



TERMS OF REFERENCE NO. 07/24

Procurement of training and certification preparation services: DIGITAL TRANSFORMATION AND APPLICATION OF ARTIFICIAL INTELLIGENCE IN THE DIGITAL TRANSFORMATION OF THE HEALTHCARE SECTOR – BASIC LEVEL and ADVANCED LEVEL

1. Background

With digitalization no longer merely a contributor to business growth but a critical precondition for continued competitiveness of corporate entities across all industries, there is growing global realization of the need to allocate greater resources to enable and expedite the processes of digital transformation, adaptation and innovation. Nonetheless, the level of both digital awareness and uptake in Bosnia and Herzegovina remains limited with little organic demand for transformational assistance and the deployment of digital technologies. The healthcare sector represents an illustrative case study in the cost of dismissing digital enablers and innovation in general, with demand for healthcare services - in both volume and scope - growing alongside the further diminishing of available resources. At the same time, healthcare is among the most carbon-intensive industries in the world.¹ It is responsible for close to 5% of greenhouse gas emissions worldwide, largely stemming from fossil fuel combustion, exacerbating the existing public health crisis with atmospheric pollution very much contributing to the high instance of chronic diseases in Bosnia and Herzegovina.

The introduction of green and digital technologies and innovations offer both improved patient outcomes, as well as greater efficiency in operation for both public and private healthcare providers. There is, however, a pressing need to ensure that the coming digital transformation and innovation journeys are properly supported and resourced. This entails, at a minimum, a basic level of awareness of the benefits offered through both green and digital transformations as well as the skills needed to fully exploit the available opportunities. This will enable healthcare businesses and public institutions alike to make informed decisions about moving their organizations forward. In addition to this basic level of awareness and knowledge of digitalization as an enabler in healthcare, there is further need to provide interested providers with on-site support and tailor-made assistance in assessing the needs of their organizations and charting the way forward. Finally, innovations in healthcare, as in any other sector, will require the development of a supporting enabling environment that will generate new and advanced healthcare services and solutions. This will include prototype development, testing and product, and business, design.

The its4Health Digital Innovation Hub (the Hub) will offer an integrated package of services, ranging from facilitating digital and green transformation of partner healthcare SMEs and public providers, through enabling the emergence of innovative products, to incubating and developing businesses around the innovations. The Hub is unique in its approach as it aims to provide significant added value to society at





large through making a tangible contribution to improving the performance of the country's struggling health sector.

The Hub aims to grow into a unique country-wide platform for enhancing and enabling cooperation between businesses, public institutions and scientific entities, helping improve the performance, and the





continued resilience, of the healthcare sector in the post-pandemic setting. The establishment and inception of the Hub represent the initial steps in accelerating the adoption and diffusion of new technologies by the healthcare industry, building on the existing healthtech ecosystem in Bosnia and Herzegovina, and exploiting the opportunities presented by the coming green and digital transitions.

In order to facilitate this mission, **the Hub is initiating an assessment to gauge digital preparedness within Bosnia and Herzegovina's private healthcare sector.** This endeavor seeks to measure digital literacy and the attitude of healthcare employees towards the use of digital technologies in their daily operations, aiming to better tailor future educational programs. The study will survey between 150 to 200 employees from 25 varied private healthcare institutions, ensuring a sample that reflects regional diversity and encompasses a range of healthcare services, such as polyclinics, clinics, and medical laboratories.

This assessment aims to deliver in-depth insights into the levels of digital literacy and the extent of technological adoption among the private healthcare workforce. It will provide essential information on the integration and perception of digital technology in everyday tasks within various healthcare settings.

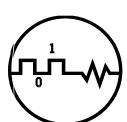
Utilizing a pre-existing survey with carefully crafted questions as a baseline, the Service Provider will explore digital literacy among healthcare workers. The results will lay the groundwork for designing focused training and development initiatives to enhance digital competencies in the healthcare sector.

The project for establishing digital innovation hubs is part of the broader project EU4DigitalSME, jointly funded by the European Union and the Federal Ministry for Economic Cooperation and Development of the Federal Republic of Germany (BMZ).

Setting up and supporting the development of DIH (Digital Innovation Hub) services is one of the key activities of the EU4DigitalSME project, all aimed at contributing to the development of an ecosystem for digitalization, automation, and innovation in small and medium-sized enterprises (SMEs) in Bosnia and Herzegovina.

2. Objective

The main objective of this call is to provide training and certification preparation services in the field of digital transformation and the application of artificial intelligence in the healthcare sector. This includes curriculum development and training materials, implementation of internal processes and procedures for activity management, organization of educational programs for consultants. The primary focus is to ensure that consultants are equipped to provide support in the field of digital transformation in the healthcare sector and achieve certification according to international standards.





3. Scope of work

Under the overall supervision of the responsible Hub unit (SSST), and in collaboration with interested partners, the Service Provider will be responsible for the implementation of the following:

1. Development of a curriculum and materials for training aimed at adopting a methodological approach to digital transformation in the healthcare sector;
2. Development and implementation of internal processes and procedures for effectively managing activities within DIH;
3. Organization of educational programs for selected consultants to ensure their competency in providing quality support in digital transformation and certification according to the requirements of international standards.
4. Quality control of training and exploration of certification offerings.
5. Providing expert support in the certification process according to the requirements of international standards for selected consultants for digital transformation to confirm their expertise and qualifications.

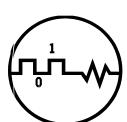
4. Minimum Eligibility and Qualification Criteria

Eligibility and Qualification will be evaluated on Pass/Fail basis.

Subject	Criteria	Document Submission requirement
ELIGIBILITY		
Legal Status	The service provider can be a company, a craftsman, or a certified consultant.	Legal registration documents submitted
Company Profile	Information about the supplier.	Company Profile, which should not exceed 5 (5) pages, including printed brochures and product catalogues relevant to the goods/services being procured
QUALIFICATION		



Previous Experience	<ul style="list-style-type: none">- Minimum qualification of a graduate lawyer or economist, engineer of technical sciences, or other relevant disciplines with the possession of a consultant training competency certificate.- Demonstrated expertise and experience in the field of digital transformation and modern technological solutions.- Demonstrated expertise and skills in providing quality consulting services.- Experience in organizing pilot projects to support digital transformation for SMEs.- Certification according to the requirements of the international standard ISO 17024 for the field of digital transformation.- Excellent oral and written communication skills in the BHS language and English.	Submission of relevant documents confirming satisfactory delivery of results submitted.
Financial Standing	Bidder must demonstrate the current soundness of its financial standing. (Valid for legal entities)	Income statement and balance sheet for the year 2022 and 2023 and/or other relevant documents demonstrating current soundness of financial standing. (Valid for legal entities)





5. Deliverables and Payment Schedule

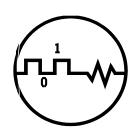
The Hub expects the assignment to be fully completed by 31.08.2024., in line with the schedule below:

Assignment output	Deliverables	Payment %	Condition for Payment
Task 1: Development of a curriculum and materials for training aimed at adopting a methodological approach to digital transformation in the healthcare sector;	Curriculum development and material creation to support the adoption of a methodological approach to digital transformation in the healthcare sector;	20%	Within thirty (30) days from the date of meeting the following conditions: a) Client's written acceptance (i.e., not mere receipt) of the quality of the outputs; and b) Receipt of invoice
Task 2: Development and implementation of internal processes and procedures for effectively managing activities within DIH;	Establishment and implementation of optimal internal processes and procedures for efficient management of all activities within DIH.	25%	
Task 3: Organization of educational programs for selected consultants to ensure their competency in providing quality support in digital transformation and certification according to the requirements of international standards.	Ensuring the competency of selected consultants to provide quality support in digital transformation through training organization;	30%	
Task 4: Quality control of training and exploration of certification offerings.	Researching certification offerings	5%	
Task 5: Providing expert support in the certification process according to the requirements of international standards for selected consultants for digital transformation to confirm their expertise and qualifications.	The outcome of the activity is the verification of expertise and qualifications of selected consultants for digital transformation through support in the certification process.	20%	



6. Submission Deadline

All interested candidates are to submit their bids to this call with all supporting documents from **12.03.2024., to 20.03.2024., 23:59 PM**. All bids are to be submitted electronically to the following email address: *info@ssst.edu.ba*, with the subject note: *Assessment of Digital Preparedness among Private Healthcare Institutions in Bosnia and Herzegovina, no. 07/24 Call for Bid Submission*.





Annex 2. Form for Submitting an Offer

Procurement Number: 07/24

BIDDER (Name, address, and ID number)

CONTACT PERSON (Name and surname, e-mail address, and phone)

BIDDER'S STATEMENT

"Regarding the procurement carried out by SSST no. 07/24 on the published day 12.03.2024. we submit the offer and declare the following:

In accordance with the content and requirements of the invitation for bids no. 07/24, with this statement, we accept its provisions in full, without any reservations or limitations.

With this offer, we respond to the requirements from the invitation for bids for the delivery of goods and services in accordance with the conditions established by the invitation for bids, criteria, and established deadlines, without any reservations or restrictions.

The offer amount for _____ is
_____ KM without VAT.

The discount we give on the offer is _____ KM without VAT.

The final amount of our offer for the Procurement of training and certification preparation services: DIGITAL TRANSFORMATION AND APPLICATION OF ARTIFICIAL INTELLIGENCE IN THE DIGITAL TRANSFORMATION OF THE HEALTHCARE SECTOR – BASIC LEVEL and ADVANCED LEVEL with the included discount is _____ KM without VAT.

The above offer is valid for at least 60 days (in letters: sixty), counting from the end of the deadline for receiving offers, i.e., to (..... / /).

If our offer is the most successful in this procurement procedure, we undertake to:



a) submit evidence of qualification, in terms of personal ability, registration, economic and financial ability, and technical and professional ability, which are required by the tender documentation and within the deadline, which we confirm with the statements in this offer."

Name and surname of the person authorized to represent the bidder: [.....]

Signature of the authorized person: [.....]

Place and date: [.....] Seal of the company:





POZIV ZA DOSTAVLJANJE PONUDA

BR. 07/24

Nabavka usluga treninga i pripreme za certifikaciju: DIGITALNA TRANSFORMACIJA I PRIMJENA VJEŠTAČKE INTELIGENCIJE U DIGITALNOJ TRANSFORMACIJI SEKTORA ZDRAVSTVA – OSNOVNI NIVO i NAPREDNI NIVO

1. Pozadina

Kako digitalizacija više ne doprinosi samo rastu poslovanja, već je i kritičan preduslov za kontinuiranu konkurentnost korporativnih subjekata u svim industrijama, sve je veća globalna spoznaja potrebe za izdvajanjem većih resursa kako bi se omogućili i ubrzali procesi digitalne transformacije, adaptacije i inovacija. Bez obzira na to, nivo svijesti o digitalnoj tehnologiji u Bosni i Hercegovini i dalje je ograničen sa malom potražnjom za transformacijskom pomoći i primjenom digitalnih tehnologija. Sektor zdravstvene zaštite predstavlja ilustrativnu studiju slučaja o troškovima odbacivanja digitalnih pokretača i inovacija općenito, pri čemu potražnja za zdravstvenim uslugama raste zajedno sa dalnjim smanjenjem raspoloživih resursa. U isto vrijeme, zdravstvo je među industrijama s najintenzivnjom emisijom štetnih gasova u svijetu. Odgovorno je za skoro 5% emisija stakleničkih plinova širom svijeta, koje u velikoj mjeri proizilaze iz sagorijevanja fosilnih goriva, pogoršavajući postojeću krizu javnog zdravstva sa zagađenjem atmosfere gdje doprinosi visokoj instanci hroničnih bolesti u Bosni i Hercegovini. Uvođenje zelenih i digitalnih tehnologija i inovacija nude poboljšane ishode pacijenata, kao i veću efikasnost u radu kako za javne tako i za private pružaoce zdravstvenih usluga. Međutim, postoji hitna potreba da se osigura da nadolazeća digitalna transformacija i inovacijska putovanja budu adekvatno podržani i opremljeni resursima. To podrazumijeva, u najmanju ruku, osnovni nivo svijesti o prednostima koje se nude kroz zelenu i digitalnu transformaciju, kao i vještine potrebne za potpuno iskoriščavanje dostupnih mogućnosti. Ovo će omogućiti zdravstvenim preduzećima i javnim institucijama da donose informirane odluke o kretanju svojih organizacija naprijed. Pored ovog osnovnog nivoa svijesti i znanja o digitalizaciji kao pokretaču u zdravstvu, postoji daljnja potreba da se zainteresiranim pružaocima pruži podrška na licu mjesta i pomoći u procjeni potreba njihovih organizacija i planiranju puta naprijed. Inovacije u zdravstvu, kao i u svakom drugom sektoru, zahtijevat će razvoj poticajnog okruženja koje će generirati nove i napredne zdravstvene usluge i rješenja. Ovo će uključivati razvoj prototipa, testiranje proizvoda i poslovanja, te dizajn. Its4Health Digital Innovation Hub (The Hub) će ponuditi integrirani paket usluga, u rasponu od olakšavanja digitalne i zelene transformacije partnerskih MSP-a i javnih pružatelja zdravstvenih usluga, preko omogućavanja pojave inovativnih proizvoda, do inkubacije i razvoja poslovanja oko inovacija. Hub je jedinstven po svom pristupu jer ima za cilj pružiti značajnu dodatnu vrijednost društvu u cjelini kroz davanje opipljivog doprinosa poboljšanju učinka zdravstvenog sektora u zemlji. Hub ima za cilj da preraste u jedinstvenu platformu širom zemlje za unapređenje i omogućavanje saradnje između preduzeća, javnih institucija i naučnih subjekata, pomažući poboljšanju performansi i kontinuiranu otpornost zdravstvenog sektora u postpandemijskom okruženju.



Uspostavljanje i početak Hub-a predstavljaju početne korake u ubrzavanju usvajanja i širenja novih tehnologija u zdravstvenoj industriji, nadograđujući se na postojeći zdravstveni ekosistem u Bosni i Hercegovini, te iskorištavajući mogućnosti koje nam pružaju nadolazeća zelena i digitalna tranzicija. Kako bi olakšao ovu misiju, **Hub pokreće procjenu i istraživanje stepena digitalne spremnosti u privatnim zdravstvenim ustanovama u BiH**. Procjenom se želi izmjeriti digitalna pismenost i stav zdravstvenih djelatnika prema korištenju digitalnih tehnologija u svakodnevnom poslovanju, s ciljem boljeg prilagođavanja budućih obrazovnih programa. Studija će ispitati između 150 do 200 zaposlenika iz 25 različitih privatnih zdravstvenih ustanova, osiguravajući uzorak koji odražava raznolikost i obuhvaća niz zdravstvenih usluga, poput poliklinika, klinika i medicinskih laboratorija.

Ovo istraživanje ima za cilj pružiti detaljan uvid u razine digitalne pismenosti i opseg usvajanja tehnologije među privatnim zdravstvenim radnicima. Pružit će bitne informacije o integraciji i percepцији digitalne tehnologije u svakodnevnim zadacima unutar različitih zdravstvenih ustanova.

Koristeći već postojeću anketu s pažljivo osmišljenim pitanjima kao temeljem, Pružatelj usluga će istražiti digitalnu pismenost među zdravstvenim radnicima. Rezultati će postaviti temelje za osmišljavanje usmjerene obuke i razvojnih inicijativa za poboljšanje digitalnih kompetencija u sektoru zdravstva.

Projekat uspostavljanja centara za digitalne inovacije dio je šireg projekta EU4DigitalSME, koji zajednički finansiraju Evropska unija i Savezno ministarstvo za ekonomsku saradnju i razvoj SR Njemačke (BMZ).

Uspostavljanje i podrška razvoju DIH (Digital Innovation Hub) usluga je jedna od ključnih aktivnosti EU4DigitalSME projekta, a sve ima za cilj da doprinese razvoju ekosistema za digitalizaciju, automatizaciju i inovacije u malim i srednjim preduzećima (MSP) u Bosni i Hercegovini.

2. Cilj

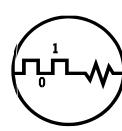
Glavni cilj ovog poziva je osigurati usluge treninga i pripreme za certifikaciju u području digitalne transformacije i primjene vještačke inteligencije u sektoru zdravstva. To uključuje razvoj nastavnog plana i materijala za obuku, implementaciju internih procesa i procedura za vođenje aktivnosti, organizaciju edukativnih programa za konsultante. Glavni fokus je osigurati da konsultanti budu osposobljeni za pružanje podrške u području digitalne transformacije u sektoru zdravstva, te da postignu certifikaciju prema međunarodnim standardima.



3. Obim posla

Pod sveukupnim nadzorom odgovorne Hub jedinice (SSST), te u suradnji sa zainteresiranim partnerima, Pružatelj usluga bit će odgovoran za provedbu sljedećeg:

1. Razvoj nastavnog plana i materijala za obuku radi usvajanja metodološkog pristupa digitalne transformacije u zdravstvenom sektoru;
2. Razvoj i implementacija unutrašnjih procesa i procedura za efikasno vođenje aktivnosti unutar DIHa;
3. Organizacija edukativnih programa za odabrane konsultante radi osiguranja njihove sposobnosti za pružanje kvalitetne podrške u digitalnoj transformaciji i certifikacije prema zahtjevima međunarodnog standarda.
4. Kontrola kvaliteta treninga i istraživanje ponuda za certifikaciju.
5. Pružanje stručne podrške u sprovođenju postupka certifikacije prema zahtjevima međunarodnog standarda za odabrane konsultante za digitalnu transformaciju radi potvrde njihove stručnosti i kvalifikacija.





4. Minimalni kriteriji podobnosti i kvalifikacije

Podobnost i kvalifikacija će se ocjenjivati na osnovu statusa zadovoljava/ne zadovoljava.

Predmet	Kriterij	Zahtjev za podnošenje dokumenta
PODOBNOŠT		
Pravni status	Ponuđač usluge možde da bude firma ili obrt ili certifikovani konsultant.	
Profil kompanije	Informacije o ponuđaču.	Profil kompanije, koji ne bi trebalo da prelazi 5 (5) stranica, uključujući štampane brošure i kataloge proizvoda relevantne za robu/usluge koje se nabavljaju
Kvalifikacije		
Prethodno iskustvo	Minimalno zvanje diplomiranog pravnika ili ekonomiste, inžinjera tehničkih nauka ili drugih relevantnih disciplina uz postojanje certifikata o sposobljenosti za treniranje konsultanata. - Dokazano stručno znanje i iskustvo u oblasti digitalne transformacije i savremenih tehnoloških rešenja. - Dokazano stručno znanje i vještine za pružanje kvalitetnih konsultativnih usluga. - Iskustvo u organizaciji pilot projekata podrške digitalnoj transformaciji za MSMP. - Certifikat prema zahtjevima međunarodnog standarda ISO 17024 za oblast digitalne transformacije. - Odlične usmene i pisane komunikacijske vještine na BHS jeziku i engleskom jeziku.	Dostavljene relevantnih dokumentacija koja potvrđuje zadovoljavajuću isporuku rezultata
Finansijsko stanje	Ponuđač mora pokazati trenutnu stabilnost svog finansijskog stanja (važi za pravna lica).	Bilans uspjeha i bilans stanja za godinu 2022. i 2023. i/ili drugi relevantni dokumenti koji pokazuju trenutnu stabilnost finansijskog stanja (važi za pravna lica).



5. Zadaci i raspored plaćanja

Hub očekuje da će zadatak biti u potpunosti završen do 31.08.2024. godine, u skladu sa rasporedom u nastavku:

Assignment output	Deliverables	Payment %	Condition for Payment
Zadatak 1: Razvoj nastavnog plana i materijala za obuku radi usvajanja metodološkog pristupa digitalne transformacije u zdravstvenom sektoru.	Nastavni plan i izrada materijala koji podržava usvajanje metodološkog pristupa digitalne transformacije u zdravstvenom sektoru.	20%	U roku od trideset (30) dana od dana ispunjenja sledećih uslova: a) Klijentovo pismeno prihvatanje (tj. ne puko primanje) kvaliteta rezultata; i b) Prijem računa od Dobavljač usluga.
Zadatak 2: Razvoj i implementacija unutrašnjih procesa i procedura za efikasno vođenje aktivnosti unutar DIHa;	Uspostavljanje i primena optimalnih internih procesa i procedura za efikasno upravljanje svim aktivnostima unutar DIHa.	25%	
Zadatak 3: Organizacija edukativnih programa za odabrane konsultante radi osiguranja njihove osposobljenosti za pružanje kvalitetne podrške u digitalnoj transformaciji i certifikacije prema zahtjevima međunarodnog standarda.	Osiguravanje osposobljenosti odabranih konsultanata za pružanje kvalitetne podrške u digitalnoj transformaciji, kroz organizaciju obuke.	30%	
Zadatak 4: Kontrola kvaliteta treninga i istraživanje ponuda za certifikaciju.	Istraživanje ponuda za certifikaciju.	5%	
Zadatak 5: Pružanje stručne podrške u sprovođenju postupka certifikacije prema zahtjevima međunarodnog standarda za odabrane konsultante za digitalnu transformaciju radi potvrde njihove stručnosti i kvalifikacija.	Rezultat aktivnosti je verifikacija stručnosti i kvalifikacija odabranih konsulanata za digitalnu transformaciju kroz podršku u procesu certifikacije.	20%	



7. Rok za predaju

Svi zainteresovani kandidati su dužni da dostave ponude na ovaj ponovljeni poziv sa svom pratećom dokumentacijom od **12.03.2024. godine do 20.03. 2024.godine, u 23:59 sati**. Sve ponude se dostavljaju elektronskim putem na sljedeću e-mail adresu: info@ssst.edu.ba, sa napomenom: *Istraživanje stepena digitalne spremnosti u privatnim zdravstvenim ustanovama u BiH br. 07/24 Poziv za podnošenje ponuda*.



Aneks 2. Obrazac za dostavljanje ponude

Broj nabavke: 07/24

1. PONUĐAČ (Naziv, adresa i ID broj)

2. KONTAKT OSOBA (ime i prezime, e-mail adresa i telefon)

IZJAVA PONUĐAČA

„Vezano za nabavku koju provodi Univerzitet SSST br. 07/24 objavljenoj dana 12.03.2024. dostavljamo ponudu i izjavljujemo sljedeće:

U skladu sa sadržajem i zahtjevima ponovljenog poziva za ponude br. 07/24, ovom izjavom prihvatomamo njene odredbe u cijelosti, bez ikakvih rezervi ili ograničenja.

Ovom ponudom odgovaramo zahtjevima iz ponovljenog poziva za ponude za isporuku usluga u skladu sa uslovima utvrđenim ovim pozivom za ponude, kriterijima i utvrđenim rokovima, bez ikakvih rezervi ili ograničenja.

Iznos ponude za isporuku usluga je _____ e
_____ KM bez PDV-a.

Popust koji dajemo na ponudu je _____ KM bez PDV-a.

Konačan iznos naše ponude za Nabavka usluga treninga i pripreme za certifikaciju: DIGITALNA TRANSFORMACIJA I PRIMJENA VJEŠTAČKE INTELIGENCIJE U DIGITALNOJ TRANSFORMACIJI SEKTORA ZDRAVSTVA – OSNOVNI NIVO i NAPREDNI NIVO sa uključenim popustom je
_____ KM bez PDV-a.



Navedena ponuda važi najmanje 60 dana (slovima: šezdeset), računajući od isteka roka za prijem ponuda, tj. do (..... / /).

Ukoliko naša ponuda bude najuspješnija u ovom postupku poziva za ponude, obavezujemo se:

a) dostaviti dokaze o kvalificiranosti, u pogledu lične sposobnosti, registracije, ekonomski i finansijske sposobnosti, te tehničke i profesionalne sposobnosti koji su traženi tenderskom dokumentacijom i u roku koji je utvrđen, a što potvrđujemo izjavama u ovoj ponudi.“

Ime i prezime osobe koja je ovlaštена da predstavlja ponuđača: [.....]

Potpis ovlaštene osobe: [.....]

Mjesto i datum:

[.....]

Pečat preduzeć