Annexure A - Technical Specification and Scope of Services

Request for Proposals (RFP)

The provision of an online application and information management solution for Human Capital Pipeline Development Programmes encompassing both a system and holistic services support to the CSIR

RFP No. 3388/16/09/2020

Project Specification and scope:

The CSIR requires support from a service provider/s for the following services relating to the pipeline development programme online application and information management solution:

We require a **modern, online, integrated and secure** application and information management solution with associated service and system support**.**

The service offering shall consider process and technology requirements, process and technology maturity and resulting gaps.

The solution and service offering shall include an **implementation plan** to achieve the desired architecture state taking into account: people, processes and technology.

The solution shall detail the **security approach and technologies** used to protect the organisation from unauthorised access, use or disclosure of data processed, stored, used by and accessed by the solution.

The solution and service offering shall detail **patch management, update and upgrade cycles** and the level of support offered for these cyclical/regular activities.

It should be a **cost-effective, realistic** and **mature** solution that fulfils the following key business requirements:

- o Functional Requirements
    - – The solution must provide **core pipeline development programme application** services **functionality** automating key processes and reducing the manual interventions
    - – The solution must allow for on-line applications and information management to accommodate **all the pipeline programmes**
    - – The solution must cater for tiered role base access for the interaction with the system, taking into account roles such as:
        - ▪ Applicant role
        - ▪ Administration roles
        - ▪ Selection Committee member role
    - – It should be able to accommodate **large volumes of applications** in a cost effective and efficient manner
    - – The solution should provide the flexibility and ability to **apply changing workflow requirements** as and when required
    - – The solution shall provision and ensure the **availability of real-time information**
    - – It shall allow for us to **track** and **report on the progress** of beneficiaries; this is done twice a year
    - – It shall be able to **maintain student information** and all **communication** with the students and enable us to track throughput
    - – The solution shall **configurable** to organisation-specific required **reporting** demonstrating the value-add to the CSIR in terms of the following:
        - ▪ Process efficiencies;
        - ▪ Reduced turnaround times; and
        - ▪ Improved reporting.
    - – In terms of **functionality**, the solution shall:
        - ▪ through the creations of **user profiles**
            - • allow applications to any of the above mentioned programmes with defined required application information

- allow administration of the end-to-end pipeline development programme lifecycle
  - allow administrators and applicants to **track** applications seamlessly
  - provide **status** of applications
  - allow applicants to use their **mobile phones** to apply
  - allow for **pre-screening and selection** of applicants
    - allow for various members of the Interview panel to score and submit their inputs
  - allow for students to submit required documents , such as ID copies and their results
  - allow for **downloading** of necessary, required and supporting documentation
  - allow for automated **contract generation**
  - automatically **reject** applicants who do not meet the requirements
  - **save** applicant's applications until the application process is completed and submitted
  - have a functionality for **emails/SMS** (communication tool)
  - **auto-calculate** the students' averages
  - keep the **history** of the communication
  - provide **summarised data** through filter functionality (dashboard)
  - allow applicants/students to send **queries**

- Technical Requirements
  - The solution shall be interoperable by making use of **open standards based integration protocols, frameworks and best practices** to enable seamless integration with current in-use technologies and potential future investments
  - The solution shall comply with Information Security protocols and standards set to ensure secure access, use, management and disposal of all information related to the programmes
  - The solution should be tiered to run on a **multi-environment set-up** (Development, Test, Pre-Production and Production) to ensure segregation of concerns and duties
  - The solution should offer the ability to apply **organisation-specific segregation of duty settings** through simple security configuration
  - The solution should be configurable to work within the **business continuity and disaster recovery** protocols and approach employed by the CSIR

- Non-functional Requirements:

![CSIR logo]

- The solution shall **adhere** to industry and sector **best practice** and **comply** with legislative, regulatory and statutory compliance requirements (e.g. the South African Board for People Practices' HR Standards Update – 2017, POPIA, ECT, GDPR, etc.)
- The solution shall provide a **friendly**, **intuitive** and **aesthetically-pleasing** user interface
- **A service support** model should qualify the support approach to **responsiveness** to service requests (e.g.] in terms of "time to respond", "time to resolve", and other key support metrics as defined in the service support model)
- **Training** – Provision of training ICT administrators and ICT support staff should be integrated on the proposal.

Please indicate your compliance. Where it does not run or integrate with any of the mentioned technologies, please indicate so. Please note that minimum versions of the software are provided. Please explain how you comply or why you do not comply.

Requirements		
Description	**Fully complies (Yes) / Partially complies / Does not comply (No)**	**Explain**
User Friendliness		
Does your solution have a user-friendly graphical user interface design?		
Access		
Does the solution provide a web-based user-interface?		
Is all the functionality of the system available through web front-end (i.e. no separate fat client interface required for power users)?		
Is the web front-end a pure HTML5 implementation (i.e. does not require the installation of ActiveX or Java components)?		
Does the solution support Google Chrome, Firefox Mozilla, Apple Safari and Microsoft Internet Explorer 9.0 or later?		
Can the solution be accessed from a mobile device like a tablet or smart phone?		
Is the solution mobile-aware and does it render on a variety of screen sizes?		
Technology Architecture		

		Can the solution integrate with Oracle PeopleSoft HR through service oriented architecture technologies?		
		Are there Application Program Interfaces (APIs) provided as part of the solution?		
		Can the APIs be used to extract data for reporting, or data warehousing purposes?		
		Can the APIs be used to extract and import data without any development effort from the service provider?		
		Can the solution integrate with Novel e-directory solution as a directory service for user authentication		
		Can the server software run on Suse Open Enterprise Server (OES) and/or Suse Linux Enterprise Server (SLES) –and/or on Windows Servers. Indicate the versions of the server operating systems that your solution is compatible with.		
		Can the database server layer run on a separate server/s from the application layer?		
		Does the solution make use of caching to reduce the load on the database server?		
		Can your solution use Oracle and/or Windows SQL Server as a database repository. List other database technologies that your solution support.		
		Can your solution integrate with Microfocus GroupWise for messaging.		
		Can your solution integrate with Microfocus Vibe solution for Collaboration and Document Management		
		Do your server components run on DELL server hardware?		
		Do your server components run on VMWare virtual servers?		
		Does your solution support a SOA (Service Oriented Architecture). If so provide details of what integration protocols are supported.		
		Does the solution come with a development toolkit for customizing and extending applications to address business needs.		
		What development platform/languages have been used to develop your solution?		
		Training		

		Can you provide the following training services: - Technical Administration training - Functional Administration training - User training - Management use training If not, are there other companies or partners who can provide the training.		
		Service and Support Capability		
		Indicate more or less how many ICT professionals can provide technical and functional services and support for you proposed solution.		
		Indicate what the average turnaround time would be for such support.		
		Do you have a help desk to support any problems with your solution?		
		What support is available and where is the help desk based?		
		What are the days and hours of operation of the help desk?		
		What are the turn-around times for bug-fixes.		
		How often are new releases and versions of the proposed solution issued?		
		How are these new releases made available.		
		Do you have formal documentation on the use and administration of the solution?		
		Viability and Vision		
		Is the publisher of the solution currently in talks or has recently been in talks of being acquired in part or whole by any other company.		
		Has your solution been quoted in any well known ICT publication or report for any of its good qualities. Provide detail if yes.		
		Do you have a partner ecosystem to provide implementation and support services on your proposed solution. Provide list of partners.		
		Do you have plans to evolve your solution, i.e. providing more and better functionality. Provide detail.		

	Do you have plans to incorporate new and emerging technologies into its technical architecture. Provide detail.		
	Do you have plans to maintain and improve long-term competitiveness and market position. Provide detail.		
	Do you have contactable reference sites in South Africa, Johannesburg or Pretoria areas where your solution is used? If so provide contact details.		

DELIVERABLES

The following key deliverables are required as outcome of this work:

1. A fully functional online application and information management solution for Human Capital Pipeline Development Programmes as per above specifications and requirements.
2. Training
3. Support and Maintenance of the solution.