

# ANNEX 1 SPECIFICATION OF REQUIREMENTS

## 1 Background

ECMWF has been using Atlassian products since 2011, including Jira, Confluence, Bitbucket and Bamboo. Until now, “Server” versions have been used, licensed via the free “Open Source” licence programme (<https://www.atlassian.com/software/views/open-source-license-request>), which included an unlimited licence segment.

The Server versions of Atlassian products will be discontinued by February 2024 and will no longer be supported. Furthermore, it will no longer be possible for ECMWF to make use of the Open-Source licence. Hence, fully paid licences and licence management are now required.

Following an evaluation of requirements, ECMWF has elected to proceed with the following configuration:

- Data Centre version of Atlassian tools (Jira, Confluence, Bitbucket, Bamboo)
- Run all four tools on-premises in ECMWF’s own data centre

Additional goals for this ITT are to establish processes and tools for licence management and develop a solution for web single sign-on which is integrated with ECMWF systems.

## 2 Objectives and structure of this ITT

This ITT comprises three lots with relevant scopes:

**Lot 1:** Purchase of licences for the Data Centre version of Atlassian tools: Provide Atlassian Data Centre licences for the period 2023-2024 (first pilot, then full deployment), and an option for 2025-2026

Two tasks of professional services:

**Lot 2:** Configure and implement web single sign-on: To configure web single sign-on integrated with ECMWF’s systems

**Lot 3:** Design and implement licence management: To develop processes to monitor and manage Atlassian licences in use by ECMWF

The bidders are invited to bid for any of the three lots, or propose a combined offer for multiple lots, identifying any synergies or cost-reductions that may be obtained.

## 3 Structure of ITT

## 4 Envisaged Timeline for the Implementation

Award of contract(s) for Lots 1, 2, and 3	November 2022
Lot 1 - Purchase of Pilot System licences	November 2022
Lot 2 and Lot 3 – Kick-off meetings	December 2022
Lot 2 and Lot 3 – Works commence	January 2023
Lot 2 and Lot 3 – Works completed by	30 June 2023
Lot 1 – Purchase of full deployment licences for 2023/2024	1 October 2023

Following the award of Lot 1, ECMWF will purchase licences for the Pilot deployment of Atlassian Data Centre. ECMWF will itself deploy the Atlassian Data Centre applications to become the Pilot System. The Lot 2 and Lot 3 works will then commence in parallel, working on the Pilot System.

## 5 Scope of Requirements

### 5.1 Lot 1: Purchase of Atlassian Data Centre Licences

The licences will start in Dec 2022 with a pilot scenario to allow set-up and configuration and, if the pilot is successful, increasing to full licence deployment from Q4 2023.

Based on initial analysis, ECMWF have identified a lower limit and an upper estimate of the number of licences required for the operational Initial deployment. The total number of user licences purchased will be at least the lower limit. Some flexibility will be required with the option to increase or decrease the level of licences in future years, depending on needs. Bidders are requested to consider and propose a flexible arrangement where the number of licences is scalable during the contract period.

Licence costs should be presented in the way provided in Annex 3 Pricing Tables template. For Lot 1, the bidders are required to specify the discount ratios they offer over the published Atlassian list prices. These discount ratios should be fixed until the end of 2024 for the pilot and the full deployment. Bidders are also requested to specify how they will approach their pricing as of 2025 for any optional purchases which may be required 2025 onwards.

Annex 3 Pricing tables template requires bidders to quote for quantities provided as Pilot, Lower limit and Upper estimate identified by ECMWF. In addition, bidders are also requested to specify in accordance with their own trading practice if they have different approach to their licence pricing in terms of volume and costs.

#### Number of licences for the Pilot System

Licence	Number of users
Jira Software	100
Jira Service Management	10
Confluence	100
Bitbucket	50
Bamboo	5
Prioritized Jira apps	100
Prioritized Confluence apps	100

#### Lower limit number of licences for the Full Deployment

Licence	Number of users
Jira Software	1000
Jira Service Management	100
Confluence	1000
Bitbucket	500
Bamboo	50
Prioritized Jira apps	1000
Prioritized Confluence apps	1000

## Upper estimate of number of licences for the Full Deployment

Licence	Number of users
Jira Software	2000
Jira Service Management	250
Confluence	2000
Bitbucket	1000
Bamboo	100
Prioritized Jira apps	2000
Prioritized Confluence apps	2000

## Jira and Confluence applications

The following Jira and Confluence applications are also in use and require licence proposals as in the Initial Deployment Pricing Spreadsheet attached (lower limit 1000, upper estimate 2000).

We invite the bidder to consider and propose a flexible arrangement where the number of licences is scalable during the contract period.

Application
Big Picture
Refined for Jira
Elements Connect
Extension for Jira Service Management
ConfiForms
Community Forums Plugin
Gliffy Diagrams for Confluence
Scroll PDF Exporter
Scroll Word Exporter
Include Bitbucket Server for Confluence
Bob Swift Run Self-Service Reports
Bob Swift SQL Pro
Jupyter Viewer for Confluence
Refined for Confluence

## 5.2 Lot 2: Professional Services: Web Single Sign-on Integration

The aim of this Lot is to configure web single sign-on integrated with ECMWF's systems.

The contractor shall work closely with relevant ECMWF staff to develop and implement an integrated single sign-on (SSO) solution connected to ECMWF's IAM systems. These systems are comprised of Keycloak authentication service and Active Directory.

Users of ECMWF's Atlassian tools include staff, contractors and users of our data, software, and computing services. Different users access the services for a variety of reasons and through different entry points: users may raise Jira tickets through the ECMWF support portal (<https://support.ecmwf.int>), staff use Confluence internally for communications and project/programme management, documentation is served to users and accessed through different external-facing websites (e.g. CDS (<https://cds.climate.copernicus.eu>), C3S (<https://climate.copernicus.eu/>)). Additionally, our development and test processes rely on Bitbucket and Bamboo.

The ECMWF Support Portal (<https://support.ecmwf.int>) is built on Atlassian Jira and Confluence and makes use of the Refined Wiki plugins for both Jira and Confluence.

User registration is managed by a pre-existing process outside of Atlassian.

User provisioning to Atlassian tools could be considered via the OpenID Connect just-in-time provisioning, or via offline methods such as AD synchronisation. The bidder is invited to make one or more proposals together with benefits and disbenefits for ECMWF to choose.

To develop the new single sign-on solution the contractor shall:

- Implement web single sign-on in Jira, Jira Service Management, Confluence, Bitbucket and Bamboo
- Assess the need for Session Management and implement accordingly
- Base the implementation exclusively on the built-in features provided by the Data Centre version of the Atlassian tools
- Ensure full public anonymous access is still allowed for some areas (e.g., the Support Portal or Documentation areas), and authenticated access is only required for protected areas of Confluence (e.g., when raising Jira issues or when accessing resources with an access restriction)
- Ensure integration with the ECMWF Support Portal
- Create a catalogue of the most common user journeys from the portal and external websites to ensure that the solution co-exists smoothly with other ECMWF websites, and that the user experience is consistent. For the purposes of this Task, ECMWF's other web sites include, but are not limited to:
  - [www.ecmwf.int](http://www.ecmwf.int)
  - [apps.ecmwf.int](http://apps.ecmwf.int) (web charts)
  - [climate.copernicus.eu](http://climate.copernicus.eu)
  - [atmosphere.copernicus.eu](http://atmosphere.copernicus.eu)

We anticipate 10-20 user journeys, agreed with us as being the most important.

- Project manage the work, to include organising meetings with ECMWF staff as required and reporting on progress at regular checkpoints
- Develop a testing suite, use it to test the solution, and make it available for future use by ECMWF staff as an automated and reproducible testing system. **(This task is optional and may be actioned by ECMWF during implementation based on the bidder's response including pricing)**

## **Deliverables:**

- Solution design and implementation plan based on analysis of requirements
- Procedure to deploy integrated SSO, including all necessary settings and adjustments.
- User journeys catalogue from the main ECMWF-maintained websites.
- Automated testing suite with necessary documentation, based on the catalogue of user journeys (optional)

### **5.3 Lot 3: Design and Implement Licence Management**

The aim of this lot is to design and implement processes to monitor and manage Atlassian licences in use by ECMWF.

ECMWF users of Atlassian include internal and external users, with short-term and long-term requirements for licences depending on their role. The organisation needs a system to track and monitor the licences issued, including a mechanism for approvals and withdrawal of licences when they are no longer required.

The contractor shall, in collaboration with ECMWF staff, design and implement a set of processes, supported by monitoring and management tools, to track and help manage ECMWF's Atlassian Licences across active tools and applications. It will be desirable to avoid bespoke solutions and make use of standard Atlassian features as much as possible. The processes shall be connected to ECMWF's Identity and Access Management (IAM) systems and could be based on group memberships within our Active Directory (AD).

Roles, group memberships, permissions and licences are managed by the ECMWF Service Desk Team.

This Lot comprises two work packages, to be project managed by the contractor (includes organisation of meetings with ECMWF staff as required and regular reporting of progress at defined checkpoints).

#### *Lot 3 Work Package 1: Requirements and Specification*

For this work package, the contractor shall review requirements and organisational constraints and propose solutions. The required tasks are:

- Conduct stakeholder interviews with relevant teams within ECMWF to understand requirements and constraints. Stakeholders include:
  - ECMWF Computing and Software Support Team (managers of Atlassian products)
  - ECMWF Service Desk Team (grant and revoke roles for users)
  - ECMWF Identity and Access Management Architect
- Identify and propose access schemes that implement the licensing scheme
- Define and document internal processes to request and approve licences
- Define and document internal processes to withdraw licences

## **Deliverables:**

- Documented process, and description of configuration of Atlassian tools, to implement licensing scheme (technical and policy steps required to issue and withdraw licences)
- Documented process, and description of configuration of Atlassian tools, to monitor and regularly report licence statistics (how many in use, how many remaining)

#### *Lot 3: Work Package 2: Implementation*

For this work package, the contractor shall configure the systems and implement tools, based on the Work Package 1 findings. Prior to the delivery of this Work Package, ECMWF will have procured the Pilot System licences and installed a new Data Centre edition instance of the Atlassian tools.

The required tasks are:

- Configure the Pilot System Atlassian tools: Jira, Confluence, Bitbucket, Bamboo so that
  - They are aware of licensing changes
  - They integrate with ECMWF's Active Directory to manage group membership
- Identify and configure/deploy tools to reduce workload of licence management by
  - Monitoring licence usage and ensure limit (budget) is not exceeded
  - Generating reports
  - Issuing early warning if limits are approached, to allow time to implement mitigation action

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**Deliverables:**

Documented implementation of the configuration and/or process in Jira, Confluence, Bitbucket and Bamboo Data Centre:

- Configuration of Atlassian tools to support licence management processes
- System to monitor and regularly report licence statistics (how many in use, how many remaining)