The responsibilities of a govroam regional federation operator

## Background

The govroam service is a fabric of trust between participant organisations, with every member contributing guest connectivity along with an authentication and support infrastructure. To maximise the efficiency and effectiveness of the service, organisations can also aggregate in to regional federations (RFs) that partition local roaming authentication traffic and provide each other with mutual support. These regional federations are headed by a nominated regional federation operator (RFO), which act as the go-between for member organisations and the Jisc govroam team.

Figure showing govroam RADIUS heirarchy. 
ORPS can connect directly to the NRPS. 
Or, within a federation, ORPS connect to the RRPS, which then connects to the NRPS. 
A federation can comprise several organisations, all connecting to the NRPS via their local RRPS. This document outlines the responsibilities of a RFO.

## RADIUS hierarchy

The RFO is responsible for operating the ‘top-level’ RADIUS proxy for its RF, known as the regional RADIUS proxy server (RRPS). It maintains the link between the RRPS and Jisc’s national infrastructure (NRPS), and is required to achieve 99.9% availability outside of maintenance. This is explored in more detail in sections 2.3.1.1. and 2.3.1.3 of the service definition.

The RRPS aggregates the proxying routes from all member organisations’ RADIUS servers (ORPS), and is the point of contact between its RF and all other RFs in the UK via Jisc’s NRPS.

The RFO can directly manage its RRPS, or subcontract to a third-party.

The configuration of member organisations’ RADIUS servers is key to maintaining the overall security of the service, and Jisc reserves the right to audit RRPS and ORPS and request changes if required to maintain the integrity of govroam.

## Contractual obligations

Jisc has a contractual relationship with each RFO to mutually ensure the effective governance of the service. RFOs are required to bind their members to a similar legal agreement, so that they can enforce the responsibilities outlined in the terms and conditions. These include, but aren’t limited to:

* Maintaining and sharing accurate and up-to-date data about service usage;
* Holding all necessary licenses, authorisations, and permissions required to meet service obligations;
* Complying with the service technical specification;
* Observing good practice around operations, security, and data handling;
* Protecting the reputation of the service;
* Assisting other members, the RFO and Jisc in the investigation of problems and misuse.

Schedule 1 of the govroam terms and conditions provide a template agreement that an RFO can use as the basis for an agreement with its RF members. There will also be RF-specific requirements that need to be agreed upon.

If any breach of the terms and conditions by the RFO or one of its RF members is not resolved within 20 working days of notice, govroam membership may be withdrawn.

## Support coordination

The RFO must:

* provide adequate staff resource to maintain its RRPS;
* provide Jisc with an up-to-date list of the technical contacts for all its member organisations;
* contribute to Jisc’s support of submitted tickets by providing RF-specific information as required;
* provide business-to-business level technical support to its member organisations in resolving govroam issues

The RFO is the first escalation stage if a home organisations and a visited organisation cannot resolve a roaming issue between them. If the RFO is unable to resolve an issue, it should be escalated to Jisc as outlined below.

In the event of a significant govroam security incident, the RFO works with Jisc’s CSIRT on behalf of affected members. The Jisc CSIRT will be the primary contact for the media and police until the incident is resolved.

## Support levels

The RFO is required to monitor and report against a number of SLAs.

The RFO must delivery their RRPS to at least 99.9% uptime, excluding scheduled maintenance, and must ensure that the ORPS of its members delivery to the same availability. The RFO works with Jisc to provide advice to its member organisations around optimising their ORPS.

The RFO must also track the time taken to address, fix, and escalate issues within the proxy hierarchy of their region at various levels of severity, as indicated below:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Severity 1 Incident  (Multiple RFO member organisations suffer complete loss of service)** | **Severity 2 Incident (Individual RFO member organisation suffers complete loss of service)** | **Severity 3 Incident  (RFO member organisation(s) suffer degraded or intermittent service)** |
| **RFO member organisation to RFO** | **> Respond to End User and inform Jisc direct within 1 hour**  **> Use best efforts to fix within 4 hours**  **> Escalate to RFO after 4 hours if still unfixed** | **> Respond to End User and inform RFO within 1 hour**  **>Use best efforts to fix within 2 days**  **> Escalate to RFO after 2 days if still unfixed** | **> Respond to End User within 8 hours**  **> Use best efforts to fix within 5 days**  **> Escalate to RFO after 5 days if still unfixed** |
| **RFO to Jisc** | **> Respond to RFO member organisation and inform Jisc within 1 hour**  **> Use best efforts to fix within 4 hours**  **> Escalate to Jisc after 4 hours if still unfixed** | **> Respond to RFO member organisation and inform Jisc within 4 hours**  **> Use best efforts to fix within 2 days**  **> Escalate to Jisc after 2 days if still unfixed** | **> Respond to RFO member organisation within 8 hours**  **> Use best efforts to fix within 5 days**  **> Escalate to Jisc after 5 days if still unfixed** |

## Monitoring, diagnostics and metering

The RFO plays a role in monitoring the performance and availability of the ORPS within its RF, both by independently monitoring roaming usage and sharing relevant data with Jisc. The degree and mechanisms for this data gathering can be agreed within each RF, but there are certain minimum requirements as set out in the govroam terms and conditions. See section 2.3.3.1 of the service definition.

Along with their membership data, we ask that RFOs share summary usage statistics and interesting use cases with the govroam team.

It is strongly recommended that any RFOs that anticipate a change that will move its RF to a new tier boundary, for instance by growing to more than 25 member organisations, let the govroam team know as soon as possible.

## Financial arrangement

Jisc bills either annually in advance or monthly in arrears, depending on RFO preference. The tariff is reviewed annually and published online.

It is a local decision whether to divide the subscription charges between member organisations, and if so how to manage this.