



Warsaw University of Technology



Joint Project: Capacity Building in the Field of Higher Education ERASMUS+ 2018

Crisis and Risks
Engineering for
Transport Services

# Presentation of CRENG project



**Warsaw**, 2019

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# Why Crisis and Risks Engineering for Transport Services?

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- Economic, political, natural and organizational factors influencing TS, leading to failures in supply chains
- Need for specialists in CRENG.
- UA, AZ, TM located in strategic transport routes for Europe-Asia traffic.
- MA programs on CRENG implemented in European universities.
- PCs develop TSs on their way to integration into global TS
- EU supports integration and shares experience to support CRENG implementation.
- PCs companies implementing anti risks and crisis strategies face with lack of skilled specialists.
- Identifying, assessing and controlling the risks in TS and making decisions about their minimization.







#### **CRENG** objectives

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engineering environment 7

- Develop, implement and accredit new practice-oriented, student-focused MA program on CRENG including innovative teaching approaches and ECTS in UA, AZ and TM till Jan 2021
- 13 core (9 new + 4 updated) and 3 transferable curricula: 120 ECTS credits
- Learning environment: Skills Wallet (SW), International Project Based Learning (IPBL), CRENG Service Offices
- Information environment for dissemination of project results
- Training courses and master classes on new curricula for academics from PCs
- Academic teachers from PCs to develop teaching environment on CRENG, create and accredit new MA program at the national level.

of UA, AZ, TM transport systems and integration with global transportation network

Create environment for education of high skilled specialists in line with labor market, EU best practices and Bologna process

development





#### **CRENG** partners

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- PL P1: Warsaw University of Technology
- DE P2: Berlin Technical University
- FR P3: University of Valenciennes
- DE P4: ECM Space technologies GmbH
- UA P5: Pryazovskyi State Technical University
- UA P6: Dnipropetrovsk National University of Railway Transport
- UA P7: State University of Infrastructure and Technologies
- AZ P8: Baku Engineering University
- AZ P9: Azerbaijan Technical University
- AZ P10: Azerbaijan Technological University
- TM P11: Turkmen State Institute of Transport and Communications
- TM P12: International University for the Humanities and Development
- TM P13: Turkmen State Architecture and Construction Institute
- AZ P14: The Ministry of Education of the Republic of Azerbaijan
- TM P15: Ministry of Education of Turkmenistan
- UA P17: The Ukrainian Railway (Ukrzaliznytsia)
- AZ P16: Baku Transport Agency





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1. PREPARATION - Designing Agreement and guidelines on instructional strategies for MA program "CRENG" development

#### Milestones:

- kick-off meeting conducted;
- working groups in each PCs and EU HEIs created;
- the **Agreement and Guideline** model for MA curricula development and implementation designed and signed by 9 PCs HEIs and 3 EU HEIs.

Crisis and Risks Engineering for Transport Services

DETAILED
DESCRIPTION OF
THE PROJECT





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2. DEVELOPMENT - Development of new MA program "CRENG" environment

Milestones:

- new core and transferable curricula on CRENG developed and implemented;
- MA program "CRENG" accredit on institutional and national levels;
- set of teaching materials for each new curricula developed and published (Join Web Platform);
- e-learning courses developed and downloaded on MOODLE platform in PCs HEIs
- **Lab, VCR** at each PCs HEIs created and equipped;
- retraining program on new curriculum on CRENG developed by EU HEIs;



and innovative teach



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and innovative teach

2. **DEVELOPMENT** - Development of new MA program "CRENG" environment

- teachers retrained on new MA programs and teaching/learning environment at EU HEIs;
- master classes on new MA program teaching/learning environment conducted by retrained PCs teachers an EU HEIs;
- one year pilot teaching conducted;
- staff from PCs HEIs **retrained** to operate **CRENG Service Offices**;
- CRENG Service Offices established and equipped;
- CRENG + Agreement signed;
- Skills Wallet and IPBL implemented at PCs HEIs.





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3. QUALITY PLAN - Internal and external quality control of processes and deliverables

- Internal Evaluation Committee (IEC) established;
- number of IEC meetings conducted (IEC reports);
- questionnaire, feedback, annual reports;
- online evaluation in function;
- peer-view visits;
- report of inter project coaching;
- report of PTAT;
- external audit report.





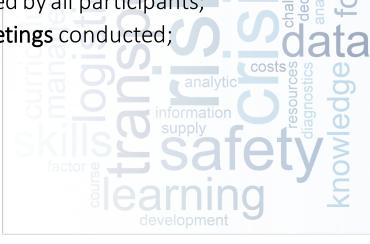


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4. DISSEMINATION & EXPLOITATION - Strategy dissemination and event plan

- Dissemination events plan and timetable worked out and approved by all participants;
- 100% execution of Dissemination event plan: **conference and meetings** conducted;
- CRENG + agreement worked out;
- number of stakeholders signed CRENG + Agreement;
- Joint WEB based platform updated;
- number of WEB site visitors;
- number of groups in social networks created and updated;
- number of people integrated via social networks;





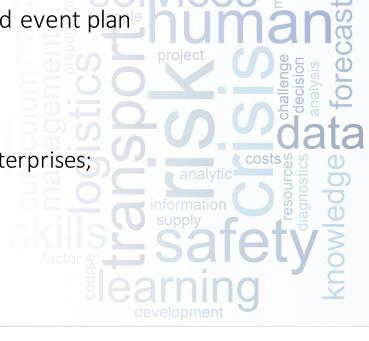


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4. DISSEMINATION & EXPLOITATION - Strategy dissemination and event plan

- number of networked CRENG Service Offices;
- number of promotional materials disseminated;
- number of refresh training courses conducted for specialists of enterprises;
- number of people retrained;
- number of enterprises signed Carrier Support Agreement;
- number of students participated in Skills Wallet;
- number of graduates employed after Skills Wallet participation.





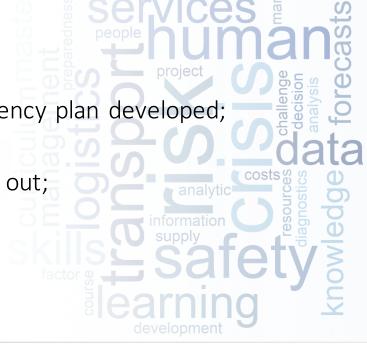


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5. MANAGEMENT - Management of the project

- project work-plan and timetable incl. milestones and contingency plan developed;
- joint management group formed;
- number of LPT formed, plan of coordinating meeting worked out;
- number of coordinating meeting conducted;
- number of management assessment reports;
- number of downloaded files on WEB platform.









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# Thank you for you attention!



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