

Horizon 2020 Framework Programme Grant Agreement: 825215 — FIN-TECH Amendment request – detailed proposal

1. Extension

Following the Covid-19 emergency, to gain more flexibility, while guaranteeing a solid preparation, we propose to extend the project until June 30th, 2021 for an overall duration of 30 months, instead of the 24 originally planned. All milestones and deliverables are shifted accordingly to the proposed extension.

2. Management

To improve the efficiency in the execution of the planned project activities we propose the following internal changes of activities, related man months and budget.

- 2.1. The activities, man/months and budget corresponding to the WP4 leadership are moved from Paris 1 to ZHAW.
- 2.2. The remaining 37.5% of the activities, man/months and budget corresponding to WP7 are moved from FIRAMIS to ASE Bucharest.
- 2.3. The remaining activities, man/months and budget corresponding to Suptech Belgium are moved from B-HIVE to the University of Luxembourg.
- 2.4. The remaining activities, man/months and budget corresponding to Suptech Netherlands are moved from B-HIVE to UNIPV, which will organise a Suptech activity with the ECB in Frankfurt.
- 2.5. The activities, man/months and budget for the final research workshop (Berlin, 19 March 2021) are moved from FIRAMIS to UBER.

3. Increase in partners' effort.

Some Partners propose to increase their person/months in the project, yet maintaining the same assigned budget. The proposal is detailed in the following subparagraphs.

3.1. ASE Bucuresti (BUES)

WP	WP Title	Initial P/M	Extra P/M	New total P/M
WP1	Management	1	0	1
WP2	Big data analytics research platform	2	0	2
WP3	Artificial Intelligence research platform	2	0	2
WP4	Blockchain research platform	2	0	2
WP5	Suptech workshops	6	2	8
WP6	Regtech workshops	0	0	0
WP7	Dissemination	1	17.1	18.1
Total		14	19.1	33.1

Proposed increase in effort¹ (1):
The remaining activities and budget of WP 7 will move from FIRAMIS to ASE and according to the number of hours used by ASE in a unit of man/month (41hours per man/month) the new number of man/months per WP7 for ASE will increase from 1 (41 hours) man/months to 18.1 (742 hours) man/months.
Explanation:
ASE will take over WP7 and continue the activities of coordinating the collection of feedback and dissemination as proposed in the GA. Supplementary ASE will create a methodology for obtaining more qualitative feedback from partners and supervisors and will implement it together with the partners. Supplementary, ASE will work with WP Leaders to increase the impact and dissemination of the project using the approach proposed during London Management Meeting. Supplementary, ASE will support the partners (those expressing availability) for helping them organize the proposed Regional Workshops for increasing the strength of the network and the dissemination of the project.
Proposed increase in effort (2):
ASE proposes to increase its activity in WP 5 and allocate 82 supplementary hours (2 new man/months) for organising supplementary activities.
Explanation:
Supplementary, ASE will organize local events (Suptechs) for increasing the awareness of the project and of the topics of the project in Romania (Supervisor + Second Supervisor + Banks + Insurance companies + Fintechs). Supplementary, ASE will organize together with partners a Regional Workshop for increasing the strength of the network and the dissemination of the project. The supplementary budget for covering the 82 new hours and other organisational costs will come from the remaining budget that was not spent for organising the Midterm Workshop on the 15 th of November 2019 (only 65% of the budget was spent).

3.2. University of Economics in Bratislava (EUBA)

WP	WP Title	Initial P/M	Extra P/M	New total P/M
WP1	Management	1	2	3
WP2	Big data analytics research	1	0	1
WP3	Artificial Intelligence research	1	0	1
WP4	Blockchain research	1	0	1
WP5	Suptech workshops	4	3	7
WP6	Regtech workshops	0	0	0
WP7	Dissemination	1	1	2
Total		9	6	15

Proposed increase in effort:
EUBA will increase its activity in WP 1, WP7 and WP 5 and will allocate 48 supplementary hours (6 new man/months) for organising supplementary activities.
Explanation:

¹ Differently from the other proposed amendments reported in Tables 3.1 to 3.7, part of this change in effort corresponds to a shift in budget, from Firamis to ASE. However, it is reported here to better define the proposal in terms of P/M.

Supplementary, EUBA will organize local events (Suptechs) for increasing the awareness of the project and of the topics of the project in Slovakia (Supervisor asks to organize additional workshops to involve new own employees as well as other stakeholders from its newly established Fintech hub).

Supplementary, EUBA will organize together with partners a Dissemination Workshop for increasing the strength of the network and the dissemination of the project.

The supplementary budget for covering the additional man/months and other organisational costs will come from the remaining budget that was not spent for WP1, WP5 and WP7.

3.3. Kaunas University of Technology (KTU)

WP	WP Title	Initial P/M	Extra P/M	New total P/M
WP1	Management	1	1	2
WP2	Big data analytics research	3	0	3
WP3	Artificial Intelligence research	3	2	5
WP4	Blockchain research	3	4	7
WP5	Suptech workshops	15	6	21
WP6	Regtech workshops	0	0	0
WP7	Dissemination	2	2	4
Total		27	15	42

Proposed increase in effort:

KTU proposes to increase man/months by additional 15 man/months to 42 man/months, to deal with COVID-19 delays and reschedule of events that were plane in autumn 2020, and to conduct additional research on AI and Blockchain.

Explanation:

The budget doesn't need to be reallocated from other sources, since funds were not spent or will not be spent in 2020. Therefore the budget only needs to be transferred to 2021. KTU organises KTU Big Data School together with Baltic Fintech Workshop (September 30-October 2, 2020).

Additionally, KTU as partner with MITA (science and innovation transfer agency), Bank of Lithuania and Ministry of Economics and Innovations is going to organize FintechInn Vilnius (web page of event in 2019 <https://www.fintechinn.lt/>), which is rescheduled for April 2021. This event is perfect for dissemination in a large scale since it attracts above 500 fintech companies and above 3000 participants from more than 60 countries worldwide.

Moreover, 4 research papers are planning to be prepared:

- *"Review of Bitcoin Improvement Proposals (BIP) and their effect on possible BTC integration with classical financial markets and institutions"* - Proposed case study and publication analyses outstanding BIP's in relation to possible BTC integration with classical financial markets and institutions. We provide summary of BIPs, analysis of their possible impact on pedigree traceability, verification of ownership, creation of smart contracts, etc.
- *"Arbitrage analysis in the crypto currency exchanges"*. This research focuses on analysis of daily arbitrage possibilities in more than 10 crypto currency exchanges worldwide.
- *"Dominance and contagion in crypto currency markets"*. This research focuses on identification of stochastically dominating crypto currency and its influence to other crypto's.

“Traceability of origin funds of transactions in Bitcoin blockchain”. It is essential to identify the correct owner of the wallet when its address changes through various types of transactions – starting with the simplest simple payment chains and going through multi-inputs and multi-outputs ones when mixing and tumbling is used. This would allow the full traceability of the origin of the funds from the final transaction: were they mined, traded, exchanged or laundered. We are working now with analysis of common patterns in Bitcoin transactions and trying to build a probabilistic tree which would show possible origin funds for chosen transactions. Later these results could be used for robo-advisors training to identify the risky activities. All information is gained from the bitcoin blockchain and is publicly available.

3.4. Masaryk University (MU)

WP	WP Title	Initial P/M	Extra P/M	New total P/M
WP1	Management	1	0	1
WP2	Big data analytics research	1	1	2
WP3	Artificial Intelligence research	1	0	1
WP4	Blockchain research	1	-1	0
WP5	Suptech workshops	3	4	7
WP6	Regtech workshops	0	0	0
WP7	Dissemination	1	0	1
Total		8	4	12

Proposed increase in effort:

MU proposes the increase of 4 man/months for WP5, the change of 1 man/month from WP4 to WP2, with no budget change.

Explanation:

The increase is requested due to additional workload/provided training as requested by the national regulator (Czech National Bank) to achieve and enhance project deliverables. Background training alongside with review of the use cases and the activities of local FinTech firms result in a higher satisfaction with project activities (as evident by SupTech workshop evaluations). Additional activities supporting the project's deliverables have resulted in the necessity to increase staff involvement (person months). Lower individual personnel PM rates in accordance with H2020 rules reflecting real conditions and salaries in the institution to fulfil the above-mentioned training deliverable (increased workload) without changing the overall project budget set for Masaryk University.

The additional effort in WP2 of 1 P/M (at the expense/decrease of 1 P/M in WP4) is required to improve the manuscript “Default or Profit Scoring Credit Systems? Evidence from an Emerging High-Risk P2P Loan Market” after the submission and feedback in a top-ranked journal. The change in PM in both WPs supports the effort of the MUNI team to produce high-quality research without changing the overall project budget set for Masaryk University.

3.5. Universidad Complutense de Madrid (UCM)

WP	WP Title	Initial P/M	Extra P/M	New total P/M
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WP1	Management	1	0	1
WP2	Big data analytics research	2	4	6
WP3	Artificial Intelligence research	2	0	2
WP4	Blockchain research	4	0	4
WP5	Suptech workshops	6	0	6
WP6	Regtech workshops	3	0	3
WP7	Dissemination	1	0	1
Total		19	4	23

Proposed increase in effort:
UCM will increase its activity in WP2 and will allocate 4 man/months to carry out supplementary research.
Explanation:
The UCM team will devote 4 man/months more on the WP2 of Big Data Analytics to specifically research more on peer-to-peer lending and how explainable machine learning models can help to mitigate risk by improving predictive performance, while meeting with the interpretability requirements by regulators and decision makers.

3.6. University of Economics – Varna (UE-Varna)

WP	WP Title	Initial P/M	Extra P/M	New total P/M
WP1	Management	1	0	1
WP2	Big data analytics research	1	0	1
WP3	Artificial Intelligence research	1	1	2
WP4	Blockchain research	1	1	2
WP5	Suptech workshops	4	0	4
WP6	Regtech workshops	0	0	0
WP7	Dissemination	1	1	2
Total		9	3	12

Proposed increase in effort (1):
UE-Varna proposes to increase the allocated already effort under the WP 3 “Artificial intelligence research” with 1 man/month.
Explanation:
Initially allocated effort is 1 man/month (equal to 143 hours), for the entire implementation phase of the project and the work package. Due to the lower level of our experts’ remuneration UE-Varna is not able to acquire the approved budget level and the efforts that our experts are able to report and get paid don't correspond to the efforts needed for quality work that they are expected to provide. The extra man/month will be used for research activities in the area relevant to the work package.
Proposed increase in effort (2):
UE-Varna proposes to increase the allocated already effort under the WP 4 “Blockchain research” with 1 man/month.
Explanation:
Initially allocated effort is 1 man/month (equal to 143 hours), for the entire implementation phase of the project and the work package. Due to the lower level of our experts’ remuneration

UE-Varna is not able to acquire the approved budget level and the efforts that our experts are able to report and get paid don't correspond to the efforts needed for quality work that they are expected to provide. The extra man-month will be used for research activities in the area relevant to the work package.
Proposed increase in effort (3):
UE-Varna proposes to increase the allocated already effort under the WP 7 “Dissemination” with 1 man/month.
Explanation:
UE-Varna is the first partner that hosted an international local event within the FIN-TECH project. Increasing the effort for UE-Varna under the WP 7 will provide space for more in-house events, press releases and other types of activities, relevant to the work package.

3.7. Warsaw University (UNIWARSAW)

WP	WP Title	Initial P/M	Extra P/M	New total P/M
WP1	Management	1	0	1
WP2	Big data analytics research	1	0	1
WP3	Artificial Intelligence research	1	0	1
WP4	Blockchain research	1	0	1
WP5	Suptech workshops	3	2	5
WP6	Regtech workshops	0	0	0
WP7	Dissemination	1	1	2
Total		8	3	11

Proposed increase in effort (1):
The remaining activities of UNIWARSAW on WP5 (preparing and conducting two trainings for the national regulator within AI and blockchain topics) will require to allocate 2 more man-months.
Explanation:
Polish regulator requires to translate all training materials into Polish and in addition to prepare extensive general review of the presented topic, including literature review and relations to regulatory perspective. This would require 1 additional man month for each of the remaining Suptech workshops in AI and Blockchain.
Proposed increase in effort (2):
UNIWARSAW proposes to increase its activity in WP 7 and allocate 1 additional man-month for organising supplementary activities.
Explanation:
Supplementary, UNIWARSAW will organize local events for increasing the awareness of the project. Full day conference/workshop related to the third topic of the project: blockchain technology in finance is planned. In addition, UNIWARSAW plans to organize two one-day trainings for Polish fintech companies and/or banks related to the first two topics of the project: Big Data Analytics and Artificial Intelligence.

3.8. Vienna University of Economics and Business (WU)

WP	WP Title	Initial P/M	Extra P/M	New total P/M

WP1	Management	0.5	0	0.5
WP2	Big data analytics research	1	0	1
WP3	Artificial Intelligence research	1	1	2
WP4	Blockchain research	1	0	1
WP5	Suptech workshops	3	2	5
WP6	Regtech workshops	2	4	6
WP7	Dissemination	0.5	0	0.5
Total		9	7	16

Proposed increase in effort:

WU proposes the following increase in effort to adapt to the changing nature of the project from the experiences during M1-M15:

- WP3 (Artificial Intelligence) is increased by 1 MMs.
- WP5 (SupTech Workshops) is increased by 2 MMs.
- WP6 (RegTech Workshops) is increased by 4 MMs.

Explanation:

The positive experience from the first year and especially the insights from the organization of the RegTech workshop in February 2020 along with the extension of the project until to the end of June 2021 led the above-mentioned adaptations, e.g. due to the participation of the R Core member Prof. Kurt Hornik who is elaborating on RegTech and R for all three WP parts of the project in close cooperation with the Austrian Financial Market Authority which is highly appreciated by the FMA as they only rely on R. The RegTech workshop is seen as a kick-off of a series of further Workshops – in line of WP6 and also in some sense in WP5. That means that starting in Fall 2020 a series of workshops will be organized until the end of the project, especially in close cooperation with the nearby partners Slovakia, Czech Republic, and Hungary (via Switzerland). Furthermore, the development of the AI case in WP3 and the respective paper turned out so well that a set of papers is going to be prepared in this line of research.