TERMS OF REFERENCE

UPGRADING THE WEB-BASED CHILDREN'S DATABASE AND DEVELOPING AN APPLICATION ON MOBILE PHONE PLATFORMS (IOS AND ANDROID)

1. Background and justification

The Department of Child Affairs (DCA) is currently operating a computer-based child database system which, by its nature, serves as an information hub and enhances the management capacity from central to local level to quickly and accurately collect, manage and aggregate information on children in general and children who are in special circumstances in particular. The system is operating smoothly; however, some features need to be upgraded to better accommodate the emerging needs of generating data on the group of children who are in special circumstances. In addition, with the rapid development of the technology in the industrial revolution 4.0, data needs to be retrieved quickly and in timely manner. DCA plans to develop mobile interface for the current child database system.

With financial support from United States Department of Labour (USDOL), the ILO project, "Technical Support for Enhancing National Capacity to Prevent and Reduce Child Labour in Viet Nam (ENHANCE)", is implemented from 2015 to 2020, in close collaboration with MOLISA, the project management agency.

The Project's overall development objective is to build a comprehensive and efficient multi-stakeholder response for the prevention and reduction of child labour in Viet Nam. The capacity building component aims to provide support to further improve specific aspects of national legislation on child labour, particularly with regard to hazardous work; and to support the national stakeholders in effectively implementing the National Program of Action (NPA) on child labour. In turn, it will provide support to specific agencies to strengthen capacity to implement laws and policies through child labour monitoring and enforcement. Under this component, the project will also support policy development in relation to core labour standards, especially child labour standards obligations. These commitments form an integral part of Viet Nam's evolving international trade integration. To enable a systematic, evidence based, and transparent approach to policy and planning, the Project helps to establish a **national knowledge sharing system**.

To track the data of the target of more than 5,000 profiles of beneficiary children for direct assistances, the ILO- ENHANCE has been operating the web-based project Beneficiary Monitoring and Reporting (DBMR) system. With the technical support from an IT company. By the end of the project, the electronic DBMR system will be handed over to DCA for long-term operation.

With the aims of utilizing the ENHANCE project's practical experiences in operating similar system and ensuring the sustainability of the project support as well as considering the needs of the partners, the ILO ENHANCE project will support DCA to review, further develop and upgrade the current "computer-based" child database system.

The **objective** is to ensure the effectiveness of information management on children in difficult circumstances, including those in child labour or at high risk of engaging in child labour. The upgraded system will take the form of a web-based portal with mobile

technology which can be accessed and managed at multiple levels ranging from Central (DCA) to commune/ward levels.

The upgraded system for the creation and maintenance of data and information shall be designed in a tiered system with defined responsibilities from central to provincial levels. These responsibilities will involve regular information and status updates and the provision of support to children in special circumstances, including those in child labour or at high risk of engaging in child labour.

To run the system effectively on mobile operation systems (including IOS and Android), the first step will be to design and develop the mobile application for the database, followed by the provision of training on administration of the database for responsible officers at all levels.

The system will be updated comprehensively so that, in the long-term, it will facilitate the collection and entry of further disaggregated information on all groups of children who are in special circumstances. However, with the current availability of resources, the ILO-ENHANCE project will prioritize supporting DCA to collect detailed information specifically on children who are in child labour or at high risk of engaging in child labour.

To support the process, an experienced IT company (called Contractor) will be hired to work closely with both ILO-ENHANCE project and DCA to complete the following tasks:

- (i) Discuss with DCA and the ILO ENHANCE project team to carefully review all the current functions for each Module of the current child database system and identify gaps for upgrading as well as the possible design for the mobile application. By the end of this process, a detail and final technical proposal shall be submitted to ILO and DCA to ensure that all the parties are on the same page.
- (ii) Expand and upgrade the identified functions as well as the operational manual of the current computer-based child database system with a focus on how to collect and aggregate data for the groups of children who are in special circumstances, including those in child labour. The system shall be tested properly to ensure smooth operation before handing over to the ILO ENHANCE and DCA for rolling out in pilot provinces.
- (iii) Train relevant officials on the new features and operation of the system in all piloted provinces with a focus on collecting and using detailed information on children in child labour and at high risk of engaging in child labour. The operation manual shall be finalised before conducting trainings in pilot provinces.
- (iv) Gradually support the DCA to review the operation of the system in pilot provinces and propose options to expand the training to additional provinces to operate the system more effectively.
- (v) Provide technical maintenance services to ensure the operation of the application until the end of the project before handing over to DCA.

The selected contractor should undertake the following tasks to achieve the outputs below.

2. Tasks and outputs

The selected contractor will be required to fulfill the following tasks and outputs:

2.1. Output 1:

A detailed technical proposal with the list of the functions that need to be upgraded and the design of the mobile application.

Task 1:

The selected Contractor, in close collaboration with assigned staff from DCA and the ILO-ENHANCE project team, will review the current functions of each module on the child database system then agree on a detailed list of the functions that can be feasibly upgraded for each Module. Furthermore, the selected contractor will discuss and agree with DCA and the ILO-ENHANCE team on the design of the mobile application. A wider consultation meeting with other relevant stakeholders may be required to gather further inputs and additional comments.

Firstly, the Contractor will collaborate with DCA and the ILO ENHANCE project to review and revise the current data inputting form which fundamentally affects the whole system. After this, sub-groups will be added where relevant, with a focus on the disaggregation of children who are in child labour or at high risk of engaging in child labour.

Next, the Module on data aggregation/ analysis will be thoroughly revised in order to generate potentially required data, including but not limited to information related to the following categories:

No	Function/output	Format
1	List of children's families	Excel, pdf
2	List of children	Excel, pdf
3	List of children who are in normal circumstances	Excel, pdf
4	List of children who are in specific circumstance(s)	Excel, word, pdf
5	Aggregated reports (for example: by type of support to children, by identified criteria, etc.)	Excel, word, pdf

After that, additional discussions and consultations will be organised to agree on the functions of the Module on management, including administrative, user and logging management, from commune to central levels.

Last but not least, the ILO-ENHANCE project, DCA and the Contractor will discuss the possibility of an extension Module to present and collect data for different sets of indicators which are currently available and need to be collected and shared by MOLISA. However, the final decision will be made upon proper consultation and agreement between ILO-ENHANCE and DCA. These sets of indicators may include but will not be limited to:

- 1. Set of child indicators that DCA is requested to report on to the Central Government and National Assembly.
- 2. Set of Indicators on the National Program of Action on prevention and reduction of child labour

3. Others such as IEC materials, etc.

2.2. Output 2:

The child database application and the operational manual are upgraded with new features and operating smoothly on IOS and Android platforms.

Task 2:

The selected Contractor will update the child database system within the agreed timeframe and ensure the system operates smoothly on IOS and Android platforms. The contractor should address any bug or error during the period of upgrading before handing over to the DCA and the ILO ENHANCE project. In addition, the operational manual will be updated accordingly.

2.3. Output 3: All relevant officials at different levels are trained on the operation of the mobile application in piloted provinces.

Task 3: The selected contractor will conduct training for relevant officials (commune child protection staff, district and provincial DOLISA staff, and DCA data administrators) from 06 piloted provinces on how to use the new mobile application effectively.

2.4. Output 4:

The upgraded Application will be maintained properly until the completion of the consultancy service (by the end of June 2020) and eventually handed over to DCA.

Task 4:

The Contractor will be required to provide maintenance services and trouble-shooting of the upgraded Application throughout the duration of the service contract to ensure that the application operates smoothly and properly before handing over to DCA.

To achieve this, the company will be required to fix any problems/bugs originating from the Application, including the network, within a maximum of 24 hours after email or phone notification from the DCA, ILO, provincial and district DOLISAs, and commune child protection staff to ensure the Application operates smoothly and properly. The maintenance services and/or trouble-shooting will be provided by the Contractor either via telephone, or in person depending on the nature of the bugs/problems.

2.5. Output 5: By the end of the consultancy, a review will be conducted on the operation of the system in pilot provinces to propose options for expanding the training to other provinces

Task 5: Before the end of consultancy, the Contractor will support ILO ENHANCE and DCA to review the operation of the system in pilot provinces and then propose options to expand the training to additional provinces to operate the system more effectively.

3. Time Frame and Work Plan

The final work-plan may be subject to change as result of negotiation with DCA, the ILO-ENHANCE project and the selected Contractor.

A tentative work-plan for the selected Contractor is outlined as follows:

No.	Activities	Ending date
1	Discuss with DCA and ILO and agree on a list of new	30 March 2020
	functions that need to be upgraded as well as the	
	design of the application. A detailed technical	
	proposal is submitted to ILO ENHANCE and DCA.	
2	Organize consultation meeting with relevant	15 April 2020
	stakeholders to agree on the final list of functions. The	
	technical proposal is finalised.	
3	Upgrade the mobile Application/software for IOS and	30 April 2020
	Android platform and develop the operational guide	
4	Test the upgraded software application	30 April 2020
5	Conduct training on how to use the system for	31 May 2019
	relevant officials from piloted provinces and handover	
	to DCA and ILO-ENHANCE	
6	Provision of technical support and maintenance	30 June 2020
	services	
7	Conduct review on the operation in pilot provinces	30 June 2020
	and propose options for expanding trainings to other	
	provinces	

4. Estimate Cost & schedule for payment

Because this is a joint activity, the cost will be shared between ILO-ENHANCE and DCA. The ILO-ENHANCE project will cover the cost for upgrading the software, organizing training workshops for officers in six piloted provinces and the maintenance for first months of the pilot operation until the end of June 2020 (about three months). DCA will be responsible for ensuring the availability of host, server and maintenance costs after three months of piloted operation, as well as training costs for expanded provinces.

ILO-ENHANCE is responsible for the payment of the following items:

No	Item	Quantity
1	Upgrade web-based application that operates smoothly on IOS	1
	and Android	
2	Conduct training for relevant staff from 06 piloted provinces	6 (provinces)
	(provincial DOLISA, District's DOLISA, Child protection Officers	
	at communes)	
3	Maintenance service for piloted operation	3 (months)

The first installment of 40% of the consultancy fee will be paid upon completion of Activities 1, 2, 3 and 4 to the satisfaction of DCA and ILO ENHANCE.

The second installment of 30% of the consultancy fee will be paid upon completion of Activity 5 to the satisfaction of DCA and ILO ENHANCE.

The remaining amount of 30% of the consultation fee will be paid upon the implementation of the activity number 6, 7.

5. Submission of Proposal

The interested consultancy service providers need to submit their company's profile together with proposals for a detailed cost breakdown estimate to the ILO ENHANCE project. All proposals must be submitted in English to the ENHANCE Project Monitoring and Evaluation Officer (M&E) via email at buidung@ilo.org by 5:00 p.m on 27 March 2020. Proposals submitted after the deadline will not be accepted. Only short-listed companies will be contacted for further discussion.

6. Qualification

The contractor (as one legal entity) should ensure that the working team for this assignment include:

- + One team member who has at least 5 years of proven work experience in the areas of child labour and labour-social statistics.
- + One team member who has at least 5 years of proven work experience on developing labour-social software applications.
- + Team members who have experience working with ILO, DCA and provincial DOLISAs.

The profiles of the selected Contractor as well as the core team members will be cross-checked by ILO- ENHANCE and DCA.

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