LOGICAL FRAMEWORK MATRIX – LFM			
 Wider Objective: What is the overall broader objective, to which the project will contribute? To improve regional resilience to hazards and capability for regional cooperation in risk prevention and response and to ensure national professional resources and regional capacities in aim to build regional-based disaster preparedness and a culture of safety and resilience at all levels according to EU Integration Strategies and National relevant strategies 	 Indicators of progress: What are the key indicators related to the wider objective? At least 50 largest municipalities in the region employing a trained professional with relevant knowledge in Disaster Risk Management and Fire Safety Engineering (DRM&FSE) Relevant number of DRM&FSE experts with defined EQF/NQF involved in EU integration process and activities WB Countries fully participate in EU Civil Protection Mechanism Relevant regional strategies made in accordance of EU frameworks relevant for disaster risk reduction and fire 	 How indicators will be measured: What are the sources of information on these indicators? Annual reports on number of graduates, trainers and employees educated and trained in DRM&FSE Public Services official employment records WBC European Integration Offices official records on employment and engagement of experts Official publications of National and EU documents and agreements in the field of disaster risk reduction and fire safety and resilience 	
 Specific Project Objective/s: What are the specific objectives, which the project shall achieve? Modernization of Disaster Risk Management and Fire Safety Engineering master study programme (P1) and development and implementation of new Master programmes/modules (P2-P6) in WBC partners HEIs, according to regional needs and contemporary EU trends. Development and implementation of Disaster Risk Management and Fire Safety Engineering Doctoral study programme (P1) in accordance to available resources, regional needs and European partners' expertize, in 	safety and resilience Indicators of progress: What are the quantitative and qualitative indicators showing whether and to what extent the project's specific objectives are achieved? • Six modernized/developed and implemented DRM&FSE master programs in WBC (2nd and 3rd project year) • Developed and implemented PhD Program in WBC (P1) in 3rd project year • Improved teaching skills and methods • Improved teaching materials and tools • At least 120 students enrolled in DRM&FSE master programs in 2nd 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? Data from WBC accreditation bodies Official records WBC HEIs 6 educational ICT-based laboratories with interoperability capabilities Open educational resource/ K-FORCE On-line library (publications in EN, SRB, AL, B&H) K-FORCE Glossary of DRM&FSE key words and terms (EN, SRB, AL, B&H) Number and quality of new teaching materials developed and published WBC HEIs Thesis Committee Records Educational internal quality survey 	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? • Assumptions: • Addoption of NQF by WB Countries • Accreditation body will start with accreditation process for Vocational Master in Serbia • Political and economic stability in Balkan region • Support from all partners involved in the project • Students interested and motivated in subject and research • Professionals interested to

 aim to ensure regional capacities and sustainable education and research in the field. Continuous professional development of employees in DRM&FSE sector in WBC through creation and implementation of certified LLL courses for practitioners. 	 3rd project year At least 12 students from WBC enrolled in PhD study program in 3rd project year Developed and certified set of LLL courses for practitioners At least 400 trained professionals (2nd and 3rd project year) 	reports of HEIs graduates • Educational internal quality survey reports of HEIs students • Official records of institutions where practicioners are employed • Decision on certification and number of certified LLL courses • Peer reviews of curricula and LLL courses • Project reports, newsletters, e- bulletins	 participate in the LLL courses Risks: Delays in the implementation of the provisions of the Law on HE on Vocational Master in Serbia Duration time of accreditation processes and regular work of accreditation bodies for MPs and PhD Natural hazards, fires and extreme weather conditions
Outputs (tangible) and Outcomes (intangible): • Please provide the list of concrete DELIVERABLES - outputs/outcomes (<u>arouped in Workpackages</u>), leading to the specific objective/s.: 1.1 Report on DRM&FSE MPs in EU and WBC 1.2 Report on WBC needs for DRM&FSE MPs and learning outcomes 1.3 Presentation of developed DRM&FSE MPs Curricula 1.4 Equipment procured, installed and activated, local staff trained in its usage 2.1 Report on WB needs and EU trends in DRM&FSE PhD 2.2 Report on teaching staff resources for MPs and PhD 2.3 Report on compared PhD models and curricula 2.4 Presentation of developed PhD Curriculum 2.5 List of research PhD themes 3.1 Study visits reports 3.2 Report on agreed modalities of	Indicators of progress: What are the indicators to measure whether and to what extent the project achieves the envisaged results and effects? • WP1 • 4 reports compiled, published • WBC needs survey, sample of 300 students and professionals • Learning outcomes defined and published • DRM&FSE MPs Curricula published • Equipment purchased and introduced in inventory books and number of local teaching staff trained in using it • • WP2 • 5 reports compiled, published • List of research PhD themes written, published and distributed to prospective candidates and on Website •	 How indicators will be measured: What are the sources of information on these indicators? Project progress reports, number of paper copies distributed, number of downloads from site Equipment inventory books Equipment specification and user guides Report on number of trained local staff K-FORCE Web site, social network profiles and pages visits and document downloads Programmes, galleries and media reports on visits Newsletters, e-bulletins, newspapers Evaluation of training Number of textbooks published Official HEIs records Number of registered users on the flexible ITC learning platform K-FORCE e-library visits and document downloads 	Assumptions & risks: What external factors and conditions must be realised to obtain the expected outcomes and results on schedule? • NQF will be adopted timely • Adequate response of key stakeholders to questionnaires and call for interviews and their representation • Available relevant statistic data • Availability of equipment at the market • Regular work of bodies for accreditation • Adequate and regular financial flow • Timely procedures for VAT exclusion • Technical problems (internet connection problems, software problems, timely translation of all publications) • Well-defined internal evaluation procedures and protocols in partner HE institutions; administrative staff involved in accreditation material

using ICT for b-learning 3.3 WBC teaching staff trained on DRM&FSE subjects and student- centred teaching skills 3.4 b-learning materials for MPs and PhD developed 3.5 Report on evaluation of MPs and PhD learning material, fine-tuned MPs and PhD 4.1 Accredited MPs 4.2 Students enrolled on master studies 4.3 The flexible ICT learning platform activated on time 4.4 Lectures held by guest lecturers 4.5 Report on 1st cohorts' progress and satisfaction of students and staff 5.1 Accredited PhD programme 5.2 Students enrolled on PhD 5.3 b-learning PhD material delivered 5.4 Report on 1st cohorts progress and satisfaction of students and staff 6.1 Report on Students and staff 6.1 Report on WBC needs for LLL courses 6.2 Report on defined LLL outcomes 6.3 Glossary published 6.4 Selected learning material adapted for LLL purposes 6.5 LLL courses delivered to professionals in blended way 7.1 Quality Assurance mechanisms and procedures developed 7.2 The pools for different types of	 WP3 8 reports compiled, published 4 study visits organized and reports disseminated at home institutions At least 35 WBC TS trained At least 1 script and 10 presentations/webinars per developed/ modernised subject At least 1 lecture/tutorial per subject held by professionals - practical case studies 6 textbooks by PA published Number of new subjects, lectures, students, guest lecturers; feedback polls; students' exam marks WP4-WP5 9 reports comiled, published 6 Accredited MPs and 1 PhD programme 120 students enrolled on MPs and 12 on PhD 150 ICT platform users 60 authorized guest lectures and presentations held 5 case studies for tutorials and project work issued Polls on student and staff satisfaction processed WP6 5 reports compiled 	 Students' satisfaction survey reports Mailing list of prospective students and of potential LLL attendees K-FORCE Glossary published in pdf and printed in 200 copies Signed agreement about long-term cooperation between HEIs and non- academic partners at WBC Satisfaction survey of new learning material quality reviewers Satisfaction survey of the glossary external reviewers Yearly reports about dissemination activities Attendance lists from events and courses Number of HEIs guidebooks for enrolment distributed on HE fairs 3 Symposia Proceeding books published in PDF (distributed via USBs) Designed and printed project promotion material Number of delivered LLL courses certificates Minutes from meetings and formal HEIs decisions Report on implementation of the PM plan, procedures and the Risk Plan Partner expenses reports Project Interim Report External financial audit report Final report to EACEA 	preparation may be overburdened with tasks related to the mandatory reaccreditation procedure for other existing study programs at the partner HE institutions • Willingness of media to cover visibility activities • Adequate attendance at events • Technical problems with WEB page and other technical issues that have to be resolved in preparation of printing and promotional material could cause delays in dissemination plan • Creating structures for management of the project are not fully relaying on the bureaucratic procedures; Members of the Steering Committee and working groups are overburden with their other daily activities • Good project management • Good financial management
7.1 Quality Assurance mechanisms and	•	-	
		•	
7.2 The pools for different types of	 5 reports compiled 	•	
activities created	 Immproved proffesional capacity and 	 Coordinators official project files and 	
7.3 Learning material peer-reviewed	interoperability	records	

 7.4 External review of the Glossary 8.1 Project dissemination plan created 8.2 K-FORCE Web site developed, maintained and promoted 8.3 K-FORCE e-library open and maintained 8.4 Media, enrolment and LLL campaigns executed 8.5 3 K-FORCE Symposia organized 9.1 Minutes of the meetings 9.2 PM plan, procedures and Risk Plan adopted 9.3 Reports on Inter project coaching 9.4 Project activities reports and Partner expenses reports 	 18 LLL courses delivered 400 trained professionals 500 professionals accessing the ICT platform WP7 4 reports compiled Number of QA mechanisms and developed procedures At least 10 polls Learning material Review Glossary Review WP8 5 reports compiled Number of Website visits and documents downloaded 6 media campaigns Co topics procents of published in 2 	• Regular PMT memoranda on timely implementation of activities	
	 documents downloaded 6 media campaigns 60 topics presented, published in 3 Symposia Proceedings Total of 500 participants on all events Number of brochures distributed on enrolment events Number of informed stakeholders 		
	 about LLL courses WP9 5 reports compiled 4, 8, 7 and 9 mins of the Consortium, WB Board, SC and WG meetings, respectively PM plan, procedures and Risk Plan implementation 		

	 Inter project coaching reports Smooth and timely project implementat 	
Activities: What are the key activities to be carried out (<u>arouped</u> <u>in Workpackages</u>) and in what sequence in order to produce the expected results? • 1.1 Analyse DRM&FSE MPs in EU and WBC • 1.2 Analyse WBC needs for DRM&FSE MPs and learning outcomes • 1.3 Develop DRM&FSE MPs Curricula aligned with EU trends • 1.4 Procure, install and activate the equipment • 2.1 Assess WB needs and EU trends in DRM&FSE PhD • 2.2 Analyse WB teaching staff resources for MPs and PhD • 2.3 Compare PhD models and curricula in EU • 2.4. Develop PhD Curriculum • 2.5 Compile a list of research PhD themes, according to WB disaster trends	<i>Inputs:</i> What inputs are required to implement these activities, e.g. staff time, equipment, mobilities, publications etc.? • WP1-WP2 (PREP): • Staff costs: 110,990 € • Number of staff days: 1,005 • P1: 145 P2: 82 P3: 92 • P4: 82 P5: 82 P6:82 • P7: 101 P8: 52 P9: 69 • P10: 63 P11: 67 P12: 30 • P13: 29 P14: 29 • • Equipment: 291,200 € • P1: 144,200 € P2: 29,400 € • P3: 29,400 € P4: 29,400 € • P5: 29,400 € P6: 29,400 € • Equipment for MPs: • 60 PC Clients • 6 Outdoor handheld GPS GIS Mapping Data Collectors	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 • A: Available relevant information/statistic data • A:Equipment procured, installed and activated timely • R: Insufficient dedication of partners to project aims • R: Inadequate and irregular financial flow • R: Delay of procedures for VAT exclusion • • WP2 • A: Available relevant statistic data • R: Inadequate response of HEIs and target groups to polls
 3.1 Study visits to PR HEIs 3.2 Analyse and agree on the modalities of using ICT for b-learning 	 6 Handheld laser distance measurers 6 Digital cameras 60 Books, journals, e-books 	• • WP3 • A: Best-suited staff is available and

• 3.3 Train the WB teaching staff on	• 60 E-book readers	willing to travel
DRM&FSE topics and b-learning	 6 Agent based evacuation simulation 	• A: Academic staff motivated and
methodologies	softwares	prepared for training
• 3.4 Develop b-learning materials for	 24 Lap tops+external displays 	• R: Delays in study visits'
MPs and PhD	•	implementation
 3.5 Pilot the new MPs and PhD 	 Equipment for PhD: 	• R: Teaching staff at WB HEIs is not
learning material, evaluation and fine	• 2 Rack servers	willing to accept new teaching
tuning	 1 Outdoor handheld GPS GIS 	methods
• 4.1 Accredit MPs	Mapping Data Collector	 R: Technical problems (internet
 4.2 Enrol the Master students 	 1 Fire dynamics and smoke control 	connection problems, software
 4.3 Activate flexible ICT learning 	software	problems, timely translation of
platform	• 1 Digital Map of Serbia with database	publications)
• 4.4 Selected MP lectures held by K-	 1 Hyphenated TGA-FTIR 	• R: Various problem in adaptation of
FORCE guest lecturers	 1 Unmanned Aerial 	developed learning material to new
 4.5 Evaluate the 1st cohorts' 	Photogrammetric Vehicle with PC	methodological approach
progress and satisfaction of students	client	•
and staff	•	• WP4, WP5
 5.1 Accredit the PhD programme 	• WP3-WP6 (DEV)	• A: Regular work of accreditaton
• 5.2 Enrol the PhD students	• Staff costs: 165,500 €	bodies
• 5.3 Selected PhD lectures held by K-	 Staff days: 1,624 	• A: Relevant number of students
FORCE guest lecturers	• P1: 279 P2: 129 P3: 129	interested to enrol
• 5.4 Evaluate the 1st cohorts'	• P4: 109 P5: 119 P6: 109	• A: Availability of staff members with
progress and satisfaction of students	• P7: 92 P8: 151 P9: 36	respective qualification
and staff	• P10: 279 P11: 65	• R: Duration time of accreditaton
• 6.1 Analyse the WBC needs for LLL	• P12: 45 P13: 45 P14: 37	processes
courses	•	• R: Inability of guest lecturers to
• 6.2 Define LLL outcomes according to	• Mobilities: 117,160 €	perform teaching tasks
EQF/NQFs	 86 PA to PR flows 	R: Technical problems
• 6.3 Create K-FORCE Glossary	• 33 PR to PR flows	
• 6.4 Adapt selected learning material	 8 PA to PA flows 	• WP6
for LLL courses	• 12 PR to PA flows	• A: Availability of staff members with
• 6.5 Deliver LLL courses in blended	•	respective qualification within specific time frame
way to professionals	• WP7	
• 7.1 Develop Quality Assurance	• Staff costs: 26,920 €	• A: Relevant number of stakeholders
mechanisms and procedures		interested in LLL courses

• 7.2 Create polls for different types of	• Staff days: 266	• R: Technical problems
activities	• P1: 27 P2: 7 P3: 7	• R: Various problem in adaptation of
• 7.3 Learning material peer review	• P4: 7 P5: 7 P6: 7	developed material to new
• 7.4 External review of the Glossary	• P7: 14 P8: 14 P9: 22	methodological approach
• 8.1 Create dissemination plan	• P10: 25 P11: 105	•
• 8.2 Develop, maintain and promote	• P12: 9 P13: 9 P14: 7	• WP7
K-FORCE Website	•	 A: Well-defined internal evaluation
• 8.3 Open/maintain e-library public	 Sub-contracting cost (external expert 	procedures and protocols in partner
access area	quality report and Glossary review):	HE institutions
• 8.4 Perform media, enrolment and	6,000 €	 R: Many staff does not understand
LLL promo campaigns	•	QA so avoid doing it
 8.5 Organize 3 Symposia 	• WP8	•
 9.1 Organize K-FORCE bodies 	• Staff costs: 29,956 €	• WP8
meetings	• Staff days: 355	 A: Continued interest of target
 9.2 Prepare/adopt the PM plan, 	• P1: 60 P2: 16 P3: 16	groups
procedures and Risk Plan	• P4: 16 P5: 36 P6: 16	 A: Willingness of media to cover
 9.3 Inter project coaching 	• P7: 7 P8: 7 P9: 7	visibility activities
 9.4 Manage all pr 	• P10: 12 P11: 15 P12: 42	 R: Different social situation in the
	• P13: 50 P14: 55	periods campaigns' realisation
	•	• R: Technical problems with WEB
	• Mobilities: 74,335 €	page and other technical issues
	• 42 PA to PA flows	•
	• 54 PR to PA flows	• WP9
	• 16 PA to PA student flows	A: Administrative staff competence
	•	for efficient project implementation
	 Sub-contracting cost (translation 	• A: Fully working communication
	services): 12,000 €	mechanism
	•	R: Creating structures for project
	• WP9	management are not fully relaying on
	Staff costs: 56,103 €	the bureaucratic procedures
	• Staff days: 501	• R: SC and WGs members are
	• P1: 122 P2: 31 P3: 21	overburden with their other activitie
	• P4: 21 P5: 21 P6: 21	
	• P7: 38 P8: 28 P9: 22	

• P10: 27 P11: 36 P12: 40 • P13: 39 P14: 34	
•	
 Mobilities: 81,310 € 62 PA to PA flows 	
• 60 PR to PA flows	
 3 PA to PR flows 2 P1 to Brussel	
 Sub-contracting cost (external audit report): 14,000 € 	