



Identification Form – Tied Financial Donation

Project Title (short yet clear)	Schools Innovation Labs		
Country	Jordan	Project Location	All Governorates
1. Funding	Requested Funding from the Czech Republic Official Development Assistance	Additional Funding from Other Sources (if applicable)	Total Project Budget
In CZK (according to Czech Embassy Exchange Rate)	3975028		3975028
In Local Currency			
2. Applicant			
Name of Organization			
Company Identification Nr.			
Acting By and Through (name and position)			
Telephone			
E-mail			
Bank Account			

1. Description of Problem

Jordan currently faces an increasing need for flexible and rapid technological solutions to address humanitarian crises and the requirements of marginalized groups. While there is a strong commitment to tackling these issues, the necessary infrastructure - specifically effective 3D printing - is lacking. This technology is critical for various innovation initiatives and sectors including hardware product design and prototyping, engineering, architecture, healthcare and low-cost humanitarian intervention. Without access and skills in 3D printing, innovations in social care and humanitarian aid remain underutilized, directly limiting the country's ability to effectively support its most vulnerable citizens.

The **King Abdullah II Schools for Excellence** represent Jordan's premier national educational initiative for gifted and talented students. Established by Royal Decree in 2003, this network of schools was created to provide a specialized, high-standard learning environment for the nation's top-performing youth, regardless of their socio-economic background starting from grade 6 until high school. There is currently one campus in each of Jordan's 12 governorates (with an additional campus in Amman/Sahab), ensuring that talent from every corner of the Kingdom is nurtured. Admission is highly competitive, based strictly on merit through rigorous IQ and academic testing.

Despite being the premier national institutions for Jordan's most gifted students, face a critical "Applied Innovation Gap." While the theoretical STEM curriculum is highly rigorous, many students lack consistent access to high-performance, industrial-grade manufacturing tools that translate abstract concepts into physical prototypes. This creates a bottleneck in students' ability to master the Fourth Industrial Revolution skills required by universities, higher education and the changing job market. Furthermore, because these 13 schools are distributed across all 12 governorates, there is a logistical challenge in providing standardized, high-quality technical infrastructure to remote areas, resulting in unequal opportunities for gifted youth in the provinces compared to the capital.

While the King Abdullah II Schools for Excellence will focus on core STEM education, The **CPF (Crown Prince Foundation) Makerspace** – as a national technical hub in the field of digital fabrication – has identified a critical capacity and capability gap. Currently, there is high demand for large-scale functional prototypes that exceeds the current hardware availability, leading to project backlogs. Furthermore, there is a growing demand for high-performance engineering applications in various sectors. This program will significantly expand Jordan's capabilities by laying the foundation for skilled youth in the field of 3d printing, problem solving and innovation. It is also expected to address youth and tech-gap needs.

2. Suggested Intervention

The intervention involves the establishment of 13 standardized "Czech-Jordanian Innovation Labs" across the schools. We will deploy a specific dual-hardware configuration comprising two high-speed 3D printers for rapid iterative design and one large FDM 3D printer for large-scale engineering projects - at each campus. Our intervention goes beyond hardware delivery: CPF Makerspace will conduct a comprehensive ongoing program support to guarantee long-term impact and project's sustainability which includes: full lab setup and technical configuration, continuous technical supervision and specialized troubleshooting to maintain 100% uptime across all locations. CPF will also implement a "Train the Trainer" program, certifying dedicated school teachers and staff in advanced machine operation and maintenance to ensure high and direct impact. In addition, we will connect them with two entrepreneurship competitions; one is regional across the arabic nations and one is global where both competitions are dedicated to their specific age group and we will make sure that the participating schools are getting all necessary mentorship and technical support through their participation. Moreover, we will provide guidance on how to conduct in-house programs such as hackathons to engage students in innovation and creative thinking, provide a comprehensive list of DIY projects for the students to help them "break the ice", and join the maker movement/community. Finally, this project ensures that technology is not just present, but deeply integrated into the curriculum, preparing students for university-level engineering, participating in national/international competitions and cultivating their talent, critical thinking capabilities and hands-on skills. We anticipate that this program will prepare the students for integrating and participating in innovation centered initiatives in the field of engineering and technology across various sectors including product design, architecture, engineering, healthcare and humanitarian intervention.

Moreover, we will expand the central capacity of CPF Makerspace by adding one additional multi color large FDM 3D printer to handle the increasing demand for large-scale, multi-material FDM printing. Most importantly, we will introduce one delta high-temperature industrial 3D printer to the hub. This high-temperature flagship will not merely add capacity but will fundamentally elevate the lab's material science services, its presence allows the hub to support industrial beneficiaries requiring high-performance engineering polymers (PEEK, PEI, and Carbon Fiber) that can withstand extreme mechanical and thermal stress. By expanding our specialized hardware fleet, CPF The Makerspace will solidify its position as one of Jordan's industrial R&D hubs for hardware products/innovation,

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ensuring that domestic innovators, startups, and established industries have the high-capacity, specialized manufacturing infrastructure needed to compete at an international standard.

3. List of Items

King Abdullah Schools of Excellence

- Advanced Desktop 3D Printer – 26 pcs
- Large Scale 3D Printer – 13 pcs
- Filament PLA (1kg Spools)
- Consumables - set

CPF Makerspace

- High-Temperature Industrial Printer
- Advanced Large Scale 3D Printer
- PC Carbon Fiber (800g) NFC
- ASA (800g) NFC
- PLA (1kg Spools)
- PETG Jet Black 1kg
- Consumables – set

4. Project Timeframe

Overview of the expected timeframe and related activities

Related Activities	Duration
Schools' visits, site inspections and planning. (prior to receiving the equipment)	6 weeks
13 Lab setup across Jordan and ToT training (Hands-on advanced training using the lab 3D printers)	13 weeks
Ongoing program support	18 weeks

The timeframe is expected to be 37 weeks; 6 weeks prior to receiving the equipment, 13 weeks after receiving the equipment where we will conduct a visit of 3 days to set up the lab and for the ToT for each school. After all labs are fully operational, we will keep our program support by offering remote and on-site technical support and supervision, connect them with competitions, mentor them on conducting in-house hackathons and provide them with a list of DIY projects.

5. Budget Proposal in CZK

(Funding from the Czech Official Development Assistance Only)

Budget Category	Unit Specification	Number of Units	Unit Price	Total Costs
1. Equipment	3D Printer with the following specs: - Assembled and enclosed FDM with camera and filament sensor. - All Steel Exoskeleton Frame - Minimum print area 250×220×270mm - Maximum nozzle temperature is 290C - Maximum bed temperature 120C - Machine motors: Stepper motors 0.9 degrees X,Y - Electricity 220-240 V AC - 2 years extended warranty	26	40708	1058408
	3D Printer with the following specs: - Assembled and enclosed FDM with camera and filament sensor. - Single toolhead. - Aluminum extrusions and steel sheets frame - Minimum print area 360×360×360mm - Maximum nozzle temperature is 290C - Maximum bed temperature 120C - Machine motors: Stepper motors 1.8 degrees X,Y - Electricity 220-240 V AC - 2 years extended warranty	13	69708	906204

	<p>3D Printer with the following specs:</p> <ul style="list-style-type: none"> - Assembled and enclosed FDM with camera and filament sensor. - 5-toolhead multicolor. - Aluminum extrusions and steel sheets frame - Minimum print area 360×360×360mm - Maximum nozzle temperature is 290C - Maximum bed temperature 120C - Machine motors: Stepper motors 1.8 degrees X,Y - Electricity 220-240 V AC - 2 years extended warranty 	1	98708	98708
	<p>3D printer with the following specs:</p> <ul style="list-style-type: none"> - Delta FDM printing system. - Build volume Ø300 × 400 mm - Maximum nozzle temperature 300C/500C - Maximum bed temperature 155C - Electricity 220-240 V AC - 2 years extended warranty 	1	245908	245908
2. Goods	Consumables for spare parts and maintenance	1	342700	342700
3. Material	PLA (1kg Spools) for Schools	390	560	218400
	PLA (1kg Spools) for CPFMakerspace	7	560	3,920
	PC Carbon Fiber (800g) NFC for CPFMakerspace	7	1340	9380
	ASA (800g) NFC for CPFMakerspace	7	575	4025
	PETG 1kg for CPFMakerspace	7	575	4025
4. Contracted Services	Consultancy and travelling costs for the Czech manufacturer visits to verify that the laboratories comply with standards thereby mitigating long-term operational risks and liability.	1	306350	306350
5. Other Costs <i>(clearly specified)</i>	Lab Configuration including site check and preparation visits, layout, lab setup fees and transportation.	1	50000	50000
	Training Fees – ToT training for each school staff on machines' operations, maintenance, g-code preparation and H&S practices.	1	72000	72000
	Program Support Fees – Remote and on-site technical support, instruction and supervision (this is after the set-up and training phase). Travel and accommodation expenses to the schools across governorates. Mentorship on program execution and participation in national hackathons and competitions. Follow-up support by conducting workshops at the school(s) premises. Consult on integrating 3D printing into school curriculum and activities.	1	375000	375000
	Shipping and Clearance	1	280000	280000
Grand Total Requested from the Czech Republic Official Development Assistance				3975028

7. Final Clauses	
Done in (city)	
Date	
Submitted by (name and position)	
Telephone	
Email	
Signature and Stamp	

Data protection information

The following information is provided on the basis of Article 13 of the GDPR¹:

I. The Ministry of Foreign Affairs of the Czech Republic, *označení příslušného ZÚ*, as a controller of personal data, processes only the personal data of the data subject submitted in an application for the financial donation and in any document attached to such application or provided in connection with this application.

II. The purpose of the collection of personal data is to process granting of a tied financial donation.

III. Legal basis for the processing of personal data:

- processing is necessary for the performance of a contract to which the data subject is party or in order to take steps at the request of the data subject prior to entering into a contract (Article 6(1)(b) of the GDPR).

IV. The recipients of the personal data: not applicable

V. The personal data are transferred to third countries or international organisations: not applicable

VI. The personal data are to be stored for 5 years following the year, in which the project was completed.

VII. The data subject has the following rights in relation to the data controller:

- right of access by the data subject (Article 15 of the GDPR)
- right to rectification (Article 16 of the GDPR)
- right to erasure (Article 17 of the GDPR)
- right to restriction of processing (Article 18 of the GDPR)
- right to request information on the recipients to whom the controller has communicated the rectification or erasure of personal data or restriction of processing (Article 19 of the GDPR)
- right to data portability (Article 20 of the GDPR).

VIII. Data subject can contact the controller of personal data, see point I, to exercise her/his rights regarding their personal data or to contact the controller's data protection officer (DPO), email: poverenec@mzv.cz, address: Ministry of Foreign Affairs of the Czech Republic Loretánské náměstí 5, 118 00 Praha 1 – Hradčany, Czech Republic.

IX. If the data subject considers that the processing of personal data relating to him or her infringes the GDPR, the data subject has the right to lodge a complaint with the supervisory authority – the Office for Personal Data Protection, www.uoou.cz: Úřad pro ochranu osobních údajů, pplk. Sochora 727/27, 170 00 Praha 7 – Holešovice, Czech Republic.

¹ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).