledge Alliances action. (Recommended limit 3000 characters)

The **aims of the project** formulated in the Summary require efforts in two basic directions.

Focus A. A first focus of the project is the establishment of a reliable structural and processual organization of the network of the participating HEI (full and additional partners) on a conceptual, content and organizational level.

Focus B. A second focus of the project is on raising the awareness of more EU companies of the potential of SIM for their strategic development, particularly those in the manufacturing sector, to win them to join the network of companies as additional partners, and to set up a strong cooperation with the HEI network in focus A.

The **main objectives of the project** are

- (a) exchange, joint development and further development of relevant teaching materials as Open Educational Resources,
 - (b) development and expansion of online-based training structures based on existing case collections in the form of online courses and in transregional platforms,
 - (c) close integration of student training with practical challenges in this area by establishing appropriate stable contacts with industrial companies and
 - (d) establishment and expansion of academically anchored further education structures, through which this innovation potential can also be effective in the SME area.
1. Take the stock of courses already offered at the participating academic institutions to describe and publicize existing specializations in greater detail, as well as match industry needs to identify gaps in the curricula.
 2. Mutual support in the development and further profiling of corresponding offers among the consortium partners and support of other partners in this direction.
 3. Exchange of students in Master's and Postgraduate study programs between the consortium partners with the involvement of other partner institutions in order to make the specializations in different locations effective for integrated training.

I.3.2 Please explain the contribution of higher education institutions to the project and how they will benefit from the project in the short and long term. (Recommended limit 1500 characters)

The consortium (coordinator and full partners) was selected from the point of view of representing various forms of academic education (classical university – Leipzig, technical universities – Strasbourg and Brno, colleges – Offenburg, dual college – ??) to represent the existing range of academic training structures and to recover synergies resulting from the experiences of working with different students' target groups of the respective education.

I.3.3 Please explain the contribution of enterprises to the project and how they will benefit from the project in the short and long term. Please refer to the nature/ field of their economic activity. (Recommended limit 1500 characters)

We included two types of business partners – a big industrial company with intra company organized training of engineers in the targeted skills and a consulting company that organizes inter company consultancy and trainings in order to cover the broadest possible range of industrial applications of these methodologies and to focus on the most important areas of application both in the practical application of such methodologies and in company training.

An additional role in this context play experts from partner countries, see point 7, through which the experience of the international TRIZ association MA TRIZ will flow into the project.

I.4. European added value

Please describe the benefits of, and need for, European cooperation. Please also describe why the results cannot be achieved through cooperation at national, regional or local level. (Recommended limit 3000 characters)

PART II. Quality of the project design and implementation

II.1. Methodology

Please explain the strategy that will be adopted by the consortium to address the needs identified; also describe the methodology proposed for implementing the proposed Work Packages/activities and for achieving the expected objectives (including major milestones and contributors, how the different Work Packages and produced outputs will be inter-connected/articulated, measurable indicators, etc.). (Recommended limit 3000 characters)

The project is designed in such a way that the full partners form the core of a network that is to be expanded in the course of the project by *additional partners* from both the HEI area and the area of industrial companies. These partners are both involved in the operational work and invited to the project meetings and milestones. Participation in these measures is to be secured by these additional partners by own resources, which means that the transition from project financing to self-financing of network activities starts already during the project period. This is an essential moment to ensure the sustainability of the network and its work beyond the end of the project.

II.2. Overall project management

Please explain how the consortium will be coordinated and indicate the overall project management arrangements. You should also describe the division of tasks between the partners and the allocation of resources for each activity. (Recommended limit 5000 characters)

The project organization is based on the SCRUM methodology as an agile process model. The work is divided into 6 sprints of about 6 months each. Sprint Planning, Sprint Review and Sprint Retrospective will take place at multi-day project meetings P0 to P6 according to the SCRUM methodology.

Project meetings with an odd number have the character of a review, where the operational status of the work is analysed in more detail and deliverables in advanced stage are presented and discussed. Project meetings with an even number are planned as milestones at which essential deliverables are finally confirmed.

II.3. Quality assurance, evaluation and monitoring

Please define the specific quality measures to be put in place, as well as indicators foreseen to verify the outcomes of the project. Explain which mechanisms you intend to use to ensure the monitoring and evaluation of the project, its deliverables, results and outcomes. (Recommended limit 3000 characters)

II.4. Recognition and validation

If appropriate to the type of project activities, please explain the approaches that are or will be used for the validation and recognition of learning outcomes, in line with the European transparency and recognition tools and principles. (Recommended limit 1500 characters)

II.5. Budget and cost-effectiveness

Please describe the measures adopted to ensure that the proposed results and objectives will be achieved in the most cost-effective way and in time. Explain the principles of budget allocation between the partners. Indicate the arrangements adopted for financial management. (Recommended limit 3000 characters)

PART III. Quality of the partnership, the team and the cooperation arrangements

III.1. Knowledge Alliances: composition of the consortium

Please mark the type of organisations which make up the consortium (please make sure that associated partners are also indicated). Please choose the right category for each partner and ensure that the composition fulfils the eligibility criteria. Please use the same numbering both in the eForm and in the Excel budget table. **IMPORTANT:** If your consortium includes any affiliated entities, the total requested grant of the partner and its Affiliated Entity should be reported in the section B.4 (Grant request) of the eForm

NB: Please note that ticking one of the 3 columns under the key category 'Enterprises' means that, in line with the Erasmus+ Programme Guide, the organisation(s) concerned is/are undertakings actually engaged **in an economic activity and contributing as such** to the proposed project.

Organisations (please use the same numbering both in the eForm and in the Excel budget table)			Higher Education Institution (HEI)	Enterprises			Other organisation types									
Nr	Partner Acronym	APP (applicant) or PAR (partner) or AE (Affiliated Entity) or AssPAR (associated partner)	HEI (tertiary level - ECHE holder if in a Programme Country)	Small and medium sized enterprise	Large enterprise	Social enterprise	EU-wide network	Social partner or other representative of working life ⁵	Research Institute / Centre	Non-governmental organisation/association	School/ Institute/ Educational centre – Vocational training	School/ Institute/ Educational centre – Adult education	National, regional, local public body	Accreditation, certification or qualification body	Counseling body	International organisation under public law
1	ULEI	APP	HEI													
2	INSASB	PAR	HEI													
3	Hsoff	PAR	HEI													
4	BUT	PAR	HEI													
5	UTC	PAR	HEI													
6	LUT	PAR	HEI													
7	HTBLA	PAR									X					

Organisations (please use the same numbering both in the eForm and in the Excel budget table)			Higher Education Institution (HEI)	Enterprises			Other organisation types									
Nr	Partner Acronym	APP (applicant) or PAR (partner) or AE (Affiliated Entity) or AssPAR (associated partner)	HEI (tertiary level - ECHE holder if in a Programme Country)	Small and medium sized enterprise	Large enterprise	Social enterprise	EU-wide network	Social partner or other representative of working life	Research Institute / Centre	Non-governmental organisation/association	School/ Institute/ Educational centre – Vocational training	School/ Institute/ Educational centre – Adult education	National, regional, local public body	Accreditation, certification or qualification body	Counseling body	International organisation under public law
8	Schaeffl	PAR			X											
9	Arxia	PAR		X												
10	TP	PAR		X												
11	TIM	PAR		X												
12	NPK	PAR		X												
13	BM-TRIZ	PAR		X												

Does your consortium include any affiliated entities (please choose YES or NO)? If yes, please fill the information in the Annex of this document.

In accordance with Art. 122 of the Financial Regulation. The following can be considered affiliated entities:

- legal entities having a legal or capital link with beneficiaries; this link is neither limited to the action nor established for the sole purpose of its implementation.*
- several entities which satisfy the criteria for being awarded a grant and together form one entity which may be treated as the sole beneficiary, including where the entity is specifically established for the purpose of implementing the action.*

The affiliated entities must comply with the eligibility and non-exclusion criteria, and where applicable also with the selection criteria applying to applicants.

☐ **YES**
☒ **NO**

III.2. Rationale for setting-up the partnership

Please explain why the partners are best suited to participate in this European project. Describe skills, expertise and competences within the partnership directly relating to the planned project activities. (Recommended limit 3000 characters)

The project proposal has three priorities

- (A) Establishment of networking structures among the HEI partners,
- (B) Establishment of networking structures among the industrial company partners,
- (C) Crosslinking the networking structures (A) and (B).

(A) Partners are HEIs of different orientations and with different experiences in the field of SIM teaching.

Leipzig University as applicant plays a special role – it plans to strengthen its curricular structures and yet little experience in teaching in this area. Moreover a *Competence Center SIM*[®] is being set up in order to establish appropriate training structures in the region “Mitteldeutschland”, not only at Leipzig University.

In addition to the coordination and systematization of corresponding teaching experiences of the HEI partners, these experiences are basic for the *practical* development of corresponding regional structures and should be developed as a *best practice example* for other HEI locations (additional partners), which also plan to develop corresponding teaching capacities.

(B) In the project preparation the perception of the importance of corresponding skills for the strategic development of companies showed a clear east-west divide in Europe. The East European HEI partners in Brno and Cluj have significantly better relationships with companies with a corresponding focus. We also see potential in the legacy of the GDR inventor schools as a research focus at Leipzig University. With Schaeffler AG, a large European industrial partner joined the project, who has already recognized the importance of SIM skills for its strategic development.

The industrial structures in that area consist of companies that use SIM skills, as well as consulting and training companies that offer consultancy services and teach SIM skills. The partners from Belarus and Russia are representatives of this second group. In core Europe, these services are partly provided by the HEI partners (Brno, Strasbourg, Offenburg, Cluj) and partly by SMEs in the consulting area. In the latter area, greater efforts are required to convince such companies as additional partners, at least in the course of the project.

(C) More precise forms of such crosslinking can only be developed in the course of the project implementation. With our agile approach based on SCRUM methodology, the necessary organizational requirements using proven principles are set up.

(2604 characters)

III.3. Description of the consortium members

This section III.3 must be completed for each organisation participating in the project (applicant, partners and affiliated entities). Please use the same numbering as in the application e Form. Please note that the applicant should be P1.

III.3.1. Partner number – P1 – (Leipzig University)

Organisation name	Country
Leipzig University	Germany

III.3.1.1. Aims and activities of the organisation

Please provide a short presentation of the organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project. Please provide also a link to the website of the organisation, if available. (Recommended limit 1500 characters)

III.3.1.2. Role of the organisation in the project

Please describe the role of the organisation in the project and how the organisation will actually contribute to the project success. (Recommended limit 1500 characters)

III.3.1.3. Operational/Technical capacity: Skills and expertise of key staff involved in the project

Please fill in the table below for each key staff member and add lines as necessary.

NB: Please note that the first key staff to be listed under **P1** should be the Project coordinator (also called 'Project manager' and 'Contact person' in section A.2 of the eForm). The coordinator will have the responsibility to ensure that the project is implemented in accordance with the selected application. Its coordination will include the following duties:

- be the single point of contact of the Agency for all communications on the project;
- coordinate the work of the consortium in line with the work plan;
- monitor that the action is implemented in accordance with the EU grant agreement.

Therefore, this person must have all the necessary professional experience and competencies to carry out the coordination of the project. Please provide detailed information for this person.

Names of the staff members	Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.
Thomas Neumuth	
Hans-Gert Gräbe	
Sabine Lautenschläger	
Ken Pierre Kleemann	

III.3.2. Partner number – P2 – (HS Offenburg)

Organisation name	Country
HS Offenburg	Germany

III.3.2.1. Aims and activities of the organisation

Please provide a short presentation of the organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project. Please provide also a link to the website of the organisation, if available. (Recommended limit 1500 characters)

HOCHSCHULE OFFENBURG is an educational and research institution with a strong practical orientation. Today, the University forms a thriving community with over 4,500 students and 415 staff members (heads) on two campuses and offers Bachelor's and Master's degrees in four departments in the fields of Technology, Engineering, Business and Media. Close collaboration with the industrial companies, especially with the medium-size enterprises in the region, an international focus and contacts with numerous partner universities worldwide allowing application-oriented research, technology transfer, up-to-date laboratories and interdisciplinary expertise in various technological fields. Since 2013 the Faculty of Mechanical and Process Engineering as one of the largest departments of HSO offers courses in Innovative Design, New Product Development, and Systematic Inventive Problem Solving with the theory of inventive problem solving TRIZ in nine undergraduate Bachelor programs and six Master programs. Within the European Project IbD 'Intensified by Design' (2015-2018) within international consortium of 22 universities, research institutes and industrial companies, the HSO researchers of the Lab for Product and Process Innovation have developed the Advanced Innovation Design Approach (AIDA) for process engineering.

Design Approach (AIDA) is a holistic approach for enhancing innovative and competitive capability of industrial companies. In the research project "Innovation Process 4.0" run at the HSO Offenburg in co-operation with 10 German industrial companies in 2015-2019 a holistic approach for enhancing innovative and competitive capability of companies and the AIDA best practice innovation toolbox have been developed and applied in numerous industrial case studies. Additionally, HSO is an active member of the international academic fellowship "Educating the Edisons of the 21st Century - Embedding tools of the Theory of Inventive Problem Solving (TRIZ) into the engineering curriculum".

Website: www.hs-offenburg.de

III.3.2.2. Role of the organisation in the project

Please describe the role of the organisation in the project and how the organisation will actually contribute to the project success. (Recommended limit 1500 characters)

HSO's role will be focused primarily on

1) Further development and implementation of agile (rapid and efficient) systematic innovation tools for eco-innovation and eco-design especially in process engineering, combining the advantages of Knowledge-Based Engineering (KBE) methodology (e.g. Process Intensification), inventive tools of Knowledge-Based Innovation (KBI) and TRIZ theory, and main principles and best-practices of Eco-Design and Sustainable Manufacturing. The work will be focused on a) Definition of the eco-innovation process in the domain of process engineering, b) Adaptation of the Process Intensification databases for eco-innovation, c) Further development, optimization and computerization of the toolbox for the eco-innovation process, d) Application of the Eco-innovative tools for their validation through the industrial case studies.

2) Development of learning resources in systematic eco-innovation for dissemination of major outcomes to the current and next generation of engineers. Using its new developed method for enhancing innovative and competitive capability of companies, HSO will perform an industrial survey to identify and prioritize industry requirements and specifications on innovations competences and tools, especially in the early phase

III.3.2.3. Operational/Technical capacity: skills and expertise of key staff involved in the project

Please fill in the table below for each key staff member and add lines as necessary.

Names of the staff members	<i>Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.</i>
Pavel Livotov (male)	Professor at the Faculty of Mechanical and Process Engineering at Hochschule Offenburg (HSO), a seasoned inventor, scientist and innovation consultant. He is the Head of the Laboratory for Product and Process Innovation, author of more than 80 patented inventions and more than 90 articles. He has worked with inventive TRIZ methodology since 1980, received his PhD in 1988 in St. Petersburg, Russia on the field of aerospace robotics. From 1989 to 1993 he continued his research work at the University of Hanover, Germany as a senior scientist of Institute for Production Engineering and Machine Tools. From 1993 till 1999 he was the head of R&D department robotics at Focke & Co, Germany. In 1999 he founded the TriSolver Consulting and later the TriSolver Innovation Software GmbH in Germany. He is founder and head of the TriS Europe Innovation Academy. Since 2010 he is a professor for design in process engineering at the Beuth University Berlin, and since 2013 a professor for product development at HSO.
Mas'udah (female)	Academic Researcher at the Laboratory for Product and Process Innovation (PPI), at the Department of Mechanical and Process Engineering HSO. She holds an MSc degree in Process Engineering from HSO, and a degree in Environmental Protection and Biotechnology from University of Warmia and Mazury in Olsztyn (UWM), Poland. She is a specialist in process innovation, process intensification, inventive problem solving and secondary impact analysis of product innovation. Between 2015 – 2019, she worked as a research assistant in the European Project, IbD Intensified by Design®, and has been the moderator for several workshops of TRIZ application for process intensification in different industrial domains such as chemical, pharmaceutical and ceramic industries. She also has acted as co-author and principal author of several scientific and practitioner publications.
Arun Prasad Chandra Sekaran (male)	Academic Researcher at HSO in the field of systematic innovation in manufacturing industries. He holds a BTech degree in Chemical Engineering from Anna University, India and a MSc degree in Process Engineering from HSO. From 2011-2014, he worked in the field of quality control of automotive adhesives & sealers and industrial environmental impact assessment studies in India. Since 2016, he is a researcher at HSO. He was also involved in the European research project IbD “Intensified by Design” where he assisted European Industrial partners and University researchers for Process Intensification using TRIZ methodology. His activities include process & environmental analysis of industrial operations, systematic problem solving, development of TRIZ tools for Process Engineering. He is a co-author and principal author of scientific publications.

Relevant Publications in the field of Systematic Innovation Methodologies and their Education

Belski, I., Livotov, P., Vaneker, T. (2016), Structured Innovation with TRIZ in Science and Industry - Creating Value for Customers and Society, *Procedia CIRP*, Volume 39, 2016, Pages 1-2.

Livotov, P., Mas'udah, Chandra Sekaran, A.P. (2018), On the Efficiency of TRIZ Application for Process Intensification in Process Engineering. in: Cavallucci D., De Guio R., Koziółek S. (eds) *Automated Invention for Smart Industries*, TFC 2018, IFIP Advances in Information and Communication Technology, Vol 541., pp.126-140, available at: [dx.doi.org/10.1007/978-3-030-02456-7_11](https://doi.org/10.1007/978-3-030-02456-7_11)

Livotov P., Mas'udah, Sarsenova A., Chandra Sekaran A.P. (2019), Identification of Secondary Problems of New Technologies in Process Engineering by Patent Analysis, In: Chechurin L., Collan M. (eds) *Advances in Systematic Creativity*, Palgrave Macmillan, Cham. available at: doi.org/10.1007/978-3-319-78075-7_10

Livotov, P., Chandra Sekaran, A.P., Mas'udah, Law, R., Reay, D., Sarsenova, A. and Sayyareh, S. (2019), Eco-innovation in Process Engineering: Contradictions, Inventive Principles and Methods, *Thermal Science and Engineering Progress*, Vol. 9, pp. 52-65, doi.org/10.1016/j.tsep.2018.10.012.

Livotov P., Chandra Sekaran A.P., Law R., Mas'udah, Reay D. (2019), Systematic Innovation in Process Engineering: Linking TRIZ and Process Intensification. In: Chechurin L., Collan M. (eds) *Advances in Systematic Creativity*. Palgrave Macmillan, Cham, doi.org/10.1007/978-3-319-78075-7_3

Livotov, P. (2018), Competitive capability assessment of industrial companies within the framework of advanced innovation design approach. In: Marjanović D., Štorga M., Škec S., Bojčetić N., Pavković N. (Eds) *DS 92: Proceedings of the DESIGN 2018 15th International Design Conference*, Section: Design Innovation, pp 1903-1914, DOI: doi.org/10.21278/idc.2018.0267.

- Livotov, P., Mas'udah, M., Chandra Sekaran, A.P., Law, R., & Reay, D. (2019), Ecological Advanced Innovation Design Approach for Efficient Integrated Upstream and Downstream Processes. Proceedings of the Design Society: International Conference on Engineering Design, 1(1), 3291-3300. doi:10.1017/dsi.2019.336
- Chandra Sekaran, A.P., Livotov, P., Mas'udah. (2019), Classification of TRIZ Inventive Principles and Sub-Principles for Process Engineering Problems. TFC 2019, IFIP Advances in Information and Communication Technology, Vol. 572, Springer, Cham, pp. 314-327. doi:10.1007/978-3-030-32497-1_26
- Livotov, P., Petrov, V. (2013), TRIZ Innovation Technology. Product Development and Inventive Problem Solving. Handbook, 288 p., TriS Europe, Berlin.
- Livotov, P. (2015), Web-Based Asynchronous Distance Education in New Product Development and Inventive Problem Solving for Industrial Companies, Procedia Engineering, Volume 131, 2015, Pages 123-139
- Livotov, P. (2015), Measuring Motivation and Innovation Skills in Advanced Course in New Product Development and Inventive Problem Solving with TRIZ for Mechanical Engineering Students. Procedia Engineering, Volume 131, pp 767-775.
- Belski, I., Livotov, P. and Mayer, O. (2016), Eight Fields of MATCEMIB Help Students to Generate More Ideas. Procedia CIRP, 39, 85-90., DOI:10.1016/j.procir.2016.01.170.
- Livotov, P. (2017), Modelling Innovation Process in Multidisciplinary Course in New Product Development and Inventive Problem Solving. In: Huda, N., Inglis, D., Tse, N, Town, G. (eds.) Proceedings of the 28th Annual Conference of the Australasian Association for Engineering Education AAEE 2017. pp. 287-294. Sydney, NSW, Australia: School of Engineering, Macquarie University .
- Livotov, P. (2018), Enhancing Innovation and Entrepreneurial Competences of Engineering Students through a Systematic Cross-Industry Innovation Learning Course. Paper presented at the 29th Annual Conf. of the Australasian Association for Engineering Education, Hamilton, New Zealand.
- Belski, I., Cavallucci, D., Livotov, P. et al. (2018), Sustainable Education in Inventive Problem Solving with TRIZ and Knowledge-Based Innovation at Universities. Paper presented at the 18th Int. TRIZ Future Conference TFC 2018, Automated Invention for Smart Industries, pp. 51-73, Strasbourg, France.
- Livotov, P., Chandra Sekaran, A.P., Mas'udah. (2019), Lower Abstraction Level of TRIZ Inventive Principles Improves Ideation Productivity of Engineering Students. TFC 2019, IFIP Advances in Information and Communication Technology, Vol. 572, Springer, Cham, pp. 526-538. https://doi.org/10.1007/978-3-030-32497-1_41
- Livotov, P., Mas'udah, Chandra Sekaran, A.P., Law, R., & Reay, D. (2019), Education in Systematic Eco-Innovation in Environmental and Process Engineering. In S. Goh (Ed.), Proceedings of the 30th Annual Conference of the Australasian Association for Engineering Education - AAEE2019 (pp. 1-7). Brisbane, Australia: AAEE.

III.3.3. Partner number – P3 – (INSA Strasbourg)

Organisation name	Country
INSA Strasbourg	France

III.3.3.1. Aims and activities of the organisation

Please provide a short presentation of the organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project. Please provide also a link to the website of the organisation, if available. (Recommended limit 1500 characters)

III.3.3.2. Role of the organisation in the project

Please describe the role of the organisation in the project and how the organisation will actually contribute to the project success. (Recommended limit 1500 characters)

III.3.3.3. Operational/Technical capacity: skills and expertise of key staff involved in the project

Please fill in the table below for each key staff member and add lines as necessary.

Names of the staff members	Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.
Denis Cavallucci	

III.3.4. Partner number – P4 – (BUT Brno)

Organisation name	Country
BUT Brno	Czech Republic

III.3.4.1. Aims and activities of the organisation

Please provide a short presentation of the organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project. Please provide also a link to the website of the organisation, if available. (Recommended limit 1500 characters)

III.3.4.2. Role of the organisation in the project

Please describe the role of the organisation in the project and how the organisation will actually contribute to the project success. (Recommended limit 1500 characters)

III.3.4.3. Operational/Technical capacity: skills and expertise of key staff involved in the project

Please fill in the table below for each key staff member and add lines as necessary.

Names of the staff members	<i>Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.</i>
Bohuslav Busov	

III.3.5. Partner number – P5 – (UTC Cluj-Napoca)

Organisation name	Country
UTC Cluj-Napoca	Romania

III.3.5.1. Aims and activities of the organisation

Please provide a short presentation of the organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project. Please provide also a link to the website of the organisation, if available. (Recommended limit 1500 characters)

The Technical University of Cluj-Napoca, an “Advanced Research and Education University” as awarded with the Order of the Ministry of National Education no 5262/September 5th 2011, is today a tertiary educational institution having both tradition and national and international recognition.

The Technical University of Cluj-Napoca comprises twelve faculties in the two academic centres, Cluj-Napoca and Baia Mare, as well as in locations, such as Alba-Iulia, Bistrita, Satu Mare and Zalau. The educational offer, aligned to the Bologna system, includes bachelor's, master's and doctoral programs, as well as continuous training programs.

The fields of study have a wide range, from engineering to architecture, fundamental sciences, socio-human sciences and arts. Also, within the Technical University, the Department for Continuing Education, Distance Learning and with Reduced Frequency organizes and conducts continuous education activities and programs, postgraduate courses, continuous professional development programs or courses or based on occupational standards.

The Technical University of Cluj-Napoca is concerned with the international exchange of scientific values, and this trend is found in the over 400 inter-university collaboration agreements or in the large number of student mobilities. Opening up towards the European and world space of education and research through a steady process of internationalization is one of the major objectives of the university.

Research is, along with education, the main priority of the Technical University of Cluj-Napoca. In all faculties of the university there are research structures, from collectives, groups and laboratories, to research centers and platforms. The performance anchored in the socio-economic environment, the international visibility and cooperation as well as the scientific novelty and interdisciplinarity are some of the characteristics of the research environment of the Technical University of Cluj-Napoca.

Open research directions are oriented towards global priorities and perspectives: from the Information and communications technology to Renewable Energy and Ecology; from superconductivity, spintronics and nanomaterials, to management and robotics; from mechatronics and electrical engineering, to the automobile and the home of the future, or to urbanism and society.

III.3.5.2. Role of the organisation in the project

Please describe the role of the organisation in the project and how the organisation will actually contribute to the project success. (Recommended limit 1500 characters)

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III.3.5.3. Operational/Technical capacity: skills and expertise of key staff involved in the project

Please fill in the table below for each key staff member and add lines as necessary.

Names of the staff members	Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.
Stelian Brad	

Names of the staff members	<i>Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.</i>

III.3.6. Partner number – P6 – (LUT Lappenranta)

Organisation name	Country
LUT Lappenranta	Finland

III.3.6.1. Aims and activities of the organisation

Please provide a short presentation of the organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project. Please provide also a link to the website of the organisation, if available. (Recommended limit 1500 characters)

III.3.6.2. Role of the organisation in the project

Please describe the role of the organisation in the project and how the organisation will actually contribute to the project success. (Recommended limit 1500 characters)

III.3.6.3. Operational/Technical capacity: skills and expertise of key staff involved in the project

Please fill in the table below for each key staff member and add lines as necessary.

Names of the staff members	Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.
Leonid Chechurin	

III.3.7. Partner number – P7 – (HTBLA Wolfsberg)

Organisation name	Country
HTBLA Wolfsberg	Austria

III.3.7.1. Aims and activities of the organisation

Please provide a short presentation of the organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project. Please provide also a link to the website of the organisation, if available. (Recommended limit 1500 characters)

III.3.7.2. Role of the organisation in the project

Please describe the role of the organisation in the project and how the organisation will actually contribute to the project success. (Recommended limit 1500 characters)

III.3.7.3. Operational/Technical capacity: skills and expertise of key staff involved in the project

Please fill in the table below for each key staff member and add lines as necessary.

Names of the staff members	Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.
Jürgen Jantschgi	

III.3.8. Partner number – P8 – (Schaeffler AG)

Organisation name	Country
Schaeffler AG	Germany

III.3.8.1. Aims and activities of the organisation

Please provide a short presentation of the organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project. Please provide also a link to the website of the organisation, if available. (Recommended limit 1500 characters)

III.3.8.2. Role of the organisation in the project

Please describe the role of the organisation in the project and how the organisation will actually contribute to the project success. (Recommended limit 1500 characters)

III.3.8.3. Operational/Technical capacity: skills and expertise of key staff involved in the project

Please fill in the table below for each key staff member and add lines as necessary.

Names of the staff members	<i>Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.</i>
Armin Lau	
Thomas Fuhrmann	

III.3.9. Partner number – P9 – (Arxia SRL)

Organisation name	Country
Arxia SRL	Romania

III.3.9.1. Aims and activities of the organisation

Please provide a short presentation of the organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project. Please provide also a link to the website of the organisation, if available. (Recommended limit 1500 characters)

III.3.9.2. Role of the organisation in the project

Please describe the role of the organisation in the project and how the organisation will actually contribute to the project success. (Recommended limit 1500 characters)

III.3.9.3. Operational/Technical capacity: skills and expertise of key staff involved in the project

Please fill in the table below for each key staff member and add lines as necessary.

Names of the staff members	Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.
Daniel Homorodean	

III.3.10. Partner number – P10 – (Tehnoprod Plast SRL)

Organisation name	Country
Tehnoprod Plast SRL	Romania

III.3.10.1. Aims and activities of the organisation

Please provide a short presentation of the organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project. Please provide also a link to the website of the organisation, if available. (Recommended limit 1500 characters)

III.3.10.2. Role of the organisation in the project

Please describe the role of the organisation in the project and how the organisation will actually contribute to the project success. (Recommended limit 1500 characters)

III.3.10.3. Operational/Technical capacity: skills and expertise of key staff involved in the project

Please fill in the table below for each key staff member and add lines as necessary.

Names of the staff members	<i>Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.</i>
Lucian Moraru	

III.3.11. Partner number – P11 – (Target Invention Minsk)

Organisation name	Country
Target Invention Minsk	Belarus

III.3.11.1. Aims and activities of the organisation

Please provide a short presentation of the organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project. Please provide also a link to the website of the organisation, if available. (Recommended limit 1500 characters)

Target Innovation has a rich teaching experience and practical consulting of SME all over the world (in particular Samsung/Korea, China).

III.3.11.2. Role of the organisation in the project

Please describe the role of the organisation in the project and how the organisation will actually contribute to the project success. (Recommended limit 1500 characters)

The partner will be involved with quality assurance of both practical teaching courses and teaching material.

III.3.11.3. Operational/Technical capacity: skills and expertise of key staff involved in the project

Please fill in the table below for each key staff member and add lines as necessary.

Names of the staff members	<i>Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.</i>
Nikolay Shpakovsky	He is a certified TRIZ master for many years and the main representative of the Minsk OTSM-TRIZ school.

III.3.12. Partner number – P12 – (NPK Consult Moscow)

Organisation name	Country
NPK Consult Moscow	Russia

III.3.12.1. Aims and activities of the organisation

Please provide a short presentation of the organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project. Please provide also a link to the website of the organisation, if available. (Recommended limit 1500 characters)

NPK Consult Moscow is a big consulting company with rich experience in applying TRIZ methodology within SME innovation challenges.

III.3.12.2. Role of the organisation in the project

Please describe the role of the organisation in the project and how the organisation will actually contribute to the project success. (Recommended limit 1500 characters)

The partner will be involved sharing experience in organizing intra and cross SME trainings in systematic innovation methodologies to build up a common stock of approaches of such training concepts and materials.

III.3.12.3. Operational/Technical capacity: skills and expertise of key staff involved in the project

Please fill in the table below for each key staff member and add lines as necessary.

Names of the staff members	Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.
Elena Redkolis	

III.3.13. Partner number – P13 – (BM TRIZ Chelyabinsk)

Organisation name	Country
BM TRIZ Chelyabinsk	Russia

III.3.13.1. Aims and activities of the organisation

Please provide a short presentation of the organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project. Please provide also a link to the website of the organisation, if available. (Recommended limit 1500 characters)

BM TRIZ Chelyabinsk is one of the leading consulting firms in the area of business and management using contradiction oriented systematic innovation methodologies. In Sept. 2019 Anton Kozhemyako was appointed as Director of Developing TRIZ Applications for Business and Management by MA TRIZ, the International TRIZ Association.

III.3.13.2. Role of the organisation in the project

Please describe the role of the organisation in the project and how the organisation will actually contribute to the project success. (Recommended limit 1500 characters)

The partner will be involved to support the collection of recent business cases and methodological development in the area of business and management to continuously improve the teaching concepts and materials within our Knowledge Alliance.

III.3.13.3. Operational/Technical capacity: skills and expertise of key staff involved in the project

Please fill in the table below for each key staff member and add lines as necessary.

Names of the staff members	Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.
Anton Kozhemyako	In Sept. 2019 he was appointed as Director of Developing TRIZ Applications for Business and Management by MA TRIZ, the International TRIZ Association.

III.4. Cooperation arrangements across the partnership

Please describe arrangements and responsibilities for decision-making, conflict resolution, reporting, monitoring, communication and other relevant issues. (Recommended limit 2500 characters)

III.5. Partner Country participation⁷ (where applicable)

This section should be completed, if the application involves organisations from Erasmus+ Partner Countries.

Please explain how Partner Country organisation(s) participating in the project are giving an essential added value to the project. (Recommended limit 1500 characters)

***NB:** please note that the involvement of a participating organisation from a Partner Country must bring **an essential added value** to the project. As a result, organisations from Partner Countries must bring specific skills, experiences or expertise that organisations from Programme Countries cannot bring and that prove to be essential for the achievement of the project's objectives and/or to ensure a significantly higher quality of the project outputs.*

⁷
participate in the Erasmus+ Programme?"

See list in the Erasmus+ Programme Guide, part A 'Who can

PART IV. Impact, dissemination, exploitation, and sustainability

IV.1. Target groups

IV.1.1 Please explain which target groups (e.g. participating organisations as well as other stakeholders such as higher education institutions, companies/SMEs/businesses, students, professionals, the wider public) will benefit from the project results/outcomes. Indicate how the project outputs will be used by these target groups and will lead to expected outcomes and change. (Recommended limit 3000 characters)

1. Actors for the exemplary establishment of a corresponding training structure in Mitteldeutschland (Leipzig region).
2. HEI who want to develop and implement similar programs to build up appropriate training capacities in these cross cutting skills.
3. Industrial companies that want to build up an appropriate base of skilled people in their own company.
4. Consulting companies, in whose profile consulting, application and training of SIM are core competencies.

IV.1.2 Please describe how the target groups will be reached and involved during the project lifetime and how the project will be beneficial for these target groups at local, regional, national and or European level. What is the change your project will make? (Recommended limit 3000 characters)

*IV.1.3 Please describe how the target groups will be reached **after the project is finished**. (Recommended limit 3000 characters).*

IV.2. Sustainability and impact

IV.2.1 How will the activities and the partnership be sustained beyond the project lifetime? Please explain which results of your project will be maintained after EU funding, and how you intend to maintain them, including the necessary financial and human resources. (Recommended limit 3000 characters)

IV.2.2 Please indicate what is the expected short term and long term impact on the target groups (including participating institutions and stakeholders); what is the desired impact of the project at local, regional, national, European and/or international level? What activities do you envisage to ensure that the expected and desired impact is achieved? (Recommended limit 3000 characters)

IV.2.3 Please specify whether/how existing undertakings, schemes, projects, platforms, ventures etc. will be linked to/integrated into the project. Also demonstrate that the project outputs and results will be transferable and accessible to a broader audience. (Recommended limit 3000 characters)

IV.2.4 Describe the dissemination and promotion measures that will ensure the best project visibility, including project advocacy and pro-active public relations activities. In this context, indicate the main project website features that will ensure that the produced outputs/deliverables are accessible to end users and properly promoted. Also explain your strategy on social media. (Recommended limit 3000 characters)

IV.2.5 Overview of short term results and long term outcome indicators

Please highlight the main results (outputs and outcomes) for stakeholders (individuals, organisations, etc.....) sectors or systems that your project intends to generate;

Please add lines as necessary according to the number of indicators

Short term results	Target groups/potential beneficiaries	Quantitative indicators	Qualitative indicators

Long term outcomes	Target groups/potential beneficiaries	Quantitative indicators	Qualitative indicators

IV.3. Dissemination and exploitation strategy

How will the dissemination activities be structured so as to ensure that the results will reach the relevant target groups? How will the exploitation activities be structured so as to use the results both within the project's lifetime and after? How will the results be mainstreamed and multiplied? (cfr: Annex II of the Programme Guide - sections 1 & 2 pages 312-317)

If appropriate, to which existing initiative(s) you intend to link? (Recommended limit 3000 characters)

IV.4. Open access to the educational resources

Please describe how the materials, documents and media produced will be made available to the wider public through new technologies. Please explain also if you consider that this part is not applicable to your project. (Recommended limit 3000 characters)

In this direction the project follows the principles of Open Culture and in particular presents the experience gathered on a public platform for subsequent use. We build on the experience and structures of the Leipzig WUMM Project⁸, in which a corresponding open infrastructure has been built around a github organizational account⁹ since the beginning of 2019. In this context, the multilingual potential of RDF-based technologies for the presentation of methodological concepts has already been prototypically demonstrated. This approach of making relevant materials available under the Apache 2.0 License is to be pursued and expanded further in the project.

PART V. Specific arrangements regarding learning mobility (if applicable)

Knowledge Alliances may organise learning mobility activities of students, researchers and staff in so far as they support/complement the main activities of the Alliance and bring added value in the realisation of the project's objectives. Kick-off and project meetings are not considered as learning mobility activities. Mobility days for which travel and subsistence unit costs are charged to the project, cannot be charged as working days for implementation support to the main activities. **Mobility activities / Learning mobility do not constitute the main activities of a Knowledge Alliance**; extending and scaling-up these activities would need to be supported via the Key Action 1 of this Programme or other funding instruments.

V.1. Added value

Please describe how the mobility activities of students, researchers and staff support/complement the other activities of the Alliance and bring added value in the realisation of the project's objectives. (Recommended limit 3000 characters).

V.2. Implementation of the learning mobility

Please describe the selection of participants, the quality measures set up in the sending and receiving organisations for monitoring the mobility activity, how the project intends to recognise and validate the learning outcomes of the participants (ECTS-DS ...), and follow up of the mobility activities. Please refer to the information provided in Section C.1 of the eForm. (Recommended limit 3000 characters)

8 <http://www.leipzig-netz.de/index.php/WUMM>

9 <https://github.com/wumm-project>

*NB: If learning mobility activities are planned, they should be embedded in the project activities. Please also note that the budget for learning mobility **cannot** be used to finance costs for travels & subsistence of staff that are not directly related to the learning mobility activities (e.g. attendance costs to events, costs linked to partnership meetings, etc). Only learning mobility costs can be put in the sheet 'Learning mobility' of the budget annex.*

PART VI. Additional project information (if applicable)

This section allows you to provide any additional project specific information, which is not covered in other parts of the application form. Please refrain from any repetition of previous statements and earlier mentioned aspects. (Recommended limit 1500 characters).

In line with the call requirements, higher education institutions (HEIs) established in a Programme Country must hold a valid Erasmus Charter for Higher Education (ECHE). Should the charter code not display automatically or be incorrect in the eForm (Part A section A1 – field 'accreditation number'), please use this section to indicate it and explain how it applies to your HEI.

The charter code is composed of the country code (letters) – city acronym – number (2 digits). You can consult the Erasmus Charter holders' list published on the following link:

https://eacea.ec.europa.eu/erasmus-plus/actions/erasmus-charter_en.

PART VII. Work Plan and Work Packages

VII.0. Work Plan and Work Packages (WPs) list

Please enter the different project activities you intend to carry out in your project.

WP number	WP title
WP1	
WP2	
WP3	
WP4	
WP5	
WP6	
Etc.	

For each WP, please fill in the following WP description, WP results and WP explanation of expenditures (add more WPs if necessary)

VII.1. Work Package 1 – *(Add Title)*

WP1 description

WP No.1	
Work Package/Activity type	<input type="checkbox"/> Preparation <input type="checkbox"/> Management <input type="checkbox"/> Implementation (the substance of the work planned including production, testing, etc.) <input type="checkbox"/> Quality Assurance (quality plan) <input type="checkbox"/> Evaluation <input type="checkbox"/> Dissemination and Exploitation of results
Title	
Description <i>(Recommended limit 1500 characters)</i>	
Tasks <i>(Recommended limit 3000 characters)</i>	
Estimated start date	
Estimated end date	
Lead organisation	
Participating organisations	

WP1 Results (outputs and outcomes)

Please add tables as necessary.

Expected result (output or outcome)	WP1	
	Title	
	Type	
	Description	

	<i>(Recommended limit 1500 characters)</i>	
	Due date	
	Language(s)	
	Media(s)	
Dissemination level	<input type="checkbox"/> Public <input type="checkbox"/> Restricted to other programme participants (including Commission services and project reviewers) <input type="checkbox"/> Confidential, only for members of the consortium (including EACEA and Commission services and project reviewers)	

WP1 Explanation of Work Package expenditures

Please explain what costs will be associated to each Work Package and covered by scale of unit costs. If learning mobilities are to be organised, please explain what is covered under the heading for "travel and subsistence costs". (Recommended limit 3000 characters)

VII.2. Work Package 2 – (Add Title)

WP2 description

WP No.2	
Work Package/Activity type	<input type="checkbox"/> Preparation <input type="checkbox"/> Management <input type="checkbox"/> Implementation (the substance of the work planned including production, testing, etc.) <input type="checkbox"/> Quality Assurance (quality plan) <input type="checkbox"/> Evaluation <input type="checkbox"/> Dissemination and Exploitation of results
Title	
Description (Recommended limit 1500 characters)	
Tasks (Recommended limit 3000 characters)	
Estimated start date	
Estimated end date	
Lead organisation	
Participating organisations	

WP2 Results (outputs and outcomes)

Please add tables as necessary.

Expected result (output or outcome)	WP2	
	Title	
	Type	
	Description (Recommended limit 1500 characters)	

	Due date	
	Language(s)	
	Media(s)	
Dissemination level	<input type="checkbox"/> Public <input type="checkbox"/> Restricted to other programme participants (including Commission services and project reviewers) <input type="checkbox"/> Confidential, only for members of the consortium (including EACEA and Commission services and project reviewers)	

WP2 Explanation of Work Package expenditures

Please explain what costs will be associated to each Work Package and covered by scale of unit costs. If learning mobilities are to be organised, please explain what is covered under the heading for "travel and subsistence costs". (Recommended limit 3000 characters)

VII.3. Work Package 3 – *(Add Title)*

WP3 description

WP No.3	
Work Package/Activity type	<input type="checkbox"/> Preparation <input type="checkbox"/> Management <input type="checkbox"/> Implementation (the substance of the work planned including production, testing, etc.) <input type="checkbox"/> Quality Assurance (quality plan) <input type="checkbox"/> Evaluation <input type="checkbox"/> Dissemination and Exploitation of results
Title	
Description <i>(Recommended limit 1500 characters)</i>	
Tasks <i>(Recommended limit 3000 characters)</i>	
Estimated start date	
Estimated end date	
Lead organisation	
Participating organisations	

WP3 Results (outputs and outcomes)

Please add tables as necessary.

Expected result (output or outcome)	WP3	
	Title	
	Type	
	Description <i>(Recommended limit 1500 characters)</i>	

	Due date	
	Language(s)	
	Media(s)	
Dissemination level	<input type="checkbox"/> Public <input type="checkbox"/> Restricted to other programme participants (including Commission services and project reviewers) <input type="checkbox"/> Confidential, only for members of the consortium (including EACEA and Commission services and project reviewers)	

WP3 Explanation of Work Package expenditures

Please explain what costs will be associated to each Work Package and covered by scale of unit costs. If learning mobilities are to be organised, please explain what is covered under the heading for "travel and subsistence costs" (Recommended limit 3000 characters).

VII.4. Work Package 4 – (Add Title)

WP4 description

WP No.4	
Work Package/Activity type	<input type="checkbox"/> Preparation <input type="checkbox"/> Management <input type="checkbox"/> Implementation (the substance of the work planned including production, testing, etc.) <input type="checkbox"/> Quality Assurance (quality plan) <input type="checkbox"/> Evaluation <input type="checkbox"/> Dissemination and Exploitation of results
Title	
Description (Recommended limit 1500 characters)	
Tasks (Recommended limit 3000 characters)	
Estimated start date	
Estimated end date	
Lead organisation	
Participating organisations	

WP4 Results (outputs and outcomes)

Please add tables as necessary.

Expected result (output or outcome)	WP4	
	Title	
	Type	
	Description (Recommended limit 1500 characters)	

	Due date	
	Language(s)	
	Media(s)	
Dissemination level	<input type="checkbox"/> Public <input type="checkbox"/> Restricted to other programme participants (including Commission services and project reviewers) <input type="checkbox"/> Confidential, only for members of the consortium (including EACEA and Commission services and project reviewers)	

WP4 Explanation of Work Package expenditures

Please explain what costs will be associated to each Work Package and covered by scale of unit costs. If learning mobilities are to be organised, please explain what is covered under the heading for "travel and subsistence costs" (Recommended limit 3000 characters).

VII.5. Work Package 5 – (Add Title)

WP5 description

WP No.5	
Work Package/Activity type	<input type="checkbox"/> Preparation <input type="checkbox"/> Management <input type="checkbox"/> Implementation (the substance of the work planned including production, testing, etc.) <input type="checkbox"/> Quality Assurance (quality plan) <input type="checkbox"/> Evaluation <input type="checkbox"/> Dissemination and Exploitation of results
Title	
Description (Recommended limit 1500 characters)	
Tasks (Recommended limit 3000 characters)	
Estimated start date	
Estimated end date	
Lead organisation	
Participating organisations	

WP5 Results (outputs and outcomes)

Please add tables as necessary.

Expected result (output or outcome)	WP5	
	Title	
	Type	
	Description (Recommended limit 1500 characters)	

	Due date	
	Language(s)	
	Media(s)	
Dissemination level	<input type="checkbox"/> Public <input type="checkbox"/> Restricted to other programme participants (including Commission services and project reviewers) <input type="checkbox"/> Confidential, only for members of the consortium (including EACEA and Commission services and project reviewers)	

WP5 Explanation of Work Package expenditures

Please explain what costs will be associated to each Work Package and covered by scale of unit costs. If learning mobilities are to be organised, please explain what is covered under the heading for "travel and subsistence costs" (Recommended limit 3000 characters).

VII.6. Work Package 6 – (Add Title)

WP6 description

WP No.6	
Work Package/Activity type	<input type="checkbox"/> Preparation <input type="checkbox"/> Management <input type="checkbox"/> Implementation (the substance of the work planned including production, testing, etc.) <input type="checkbox"/> Quality Assurance (quality plan) <input type="checkbox"/> Evaluation <input type="checkbox"/> Dissemination and Exploitation of results
Title	
Description (Recommended limit 1500 characters)	
Tasks (Recommended limit 3000 characters)	
Estimated start date	
Estimated end date	
Lead organisation	
Participating organisations	

WP6 Results (outputs and outcomes)

Please add tables as necessary.

Expected result (output or outcome)	WP6	
	Title	
	Type	
	Description (Recommended limit 1500 characters)	

	Due date	
	Language(s)	
	Media(s)	
Dissemination level	<input type="checkbox"/> Public <input type="checkbox"/> Restricted to other programme participants (including Commission services and project reviewers) <input type="checkbox"/> Confidential, only for members of the consortium (including EACEA and Commission services and project reviewers)	

WP6 Explanation of Work Package expenditures

Please explain what costs will be associated to each Work Package and covered by scale of unit costs. If learning mobilities are to be organised, please explain what is covered under the heading for "travel and subsistence costs" (Recommended limit 3000 characters).

VII.7. Overview of consortium partners involved and resources required

Please add lines as necessary according to number of Work Packages and partners involved.

Indicative input of consortium staff - The total number of days per staff category should correspond with the information provided in the budget tables.

N° of Work Package	Lead partner	Partners involved	Country	Number of staff days					Role and tasks in the Work Package
				Category	Category	Category	Category	Total	
				1	2	3	4		
1	Lead partner	P(n)							
		P(n)							
		P(n)							
		P(n)							
Subtotal									
2	Lead partner	P(n)							
		P(n)							
		P(n)							
Subtotal									
3	Lead partner	P(n)							
		P(n)							
		P(n)							
Subtotal									
4	Lead partner	P(n)							
		P(n)							
		P(n)							
Subtotal									
5	Lead partner	P(n)							
		P(n)							

N° of Work Package	Lead partner	Partners involved	Country	Number of staff days					Role and tasks in the Work Package
				Category	Category	Category	Category	Total	
				1	2	3	4		
		P(n)							
Subtotal									
6	Lead partner	P(n)							
		P(n)							
		P(n)							
Subtotal									
TOTAL									

VII.8. Overview of expected results (outputs and outcomes)

Please add lines as necessary according to number of Work Packages (WP) and results (outputs or outcomes).

N° of WP	Lead organi- sation (Pn)	Delive- rable nr	Start date	End date	Title of the deliverable	Medium that will be used (publication, electronic, online, other (specify))	Languages	Dissemination level (Public, Restricted, Confidential)	Target groups/potential beneficiaries

PART VIII. Specific arrangements regarding Associated Partners (if applicable)

In addition to full partners, Knowledge Alliances can also involve Associated Partners who contribute to the implementation of specific project tasks/activities or support the dissemination and sustainability of the Alliance. From a contractual point of view, they are not considered as project partners and do not receive funding, however it is important to make clear in the application how they will contribute to the project

Please list hereafter the associated partners

Names of the Associated Partner organisations	Types of organisations

Explain their involvement and role in the project and different activities (Recommended limit 1500 characters)

Annex – Affiliated Entities (if applicable)

Please fill in this Annex in case your Consortium involves Affiliated Entities.

I. List of Affiliated Entities that are members of the beneficiaries' organisation(s) involved in the application

Please fill in the table indicating the beneficiaries' and their affiliated entities who will participate in the project activities.

Beneficiary N° <i>(please use the same numbering both in the eForm and in the Excel budget table)</i>	Name of the beneficiary (partner) organisation	Country	Affiliated Entity N° AE (AE1 – AEn)	Name of the Affiliated Entity of the beneficiary organisation	Country of the Affiliated Entity
P 1			AE	Affiliated Entity 1	
				Affiliated Entity 2	
				Affiliated Entity 3	

II. Description of the Affiliated Entities

This section must be completed separately by each Affiliated Entity participating in the project. Please use the same numbering as in the table above, corresponding to the one on the eForm and the Excel budget table (e.g. AE1 refers to Affiliated Entity 1 of the beneficiary organisation who is Px in the eForm).

Partner number - P x [P1 – Pn] (beneficiary organisation)

Affiliated Entity number AE x (AE1 – AEn) (member of the beneficiary organisation)

Organisation name	
Country	

Please provide information on the legal or capital link between the Partner organisation and the Affiliated Entity. Please briefly describe the profile (with regard to the required types of organisations) and the role of your organisation in the project.

Please indicate the names of the staff that will be involved and provide a brief description of their expertise.



III. Overview of consortium partners and their Affiliated Entities and resources required

Please add lines as necessary according to number of Work Packages, partners and Affiliated Entities involved.

Indicative input of consortium staff - The total number of days per staff category must correspond to the information provided in the budget tables.

For each Work Package concerned, please fill in the table for each partner organisation whose Affiliated Entities will be involved in the project activities. Please list the number of days and tasks allocated to each Affiliated Entity in additional rows. The number of days dedicated to a beneficiary organisation has to be splitted between the partner organisation and its Affiliated Entity. For example, the partner organisation has 10 days for category 1, but after including the Affiliated Entities, it will have 5 days, Affiliated Entity 1 - 3 days and Affiliated Entity 2 – 2 days (total will be 10). Information regarding the other partners should not be modified.

N° of Work Package	Partner organisations involved	Country	Number of staff days					Role and tasks in the Work Package
			Category	Category	Category	Category	Total	
			1	2	3	4		
1	P(x) Partner organisation							
	Affiliated Entity 1 (name of the organisation)							
	Affiliated Entity 2 (name of the organisation)*							
	Affiliated Entity 3 (name of the organisation)*							
2	P(x) Partner organisation							
	Affiliated Entity 1 (name of the organisation)							
	Affiliated Entity 2 (name of the organisation)*							

*Please add rows as necessary.