Improving Malaysian HE Knowledge Towards a Wood and Furniture Industry 4.0

Deliverable 6.9

Exploitation Plan

Prepared	Verified	Approved
WULS & USM	**All**	**All consortium**

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Table of track changes

Date	Changes	Status
28/11/2020	1st edition of the document	First Draft
29/11/2020	2nd edition of the document	First Draft V2
26/1/2021	3rd edition of the document	First Draft v3
10/9/2022	4th edition - final	current

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1. Introduction

Making 4.0 exploitation plan is made to help the project to continue achievements in tasks and objectives amongst project stakeholders and the general public after the project finishes. Making 4.0 aims to develop an innovative master's degree to modernize the current training offer in wood and furniture technology processes and design around Industry 4.0 in Malaysia.

The plan presents the guidelines for exploitation and transfer of project results outside the original project network and duration, in order to give value to the results generated within the project and to enable them to become "sustainable. The Plan will include the vision of the partnership on the future use and development of the results, the identification of possible future users and restrictions, Analysis of each partner market, opportunities and threats; Scenarios for the use of the results by each partner.

2. Definitions

Exploitation is associated with the use of the project's results at different levels, during and after the implementation of the project. It is related to   the necessary action that will bring visibility to the project to involve the target groups, end-users, stakeholders and transfer the results/products into their professionals' scope. Exploitation is mostly related to the idea of convincing the key actors to use the main products and services of a project.

Exploitation activities should ensure that the results of the project are used by its target groups and possibly are transferred to other contexts (e.g., other countries; other pedagogical areas, other sectors).

Sustainability is the capacity of the project to continue and use its results beyond its end. The project results can then be used and exploited in the longer-term, via commercialisation, accreditation, or mainstreaming. Sustainability of results implies use

and exploitation of results in the long term. A project can be considered as sustainable if its outcomes or parts of these continue after the end of the funded project duration.

3. Recommendations

Exploitation must include realistic objectives and timetable of activities to be undertaken, to maximise the use of the project's results

Main objectives relating strategic project priorities are:

- raise awareness
- extend the impact
- engage stakeholders and target groups
- share solutions and know how
- influence policy and practice
- develop new partnerships

The Making 4.0 exploitation plan will be based on the following pillars:

- the identification of strategic project priorities
- the identification of institutions and groups which the sustainability strategy is primarily aiming to reach
- a timeline for progressive implementation of the initiatives as planned process of convincing end-users to adopt and/or apply the results of the project

- The main project result, the master training content, will be maintained after the EU funding and will continue having an impact and producing results. It will be periodically updated - universities that are interested in developing and use these materials, ensuring their continuous improvement, are welcome to do so.

- Development of different degrees or postgraduate courses that will be included in the offer of the HE organizations. Making 4.0 course is available to reuse and adapt whole or some parts of the training content to create different courses or new subjects.

- Transfer to other Universities/fields: MAKING4.0 master is available for potential transfer to other countries and Universities by adapting some features through future alliances.

- Consortium partners will look for public or private funds to continue the project with initiatives like student exchange a new course on circular economy related Industry4.0

4. Malaysian Education Blueprint

Base assumptions and changes

In order to make exploitation plan universally conforming, it was decided not to try to accommodate individual approaches, but rather adjust to Malaysian Education Blueprint – guideline until 2025 for all Malaysian educational institutions.

Malaysia Education Blueprint was developed in 2015 for years 2015–2025 (Higher Education) or the MEB (HE). Over the course of development, the Ministry drew on multiple sources of input, from Malaysian and international education experts to leaders of Malaysian HLIs and members of the public.

The systemic targets focus on build on the five aspirations set out in the MEB of access, quality, equity, unity, and efficiency.

Figure 1. Five pillars of Malaysia Education Blueprint

The Ministry of Education emphasises the balance between both knowledge and skills (ilmu) as well as ethics and morality (akhlak). The student aspirations in the MEB are built around six primary attributes: ethics and spirituality, leadership skills, national identity, language proficiency, thinking skills, and knowledge. These are the same six attributes for students that the higher education system is anchored on.

Figure 2. Balance in HE according to blueprint

The Ministry's major aspiration is to create a higher education system that ranks among the world's leading education systems and that enables Malaysia to compete in the global economy. The Blueprint focuses on the following aspirations:

1. Instil an entrepreneurial mindset throughout Malaysia's higher education system and create a system that produces graduates with a drive to create jobs, rather than to only seek jobs;

2. Construct a system that is less focused on traditional, academic pathways and that places an equal value on much-needed technical and vocational training;

3. Focus on outcomes over inputs and to actively pursue technologies and innovations that address students' needs and enable greater personalisation of the learning experience;

4. Harmonise how private and public institutions are regulated, and to transition from the current, highly centralized governance system for HLIs to a model based on earned autonomy within the regulatory framework;

5. Ensure the financial sustainability of the higher education system by reducing HLIs reliance on government resources and asking all stakeholders that directly benefit from it to contribute as well.

As of Making 4.0, impact and sustainability is focused on points 2 and 3, meaning influence on technical education, and pursuing new technologies. Secondary impact is within entrepreneurial mindset – students focusing on new technologies, still without widespread use, regarding possibilities of establishing their own business. These could be focusing on consultancy or B2B for existing wood/furniture companies.
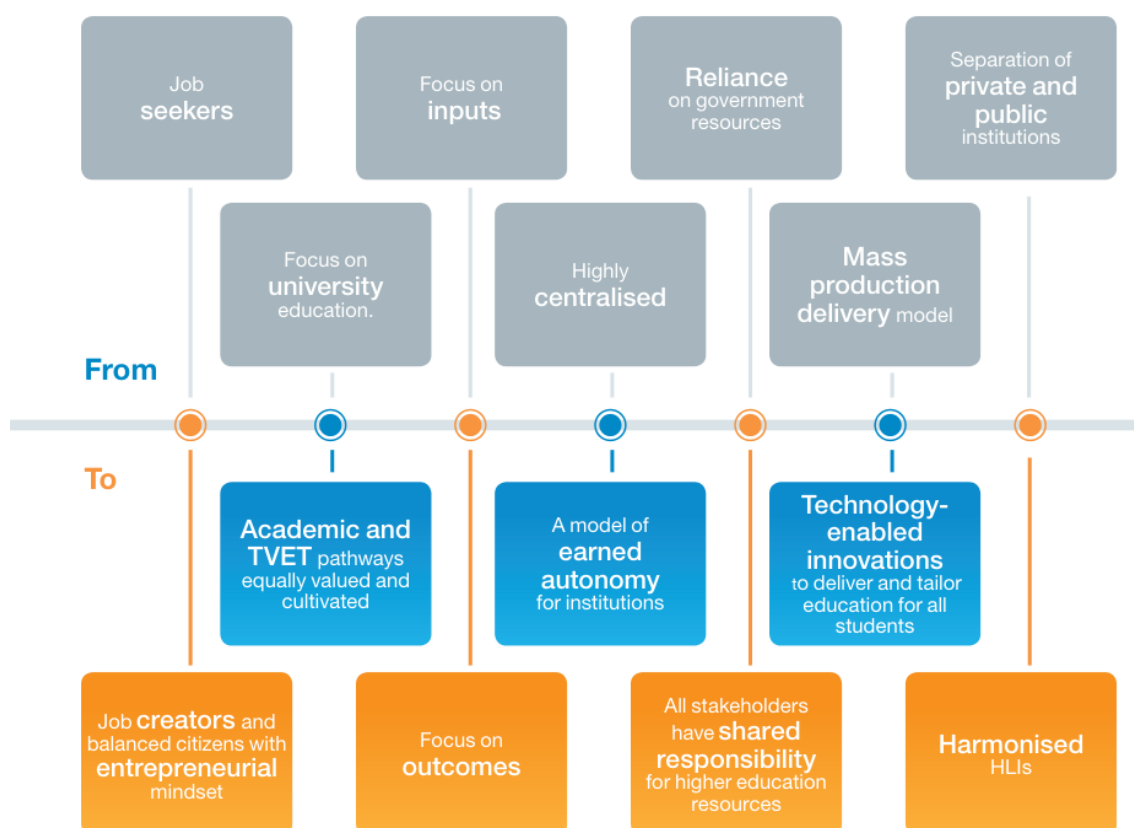
Figure 3. Planned shifts in the way the higher education system operates

Again, Making 4.0 assumed focusing on outcomes, and involvement of numerous stakeholders – universities and companies – job creators. All stakeholders were informed, consulted and interviewed about programme outcomes and had documented impact on these. Technology enabled innovations based on Key Enabling Technologies are provided within programme, ready to be harmonized within institutions/enterprises.

Major shifts in education system

MEB (HE) outlines 10 Shifts that will spur continued excellence in the higher education system. All 10 Shifts address key issues in the system, particularly with regard to quality and efficiency, as well as global trends that are disrupting the higher education landscape.

Figure 4. Major shifts in Malaysian Higher Education

The first four shifts focus on outcomes for key stakeholders in the higher education system, including students in academic and TVET pathways, the academic community, as well as all Malaysians participating in lifelong learning.

The later six shifts focus on enablers for the higher education ecosystem, covering critical components such as funding, governance, innovation, internationalisation, online learning, and delivery.

Making 4.0 can and will contribute to these changes, having some (well, within reasonable effort and funding possibilities) impact on these categories, by:

Shift	Target	Making 4.0 contribution
1	Every graduate will have the relevant disciplinary knowledge and skills (ilmu), ethics and morality (akhlak), as well as the appropriate behaviours, mindsets, cultural, and civilisational literacy (beradab) to advance them to a high level of personal well-being. They will be global citizens with a strong Malaysian identity, ready and willing to contribute to the harmony and betterment of the family, society, nation, and global community	Enhancing the student learning experience by expanding industry and international collaboration in the design and delivery of programmes; increasing the use of experiential and service learning to develop 21st century skills, and leveraging technology-enabled models to enable more personalised learning;
2	HLIs will be able to attract, develop, and retain excellent talent through specialised pathways for educators, researchers, leaders, and practitioners. The academic community will also benefit from a conducive, supportive, and meritocratic environment with better continuous professional development programmes that enable them to meet changing responsibilities and expectations	Positioning cooperating HLIs within W&F areas of institutional excellence, namely excellence by increased wood technology support, excellence in key enabling technologies, and excellence in teaching by international cooperation and exchange.

3	Lifelong learning will become a way of life for all Malaysians. There will be high quality formal, non-formal, and informal programmes in a wide range of disciplines and topics to support both professional and personal development.	Making 4.0 creates a framework for lifelong learning, creating clear pathway for entry into workplace utilising higher technologies. Such framework requires and encourages stakeholders – employers, producers, distributors/resellers of hardware and software, other business-wise interested parties.
4	The Ministry — through its community colleges, vocational colleges, and polytechnics — will be a premier higher education TVET provider that develops skilled talent to meet the growing and changing demands of industry, and promotes individual opportunities for career development. Enrolment in TVET programmes will expand significantly, through extensive partnerships with industry, to ensure supply matches demand.	Making 4.0 directly supports industry to lead curriculum design and delivery through new partnership models and lifts the quality of delivery thru , hands-on training, and specialised employer training programmes, possible to derive from existing curriculum and programme (licensed specifically to be accessible, easy to modify and apply, only requirement is citing the source).

5	There will be continued Government investment of a large portion of the national budget and GDP in the higher education system. Return on investment will, however, improve significantly to match that of peer countries. Public and private HLIs will draw on diverse sources of funding to allow continuous improvement in the quality of their programmes, and more prudent and innovative use of their resources	Making 4.0 does not directly impact this target
6	The Ministry will have a portfolio of fully- autonomous and semi-autonomous HLIs based on their readiness and capacity for decision- making. These HLIs will operate freely within the regulatory framework established by the Government with strong governance structures, clear decision rights, and effective stakeholder management	Making 4.0 does not directly impact this target, except some influence on stakeholder group

7	The Ministry will facilitate the development of innovation ecosystems in selected strategic areas that are critical to the nation's economic growth. These ecosystems will support both university-driven and demand-driven research, development, and commercialisation models, with significant improvements on a wide range of research measures	Making 4.0 does elevate priority research areas critical to Malaysia's growth, as Industry 4.0 is regarded as a strategic area. Focus of Making 4.0 training is both university-driven and demand-driven. Together with technology transfer offices, mechanisms for the co-utilisation of infrastructure, enhanced data monitoring systems, and talent development programmes will contribute to creation of commercialization possibilities and channels.
8	Malaysia will be known as an international education hub with a difference, one that provides values-driven and globally relevant education, and is recognised by students for its balance of quality and affordability, good quality of life, and rich cultural experiences. Malaysia will expand enrollment to reach 250,000 international students by 2025, and reach new markets through more innovative programmes and partnerships.	Making 4.o directly impacts numbers of international exchanges – So far proven within visiting professors and academic fellowships. Contemporary and interesting programme has potential to push up end-to-end international student experience, increase brand visibility, and strengthen existing and create new markets for international students.

9	Blended learning models will become a staple pedagogical approach in all HLIs. Students will benefit from robust cyber infrastructure that can support the use of technologies like video-conferencing, live streaming and Massive Open Online Courses (MOOCs). Malaysian HLIs will also develop MOOCs in their niche areas of expertise, while participating in international MOOC consortiums and building the Malaysia education brand globally.	Making 4.0 can support online learning as an integral component of higher education and lifelong learning, starting with the easy conversion of courses into MOOCs, as there is both presentations and books provided for each subject. Strengthened by influence of the pandemic required infrastructure platforms, devices and equipment are ready, academic community delivers online learning at scale.
10	Ministry will catalyse transformation among private and public HLIs, and lead the way in civil service transformation, by first transforming itself. The Ministry will break down operating silos across departments, forge stronger partnerships with HLIs, industry, and community, and improve its efficiency and effectiveness in its role as a regulator and policymaker	Making 4.0, as innovatory pilot programme can serve as a case for the University Transformation Programme which works in close partnership with pilot HLIs, including identifying, codifying, piloting best practices and tools, and disseminating "playbooks" (buku panduan) to all HLIs on critical improvement areas.

5. Target groups and priorities

The main beneficiaries/stakeholders of MAKING4.0 are identified in 5 target groups:

1. University students and staff

- Students with academic background on modern subjects like Additive Manufacturing, IoT, Robotic, Furniture Manufacturing processes, Circular Economy, Technological Surveillance, etc.
- Students with improved skills and competences related personal and professional development for employability and modern business creation.
- Staff with improved knowledge and experience in a collaborative project.

2. Malaysian universities

Malaysian Universities are to offer a new and innovative master on I4.0. MAKING4.0. The expected exploitation priorities:

- Mutual exchange of experiences, methodologies, and knowledge
- Transferred skills of other organizations
- Improvement of their capacities within the area of strategic development, organizational management, leadership, quality of learning provision, equity and inclusion
- Successful implementation of the learning modules in partnering Malaysian Universities.

3. European universities

European partnering institutions participating in Making 4.0 development could have following exploitation priorities:

- Advancement in I4.0 technologies and furniture processes,
- Update of educational offer offerings
- Contribution to the internationalization strategies of the European HE

4. SMEs, large companies and professional associations of the wood and furniture industry

Sectoral industry, at national, regional and international level should be interested in:

- Improvement of their workforce skills.
- Internationalization through contacts with participating universities
- Internationalization of workforce

5. Decision-makers, public authorities, general public

Above beneficiaries potentially could withdraw:

- Awareness about new issues regarding I4.0.
- Implement new offers based on the project
- launch policies to boost industry4.0 in wood and furniture industry
- launch policies to boost internationalization in in wood and furniture industry

6. Communication

Exploitation communication channels include:

- event attendance (e.g. conferences, seminars, workshops, etc.),
- project publications (e.g. leaflets, press releases as well as conference papers, articles in professional journals etc.)
- project presentations (e.g. to local stakeholders, etc.), complemented in person, thru the project website, and main social platforms

Beneficiaries could use:

- Erasmus+ Project Results Platform
- project or organizational websites
- meetings and visits to key stakeholders

- dedicated discussion opportunities such as information sessions, workshops, (online) seminars, training courses, exhibitions, demonstrations, or peer reviews
- targeted written material such as reports, articles in specialized press, newsletters, press releases, leaflets or brochures
- media and products such as radio, TV, YouTube, video clips, podcasts
- social media
- public events
- existing contacts and networks

Due to current personal communication and travel issues, priorities and channels may change.

7. Timeline

During the last year of project life:

- contacting relevant media, preferably on the international level
- conducting activities such as information sessions, training, demonstrations, peer reviews
- improving informational impact on target groups;
- involving other stakeholders in view of transferring results to end users/ new areas/policies.
- Involving MY public authorities
- adding a link to project card within the Erasmus+ Project Platform on the project website

At final report stage:

- uploading the final project results and an update of the project description on the Erasmus+ Project Results Platform.

After the end of the project:

- continuing further dissemination
- developing ideas for future cooperation
- evaluating achievements and impact
- contacting relevant media
- contacting policy-makers

8. Goals and measurable results

In accordance to the exploitation plan, following goals are set:

Website

№	Task	Measurable/Goal	Intangible results
1	Project website	Present for 3 years after Project finishes	Constant raising awareness, constant source of information

Current achievements:
Project website active after project finished, hosting and domain already reserved and paid until 30.10.2025r

Proof:
Invoice for hosting: 0019FV202205MG.pdf

What is planned:

Basic maintenance of the website will be done by WULS and USM, mostly focused on the news from cooperation amongst partners - like Visiting professors, project within consortium's partners, publications

Partners' links

№	Task	Measurable/Goal	Intangible results
2	Direct links at partner's websites	Present for 3 years after Project finishes	Constant raising awareness, constant source of information

Current achievements:

All partners' websites are linked up, in accordance to plan these links will remain active for at least 3 years

Proof:

UiTM:

[ERASMUS+ (MAKING4.0) (uitm.edu.my)](uitm.edu.my)

UPM:

[UTAMA | FAKULTI PERHUTANAN DAN ALAM SEKITAR (upm.edu.my)](upm.edu.my)

UKM:

[MAKING 4.0 Project – Research Centre for Sustainable Process Technology (ukm.my)](ukm.my)

[Making 4.0 Project | DEPARTMENT OF APPLIED PHYSICS | FST to the fore (ukm.my)](ukm.my)

USM:

[Erasmus+ Project Making 4.0 (usm.my)](usm.my)

CETEM:

[MAKING 4.0 Project - Projects | Centro Tecnológico del Mueble y la Madera (cetem.es)](cetem.es)

WULS:

[Making 4.0 - Instytut Nauk Drzewnych i Meblarstwa (sggw.edu.pl)](sggw.edu.pl)

UPCT:

https://www.upct.es/uitt/es/proyectos-europeos/presentacion-opect/

https://girtel.upct.es/?page_id=1215

KIT:

[Karlsruher Institut für Technologie / Building Lifecycle Management (BLM) / Team - Volker Koch (kit.edu)](https://www.blm.ieb.kit.edu/536_1552.php)

https://www.blm.ieb.kit.edu/536_1552.php

What is planned:

Basic maintenance of the Institutional links leading to webpage maintained by WULS/USM, with posts focused on the news from cooperation amongst partners - like Visiting professors, projects within consortium's partners, publications, for at least 3 years after project finishes.

Social media

№	Task	Measurable/Goal	Intangible results
3	Social media	Existing channels still valid and used for communication with partners and stakeholders, for at least 3 years after Project finishes	Awareness, internationalization

Current achievements:

It was proven that the existing major channel on LinkedIn, with 222 group of stakeholders, is the main source of information on events and planned activities, functioning since the beginning of the project with almost 200 posts.

Proof:

https://www.linkedin.com/groups/13659072/
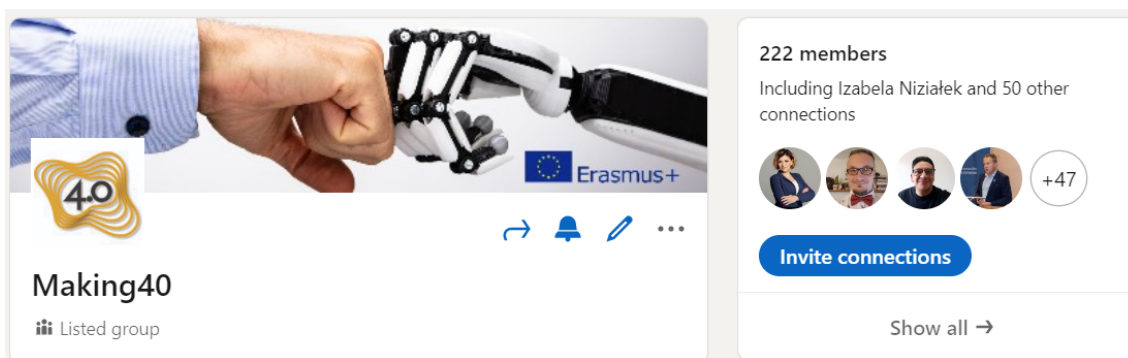
What is planned:

Basic maintenance of the group will be done by WULS and UPCT, mostly focused on the news from cooperation amongst partners - like Visiting professors, projects within consortium's partners, publications, conferences, and other news concerning stakeholders' groups.

Other channels, such as Facebook/Twitter will be used by parties for reposting initiatives gathered on the main source, to prevent incomplete information.

Developed courses

№	Task	Measurable/Goal	Intangible results
4	Developed courses	Developed, Used/applied by partners, biannually	internationalization awareness, resource

Current achievements:

Existing Making 4.0 industry course as being developed, piloted, and put into MQF should not be the only one single child of the consortium. Development of the curriculum is a lengthy process, and considering major work on implementation, cannot be reasonably planned every year. There is the present next initiative of Sustainable

Bioresource Technology MSc course developed by WULS/USM with the use of Foebe Erasmus project as a module (2022).

Proof:

Sustainable Bioresource Technology Draft 3 - Sustainabler Bioresource Technology USM-Zbiec.pdf

What is planned:

It is planned that within current cooperatives with the help of external resources Project partners will develop at least one functional course per 2 years. Number seems low, but knowing how much time and effort it needs, specifying a higher number will be simply not reasonable.

Student exchange

№	Task	Measurable/Goal	Intangible results
5	Students exchange	Exchange of students between partner institutions – planned 5 a year	internationalization, intercultural experience

Current achievements:

Thera are already functional initiatives of student exchange, for at least last period this was very problematic due to universities coming online only, and variable sanitary restrictions of different countries and regions.

Proof:

Acceptance card for BSC studies at UPCT - CYNTHIA DARSHNI - Carta de Aceptacion KA107.pdf

KA171-HED - Mobility of higher education students (18) and staff (10) for 2022 - KA171-HED-CA22E185.pdf

What is planned:

Continuation of exchange of students, within current and new Erasmus grants, reaching funding for at least 5 students a year on average.

Staff exchange

№	Task	Measurable/Goal	Intangible results
6	Staff exchange	Exchange of staff – planned 5 a year	internationalization, Exchange of knowledge

Current achievements:

Thera are already functional initiatives of staff exchange, not all funds were used due to universities coming online only, and variable sanitary restrictions of different countries and regions.

Proof:

KA171-HED - Mobility of higher education students (18) and staff (10) for 2022 - KA171-HED-CA22E185.pdf

2020-1-PL01-KA107-079960 - Mobility of higher education students and staff (1) for 2022 - Agreement_EP_20_107_W_0097U2336_signed.pdf

Acceptance letter for Mazlina Zaira Mohammad - Mazlina Zaira Mohammad - Aceptacion Español SMS KA107.pdf

Acceptance letter for Mohd Rashan Shah Bin Robuan - Mohd Rashan Shah Bin Robuan - Acceptance Letter KA107

What is planned:

Continuation of exchange of staff, within current and new Erasmus grants, reaching funding for at least 5 staff members a year on average.

Visiting professors, academic fellowships (no EU funding)

№	Task	Measurable/Goal	Intangible results
7	Visiting professors, Academic Fellowships	Longer term contracts for visiting professors/academic fellows – planned 1 a year (outside EU funding)	internationalization, Exchange of knowledge

Current achievements:

There are already functional initiatives of visiting professors/academic fellowships funded with universities internal funds, selected for teaching/science, During the project lifetime we achieved 4 positions granted.

Proof:

Dr. Shahriman Bin Zainal Abidin, UiTM – Visiting professor at WULS for academic Year 2020/21 - Letter of Appointment Shahriman.pdf

Prof. dr. Jegatheswaran Ratnasingam, UPM – Visiting professor at WULS for academic Year 2021/22 - Letter of Appointment Jega1.pdf

Dr hab. Marcin Zbiec, WULS – Acedemic Fellow at USM for academic year 2021/22 - Letter of Appointment Zbiec.pdf

Prof. dr. Jegatheswaran Ratnasingam, UPM – Visiting professor at WULS for academic Year 2022/23 - Letter of Appointment Jega2.pdf

What is planned:

Continuation of visiting professors and academic fellowships within Project partnership, reaching at least 1 a year on average.

International cooperation

№	Task	Measurable/Goal	Intangible results
8	International cooperation	Cooperation between partners, project application 1/year	internationalization, Exchange of knowledge

Current achievements:

Current point deals especially with international projects and other initiatives, based on EU or external funding. During the project lifetime, partners have undertaken already some initiatives within the area, mainly within new projects and agreements between universities.

Proof

Memorandum of understanding – cooperation agreement between UiTM and WULS - Renew MoU antara WULS & UiTM.pdf

AHOD Erasmus + Project 2019/22 , WULS and CETEM cooperation - KA204-F61375AF-EN ALL HANDS ON DECK.pdf

Allview Erasmus + Project 2020/25, UPCT, WULS, CETEM cooperation - Detailed_description_of_the_project_for_partners_ALLVIEW.pdf

Erasmus+ KA2 projects:

Tourings Erasmus + Project 2020-1-DE02-KA202-007446 KIT-CETEM cooperation – KA2_Grant_agreement_2020-1-DE02-KA202-007446.pdf

Research-In webinar programme of USM School of Arts (with WULS cooperation) - School of the Arts ResearchIN.pdf

CL4BIO - Creative learning for boosting bio-economy within HEIs' curricula (Wuls with support of all Malaysian Partners - ka220-hed.pdf, Support Letter UiTM.pdf, Support Letter UKM.pdf, Support letter UPM.pdf, Support Letter USM.pdf

What is planned:

Continuation of application for projects amongst partners, reaching at least 1 a year on average. Next planned initiative is Capacity Building programme focused on Bioeconomy for 2023, based on Making 4.0/FOEBE/CL4BIO foundations

Attached documents:

1. Malaysian Education Blueprint 2020/2025 - Malaysia Education Blueprint 20 - Malaysia. Ministry Of Education.pdf

2. Invoice for hosting: 0019FV202205MG.pdf

3. Sustainable Bioresource Technology Draft 3 - Sustainabler Bioresource Technology USM-Zbiec.pdf

4. Acceptance card for BSC studies at UPCT - CYNTHIA DARSHNI - Carta de Aceptacion KA107.pdf

5. KA171-HED - Mobility of higher education students (18) and staff (10) for 2022 - KA171-HED-CA22E185.pdf

6. KA171-HED - Mobility of higher education students (18) and staff (10) for 2022 - KA171-HED-CA22E185.pdf

7. 2020-1-PL01-KA107-079960 - Mobility of higher education students and staff (1) for 2022 - Agreement_EP_20_107_W_0097U2336_signed.pdf

8. Acceptance letter for Mazlina Zaira Mohammad - Mazlina Zaira Mohammad - Aceptacion Español SMS KA107.pdf

9. Acceptance letter for Mohd Rashan Shah Bin Robuan - Mohd Rashan Shah Bin Robuan - Acceptance Letter KA107

10. Dr. Shahriman Bin Zainal Abidin, UiTM – Visiting professor at WULS for academic Year 2020/21 - Letter of Appointment Shahriman.pdf

11. Prof. dr. Jegatheswaran Ratnasingam, UPM – Visiting professor at WULS for academic Year 2021/22 - Letter of Appointment Jega1.pdf

12. Dr hab. Marcin Zbiec, WULS – Acedemic Fellow at USM for academic year 2021/22 - Letter of Appointment Zbiec.pdf

13. Prof. dr. Jegatheswaran Ratnasingam, UPM – Visiting professor at WULS for academic Year 2022/23 - Letter of Appointment Jega2.pdf

14. Memorandum of understanding – cooperation agreement between UiTM and WULS - Renew MoU antara WULS & UiTM.pdf

15. AHOD Erasmus + Project 2019/22 , WULS and CETEM cooperation - KA204-F61375AF-EN ALL HANDS ON DECK.pdf

16. Allview Erasmus + Project 2020/25, UPCT, WULS, CETEM cooperation - Detailed_description_of_the_project_for_partners_ALLVIEW.pdf

17. Tourings Erasmus + Project   2020-1-DE02-KA202-007446 KIT-CETEM cooperation – KA2_Grant_agreement_2020-1-DE02-KA202-007446.pdf

18. Research-In webinar programme of USM School of Arts (with WULS cooperation) - School of the Arts ResearchIN.pdf

19. CL4BIO - Creative learning for boosting bio-economy within HEIs' curricula (WULS with support of all Malaysian Partners - ka220-hed.pdf, Support Letter UiTM.pdf, Support Letter UKM.pdf, Support letter UPM.pdf, Support Letter USM.pdf