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STUDY VISIT REPORT

PROJECT MEETING IN Heilbronn

16/05/2022 – 18/05/2022

contacts:	Usula C. Göz, M.SC. Dipl.-Wirtsch.Ing. M.A. INEMA Phone: +49 7131 123 727-522 Günter Käßer-Pawelka, Prof. Dr. Phone: +49 7131 1237-102
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Project acronym:	DIARKAZ
Project full title:	Dual Education for Industrial Automatisation and Robotics in Kazakhstan
Project No:	609757-EPP-1-2019-1-RS-EPPKA2-CBHE-JP
Funding scheme:	ERASMUS+
Project start date:	January 15, 2020
Project duration:	36 months

Abstract	Representatives of three partner universities and representatives of two companies, as well as the representative of the consortium leader UNS, did travel to Germany for gaining insights into best practices and transfer of knowledge as well as experiences in the field of Dual Higher Education.
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Title of document:	Report of the study visit to Heilbronn and Stuttgart, Germany
Work package:	WP2 Preparations for implementation of new study programs and LLL seminars
Activity:	WP 2.4.3 Study visit to Germany
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VERSIONING AND CONTRIBUTION HISTORY

Version	Date	Revision description	Partner responsible
V1	24.05.2022	Draft	DHBW
V2	08.06.2022	Final	DHBW

STUDY VISIT AGENDA

Attendance list: can be found in Appendix

Study Visit to Heilbronn and Stuttgart

AGENDA

Location: DHBW Heilbronn, Bildungscampus 4, 74076 Heilbronn, Germany

Time: Mo. 16th to Wed. 18th of May 2022

Contacts: Cooperative State University of Baden-Wuerttemberg (DHBW) Educational Research
M.Sc. Dipl.-Wirtsch.-Ing. M.A. INEMA **Ursula C. Göz**
ursula.goez@heilbronn.dhbw.de

Kostanay Engineering and Economics University named after M. Dulatov (KINEU)
Head International Cooperation and Project Implementation Center
Zhanat Jabassova projectcenter@kineu.kz

DAY I (Monday 16th)

DHBW Bildungscampus, Building C, C.022		
09 ⁰⁰ – 09 ³⁰	Registration of participants and Covid testing (in front of building C)	
Part I Opening		
09 ³⁰ – 10 ⁰⁰	Welcome at DHBW & Introduction	Prof. Dr. Nicole Graf Rector of DHBW Heilbronn Prof. Dr. Günter Käßer-Pawelka Head of Research and Laboratories Ursula C. Göz Senior Researcher Dual Education
10 ⁰⁰ – 10 ¹⁵	DIARKAZ State of the Art	Prof. Dr Mirko Savić Project coordinator UNS
10 ¹⁵ – 10 ⁴⁵	Summary of learnings from recent Study Visits (Novi Sad, Graz)	Zhanat Jabassova, Coordinator of KAZ partners KINEU
10 ⁴⁵ – 11 ⁰⁰	<i>Coffee break</i>	

Part II Dual Study Concepts		
11 ⁰⁰ – 11 ²⁰	Dual Study Concepts in Germany (overview)	Ursula C. Göz Senior Researcher Dual Education
11 ²⁰ – 11 ⁵⁰	Dual Study courses at DHBW	Ursula C. Göz Senior Researcher Dual Education
11 ⁵⁰ – 12 ⁰⁰	Q & A	Ursula C. Göz Senior Researcher Dual Education
12 ⁰⁰ – 12 ¹⁵	International Office DHBW Heilbronn	Verena Kruppa Head of International Office
12 ¹⁵ – 13 ¹⁵	<i>Lunch break (Mensa on Campus)</i>	
Part III Campus Tour, Dual Master and ... Dinner		
13 ³⁰ – 14 ³⁰	Guided Tour Bildungscampus (Education Campus)	Julia Väth PR Dieter-Schwarz-Stiftung
14 ³⁰ – 15 ¹⁵	Visit to Campus Founders https://campusfounders.de/	Anja Smith Community Manager
15 ¹⁵ – 15 ³⁰	Return to room C.022	
15 ³⁰ – 15 ⁴⁵	Group photo and Q & A	Ursula C. Göz Senior Researcher Dual Education
15 ⁴⁵ – 16 ⁰⁰	<i>Coffee break</i>	
16 ⁰⁰ – 16 ³⁰	Dual Master Study Courses at DHBW Center of Advanced Studies (CAS)	Prof. Dr. Andreas Föhrenbach Dean of Engineering Faculty
16 ³⁰	<i>time to relax (city tour, shopping, ... or Experimenta Science Center https://www.experimenta.science/en/)</i>	
18 ³⁰	Meeting at Hotel Arkade for a nice and relaxed walk to dinner place (3 km)	Heidi Rausch Assistant Research and Laboratories
19 ³⁰	Casual dinner at Weinstube Fischer , Kleiner Stiftsberg 2 https://weingut-fischer.de/	Ursula C. Göz Senior Researcher Dual Education
	<i>Walk or Taxi back to Hotel Arkade</i>	

DAY II (Tuesday 17th)

DHBW Bildungscampus, Building C, C.022		
08 ³⁰ – 09 ⁰⁰ h	Registration of participants and Covid testing (in front of building C)	
Part I LLL and Company Visit		
09 ⁰⁰ – 09 ⁴⁵	Life Long learning and MicroCredentialisation	Raimund Hudak Senior Researcher Dual Education
9 ⁴⁵ – 10 ⁰⁰	<i>Coffee break</i>	
10 ⁰⁰	Meet up for walk to tram station	Heidi Rausch Assistant Research and Laboratories
10 ²⁰ – 10 ⁵⁰	S-Bahn tram to Neckarsulm/AUDI	
11 ⁰⁰ – 12 ⁰⁰	Guided Tour Production AUDI AG https://www.audi.de/de/foren/en/audi-forum-neckarsulm.html	Erwin Göbbel AUDI Forum Neckarsulm
12 ⁰⁰ – 12 ²⁰	Visit to AUDI exhibition 'Living Progress'	self guided
12 ³⁰ – 13 ⁰⁰	S-Bahn tram to Heilbronn	
13 ¹⁵ – 14 ¹⁵	<i>Lunch break (Mensa on Campus)</i>	

Part II SC-Meeting		
14 ¹⁵ – 15 ¹⁵	DIARKAZ Steering Committee Meeting Part 1	Prof. Dr. Mirko Savić Project coordinator UNS
15 ¹⁵ – 15 ³⁰	<i>Coffee break</i>	
15 ³⁰ – 16 ³⁰	DIARKAZ Steering Committee Meeting Part 2	Prof. Dr. Mirko Savić Project coordinator UNS
16 ³⁰	<i>Time to relax (city tour, shopping, ... or Experimenta Science Center https://www.experimenta.science/en/)</i>	

DAY III (Wednesday 18th)

DHBW Stuttgart, FESTO		
09 ³⁰ – 10 ⁰⁰ h	Covid testing at bus stop opposite Hotel Arkade Heilbronn , loading luggage into bus	
10 ⁰⁰ – 11 ⁰⁰ h	Bus transfer to Stuttgart	
Part I Study Course Concept		
11 ⁰⁰ – 11 ²⁰ h	Welcome and Introduction to DHBW Stuttgart Study Course 'Electronics/Automatisation'	Prof. Dr. Christian Götz Head of 'Electronics/Automatisation' Sarina Mollenhauer International Office Prof. Dr. Andreas Griesinger Head of 'Mechanical Engineering and Production Technology'
11 ²⁰ – 13 ⁰⁰ h	Guided Lab Tour at DHBW Stuttgart	Prof. Dr. Christian Götz Head of 'Electronics/Automatisation' Prof. Dr. Andreas Griesinger Head of 'Mechanical Engineering and Production Technology' Christoph Tenten Head of Electronics Lab
Part II Company Visit		
13 ⁰⁰ – 14 ⁰⁰	<i>Lunch break during Bus transfer to Denkendorf</i>	
14 ⁰⁰ – 14 ³⁰	Welcome at FESTO Didactic in Denkendorf https://www.festo.com/de/en/e/technical-education-id_3776/?siteUid=fox_de&siteName=Festo+DE	Sasa Somovic Nadine Schlotz FESTO Education Center
14 ³⁰ – 16 ⁰⁰	Guided Tour at FESTO Didactic and Showroom	Sasa Simovic FESTO Education Center
16 ⁰⁰ – 16 ³⁰	Bus transfer to FESTO Education Center in Esslingen	Nadine Schlotz FESTO Education Center
16 ³⁰ – 17 ¹⁵	Presentation 'Dual Study at FESTO'	Stefan Dietl Nadine Schlotz FESTO Education Center
17 ¹⁵ – 18 ³⁰	Guided Tour at FESTO Education Center	Stefan Dietl Nadine Schlotz FESTO Education Center
18 ³⁰ – 19 ⁰⁰	<i>Bus transfer to Stuttgart (if possible: hotel drop off)</i>	
19 ⁰⁰	<i>Time to relax / End of Study Trip</i>	

STUDY VISIT PROGRESS

Arrival of Participants in Heilbronn on Sunday, 15th of May.

1st day of the study visit (Monday 16th):

After having seen the Dual Study System at FH Joanneum in Graz/Austria, the DIARKAZ delegation was welcomed at DHBW Heilbronn, in the heart of Baden-Wuerttemberg. We discussed the agenda, logistics and other details. Our rector, Prof. Dr. Nicole Graf, gave a short introduction to the main features of Dual Education at the DHBW Campus in Heilbronn, followed by Prof. Dr. Günter Käßer-Pawelka, the Head of Research and Labs. The leader of the consortium, Prof. Dr. Mirko Savic and the coordinator of the Kazakh partner Universities, Mrs. Zhanat Jabassova, continued with a summary of the state of the project as well as learnings from other study visits. After this introduction, some new insights to the Dual Study Concepts of DHBW as well as to specific challenges of developing new study courses were given by Senior researcher Mrs. Ursula Göz. The International Office of DHBW Heilbronn offered a short presentation of opportunities.



Welcoming of DHBW
Heilbronn Rector,
Prof. Dr. Nicole Graf

After lunch, the delegation could get an overview of the Bildungscampus Heilbronn, where several HE institutions work together for the sake of learners on different tracks. We could visit the 'LIV' (Library for Learning, Information and Networking) and the 'Campus Founders' presented their Eco-System for young entrepreneurs. Finally, Prof. Dr. Föhrenbach gave a short lecture about the Dual Master at DHBW CAS (Center for Advanced Studies). This feature of the DHBW Study Concept provides for a continuous partnership of learners, University and companies enabling students to combine tailored studying with working.



Many essential questions and topics have been discussed over the day. In the evening, the focus was slightly moved to more personal conversations when we finished the day in a lovely restaurant of a winery in amidst of the Heilbronn vineyards with some lovely local food and wine.



Relaxed Dinner at Winery in Heilbronn

2nd day of the study visit (Tuesday 17th):

This day started with some input on Life Long learning (LLL) and MicroCredentiaisation (MC). Senior researcher Mr. Raimund Hudak introduced the concept of European MicroCredentials. Several perspectives have been discussed by the Kazakh delegation. After a Suabian 'Brezel' and a cup of coffee, we moved towards the AUDI Production site in Neckarsulm, close to Heilbronn. AUDI is one of the Dual Partners of DHBW. The guided tour on the AUDI campus, including a walk through the assembly hall of A6/A7 types, provided for a bunch of impressions which were digested later on, whilst visiting the exhibition on the history of this plant.

A key to success factor at AUDI production are meticulously analysed and controlled processes, supported by sensors and robotic devices, in a clocked assembly line. The rhythm is 88 sec. This ongoing assembly needs a zero delay delivery of supply parts to each specific place of assemblage. Quality derives from seamless monitoring of all included activities and their data. The importance of tailored automatisisation of assembly and data flow became evident to our DIARAZ team.

Visit to AUDI
at Neckarsulm



Lunch was taken after coming back to Bildungscampus Heilbronn. Afterwards, the day continued with our Steering Committee meeting, based on a tough agenda. One of the main topics was the sustainability of the DIARKAZ project. Senior researcher Mrs. Ursula Göz presented a collection of aspects and ideas in for the future of DIARKAZ. Next steps towards achievement of the project goals have been discussed and agreed upon. Members of the delegation could relax for the rest of the day with a little guided tour and some shopping in Heilbronn.



Focus on LLL
and MC

3rd day of the study visit (Wednesday 18th):

The last day of the study visit, the delegation was picked up by bus from the Hotel to travel to Stuttgart. There, the DHBW branch offers several Study courses of specific interest for the DIARKAZ partners. Prof. Dr. Christian Götz welcomed us and gave a comprehensive overview on the study course of 'Electronics/Automatisation'. One of the Dual Students outlined his reasons for studying Automatisation as well as the core features of his practical and academic learning. The International Office of DHBW Stuttgart continued with an invitation for students from abroad to come over for the International Study Programme (ISP). We then divided into two groups for visiting different Laboratories: the Lab of Electronics & Automatisation and the Lab of Mechatronics & Machine Engineering. Several projects could be seen and were explained by Prof. Dr. Götz and Prof. Dr. Griesinger. We also could visit and talk to students in the CAD Computer Lab.



DHBW
Stuttgart
Electronics /
Automatisation



Lunch was taken during the bus trip to Denkendorf, where we have got a warm welcome by FESTO, another Dual partner company of DHBW. Some cups of strong coffee and sweet cakes made the delegation ready for an 1.5 hour tour at FESTO DIDACTICS including the whole variety of teaching devices and models for Mechatronics and Automatisation. It became tangible how teaching and learning with this firm's devices can be organised and performed. As it was a hot day, we felt very happy that cold refreshments were provided before the group went down to Esslingen by bus for completing the FESTO experience at their Education Center.



Tour at FESTO
DIDACTIC



This was the absolute highlight of the day: We were introduced by Nadine Schlotz, a former Dual Student and now Head of the Electronic Teaching Lab for Apprentices and Dual Students. She presented the Dual Study cooperation with DHBW as well as her own insights in being a mentor of Dual Students. In addition, the Head of Education at FESTO, Mr. Stefan Dietl, depicted the perspective of a Dual Partner company regarding the cooperation in Dual Study courses. It became clear that a remarkable effort is needed on both sides to establish and maintain a continuous prosperous partnership for the sake of highly qualified future employees. Trust and investment of resources are two of the key components.

After a very engaged discussion, the DIARKAZ experts could try out some tasks in the Electronics Education Lab of FESTO, which were kindly prepared by Mrs. Nadine Schlotz.



at FESTO
Education Center





A 'brezel' and some refreshments helped to recreate energy and team DIARKAZ started the trip back to Stuttgart. Our bus driver made it possible to stop at the Hotel and close to the main station.

We had to say good bye to our wonderful team from Kazakhstan and Serbia.

APPENDIX:

Attendance-List 16.-18.05.2022 Heilbronn