WCO Human Resources System

Non-Functional Requirements

Please provide details on the IT system's specifications and requirements as requested below:

General
Describe overall software architecture, including the process of configuration, process of customization. This should include any frameworks and other dependencies the software has, whether built in or cloud based.

Describe how updates of minor / major versions will be handled, especially with respect to configurations and customizations.

Describe all documentation to be received with the solution including but not limited to end user guides, administrator configuration guides, installation and setup guides, disaster recovery guides, audit and logging guides.

Hardware
Operation modes
Describe the Operation modes of the IT solutions: Central servers at the WCO premises, Dedicated Hardware in a Data Centre, Cloud service, etc.

For cloud based solutions, describe the data centre country and city, and the process whereby the WCO is informed, and must approve, before the data centre location can change.

For software not offered as a service, describe the hardware / operating system requirements.

Environment
Describe environments (production, test), servers (application, database), network (public, internal, DMZ), hardware and software requirements and 3rd party licenses. Preferred OS is Windows or RedHat/CentOS Linux and MS SQL or MySQL database.

Backup/restore
Describe the backup / restore processes, including frequency, and scenarios under which data loss can occur.

Security
Describe the security measures and standards that are applied to prevent hacking of network traffic and direct access to data storage.

Data Storage
The place of data storage shall be defined within the tender documentation of the IT-service. There may be a requirement based on the contracts with corresponding entities to hold and store the data in a specific geographical area or even country.

Software
Security
Describe the security measures and standards that will protect HR information from being accessed by unauthorized personnel. This should cover unauthorized access via the application interface, escalation of privileges, and other common hacking approaches as outlined by OWASP standards (https://owasp.org/www-project-top-ten/).
Describe any encryption applied to data storage / during data transfer / on backups.

Describe any digital signature processes which can be applied to data / processes.

Describe how these security standards are maintained for customisations, and version updates.

Audit Logging

All accesses to the system should be logged, to include user login / logout dates and times, and IP of connection. All data changes should ideally be logged to show who edited the data, and the before / after values.

Describe the logging processes with respect to these requirements.

Operations

Maintenance

Please describe the maintenance process to operate the IT solution.

Availability

Please describe the availability specifications for normal production use, and also frequency / downtimes for updates / upgrades.

Support

Please describe the support process and specifications included but not limited to the different support levels and the response and resolution time.

Describe the Scalability specifications

The WCO will initially purchase a solution sufficient for our current HR needs.

Describe how the number of staff and system user profiles can be increased.

Compatibility

Required for the latest Microsoft Edge browser as the WCO uses this internally as its default standard.

Describe the compatibility with all major browsers (> 5% market share), and common mobile phone standards (recent iPhone / Android).

Describe possible integration protocols to push data to legacy systems, or for legacy system to pull data they require.

Performance

Systems with slow response times can have a significant impact on productivity. Describe the system response times users can expect under normal load conditions.

Describe how end-user experience is affected by latency, load and resource utilisation.