## Contract Type D&F for Software Development Services using Agile Methodologies

In accordance with the following Determination and Findings and Federal Acquisition Regulation [Insert appropriate FAR reference: FAR 8.404(h)(3)(ii) and 8.404(h)(3)(iii) or FAR 12.207(b)(1)(ii)(A) and 12.207(b)(2)], use of a Time & Materials (T&M) or Labor Hour (LH) order is the most appropriate contract type for Agency X's Software Development Services requirement.

## Background

The purpose of this acquisition is to competitively award an order to provide Agency X with agile software development services to begin work toward the product vision of a user-friendly data system. The services to be provided under this task order will include all aspects of the software development process — including initial planning, design, user research, software development and coding, prototyping, documentation, testing, and configuration.

The total period of performance for this requirement will be 3 years. It will consist of a Base Period of 1 year plus 2 Option Periods of 1 year each.

## **Findings**

- 1. **Description of the market research conducted:** In accordance with FAR Part 10, the government conducted market research using the following methods:
  - a. Released a Request For Information (RFI) under the General Services Administration (GSA) Multiple Award Schedule (MAS) 54151S: Information Technology (IT) Professional Services to visualize the competition and socioeconomic responses that Agency X can expect if they use GSA's acquisition vehicle. Also, to receive feedback from Schedule holders on the Performance Work Statement (PWS). The government received valuable information on the government's objectives in the PWS and updated it to reflect industry's input.
  - b. Reviewed the scope of services available on GSA MAS IT Schedule and determined this requirement is best suited for that vehicle.
- 2. Establish that it is not possible at the time of placing the order to accurately estimate the extent or duration of the work or anticipate costs with any reasonable degree of confidence: Since the government is seeking software development services using agile methodologies, it is not possible to accurately estimate the exact requirements or hours needed to complete the project. The underlying premise of agile development projects is that the exact requirements for a product cannot be known accurately prior to development. There are significant

performance uncertainties inherent with software development services using agile methodologies that cannot be identified in advance to allow the costs to be estimated with reasonable certainty.

This particular acquisition will be to build custom software to extend the functionality of Agency X's system using agile methods that fulfill epics, or new user stories, as the client and the contractor work together to incrementally develop the software. The requirements of this task order are not appropriate for a Firm-Fixed-Price (FFP) order because while the general labor categories may be known at the time of award, the level-of-effort for each labor category can differ week-to-week, based on the following:

- Agile software development iteration schedule requirements are defined at the beginning of each sprint, typically on a one or two week basis, and testing is utilized throughout the sprint to ensure quality.
- To ensure the quality of results, the "definition of done," which is established at the beginning of each iteration, must be objective and comprehensive.
- Agile provides for the discovery of requirements while the project is underway, usually based on user feedback. This is the reason that agile project requirements are typically stated as problems to solve rather than solutions to build. So even if the government believed that it could estimate a known set of work to do, in agile, there is the additional problem of not knowing what the set of work will actually be until the project is underway.

The considerations outlined in the FAR to determine if a FFP contract is appropriate do not apply to this requirement since the services do not have reasonably definite functional or detailed specifications. A T&M or LH contract type is best suited for this work due to frequent changes based on technology, IT security, programmatic, and user needs. Thus, it is not possible for the government to accurately estimate the level of effort to perform each of these tasks with any reasonable degree of confidence.

3. Establish that the current requirement has been structured to maximize the use of fixed-price orders on future acquisitions for the same or similar requirements. Agency X has established a Not-To-Exceed amount for labor hours spend, Other Direct Costs (ODCs), and Travel Contract Line Item Numbers (CLINs), as reflected in the Independent Government Cost Estimate (IGCE) and the Request For Quote (RFQ). Pricing Form. The government has limited the length of the order to 3 years to give the government the ability to incorporate firm fixed price portions on future procurements. Agency X will track final cost data on all T&M or LH task orders to facilitate possible transition of some tasks to FFP in the future.

Additionally, if during contract management, requirements and/or hours become more known, the government may modify the contract type per FAR 52.212-4(c). After award,

T&M or LH CLINs may be converted to Firm-Fixed-Price CLINs through mutual agreement of both parties, based on the labor hour rates and categories negotiated at time of award.<sup>1</sup>

4. Describe actions to maximize the use of fixed-price orders on future acquisitions for the same requirements.

Based on market research, a T&M or LH order is appropriate for agile software development services. However, Agency X will continue to survey the market on how development services are delivered and utilize this information when evaluating the best contract type for each new requirement. For future acquisitions of the same requirements, use of firm-fixed-price or fixed-price with economic price adjustment contracts or task orders will be maximized by trying to apply the information gathered from this order to increase the level of knowledge in writing the requirement, thus making the same requirement more defined to warrant the potential for a FFP contact type.

There will be adequate government surveillance of contractor performance conducted by the Contracting Officer Representative (COR) and supported by the government technical leads and business owners. They will oversee the contractor's performance closely by analyzing data and reports as well as monitoring schedule progress to ensure efficient methods and effective cost controls are being used.

The Contracting Officer (CO) will include a not-to-exceed ceiling that the contractor exceeds at its own risk (Insert either FAR 8.404(h)(3)(ii)(B) or FAR 12.207(b)(1)(ii)(B)). Any change in the ceiling price will only be authorized by the CO upon a determination, documented in the contract file, that change is in the best interest of the government. The contractor will be made aware of the ceiling amount and the procedures at the time of award/order kick-off.

## **Determination**

Based on the above findings and in accordance with [Insert appropriate FAR reference: FAR 8.404(h)(3)(ii) and 8.404(h)(3)(iii) or FAR 12.207(b)(1)(ii)(A) and 12.207(b)(2)], it is determined that the issuance of a Time and Materials or Labor Hour order for the services described herein is in the best interest of the Government and no other contract type is suitable.

{{Name}}	Date	
Contracting Officer (CO)		
Agency X		

<sup>\*\*</sup>HCA signature is only required when PoP exceeds 3 years.\*\*

<sup>&</sup>lt;sup>1</sup> This technique is called "Enhanced Contract Type Conversion" and is included on the <u>FAI Periodic Table of Acquisition Innovations</u>. It allows procurement teams to build flexibility into the solicitation to allow for future conversion from one contract type to another, such as from time-and-materials to firm-fixed-price, after award.