Development of Embedded System Courses with implementation of Innovative Virtual approaches for integration of Research, Education and Production in UA, GE, AM

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REGIONAL MEETING AM

- Agenda
  - NEO AM, Lana Karlova, feedback
  - Intermediate report
  - Planned actions: pilot teaching
    - Work packages
  - Final Symposium
  - Budget status
  - Extension of project
  - Findings Audit

NEO FEEDBACK

- Overall very positive feedback
- AM opinion?
- Skype
  - Delayed equipment
    - Difficult administration at AM
      » Address this together as a consortium – AM + coordinator(s)
    - Delayed answers EACEA: ROO / Staff Calculation
    - Overcrowded planning coordinator
  - Prepayment on big events
    - E.g. summer course: hard to pre-pay all for staff involved
    - Difficulties with transfer costs for small amounts + 2 times processing by accountancy

NEO FEEDBACK

- Skype
  - Website
    - More information should be there
      - » Compilation – synthesis on WP1
      - » What is going on at all partners
      - » On IUT spring course
      - » On Tbilisi meeting
      - » Link to AM NPUA / NUACA
    - WHO?

NEO FEEDBACK

- Skype
  - ROO: still difficult => myRIOs, PCs, Terasic
  - Tax exemption: difficult to impose: keep attention to this
  - IUT MC: OK!
  - National Centre of Accreditation
    - Discussion with ministry of education: take steps for accreditation
    - Local coordinators Amalya, Gohar & Mher: meeting + report

NEO FEEDBACK

- Skype
  - Dissemination wider community
  - Along with the new rector of NPUA:
    - Unification + collaboration to strengthen partners and increase project outputs
    - Make results visible
  - New projects: always inform NEO
  - Remote lab usage & planning: maximize usage of RLs
  - Reallocation of the money: I am in favor

INTERMEDIATE REPORT

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- Remarks
  - Delivery of equipment
  - Continue to publish on the website
    - Results of surveys on website
  - More training in GE and AM
    - Is this a problem of not done or not counted?

INTERMEDIATE REPORT

- Remarks
  - Ukraine
    - In line with the new Law on High Education
    - Check: http://erasmusplus.org.ua/erasmus/ka3-pidtrymka-reform/natsionalna-komanda-ekspertiv-here/materiali-here.html
    - 5th Channel "Window to Europe"
    - Ministry of Education and Science website
    - Higher Education Portal (http://vnz.org.ua) + others
  - Georgia
    - Joint Master program GTU-TSU
    - Preparation for program accreditation

DesIRE

FINAL SYMPOSIUM

- Consortium Meeting
- Methodologic symposium
- 3 days in total
- Students?

FINAL SYMPOSIUM

- 5 people invited + paid for in travel
- Action needed
  - Status at partners?
  - At least one paper on project impact and results

WP1

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- Analysis of the current situation in target HEIs

- Status
  - Action needed
    - » Finalizing and publication on the website

WP2

- Develop relevant course material on different topics in embedded systems engineering

WP2

- Status
  - Template
  - Syllabi
  - Courses
    - UKF: finished & published
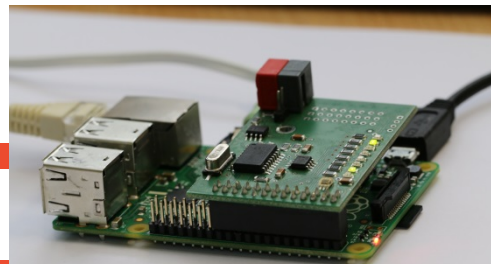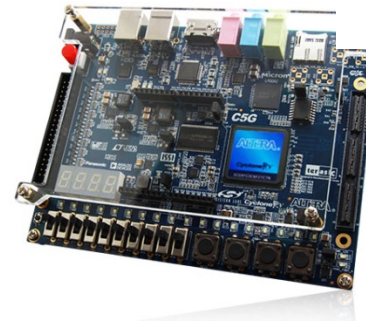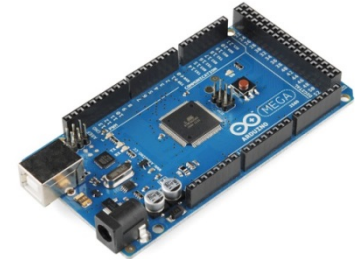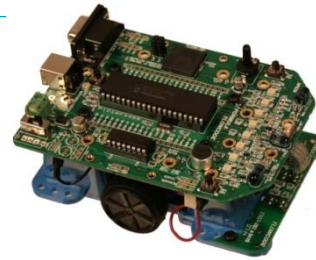   - TMMA: finished but one & published
    - IUT: ???

    $\Rightarrow$All need material needs time to work into = WP5!
    $\Rightarrow$Stay ahead of your students – plan some time – let students help

WP2

- Status
  - Actions needed
    - Work with course material for target partners, produce results, show results
    - IUT: finalize courses for website
    - TMM: finalize course Embedded SW
    - All partners: send syllabi
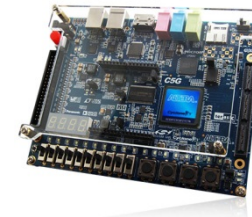   - <u>WHO?</u>

WP3

- Implementing a (virtual) learning environment in ESD engineering
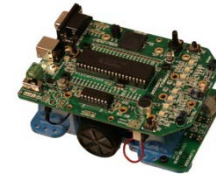
- Status
  - Hands-on
    - UDOO Quad Starter Kit
    - Extra: RPI expansion board
    - Extra: Formula Allcode
    - Extra: 4 Basys3 boards

WP3

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- Status
  - Hands-on
    - No UDOOs yet
    - AM some delay
      - » PCs
      - » RIOO NPUA
      - » 3D printer NPUA
      - » Logic Analyzers NPUA

DesIRE

WP3

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- Status
  - Operational?
    - No!
    - Planning IUT?
      » List of needed action
      » Contact IUT

WP3

- Status
  - Actions needed
    - PCs AM
    - Rest AM
    - Making operational of Remote Labs
    - UDOO???
    - (Moodle)
    - Work with material
    - Documents proving equipment in balance of target HEIs

      => not needed, but <u>delivery note</u>

WP4

- Status
  - UKF finished
  - IUT: finished
  - TMM: finished
    - Questionnaires processed?

- Pilot teaching/operation
  - definitive implementation of the new course material
  - dissemination of the course material with master classes in situ to a contact group of stakeholders
  - ambition:
    - 20 students,
    - 6 academic teachers,
    - 2 representatives of local enterprises
    - 2 representatives of public welfare   = challenge

- Pilot teaching/operation
  - present and demonstrate the new material and teaching infrastructure for creating a good insight in the starting and end competences attained
  - practical demos on expected results
  - train the trainer sessions organized within the target HEIs
  - a pilot group of students and stakeholders starts with complete courses, at least 4 in total
    - Status?
  - evaluation is organized

WP5

- Key performance parameters
  - attendance of stakeholders
  - relevant questions during demos
  - activity of staff and students on the e-learning platform, virtual and remote labs
  - ease of adoption of the new courses is also important for sustained operation
  - attained grades and competences of the pilot group

- Needs
  - Stakeholders (who, where, why)
  - Presentation - Demonstration
  - Peer training / assessment
  - Progress assessment pilot group (TC / EU)
  - Evaluation pilot group (TC / EU assessment)
  - Interviews teacher - students
  - E-conference teacher – teacher: Skype / Adobe Connect

  => Can this be organized? How?

WP5

- Deliverables
  - 5.1 Master Classes in "ESD" in TC
  - 5.2 Master Classes in "RL usage for ESD" in TC
  - 5.3 Teaching the teachers and researchers in TC
  - 5.4 Educate the pilote student groups in TC

WP5

- Status
  - How far is planning?
    - Will some courses be used?
    - Is a pilot group appointed?
  - Implementation travels
    - What is needed?
      - » IUT start up all remote labs
      - » TMMA for demo sessions
      - » Extra DESIRE-d?

WP5

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- Status
  - Action needed
    - An overview of implementation for each HEI
      » What is taught to whom, when, where, which material, which assessment planned, how is impact en progress measured, how the results will be made public.
    - Who???

- ## Quality Assurance and Quality Control
  - – PMT: appoint quality manager
  - – quality manager will supervise:
    - comparison with timetable
    - evaluation of outcomes and their quality
      - » questionnaire reports based on feedback reports from target students /academics/ stakeholders groups

        Timely based and event based
      - » students, graduates and researchers interviews

        Is this done?
      - » online evaluation

        Is this actual?

WP6

- ## Quality Assurance and Quality Control
  - P12 - as research institute - is an external expert
    - What is done here? Which actions, which results? Where visible?
  - Viktor Kabatov, head of International technical center of JSC "Motor-Sich" is invited
    - Is this still actual? No! => No external evaluation
  - inter project coaching as a part of external evaluation
  - expert's reports based on semester reports on project results

WP6

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- Deliverables
  - 6.1 Establish the Quality Assurance Plan
  - 6.2 Inter-Tempus coaching
    - Minutes of meetings with MMATENG and ICOOP present
  - 6.3 Monitoring/Evaluation of processes and products
  - 6.4 Assessment at the regional and national level
    - Assessment of new material? UA?

WP6

- Status
  - Alena Haskova (UKF) appointed as Quality Manager
  - Local quality institutes appointed
    - UA: BGKU
    - AM: YeTRI
    - GE: TSU
      - » Output?
  - Plan? UKF?
    - Systemized input, surveys
    - Reports

WP6

- Status
  - Actions needed
    - Surveys summer course (?), Master Classes, PM2
    - Output P12
    - Interviews for stakeholders by BGKU, TSU and YeTRI

- Dissemination and Enterprise Collaboration
  - reach out to the stakeholders (public, HEIs, industry: presentation – letter - website)
  - Example: https://forum.digilentinc.com/topic/2149-desire-academic-teaching-project-for-ukraine-georgia-and-armenia/

- Dissemination and Enterprise Collaboration
  - University-Enterprise Contact Group (UECG)
    - regional industry.
      - » Is this actual?
      - » At UA monitoring: stakeholders group
  - Contact group:
    - information on the project
    - plan seminars on specialized modules open to industry workers and unemployed
    - special dissemination seminars and road shows

WP7

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- Dissemination and Enterprise Collaboration
  - local and national press and media to increase visibility
  - academic media (university journals to inform students and teachers at the TC HEI's)
    - A lot is done: don't forget to generate output, e.g. on DESIRE website

WP7

- Status
  - UECG?
  - New: Digilent interest

WP7

- Status
  - DesIRE - plus
    - No candidates yet

"DESIRE – Plus" COOPERATION AGREEMENT

Dissemination and implementation of the outputs of TEMPUS project DESIRE
**" Development of Embedded System Courses with implementation of Innovative
Virtual approaches for integration of Research, Education and Production in UA,
GE, AM " – DESIRE**

544091-TEMPUS-1-2013-1-BE-TEMPUS-JPCR

<u>Parties to the agreement</u>

This is an cooperation agreement among the consortium members of Tempus
"DESIRE", hereinafter referred to as "CoDESIRE" on the one hand and

....
(name and address of organisation /university)

targeting dissemination, implementation and development of the results of
DESIRE, hereinafter referred to as CoDESIRE-Plus, joint referred as PARTIES.

<u>Subject of the agreement</u>

The PARTIES will to joint their efforts aiming implementation, dissemination and
developing of the results of DESIRE, particularly in the field of improvement of
training high qualified specialists as well as in research activities.

For this purpose the PARTIES agree on the following activities:

1. CoDESIRE:
a) Will share with CoDESIRE-Plus information about the above project as the
   up-to-date timetable of Project activities and teaching /training aids
   developed during the Project
b) Will develop on the base of project portal www.tempus-desire.eu a sub
   domain called "DESIRE - Plus".

2. Every member of CoDESIRE-Plus:
a) Will study the information derived, develop a plan to adopt and implement
   in teaching activities or/and improve training of graduated professional
   staff.
b) Will develop a plan for participating at DESIRE activities, at actions on
   implementation and dissemination of project results (self-reliant actions, if
   possible joint actions with CoDESIRE), may participate at master
   classes/conferences of DESIRE in the frames of the Project,
c) Will regularly inform CoDESIRE about their activities concerning the
   subject of this agreement.
d) Will provide a feedback report used for quality assurance on the shared
   information or attended activities.

WP7

- Status
  - Action Needed
    - UEGC
    - External stakeholders
    - Output – dissemination – generate statistics on project impact, tangible outcomes, results

DESIRE

10/06/2016

DesIRE

- Management of the project

WP8

- Status
  - Action needed
    - Prepare final symposium
    - Plan audit: done!
    - Make budget reviews for staff and travel

FINANCIAL STATUS

Planned Budgets	Staff Cost	Travel Cost & Cost of Stay	Equipment Cost	Printing & Publishing	Other Costs	Total Direct Costs
	350,345	341,793	209,916	37,193	41,260	980,507
CEPU	-11,035	-14,256	-22,560	-2,700	-2,200	-52,751
	339,310	327,537	187,356	34,493	39,060	927,756
Actual Costs						
	188,699	186,975	128,967	200	7,394	512,235

(All-in EUR)

BUDGET REVIEWS

- Travel
  - Difference between tickets communicated and actual invoices (e.g. 7EUR insurance)
  - Needs a rectification document

BUDGET REVIEWS

- Staff
  - 4 things are important:
    - Working relationship between HEI and co-worker (contract)
    - Staff Conventions & Timesheets – proof of work
    - Proof of payment: from Thomas More to individual accounts <u>OR</u> from Thomas More to university's account and from the university's account to the individual accounts (+ payment to government tax services for this work). <u>No profit for the HEI on this work is allowed!</u>
    - The applied rate corresponds to the institution's remuneration policy (the certificate can be used for this last purpose)

- Equipment
- Budgets
- Pilot teaching
  - Documents from Peter

FINDINGS AUDIT

- Travel policy
  - ⇔ ours is not in line with normal of HEIs
- Staff
  - All conventions should be signed and stamped by the person responsible in the instituion where this person is normally employed
  - In many cases, bullet point 4 "Number of days devoted to the project" is not correctly completed
  - In many cases, no reference number has been given to the conventions (left upper top)

FINDINGS AUDIT

- See Excel

CONCLUSIONS

- Home assignments
  - Look at action needed in red
  - Make at least one practical assignment on one ES
    - Photo - video
    - Description of the expected operation
    - Code
    - Schematic
    - Problems / pitfalls

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