**Transnational Education (GJU – UAS Magdeburg-Stendal – DAAD)**

**Network Energy & Environmental Engineering**

**German Jordanian University & German partner universities**

**Network Meeting 2019**

**Westfälische Hochschule Gelsenkirchen, 27th – 28 th June 2019**

**Minutes**

**Attendees:**

Prof. Dr. Ralf Holzhauer WH Gelsenkirchen

Prof. Dr. Christian Fieberg WH Gelsenkirchen

Prof. Dr. Volker Siegismund DHBW, Network Head

Prof. Dr. Torsten Schmidt UAS Magdeburg-Stendal, Network Head

Prof. Dr. Munjed Al-Sharif GJU, Dean SNREM

Dr. Arwa Abdelhay GJU, Vice-Dean SNREM

Dr. Mohammad Al-Addous GJU, SNREM

Ms. Fathimeh Hadidi GJU, Exchange Coordinator SNREM

Mr. Mathar Bdour GJU, Exchange Coordinator SNREM

Prof. Dr. Thomas Schönmuth UAS Zwickau

Prof. Dr. Satyanarayana Narra UAS Rostock

Prof. Dr. Wolfram Heller UAS München

Mrs. Veronika Wöninger UAS München, International Office

Dr. Monica Heitz GJU Project Office at UAS Magdeburg-Stendal

**Guests (28th June 2019):**

Tariq Alshahrouri GJU - WH

Sara Hijzeen GJU - WH

Dana Tamim GJU – WH

**Minutes:**

Dr. Monica Heitz

**Thursday, 27th June 2019**

**Opening and introduction**

* Prof. Dr. Ralf Holzhauer, WH Gelsenkirchen, welcomed the participants to the joint network meeting 2019 and underlined the valuable collaboration.
* All participants introduced themselves.
* WH Vice-President Prof. Dr. Katrin Hansen gave a short introduction to WH and its three campus sites in Gelsenkirchen, Bocholt and Recklinghausen. Founded in 1992, WH works with 8.000 enrolled students, 1.000 of them non-German students. WH offers 23 BA Programmes, 10 Dual Studies Programmes (strong collaboration with industry) and 19 MA Programmes (technical majors). The university was part of the founder group of the GJU network. The first MoU between GJU and WH Gelsenkirchen was signed 10 years ago, each year 4-5 GJU students spend their study semester throughout their German Year at WH. At the heart of WH is a thorough strategy of internationalisation, GJU plays a very important part in that internationalisation strategy (international classrooms). Aim: intercultural and international experienced students.

The Vice-President highlighted the university’s special focus on recycling technology, wastewater technology (wastewater treatment) and building and air conditioning technology.

**Updates from GJU**

* Prof. Dr. Munjed Alsharif, Dean SNREM, presented the Follow-Up to the minutes of the last network meeting. He stressed the **importance of the German Year of all GJU students and the collaboration with industrial partners**. The first German company inaugurated a branch office on GJU campus; the contract with Deutsch Bahn was prolonged, Jordan is seen as a market for railway engineering; DB asked for 400 GJU graduates with German skills.

For the first time, **GJU** is mentioned **among the best 1000 universities worldwide** in QS World Ranking, in Jordan GJU is constantly ranked highly. With regard to the employability rate GJU and the Jordan University of Science and Technology (JUST) achieved the highest rank.

The **Study Plan of Energy Engineering** was successfully revised throughout the last Network Meeting at GJU in June 2018 and confirmed by GJU.

SNREM offers the fairly new programme of **Civil** **Engineering**. There has been a decrease in Water & Environmental Engineering. As the study content of both Study Programmes is similar, Water & Environmental topics are not lost and students can be shifted to courses of both programmes (also throughout the German Year). The School has been asking for seats in Civil Engineering at German partner universities over the last year in order to secure enough seats for the German Year. Ongoing three-step procedure:

1) Which seats from existing partners could be used for Civil Engineering?

2) Which existing partner in Germany has also a CE Department in order to extend the MoU? 3) Search for new partners with recommendation of existing partners.

**German Year:** Ongoing discussion about **preparation** of GJU-Students for their **German Year** and the **level of language skills**; the influence of the German language in lectures and courses at GJU should be increased (FF, German universities and industry) ; IO has introduced a **Code of Conduct** to be signed by all outgoing GJU students (rules of attendance etc.) which will come into force in autumn 2019.

* Dr. Arwa Abdelhay, Vice-Dean SNREM, informed about the School’s structure and programmes. Water & Environmental Engineering is confronted with declining numbers of students, at the same time most of the projects are linked to Water & Environmental Engineering (many donors / funding agencies).

**The academic contribution of the School rose significantly in 2018** (31 publications in 2018 compared to 23 in 2017; projects rose from 7 in 2017 to 15 in 2018). Dr. Arwa presented the MW PV power system on campus as one of the leading applied projects managed by the School. GJU’s electricity bill was decreased by 90 % (1 Mio JD => 100.000 JD).

Furthermore, she introduced **two new MA programmes**: Traffic Safety Engineering (funding agencies: ERASMUS+ / MENSAFE project) and Humanitarian Water, Sanitation and Hygiene (funding agencies: OFDA/USAID, UNICEF) => set up in order to respond to needs in emergency situations (crisis management in an environmental disaster, war etc.). GJU implemented a new Exchange Programme in the field of Integrated Water Resources Management together with TH Köln.

A research momentum was created at the School => **Research projects:** BMBF-funded project on Water Security; Petra Flood Management Project; Project on Solar Driven Water Pumping and Desalination Units for Applications in Remote Areas of Jordan; Project “Waste to Positive Energy” funded by BMZ / GIZ; Project “Treatment of Olive Mill Wastewater using DAF technology in Jordan” funded by DAAD (for more details see the attached PPT).

**Two new labs have been established:** Civil Engineering Lab Complex (Construction Lab + Road Lab); Simulation Lab with 16 seats. With regard to the presented research projects and MA programmes **three Labs are currently in progress**: Solid Waste Lab, DAF Unit, WaSH Lab (disinfection, pumps).

* Dr. Matthar Bdour (Exchange Coordinator) presented the work of the **Energy Engineering Department with its two fields of specialisation: Electrical Power Engineering and Renewable Energy Engineering** as well **as the requirements, procedures and regulations of the German Year**; student intakes at the Energy Engineering Department have been consistently high with 88 (2016/17), 98 (2017/18) and 84 (2018/19) over the last years;

The **German Year** is realised with a stable network of **21 German partner universities**; together with IO at GJU a new distribution process to achieve a balanced distribution of excellent, average, and weak students to the German partner universities has been introduced in 2019 (for the procedures and regulations see the attached PPT); 9 students of the department are working on graduation projects in Germany.

**Department’s Applied (&) Research Projects:**

* Photo Voltaic System for Renewable Energy on GJU Campus (see also presentation of Dr. Arwa Abdelhay);
* Photovoltaic System for Brackish Water Desalination in Remote Areas;
* BIOSOL / CSP with biomass (projects led by a consortium of research institutions of EU and MPC countries);
* BIOREEED with TUHH (2015-2017) focussing on promoting the use of solar energy as well as energy from bio-waste by designing and installing a hybrid (PV system and biogas plant) system; main feeding substrates come from the residuals of agricultural waste from the Jordan valley;
* Biogas Production in Local Communities in Jordan (also with TUHH);
* Solar Cooling System operating as cooling unit working on Solar Energy; the system was installed on the roof top of building C at GJU, as a result of the signed agreement with GIZ;
* Center for Renewable Energy (diplomas): Training, testing and research
* Fatimeh Hadidi (Exchange Coordinator) presented the “**Civil & Environmental Engineering**” programme in which currently 38 % of SNREM’s students are enrolled; she also highlighted the **requirements, procedures and regulations of the German Year** (see enclosed PPT);

Due to the declining numbers in the programme Water & Environmental Engineering, the two study programmes (Water & Environmental – Civil Engineering) had to be combined => student numbers in Water & Environmental Engineering had been artificially high over several years, since students who had failed in other disciplines enrolled in the programme;

The German Year is realised with **12 German partner Universities**, SNREM is currently **focussing on expanding the partner network** (i.e. increasing the seats with already existing partner universities in the field of Water & Environmental Engineering, creating MoU particularly in the field of Civil Engineering with new partners), yet, partnerships need a long time to be implemented and established;

**Steps to be taken with regard to the German Year:** • Equalizing Study planes with partner universities • Clarification on the changing ECTS • Retaking the test • Evaluating the students by their professors • Written feedback from students • Direct contact with the Exchange Coordinators in partner universities

**General discussion:**

* **Discussion about preparation for the German Year and challenges throughout the GY:** 
  + **Level of language skills of German Year students remains a constant challenge** => language level B2 must be the long-term goal; PO informs about Workshop DAAD-PO-GLC to be held in September which addresses technical and content-related aspects of German Language Teaching;
  + **Knowledge and understanding of German system of higher education:** network participants stress need to introduce students to the characteristics / main features of the German system before they leave for Germany;
  + **Lack of attendance of GJU students:** Reference to Code of Conduct to be signed by all outgoing students and to be introduced in autumn 2019 (increases liability and commitment; includes possibility of sanctions by GJU)
  + **Difficulties in finding internships:** PO highlights its vast database with 100 fixed industry partners and around 2.500 industrial contacts as well as regular postings by PO on the outgoing index about internship opportunities; Volker Siegismund stresses that network partners regularly inform about internship opportunities, but for students often only the region, not the content-related offer seems to be decisive;
  + **Financial situation of students:** increase of obligatory amount on blocked account (going hand in hand with increase of BAFöG-rates in Germany) which makes situation for GJU students more difficult;
  + **Procedure learning agreements:** appeal that modified learning agreements must always be sent to the respective School at GJU for approval
  + **Code of Conduct:** discussion whether feedback of German universities to GJU would be possible due to data protection
  + **Doctorate School:** all German UAS have a graduate school which could offer PhD once the legal framework changes

**Workshop 1 Energy Engineering (headed by Prof. Dr. Volker Siegismund)**

* **Revision of the curriculum by network in June 2018:** was successfully implemented Implementation Code of Conduct: proposal to insert students’ commitment that information about their attendance in courses at German partner universities can be passed on to GJU into Code of Conduct / alternative proposal: regulation that students must bring along attendance list to courses at German partner universities and professors sign in;
* **Strong demand for extended teaching in German via FF:** 
  + Network participants’ proposal: Official Deans Council resolution to consolidate the claim that more German should be taught in FF-courses
  + PO informs about already taken decision during the Managementmeeting GJU-PO (May 2019) about setting up a central document informing all FF-lecturers about the claim to strengthen the proportion of teaching in German
  + Consideration of Support Letter by Project Director Prof. Anne Lequy to GJU President Prof. Manar Fayyad about Enforcement of German as teaching language in FF-lectures
* UAS Zittau-Görlitz requests to **take active network partners** **stronger into account** with regard to the distribution of GJU students for the **German Year**
* Extension of network partners: reactivate partner universities which take on GJU students throughout the German Year for the network
* **3rd semester extension of GJU students in Germany:** for students with good results and a concept for the graduation project such extension must be allowed and is worthwhile
* **Research projects:** If a network partner has an interesting call to share, he should ask other network partners for collaboration.

**Workshop 2 Civil & Environmental Engineering (headed by Prof. Dr. Torsten Schmidt)**

* **Discussion on courses for Civil Engineering**: Fatimeh Hadidi explains that she is currently comparing the German and Jordanian schedules to identify similar modules. Furthermore, the necessary prerequisites are important for checking whether Jordanian students can join a course or not. Fatimah Hadidi will prepare a table for the final comparison.
* **Discussion on little feedback from German UAS regarding request for seats in Civil Engineering:** Fatimeh Hadidi reports that there is little or no feedback from the German (partner) universities in response to the question for support of the Civil Engineering Study Programme. The German NW members advice not to go the “anonymous” way via International Offices, but rather contact persons directly. Especially professors which are already partners within existing networks could recommend colleagues in other disciplines, which then could be directly asked. The German partners will try to help and make contacts for Fatimah.
* **Miscellaneous:** Dr. Munjed informs about a new planned programme from PO / DAAD: One-by-One-Exchange for professors for 1 or 2 semesters. The partners discuss that a problem for this exchange could be that no Jordanian professor from the department speaks German. Therefore, they could not take over the usually German teaching in the partner university.
* **Improve connection / collaboration in research:** All partners agree to go a more active way in future and give information on drafts, calls etc to each other.

**Campus Tour: Departments and Labs Recycling technology and process engineering (Prof. Dr. Ralf Holzhauer) and Air-conditioning technology (Prof. Dr. Christian Fieberg)**

**Friday, 28th June 2019**

**Central new Measures Transnational Education 2019-2022 and Mobility Programmes**

* Dr. Monica Heitz (Director GJU Project Office, UAS Magdeburg-Stendal), gave a presentation on the central **new TNE-measures** and **how German network partners can make a contribution to and profit from the funded activities**:
  1. **Topic of the Year (ToY):** Specific topic with high relevance to GJU’s work and development to be defined for each calendar year;
     + **Input German network partners:** join the planning process and take part in events (hackathons, conferences, summer schools etc.) => **mobility and stay of up to 20 German partners taking part in ToY-activities can be funded by PO** (flight, travelling costs, 2 overnight stays – for details turn to PO);
  2. **German Accreditation of GJU’s study programmes:** TNE-proposal strives for the accreditation of all study programmes of 1-2 GJU Schools per year starting with SMLS in 2019
     + **Input German network partners:** Help GJU with their **expertise**: offer **Accreditation Workshops and consultations** on documentation for the accreditation process **(mobility and stay can be funded by PO)**
  3. **Research and practice-oriented learning in a transnational context:** Promotion of a broad mix of teaching methods at GJU and E-Learning strategies; financial support for transnationally mixed student teams working on a joint application-oriented project (Student Group Mobility)
     + **Input German network partners:** can **apply for student group mobility** **together with a colleague from GJU (application call in December/ January)**; one-week stay to finalize the project is funded by PO (for further details see <http://www.gju.edu.jo/content/study-group-mobility-9804>)
  4. **Strengthening the network concept:** regular funding of network meetings continues; one interdisciplinary network at GJU during the funding period (probably 2021);
     + **Input German Partner networks:** focus on **output-orientation** of networks (research & applied oriented projects, publications, conferences, summer schools, academic events etc.) and **stronger linkage of network activities to other TNE-measures** and TNE-funded mobility and exchange programmes
  5. **Strengthening the relationship with industry and practise:**
* Each year PO-funding of a **University-Industry Workshop** showing **best practice** from GJU / German partner universities and their respective economic/industrial counterparts => foster knowledge transfer, develop further projects and ideas, create new networks, initiate new start-ups
* Each year funding of a **Hackathon / Ideathon** with Jordanian and German industrial partners => bring together innovators from all different study disciplines to exchange ideas, form teams around shared interests, and create solutions to challenges. The ideas /prototypes are presented to an expert jury; further investment in regular Meet-Up with GJU Alumni who built a start-up: first cornerstone to create a GJU Start-Up network
  + - **Input German network partners: indicate economic & industrial partners** to take part in the described events funded by PO; **indicate collaboration projects of their universities with industrial partners** which could be presented in described events funded by PO;
  1. **Strengthening internationalization, mobility and German dimension:** increase number of partner universities and incoming students, adhere to the goal that 100% of GJU students complete their German Year, ongoing financial support for mobility programmes Flying Faculty (FF) and Staff Mobility (TtT); introduction of new event of GJU Germany Meeting at UAS Magdeburg (2019 / 2021); further development of PO’s GJU Alumni Ambassadors Programme;
     + **Input German network partners:** **Advertisement** at German universities for a **semester abroad at GJU**; **indicate colleagues interested in FF, report to GJU** if German university is interested in **receiving a GJU colleague** within the framework of the **Staff Mobility programme; indicate GJU graduates** who started working in Germany or joined a Masters’ or PhD programme at a German university **to the Project Office (Alumni Ambassadors Programme)**;

Monica Heitz also presented the joint mobility programmes of PO and GJU, mentioning details in organisation and funding of Flying Faculty & Staff Mobility programmes as well as Study Group Mobility programme. She also highlighted the opportunities of collaboration within the framework of Erasmus Plus.

* Nadine Hackmann, Director of the International Office at WH Gelsenkirchen outlined the activity and support offers for GJU students at WH Gelsenkirchen; her presentation was accompanied by an overview of the Germany year by GJU students Tariq Alshahrouri and Sara Hijzeen.
* Prof. Dr. Volker Siegismund was re-elected as Network head for Energy Engineering.
* The next network will take place at HS Zittau/Görlitz on 18th /19th June 2020.

**Company Visit: SASE gGmbH, Iserlohn, a non-profit organisation that deals with the history of waste and its disposal and Lobbe GmbH, package waste sorting plant, Iserlohn.**