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Small or medium-scale focused research project (STREP) proposal ICT Call 5

# Online Learning Platform LIMBO

**Small or medium scale focused research project (STREP)**   
**Date of preparation**: 1. December 2017.  
**Version number (optional)**: 1.0

**Work programme topic addressed**Online Learning Platform LIMBO

**Name of the coordinating person:** Anja Bukurov, Vojislav Stankovic, Lazar Rankovic  
**e-mail**: mi13043@alas.matf.bg.ac.rs, [mi13240@alas.matf.bg.ac.rs](mailto:mi13240@alas.matf.bg.ac.rs), mi13268@alas.matf.bg.ac.rs

**List of participants**

|  |  |  |
| --- | --- | --- |
| **Participant No \*** | **Participant organisation name** | **Country** |
| 1 | Faculty of Mathematics | Serbia |
| 2 | Udruzenje slepih | Serbia |
| 3 | Ministarstvo obrazovanja | Serbia |

\* Please use the same participant numbering as that used in the administrative proposal forms.

**Proposal abstract**

**1. Excellence**

**Your proposal must address a work programme topic for this call for proposals.**

* This section of your proposal will be assessed only to the extent that it is relevant to that topic.*

**1.1 Objectives**

The main objective is to include people with special needs (blindness) into to the world of Computer Science and to provide them experience that they never had. Aim is to provide non stressful learning experience for programming beginners.

The key features are:

* Speech-to-text: main purpose is to enable students to use application independently of any peripheral components and thus enabling them to participate at ant location and any time.
* Text-to-speech: the key component is to provide student knowledge of what is on the screen and what is state of their program, what mistakes did they make and how to correct them with ease.

Veliki broj slepih ljudi nije u mogucnosti da iskusi cari programiranja I da u potpunosti iskoristi resurse racunarstva. Obuka koja se do sada koristi nije prilagodjena njihovim potrebama I nije primenjiva u realnom zivotu.

Glavni zadatak je kreiranje platforme koja najrealnije prenosi stanje racunarskog okruzenja korisniku. Platforma (ime platforme) je osmisljena tako da u svakom trenutku prenosi informaciju o stanju programa korisniku. Osoba koja koristi platform treba da napise program I platofrma treba da mu pruzi informaciju o tome da li je program uspesno kompiliran I ako nije da mu pruzi pomoc kako da adekvatno ispravi gresku u programu koji je napisao.

**1.2 Relation to the work programme**

* Objective 1: Izbor programskih paradigmi.

Odabrana paradigm je OO zbog velike slicnosti sa konceptima razmisljanja iz prirode, radi laksih prvih koraka u ovoj oblasti.

* Objective 2: Standardizacija plana I testova.

Platforma omogucava izdavanje sertifikata po nivoima strucnosti, tako da je neophodno omoguciti adekvatno testiranje polaznika.

* Objective 3: Razvoj platforme

Povezivanje modula u jedinstvenu celinu (platformu).

Moduli:

1. Text-to-speech
2. Speech-to-text
3. Web grading
4. Napredno razvojno okruzenje (interpretator, kompilator, editor …)

* Objective 4: Testiranje

Nivoi testiranja:

1. Unit testing
2. Integration testing
3. System testing
4. Beta testing of entire platform (NAPISATI GDE SE IZVODI TESTIRANJE)

* Objective 5: Eksploatacija

Podizanje platforme na server I promocija kurseva programiranja na svim mogucim mestima.

**1.3 Concept and methodology**

**(a) Concept**

Poznavanje programiranja I primena od strane pojedinca dovodi do mogucnosti pojedinca da se ukljuci u svet racunarstva, pronadje posao u toj oblasti I stane rame uz rame sa ostalim kolegama iz te oblasti bez osecaja inferiornosti u bilo kom trenutku. Buduci da se racunarstvo I informatika sve vise ulaze u svakodnevni zivot ova platforma doprinosi do podizanja opsteg nivoa informatickog obrazovanja u drustvu.

**(b) Methodology**

Agilna metodologija razvoja softvera. ☺

**1.4 Ambition**

We strive to be global leader in online education and machine-to-human interactions, revolutionizing the entire education model from standardization to personalization. Through our online platforms, students have access to the best teaching software platform worldwide, 24-7, anytime, anywhere, from any device.

**2. Impact**

**2.1 Expected impacts**

Ocekujemo da ce platforma biti znacajna u edukaciji, industriji, psiholoskom I socijalnom stanju zajednice. Razvojem ove platforme svaka zemlja bi mogla da ukljuci slepe osobe u IT industriju bez znacajnih ekonomskih posledica po budzet drzave. Koristili bi ga kako prosvetni organi tako I firme I korporacije u obuci zaposlenih sa posebnim potrebama.

**2.2 Measures to maximise impact**

**a)** **Dissemination and exploitation[[1]](#footnote-3) of results**

Projekat ce biti prestavljen svim Ministarstvima obrazovanja, organizacijama za ljude sa posebnim potrebama, korporacijama sirom EU ali I sveta ako se za to ukaze prilika. Na njima je da to predstave svim srednjim skolama I da to uvedu kao neizostvan deo obuke programiranja.

**3. Implementation**

**3.1 Work plan —** **Work packages, deliverables**

Projekat LIMBO je medjunarodni projekat u ciji su razvoj ukljuceni: MATF, udruzenje za slepe, ministarstvo obrazovanja Republike Srbije. Kako na projektu radi veliki broj ljudi uspesnost projekta zavisi od njihove komunikacije I kordinacije. Svaki ucesnik projekta ce imati predstavnika u upravnom odboru. Upravljanje projekta ce se obavljati u skladu sa SCRUM metodologijom. Ciljevi ce biti definisani na dnevnom nivou, na kratkim video ili telefonskim konferencijama. Osnovna tema sastanaka bice dosadasnji progres, prepreke I planiranje narednih koraka projekta.

Jedna iteracija projekta traje mesec dana, svakodnevno cemo pratitit napredak projekta I procenjivati rizike. Time ce se baviti upravni odbor . Takodje svaki od partnera u projektu ima svog SCRUM menagera koji ce da vrsi kontrolu I reviziju svog tima I osigura striktno predrzavanje tima SCRUM metodologije. On predstavlja glavnu vezu izmedju svog tima I ostalih partnera.

**3.2 Management structure, milestones and procedures**

**Matematički fakultet – MATF**

Matematički fakultet je državna visokoškolska ustanova koja kao samostalna postoji od 1995. Godine. Proteklih godina nastavni plan i program fakulteta se intenzivno menjao, sa ciljem efikasnijih i aktuelnijih studijskih programa, usklađenih sa savremenim trendovima u visokom obrazovanju. Preko 6000 diplomiranih matematičara, preko 700 magistara, brojni specijalizanti i preko 400 doktora nauka pokazatelj su kvaliteta po kojem je Matematički fakultet najprepoznatljiviji, a iz reda nastavnika ovog fakulteta dosad je birano deset članova Srpske akademije nauka i umetnosti. Katedra za računarstvo i informatiku Matematičkog fakulteta ponosi se svojim sadašnjim i nekadašnjim studentima. Diplomirani studenti ove katedre rade u vodećim informatičkim kompanijama (i drugim kompanijama koje imaju informatička odeljenja) u Srbiji, neki rade u velikim kompanijama u inostranstvu, neki su na poslediplomskim studijama na vodećim univerzitetima, a neki od najboljih rade kao asistenti i nastavnici na Univerzitetu u Beogradu.

**The Union of the Blind of Serbia**

The Union of the Blind of Serbia was set up on July 14 1946. It has resulted from the aspirations of the blind to organize their work on meeting their specific needs and interests. The members of the Union are blind and partially sighted persons from Serbia. The Union has some 12000 blind and heavily visually impaired members of different age. The goals proclaimed are realized over the local, regional and provincial organizations, over the bodies of the Assembly, Executive and Monitoring Committees and some ten standing Commissions. Ordinary and assisting members of the Union are involved on the voluntary basis in the realization of the programme, and the Office of the Union and the offices of the organizations are involved on the professional basis.

**Ministarstvo obrazovanja Serbia**

DODATI

***Definition:***

*‘Milestones’ means control points in the project that help to chart progress. Milestones may correspond to the completion of a key deliverable, allowing the next phase of the work to begin. They may also be needed at intermediary points so that, if problems have arisen, corrective measures can be taken. A milestone may be a critical decision point in the project where, for example, the consortium must decide which of several technologies to adopt for further development.*

**3.3 Consortium as a whole**

Konzorcijum čine instituti i univerziteti koji su poznati po vrhunskom radu u svojim oblastima istraživanja. Članovi konzorcijuma poseduju odgovarajuće znanje i veštine potrebne za uspešnu realizaciju projekta SPAS. Iza sebe imaju brojne projekte i iskustvo koje im omogućava da što bolje sagledaju dimenzije problema i rešenja. Otvoreni su za saradnju što je od izuzetnog značaja za projekat ovako velikih razmera. Vođa projekta je MATF čija je glavna uloga pisanje softvera. BIOROB i ISSS imaju najveći zadatak u proizvodnji potrebnih komponenti. CUHB zahvaljujući svom stručnom kadru u oblasti medicine omogućava da se projekat istakne kao jedan od najvećih projekata današnjice u oblasti medicine. Takođe ISSS i MATF su zaduženi za marketing.

**3.4 Resources to be committed**

Konzorcijum čine najstručniji ljudi u ovoj oblasti istraživanja te se veruje da ima velikih izgleda ka uspešnoj realizaciji projekta. Znanje koji oni poseduju i dele jedni sa drugima u ovom projektu ima ogromne razmere te smatramo da su upravo ljudi najvažniji resurs ovg projekta. Finansijski plan: Za razvoj ovakvog projekta potrebno je obezbediti najbolje resurse. Veliki deo novca će biti otrošen na kupovinu svih potrebnih delova. Svim učesnicima u projektu treba plaćati za njihov rad na šta će biti potrošena određna svota novca. Potrebno je izdvojiti deo novca za putovanja koja će biti organizovana radi što uspešnijeg razvoja projekta sa ciljem bolje koordinacije. Kako je sredstva za putovanja u ovom momentu teško proceniti predlog je da se dodeli E100K (U slučaju da se deo novcanamenjen za putovanja ne potroši do kraja projekta bio bi vraćen). **Tables for section 3.1**

**Table 3.1a: List of work packages**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Work package No** | **Work Package Title** | **Lead Partic No** | **Lead Partic Short Name** | **Person-Months** | **Start Month** | **End month** |
| WP0 | Project managment | 1, 2, 3 | MATF, SSS, MIN | 24 | M1 | M12 |
| WP1 | Izbor paradigme | 1 | MATF | 4 | M1 | M3 |
| WP2 | Standardizacija plana I testova | 3 | MIN | 16 | M3 | M4 |
| WP3 | Razvoj platforme | 1, 2 | MATF, SSS | 48 | M4 | M8 |
| WP4 | Testiranje | 1, 2, 3 | MATF, SSS, MIN | 42 | M6 | M10 |
| WP5 | Eksploatacija | 3 | MIN | 48 | M11 | M12 |
| TOTAL |  |  |  | 158 |  |  |

**Table 3.1b: Work package description**

**For each work package:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Work package number** | 0 | | **Lead beneficiary** | | | | | MATF, SSS, MIN | |
| **Work package title** | Project managment | | | | | | | | |
| **Participant number** | 1 | 2 | | 3 |  |  |  | |  |
| **Short name of participant** | MATF | SSS | | MIN |  |  |  | |  |
| **Person months per participant:** | 8 | 8 | | 8 |  |  |  | |  |
| **Start month** | M1 | | | | **End month** | M12 | | | |

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| **Objectives**  Obezbeđivanje ukupne, naučne, obrazovne i tehničke koordinacije projekta. Obezbeđivanje saradnje i koordinacije sa nadležnim državnim organima u vezi sa istraživačkim programima. Obezbeđivanje napretka u razvoju projekta. |

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| **Description of work** (where appropriate, broken down into tasks), lead partner and role of participants  T1 (ISSS): Upravljanje konzorcijumom  T2 (MATF): Upravljanje rizicima  T3 (MIN): Upravljanje promenama  T4 (MATF): Upravljanje kontrolom kvalitet |

|  |
| --- |
| **Deliverables** (brief description and month of delivery)  Ugovor o saradnji (M1)  Zapisnik sa svakog upravnog sastanka (M1, M3, M11, M12)  Priručnik o projektu i plan upravljanja (M1)  Periodični izveštaji (M1, M3, M5, M7, M9, M11, M12)  Završni izveštaj na kraju projekta (M12)  Ciljni proizvod (M12) |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Work package number** | 1 | | **Lead beneficiary** | | | | | MATF | |
| **Work package title** | Izbor paradigme | | | | | | | | |
| **Participant number** | 1 |  | |  |  |  |  | |  |
| **Short name of participant** | MATF |  | |  |  |  |  | |  |
| **Person months per participant:** | 4 |  | |  |  |  |  | |  |
| **Start month** | M1 | | | | **End month** | M3 | | | |

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| **Objectives**  Izbor adekvatne paradigme koja ce biti podrzana u pocetnoj verziji platforme. Detaljno istrazivanje programerske industrije potrebe I potraznje za specificnim programerskim vestinama. |

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| **Description of work** (where appropriate, broken down into tasks), lead partner and role of participants  T1-(MATF): Pronalazenje adekvatne programske paradigm I detaljno dokumentovanje odluke. |

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| --- |
| **Deliverables** (brief description and month of delivery)  Dokumentacija o izabranoj paradigm (M3) |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Work package number** | 2 | | **Lead beneficiary** | | | | | MIN | |
| **Work package title** | Standardizacija plana I testova | | | | | | | | |
| **Participant number** | 3 |  | |  |  |  |  | |  |
| **Short name of participant** | MIN |  | |  |  |  |  | |  |
| **Person months per participant:** | 16 |  | |  |  |  |  | |  |
| **Start month** | M3 | | | | **End month** | M4 | | | |

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| **Objectives**  Nakon uspesno izbora paradigme potrebno je napraviti program I standardizovati testove. Pravljenje programa ce biti radjeno uz konsultovanje eminentnih strucnjaka iz oblasti racunarstva I informatike sa fakulteta. Prikupljace se materijali I smernice sa najboljih univerziteta na svetu. |

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| **Description of work** (where appropriate, broken down into tasks), lead partner and role of participants  T1 - (MIN) Standardizacija testova ce se izvoditi tako sto ce postojati baza podataka od 10.000 pitanja podeljenih po grupama. Grupe se razlikuju po tezini I sertifikatu koji se dobija nakom uspesnog polaganja testa. Postoji 5 razlicith nivoa (MENJAJTE BROJEVE SLOBODNO, JA SAM LUPAO) testiranja (pocetnik, napredni nivo I, napredni nivo II …). Posto se u svakoj grupi nalazi po 2000 pitanja, pred samo testiranje pseudo slucajnim izborom se bira 20 pitanja na koje kandidat odgovara. |

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| **Deliverables** (brief description and month of delivery)  Detaljna dokumentacija o nacinu testiranja, ispitnim pitanjima I potrebnim uslovima za testiranje. (M4) |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Work package number** | 3 | | **Lead beneficiary** | | | | | MATF, SSS | |
| **Work package title** | Razvoj platforme | | | | | | | | |
| **Participant number** | 1 | 2 | |  |  |  |  | |  |
| **Short name of participant** | MATF | SSS | |  |  |  |  | |  |
| **Person months per participant:** | 44 | 4 | |  |  |  |  | |  |
| **Start month** | M4 | | | | **End month** | M8 | | | |

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| **Objectives**  Razvoj softverske podrske prema dokumentaciji. |

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| --- |
| **Description of work** (where appropriate, broken down into tasks), lead partner and role of participants  T1-(MATF): Razvijanje speech-to-text softvera  T2-(MATF): Razvijanje text-to-speech softvera  T3-(MATF): Razvijanje web aplikacije koja podrzava editovanje texta I kopilaciju/interpretaciju u duhu izabrane paradigme  T4-(SSS): Konsultantske usluge vezane za softver.  T5-(MATF): Sklapanje softvera u jednu celinu I postavljanje na server. |

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| **Deliverables** (brief description and month of delivery)  Predstavljanje softvera u iteracijama (M4, M5, M6) |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Work package number** | 4 | | **Lead beneficiary** | | | | | MATF, SSS, MIN | |
| **Work package title** | Testiranje | | | | | | | | |
| **Participant number** | 3 | 3 | | 3 |  |  |  | |  |
| **Short name of participant** | MATF | SSS | | MIN |  |  |  | |  |
| **Person months per participant:** | 8 | 18 | | 18 |  |  |  | |  |
| **Start month** | M6 | | | | **End month** | M10 | | | |

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| **Objectives**  Testiranje celokupnog softverskog resenja. |

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| **Description of work** (where appropriate, broken down into tasks), lead partner and role of participants  T1 (SSS): Testiranje T2 (MATF): Testiranje  T3 (MIN): Testiranje |

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| **Deliverables** (brief description and month of delivery)  Predavanje nedeljnih izvestaja tokom testiranja (M6 – M10)  Predavanje izvestaja zavrsnog testiranja. (M10) |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Work package number** | 5 | | **Lead beneficiary** | | | | | MIN | |
| **Work package title** | Eksploatacija | | | | | | | | |
| **Participant number** | 1 | 3 | |  |  |  |  | |  |
| **Short name of participant** | MATF | MIN | |  |  |  |  | |  |
| **Person months per participant:** | 24 | 24 | |  |  |  |  | |  |
| **Start month** | M11 | | | | **End month** | M12 | | | |

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| **Objectives**  Predstavljanje platforme potencijalnim potrosacima. |

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| **Description of work** (where appropriate, broken down into tasks), lead partner and role of participants  T1-(MIN) Predstavljanje platforme visokoskolskim ustanovama  T2-(MATF) Predstavljanje platforme kompanijama |

|  |
| --- |
| **Deliverables** (brief description and month of delivery)  Izvestaj o ustanovama kojima je platforma predstavljena (M12) |

**Table 3.1c: List of Deliverables[[2]](#footnote-4)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Deliverable (number)** | **Deliverable name** | **WP NO** | **Short name of lead participant** | **Type** | **Dissemination level** | **Delivery date**  **(in months)** |
| D0.1 | Potpisan ugovor o saradnji | WP0 | MATF, SSS, MIN | R | PU | M1 |
| D0.2 | Zapisnik sa svaog sastanka upravnog odbora | WP0 | MATF, SSS, MIN | R | RE | M1, M12 |
| D0.3 | Plan upravljanja projekta | WP0 | MATF, SSS, MIN | R | RE | M2 |
| D0.4 | Periodicni izvestaji | WP0 | MATF, SSS, MIN | R | RE | M1, M12 |
| D0.5 | Zavrsni izvestaj na kraju projekta | WP0 | MATF, SSS, MIN | R | RE | M12 |
| D1.1 | Izbor paradigme | WP1 | MATF | P | PP | M3 |
| D1.2 | Izbor jezika | WP1 | MATF | P | PP | M3 |
| D2.1 | Standardizacija plana I testova | WP2 | MIN | P | RE | M4 |
| D3.1 | Razvoj platforme | WP3 | MATF, SSS | P | RE | M4 |
| D3.2 | Text-to-speech | WP3 | MATF, SSS | P | RE | M4 |
| D3.3 | Speech-to-text | WP3 | MATF, SSS | P | RE | M4 |
| D3.4 | Web-grading | WP3 | MATF, SSS | P | RE | M4 |
| D4.1 | Testiranje | WP4 | MATF, SSS, MIN | P | RE | M6 |
| D4.2 | Unit testing | WP4 | MATF, SSS, MIN | P | RE | M6 |
| D4.3 | Integration testing | WP4 | MATF, SSS, MIN | P | RE | M6 |
| D4.4 | System testing | WP4 | MATF, SSS, MIN | P | RE | M6 |
| D4.5 | Beta testing | WP4 | MATF, SSS, MIN | P | RE | M6 |
| D5.1 | Eksploatacija | WP5 | MIN | D | PU | M11 |

**KEY**

*Deliverable numbers in order of delivery dates. Please use the numbering convention <WP number>.<number of deliverable within that WP>.*

*For example, deliverable 4.2 would be the second deliverable from work package 4.*

**Type:**

*Use one of the following codes:*

R: Document, report (excluding the periodic and final reports)

DEM: Demonstrator, pilot, prototype, plan designs

DEC: Websites, patents filing, press & media actions, videos, etc.

OTHER: Software, technical diagram, etc.

**Dissemination level:**

*Use one of the following codes:*

PU = Public, fully open, e.g. web

CO = Confidential, restricted under conditions set out in Model Grant Agreement

CI = Classified, information as referred to in Commission Decision 2001/844/EC.

**Delivery date**

Measured in months from the project start date (month 1)

**Tables for section 3.2**

**Table 3.2a: List of milestones**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Milestone number** | **Milestone name** | **Related work package(s)** | **Due date (in month)** | **Means of verification** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**KEY**

**Due date**

*Measured in months from the project start date (month 1)*

**Means of verification**

*Show how you will confirm that the milestone has been attained. Refer to indicators if appropriate. For example: a laboratory prototype that is ‘up and running’; software released and validated by a user group; field survey complete and data quality validated.*

**Table 3.2b: Critical risks for implementation**

|  |  |  |
| --- | --- | --- |
| **Description of risk (indicate level of likelihood: Low/Medium/High)** | **Work package(s) involved** | **Proposed risk-mitigation measures** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Definition critical risk**:

*A critical risk is a plausible event or issue that could have a high adverse impact on the ability of the project to achieve its objectives.*

**Level of likelihood** *to occur:* **Low/medium/high**

*The likelihood is the estimated probability that the risk will materialise even after taking account of the mitigating measures put in place.*

**Tables for section 3.4**

**Table 3.4a: Summary of staff effort**

*Please indicate the number of person/months over the whole duration of the planned work, for each work package, for each participant. Identify the work-package leader for each WP by showing the relevant person-month figure in bold.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **WPn** | **WPn+1** | **WPn+2** | **Total Person-**  **Months per Participant** |
| **Participant Number/Short Name** |  |  |  |  |
| **ParticipantNumber/**  **Short Name** |  |  |  |  |
| **Participant Number/**  **Short Name** |  |  |  |  |
| **Total Person Months** |  |  |  |  |

**Table 3.4b: ‘Other direct cost’ items (travel, equipment, other goods and services, large research infrastructure)**

Please complete the table below for each participant if the sum of the costs for’ travel’, ‘equipment’, and ‘goods and services’ exceeds 15% of the personnel costs for that participant (according to the budget table in section 3 of the proposal administrative forms).

|  |  |  |
| --- | --- | --- |
| **Participant Number/Short Name** | **Cost (€)** | **Justification** |
| **Travel** |  |  |
| **Equipment** |  |  |
| **Other goods and services** |  |  |
| **Total** |  |  |

Please complete the table below for all participants that would like to declare costs of large research infrastructure under Article 6.2 of the General Model Agreement[[3]](#footnote-5), irrespective of the percentage of personnel costs. Please indicate (in the justification) if the beneficiary’s methodology for declaring the costs for large research infrastructure has already been positively assessed by the Commission.

|  |  |  |
| --- | --- | --- |
| **Participant Number/Short Name** | **Cost (€)** | **Justification** |
| **Large research infrastructure** |  |  |

**Section 4: Members of the consortium**

 *This section is not covered by the page limit.*

 *The information provided here will be used to judge the operational capacity. Please make sure that you do not include information here that relates to the headings under sections 1 to 3. Experts will be instructed to ignore any information here which appears to have been included to circumvent page limits applying to those sections.*

**4.1. Participants (applicants)**

Please provide, for each participant, the following (if available):

 a description of the legal entity and its main tasks, with an explanation of how its profile matches the tasks in the proposal;

 a curriculum vitae or description of the profile of the persons, including their gender, who will be primarily responsible for carrying out the proposed research and/or innovation activities;

 a list of up to 5 relevant publications, and/or products, services (including widely-used datasets or software), or other achievements relevant to the call content;

 a list of up to 5 relevant previous projects or activities, connected to the subject of this proposal;

 a description of any significant infrastructure and/or any major items of technical equipment, relevant to the proposed work;

* if operational capacity cannot be demonstrated at the time of submitting the proposal, describe the concrete measures that will be taken to obtain it by the time of the implementation of the task*.[[4]](#footnote-6)*

**4.2. Third parties involved in the project (including use of third party resources)**

Please complete, for each participant, the following table (or simply state "No third parties involved", if applicable):

|  |  |
| --- | --- |
| Does the participant plan to subcontract certain tasks (please note that core tasks of the project should not be sub-contracted) | Y/N |
| *If yes, please describe and justify the tasks to be subcontracted* | |
| Does the participant envisage that part of its work is performed by linked third parties[[5]](#footnote-7) | Y/N |
| *If yes, please describe the third party, the link of the participant to the third party, and describe and justify the foreseen tasks to be performed by the third party* | |
| Does the participant envisage the use of contributions in kind provided by third parties (Articles 11 and 12 of the General Model Grant Agreement) | Y/N |
| *If yes, please describe the third party and their contributions* | |
| Does the participant envisage that part of the work is performed by International Partners[[6]](#footnote-8) (Article 14a of the General Model Grant Agreement)? | Y/N |
| *If yes, please describe the International Partner(s) and their contributions* | |

**Section 5: Ethics and Security**

 *This section is not covered by the page limit.*

**5.1 Ethics**

 *For more guidance, see the* [*document "How to complete your ethics self-assessment"*](http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/ethics/h2020_hi_ethics-self-assess_en.pdf)*.*

If you have entered any ethics issues in the ethical issue table in the administrative proposal forms, you must:

* submit an ethics self-assessment, which:
  + describes how the proposal meets the national legal and ethical requirements of the country or countries where the tasks raising ethical issues are to be carried out;
  + explains in detail how you intend to address the issues in the ethical issues table, in particular as regards:
    - research objectives (e.g. study of vulnerable populations, dual use, etc.)
    - research methodology (e.g. clinical trials, involvement of children and related consent procedures, protection of any data collected, etc.)
    - the potential impact of the research (e.g. dual use issues, environmental damage, stigmatisation of particular social groups, political or financial retaliation, benefit-sharing, misuse, etc.).
* provide the documents that you need under national law(if you already have them), e.g.:
  + an ethics committee opinion;
  + the document notifying activities raising ethical issues or authorising such activities

 *If these documents are not in English, you must also submit an English summary of them*

*(containing, if available, the conclusions of the committee or authority concerned).*

*If you plan to request these documents specifically for the project you are proposing, your request must contain an explicit reference to the project title.*

**5.2 Security[[7]](#footnote-9)**

**Please indicate if your project will involve:**

* activities or results raising security issues: (YES/NO)
* 'EU-classified information' as background or results: (YES/NO)

1. ### See participant portal FAQ on how to address [dissemination and exploitation](https://ec.europa.eu/research/participants/portal/desktop/en/support/faqs/faq-929.html) in Horizon 2020

   [↑](#footnote-ref-3)
2. If your action is taking part in the Pilot on Open Research Data, you must include a data management plan as a distinct deliverable within the first 6 months of the project. This deliverable will evolve during the lifetime of the project in order to present the status of the project's reflections on data management. A template for such a plan is available in the [H2020 Online Manual](http://ec.europa.eu/research/participants/docs/h2020-funding-guide/index_en.htm) on the Participant Portal. [↑](#footnote-ref-4)
3. Large research infrastructure means research infrastructure of a total value of at least EUR 20 million, for a beneficiary. More information and further guidance on the direct costing for the large research infrastructure is available in the H2020 Online Manual on the Participant Portal. [↑](#footnote-ref-5)
4. Please refer to [General Annex H Evaluation Rules, Selection Rules, Operational Capacity](http://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2018-2020/annexes/h2020-wp1820-annex-h-esacrit_en.pdf) [↑](#footnote-ref-6)
5. A third party that is an affiliated entity or has a legal link to a participant implying a collaboration not limited to the action. (Article 14 of the [Model Grant Agreement](http://ec.europa.eu/research/participants/data/ref/h2020/mga/gga/h2020-mga-gga-multi_en.pdf)). [↑](#footnote-ref-7)
6. ‘International Partner’ is any legal entity established in a non-associated third country which is not eligible for funding under Article 10 of the Rules for Participation Regulation No 1290/2013. [↑](#footnote-ref-8)
7. See article 37 of the [Model Grant Agreement](http://ec.europa.eu/research/participants/data/ref/h2020/mga/gga/h2020-mga-gga-multi_en.pdf). . For more information on the classification of Information, please refer to the Horizon 2020 guidance: <https://ec.europa.eu/research/participants/data/ref/h2020/other/hi/secur/h2020-hi-guide-classif_en.pdf>. [↑](#footnote-ref-9)