

Evaluation of the Iceland State Financial and Human Resource System

Terms of Reference

Background

Following tender procedures the State Financial Management Authority in Iceland (*Fjársýsla ríkisins*) on behalf of the State Treasury purchased a new financial system for the State Treasury and its institutions in 2001. The contract was signed in July 2001 with the Icelandic IT company SKÝRR (now Advania) for applications based on Oracle eBusiness Suite (Oracle EBS). The system includes four major applications for financials, human resource management, project portfolio management and purchasing. Early in 2002 the State signed a contract for hosting and operation of the system with another Icelandic IT company EJS, which is now a part of Advania. The system is called the State Financial and Human Resource System, nicknamed "Orri".

The purpose of the purchase was to replace some of the older State finance and human resource systems, combine and integrate applications and support new opportunities in electronic government. The goal was to automate procedures and data communication between government institutions and between the state and the citizens and other customers in government services.

The main objective was to utilise better the potential of electronic business and data exchange in the State's operations. This objective was divided into three specific objectives:

1. Improve internal management of the State.
2. Improve information dissemination to staff, customers and the public.
3. Improve efficiency in the State's operation:
 - a. Automation/Self-service – more efficient exchange of information and processing of inquiries and requests.
 - b. Expert services – decrease cost of external expert services when breakdown of information or aggregated information can be extracted centrally and reports generated for i.e. the Parliament, Ministry of Finance, Auditor General and Financial Management Authority.
 - c. Input and multiple records – electronic interpretation of documents will reduce the need for manual input and integration of financial and human resource systems will diminish multiple records
 - d. Staff turnover – the human resource system will support management in meeting requirements and wishes of individual employees for skill development which will lower staff turnover.
 - e. Payroll statements – cost of issuing payroll statements will decrease considerably when printing is abandoned.

The new financial and human resource system was also expected to increase overall productivity through increased staff productivity compared to the previous systems.

This implementation of the Financial and Human Resource System has been one of the largest IT-projects undertaken by the State. Late in 2010, the system was upgraded to Oracle EBS R12.

At this stage the Ministry of Finance emphasises the importance of evaluating the investment made, the quality of the system and the cost of operation by assessing the current system and its features (hereafter called the System). Hence, the Ministry is seeking independent consultancy (hereafter called the Consultant) to assess how well the system fulfils the requirements and needs of the State and to propose actions to improve to the underlying IT-system and its operation. Hereafter this assignment will be called the Project.

Description of the assignment

Objectives

The overall objective of the Project is to evaluate the investment made in the Financial and Human Resource System “Orri” by assessing how well the System fulfils the requirements and needs of the State and to propose actions to improve the IT-systems supporting the State finances and human resource management.

The goal is to obtain an outside and unbiased perspective to the owner of the System.

It is not the objective of the Project to evaluate the implementation itself nor the process of acquiring, developing, adapting or integrating the System and its components.

Specific objectives

The specific objectives of the Project are divided into three categories; System quality, Operation and support and Actions:

System quality

Evaluate the following attributes of the System and assess how well it satisfies the needs and requirements of the State and its institutions:

- The functional suitability of the System, in particular functional completeness, appropriateness and correctness.
- The usability of the System, in particular operability and user error protection.
- The reliability of the System, in particular maturity, availability, fault tolerance and recoverability.
- The security attributes of the System, in particular confidentiality, integrity, non-repudiation, accountability and authenticity.

It is preferred to base this system quality evaluation of these attributes on the Software Product Quality Requirements and Evaluation (SQuaRE) as outlined in the international standard ISO/IEC 25000:2005¹.

¹ See also ISO/IEC 9126, ISO/IEC 14598 and other standards in the ISO/IEC 25000 serie.

Operation and support

Evaluate the following:

- The cost and quality of the operation, maintenance and support for the System and compare with experience from neighbouring countries.
- The adoption rate of the System for new institutions and the adaptability with respect to the implementation of necessary workflow changes.

Actions

Propose actions to improve the IT-systems supporting the State finances and human resource management in line with any inefficiencies confirmed as a result of the evaluation and considering future need.

Requested services

The requested services are divided into four phases:

Phase 1: Identification of needs and requirements

The Consultant shall carry out the following activities:

- Familiarise himself with the relevant documentation and premises.
- Become acquainted with the key aspects of the System, the roles of relevant government institutions and the major factors in the legal and governmental environment, as relevant to the success of the Project.
- Identify the set of premises, goals and objectives relevant to the System and its use.
- Refine the scope and detail of the objectives of the Project based on the information gathered regarding needs and requirements, the key aspects of the System and the environment it operates within.

In this phase, after preliminary desk review, the Consultant is expected to have meetings and conduct all necessary consultations with key players in Iceland at relevant institutions including the Ministry of Finance and the Financial Management Authority. Based on his findings, the Consultant is expected to describe his perception of the relevant needs and requirements for further work in phases 2 and 3 and to propose a refined approach, scope and work schedule for the remainder of the Project.

Phase 2: Evaluation and assessment

The Consultant shall carry out the following activities:

- Evaluation of the functional suitability, the usability, the reliability and the security of the System and confirm how well it satisfies the needs and requirements of the State.
- Objective assessment of the success of the investment made, such as increased productivity, lower cost and/or better service. This assessment is expected to be based on expert opinion based on interviews rather than analysis of detailed factual productivity data.
- Assess the cost and quality of the operation, maintenance and support for the System and compare with experience from neighbouring countries with similar context.
- Analyse the adoption rate of the System for new institutions and the adaptability with respect to the implementation of necessary workflow changes.

Improvements that materialise in increased quality or the potential for tailor-made services for the customers can often be difficult to measure. Also, it can be difficult to obtain clear view of the improvements within institutions, which calls for interpretation within the relevant context to understand the main drivers. It is not within the scope of the Project to perform detailed analysis of these aspects, e.g. with surveys or questionnaires, but the Consultant shall provide his expert opinion on these aspects based on interviews and the existing documentation.

Among questions that the Consultant must answer are the following:

- Is the System functionality appropriate for the State and its institutions?
- Does the System provide correct and complete information to those responsible for the State finances, i.e. the Parliament, the Ministry of Finance and the Financial Management Authority? What about the management of individual institutions?
- Is the integrity of the System acceptable? Is there any doubt that the information extracted from the System is correct and complete?
- Does the System's usability and reliability support acceptable levels of error protection and fault tolerance?
- Is the necessary segregation of duties supported in the System? Is the access control acceptable to maintain necessary confidentiality of data, i.e. between institutions?
- Is the cost and effort of operating and maintaining the System acceptable compared to other similar systems in neighbouring countries?
- Is the cost and effort in developing the System to adapt to changes in requirements acceptable compared to other similar systems in neighbouring countries?
- Has the State acceptable level of in-house know-how to act as a knowledgeable buyer?

In this phase the Consultant is expected to have meetings and conduct all necessary consultations with key players in Iceland as relevant for the success of the Project. This might require two separate visits to Iceland dependant on the approach proposed in phase 1.

Phase 3: Proposed actions

The Consultant shall carry out the following activities:

- Based on the results of the evaluation and assessment and considering future needs, propose important actions to improve the IT-systems supporting the State finances and human resource management in line with any inefficiencies discovered and based on expert opinion on best-practices and effective financial management.

Phase 4: Preparation of reports and presentation of results

The Consultant shall carry out the following activities:

- Prepare interim and final reports and present the results of the Project to the Ministry of Finance.

Required output

The required output of the Project is written documentation confirming the functional suitability, usability, reliability and security of the System, concluding how well the System fulfils the requirements and needs of the State and how the cost of operating, maintaining and supporting the system compares with cost of similar systems in neighbouring countries.

The output must also provide an expert opinion on proposed actions to improve the IT-systems supporting the State finances and human resource management.

This written documentation will be contained in two reports; interim report after phase 1 and final report at the end of the Project. Both reports shall be written in English language.

Interim report

The interim report shall be submitted after identification of needs and requirements in phase 1. The purpose is to communicate to the Ministry of Finance the Consultant's definition of the needs and requirements for the evaluation and assessment in phases 2 and 3. The interim report must also contain a proposal for refined scope and work schedule for phases 2, 3 and 4 of the Project to the Ministry of Finance prior to start of phase 2.

At minimum the interim report shall cover the following:

- Definition of needs and requirements based on identification of premises, goals and objectives for the State and its institutions.
- The attributes and indicators for the evaluation and assessment of the system quality.
- The metrics for evaluation and assessment of operation and support.
- References for comparison of cost with neighbouring countries.
- Approach for objective assessment of the success of the System.
- Schedule of work for the remainder of the Project.

This interim report will be deemed tacitly approved if the Consultant receives no response or comment from the Ministry of Finance within 1 week from the submission of the report.

Draft final report

The draft final report shall be submitted for a review and comments within four weeks after the completion of meetings in phase 2. The Ministry of Finance will submit comments within two weeks after the draft final report has been submitted.

Final report

At minimum the final report shall cover the following:

- Executive summary.
- Premises and approach.
- Underlying definition of needs and requirements.
- Functional suitability, usability, reliability and security of the System.
- How well the System fulfils the requirements and needs of the State.
- How the cost of operating, maintaining and supporting the system compares with cost of similar systems in neighbouring countries.
- The adoption rate of the System for new institutions and the adaptability with respect to the implementation of necessary workflow changes.
- The expert opinion on proposed actions to improve the IT-systems supporting the State finances and human resource management.

Expert profile or Expertise required

The Consultant shall at the minimum have the following qualifications, skill and professional experience:

Qualifications and skills

- Master degree in financial management, engineering or other field relevant for the Project.

General professional experience

- At least 10 years of experience in government finances or related field.

Specific professional experience

- Experience in supporting government authorities in the implementation and/or use of finance systems;
- Knowledge on a managerial level of latest technological trends and market developments in regards to financial systems;
- Strong communication skills.

Language skills

- Fluency in written and spoken English.

Location and duration

Starting period and foreseen period or duration

The intended commencement date is December 1st 2012 and the period of implementation of contract will be five months and two weeks beginning of this date.

Planning including the period for notification for placement of staff

The assignment shall be implemented according to the following schedule:

Activity	Indicative work days	Indicative duration
Phase 1	8	1.12.2012 - 10.2.2013
Phase 2	15	18.2.2013 - 12.4.2013
Phase 3	7	18.2.2013 – 12.4.2013
Phase 4	6	8.4.2013 - 14.5.2013
Travel days	5	21.2.2013 - 15.5.2013

Travel to and from Iceland can be combined with work days. In this indicative plan it is assumed that except for the final visit to Iceland for the presentation of the results the visits extend for a 5-day week, arriving on Monday and departing on Friday, where travel takes one day and consultancy work takes 4 days.

Location(s) of assignment

Meetings and interviews will take place in Iceland. Other desk work can take place on site at the Consultant's office.

Reporting

The Consultant shall submit progress reports to the Ministry of Finance on the first day of every month during the assignment. This progress report shall include activities to date, proposed activities for the next month and the status of the Project (work hours and reimbursable cost).

Administrative information

Language of the specific contract

The working language of the Project is English. This applies both to day-to-day communication and reporting.

Local expertise

It is foreseen that the Consultant establishes local expertise in Iceland to provide for local knowledge as needed, i.e. of laws, regulations and other relevant information regarding the operation of the State finances and the relevant local environment, and to interpret documentation in the Icelandic language. The Ministry of Finance can provide for this expertise if preferred.

Additional expertise and assistance

It is foreseen that the Consultant might want to establish additional special expertise to provide for specific knowledge, e.g. in security or Oracle EBS, and/or resource for assistance or non-expert support, e.g. in document review and research work. The Ministry of Finance can provide for resources to assist the Consultant in information gathering (e.g. where cooperation with relevant authorities in other countries is needed), document review and other support functions.

Local office in Iceland

The Ministry of Finance will provide office accommodations for the Consultant and his experts in Reykjavík.

Other authorised items foreseen under "Reimbursable"

The reimbursable items non-included in the fees are the following:

- Travel costs to and from Iceland and within Iceland;
- If necessary, other items such as costs incurring in Iceland for stationary, communication, translation, interpretation and such. The Ministry of Finance will provide office accommodations in Reykjavik.
- Daily allowances, the maximum per diem rates for Iceland are published on the following EuropeAid Internet site:

http://ec.europa.eu/europeaid/work/procedures/implementation/per_diems/index_en.htm