
CONTRACT

Between

BROADBAND SYSTEMS CORPORATION PLC (BSC)

(The CLIENT)

And

RAD DATA COMMUNICATIONS LIMITED

(The CONTRACTOR)

**FOR THE PROVISION OF NETWORK INTELLIGENCE, OBSERVABILITY AND SECURITY
PLATFORM**

THIS AGREEMENT is made on this day of November, Two Thousand and Twenty-Five.

BETWEEN

BROADBAND SYSTEMS CORPORATION PLC (BSC) TIN: 101982714 having its principal place of business at Remera, Gisimenti Airport Road, (kn5 Rda), Opposite Chez Lando P.O Box: 7229 Kigali-Rwanda (hereinafter called the "Client").

AND

RAD DATA COMMUNICATIONS LIMITED (RAD), a company incorporated under the laws of Israel, located in, 24 Raoul Wallenberg Street, Tel-Aviv 6971920, Israel (hereinafter called the "Contractor")

WHEREAS

- i. The *CLIENT* has accepted the proposal by the *CONTRACTOR* for the execution and completion of the works.
- ii. The *CONTRACTOR* has, after fully acquainting itself with the requirements of the "*CLIENT*" stipulated in the "Contract Documents" and has agreed to adhere to the terms and conditions set forth hereunder.
- iii. The Client, having accepted the Contractor's offer, agrees to pay the latter the unit price as attached to this contract

NOW IT IS HEREBY AGREED as follows:

1. Purpose

The *CONTRACTOR* shall execute and complete the Works and remedy defects therein in conformity in all aspects with the provision and installation of NETWORK INTELLIGENCE, OBSERVABILITY AND SECURITY PLATFORM (ANTI-DDDOS).

2. Scope of work: DDOS Protection

1. Technical Aspects

- i. The RAD Threat Intelligence solution will have 2 software components

- a. Controller – One for the entire system (Central management component).
 - b. Detectors – one per router that is monitored for DDoS
 - ii. The detectors will have access to the monitored routers and collect Netflow data from the routers. Once detection is identified, the detector will apply mitigation ACLs on the router.
- There will be 12 Routers that will be monitored based on the Purchase Order issued.
- iii. The Controller will be installed in one of the following configurations, based on the customer preference.
 - a. Standalone – in such case the Controller and all Detectors can run on one server.
 - b. Cluster – in such case, there should at least 3 VMs (servers) based on the cluster configuration.
 - iv. Hardware requirements (need to select option "b" or "c" below):
 - a. Prerequisite environment:
 - i. Virtualized platform: VMware ESXi or KVM
 - ii. Proper virtual networking & routing with direct access from outside to the controller's VM
 - iii. Latency requirement between nodes: Target <10 ms; absolute maximum <50 ms
 - b. Controller - Standalone (no High Availability)
 - i. vCPU: 8
 - ii. Memory: 32 GB
 - iii. Storage: 300 GB
 - iv. Network: ≥ 1 vNIC
 - c. Controller - Cluster (High Availability)
 - i. At least 3 VMs/Nodes
 - ii. Per node:

1. vCPU: 8
 2. Memory: 32 GB
 3. Storage: 500 GB
 4. Network: ≥ 1 vNIC
- d. Detectors - can be deployed on the same machine as the Controller
- i. Prerequisites per Detector/router
 1. vCPU: 2
 2. Memory: 2 GB
 3. Storage: Minimal (OS + image only)
 4. Connectivity: Outbound management/OOB to the Controller
 - ii. Sizing example (12 routers; 1 Virtual Machine)
 1. Total vCPU: $2 \times 12 = 24$ vCPU
 2. Total memory: $2 \text{ GB} \times 12 = 24 \text{ GB RAM}$
- v. Client will make sure that the hardware needed is available for the deployment. Any delay or failure by the Client to provide the required hardware shall automatically extend the project timeline and relieve the Contractor from any related performance obligations or penalties.

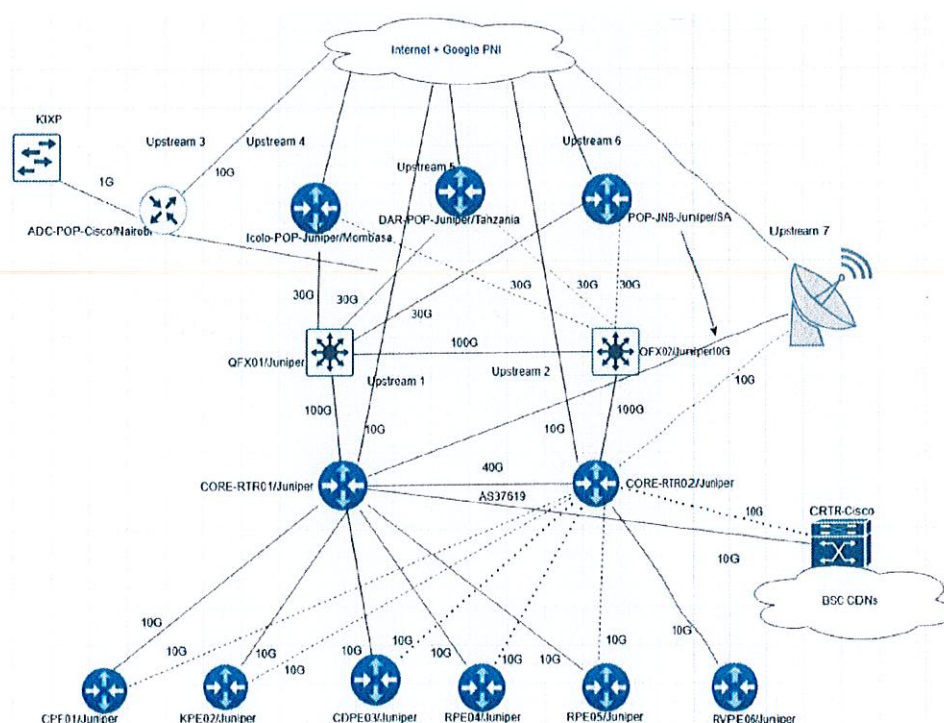
2. Supplier scope of work

- i. Assess BSC's existing network architecture, data sources (e.g., NetFlow, SNMP), and monitoring tools.
- ii. Design and propose a suitable solution architecture.
- iii. Install, configure, and integrate the platform with BSC's network devices and systems on-premises.
- iv. Configure dashboards, alerts, and reports tailored for:
 - a. Network performance and health**
 - b. Security threat detection (e.g., DDoS, anomalies)**
 - c. Customer and application usage**
- v. Train BSC staff on system usage, customization, and maintenance.
- vi. Provide complete system documentation including configuration, operational, and troubleshooting guides.

- vii. Ensure data privacy, compliance, and role-based access for different user groups.
- viii. Support BSC with post-deployment testing, fine-tuning, and acceptance validation.

3. Detailed Solution

- i. The network diagram:



- ii. The system will be configured to send Alerts and reports using its northbound interfaces, on any DDoS attack detection.
- iii. System security – the system has a role-based access for different user groups (will be configured as part of the installation and configuration) to ensure data privacy and compliance.

- iv. The system provides on-going security and DDoS related analytics as defined in the product scope.
- v. The system has northbound interfaces that will enable integration with NOC, SOC or any other security related management systems, and will report on any attack detected, based on the customer requirements and configuration.
- vi. The platform supports multi-tenancy visibility for BSC's wholesale and enterprise clients.
- vii. The system provides customized alerting policies and thresholds for anomalies and security events.

Technical Aspects

- viii. The RAD Performance Monitoring solution will have 2 components:
 - a. TWAMP Controller – One ETX-2i-10G for the entire system (Central controller solution).
 - b. TWAMP Responder – one MiNID per endpoint to collect the TWAMP statistics
 - i. There will be 12 MiNIDs around the network connected to 1GB port on third-party routers and one ETX-2i-10G with IP connectivity to each remote MiNID.
 - ii. Hardware & Software requirements for the RADview management system:

<i>HW Requirements</i>	<i>Number of Managed Network Elements</i>
	<i>Up to 100</i>
CPU***	Intel Xeon E5-2603 1.80 GHz
Number of Cores	4(8vCPU)
RAM	80 GB
Min. Number of Hard Disks	2 SSD**
Disk Space (GB) after Defining and Activating RAID	500*

Disk Performance:	160+ MiB/s
Read and Write Throughput	
Cloud Environment	AWS Volume Type: gp2 GC: Zonal Balanced PD

c. For the complete HW & SW requirements please refer the attached file.

4. Objectives

The contractor shall fulfill the following objectives.

- i. Deploy a platform that offers **end-to-end visibility** of BSC's network infrastructure.
- ii. Enable **real-time and historical traffic analysis**, anomaly detection, and alerting.
- iii. Strengthen **network performance monitoring and troubleshooting capabilities**.
- iv. Enhance **network and service-level security analytics**.
- v. Support **capacity planning**, traffic engineering, and customer experience management will be achieved by providing TWAMP KPIs to assess need to re-engineer or add capacity to the network
- vi. **Comprehensive AS Path analysis tools** enabled within the platform to visualize and analyze BGP paths, identify routing anomalies, detect hijacks or leaks – The DDOS solution will detect traffic anomalies and Instead of thementioned tools the solution will allow to monitor specific routing paths by injecting TWAMP tests following these paths and monitor changes in the TWAMP KPIs along these paths
- vii. Provide integration with existing NOC, CORE and SOC operations.
- viii. Ensure the platform supports **multi-tenancy visibility** for BSC's wholesale and enterprise clients.

5. Deliverables

- i. Detailed **Solution Architecture Document**.
- ii. Fully installed and configured platform deployed on-premises, integrated with BSC's network infrastructure and data sources.
- iii. High-Fidelity Packet and Flow-Based Monitoring
- iv. Deep AS PATH and Routing Insight – Instead to achieve the results RAD provides TWAMP KPIs along selected paths to assist BSC in path quality changes
- v. Threat Detection and Behavioral Anomaly Analysis

- vi. Service Assurance Reports for SLAs
- vii. Customized **alerting policies and thresholds** for anomalies and security events.
- viii. Reports on **traffic analytics, capacity and security trends**.
- ix. Knowledge Transfer and Staff Training, **training materials** and delivery of hands-on sessions to NOC/CORE/SOC teams.
- x. **Documentation:** Installation manuals, configuration records, and maintenance procedures.
- xi. Knowledge Transfer and Staff Training
- xii. Final **User Acceptance Test (UAT)** and sign-off report.

6. Duration

The contractor commits to complete the works within sixty (60) Calendar days from the date of execution of this contract. All duration extensions or deductions shall be agreed upon and communicated between the parties in writing.

The 60-day period shall exclude any delays attributable to the Client, including but not limited to delays in providing required infrastructure, approvals, or access. Such delays shall automatically extend the completion period on a day-for-day basis.

7. Tests and inspection

The parties shall jointly conduct testing and inspection on each scope item, objective, or deliverable to verify that the completed work complies with the terms and conditions set forth herein. This exercise shall be completed within a maximum period of thirty (30) calendar days and shall constitute a condition precedent to the payment of the contract consideration.

If the Client does not complete testing within thirty (30) days, the deliverables shall be deemed accepted and payment shall become due.

8. Terms of Payment

The contract price is USD 120,799 and RAD shall receive this amount in accordance with the following schedule:

- i. 30% advance.
- ii. 40% upon completion of 80% of the deployment.
- iii. 30% after completion of 100% of the deployment and commissioning.

9. Intellectual Property Rights

Each Party shall retain all right, title, and interest in and to any intellectual property it owned, developed, or acquired prior to, or independently of, this Contract. Nothing in this Contract shall be construed to transfer or assign any such rights to the other Party.

10. Contract Effectiveness

The contract becomes effective when all of the following conditions have been fulfilled in sequence:

- a. The contract is fully signed by both parties.
- b. The CONTRACTOR has received written instructions from the CLIENT to commence the works.

Each party shall use its best efforts to fulfil the above conditions for which it is responsible as soon as practicable.

11. Covenants

10.1 In consideration of the payments to be made by the *CLIENT* as described in this Agreement, the *CONTRACTOR* hereby covenants to execute and complete the Works more fully described in the aforesaid Drawings, Technical Specifications, and Priced Bill of Quantities, in conformity in all respects with the provisions of the Conditions of Contract aforesaid and remedy any defects within the defect's liability period.

10.2 The *CLIENT* hereby covenants to pay the *CONTRACTOR* in consideration of the execution and completion of the Works and remedying any defects at the times and in the manner described by the aforesaid Conditions of Contract and based on the assessed amount of completed works mutually determined by the *CLIENT* and the *CONTRACTOR* or their respective representatives.

12. Special Conditions

- 12.1 The *CLIENT*'s decision to remove parts of the works shall not prejudice any other rights of the *CLIENT*, under the terms of this contract agreement or otherwise.
- 12.2 The failure on the part of the *CLIENT* or *CONTRACTOR* to enforce any of the provisions of this Agreement shall not be deemed to be a waiver of the same.

13. Notices

All notices/ communication between the Parties under or in this Contract shall be in writing in the English language and be delivered by hand or through certified or registered mail or to the address as below confirming receipt. The email address mentioned below should be active throughout the project.

BROADBAND SYSTEMS CORPORATION PLC (BSC)

Address: Kn5 Airport Road, BSC
Building, Kisimenti – Gasabo

P.O Box : 7229 Kigali-Rwanda

Tel : 0788-187-408/4141

E-mail: info@bsc.rw

RAD DATA COMMUNICATIONS LIMITED

24 Raoul Wallenberg Street, Tel-Aviv
6931920, Israel

Phone : +254736000988

Email : Vishudh_a@RAD.com

14. Confidentiality and Publicity

- 14.1 Throughout the term of this Contract and for a period of five (5) years after its termination or expiry:
- (a) The Parties undertake to keep confidential their discussions concerning matters related to the Projects;
 - (b) Each Party shall maintain confidential of all information howsoever obtained, transmitted or recorded and all documents made

available by the other Party pursuant to the Contract; and

(c) The Parties undertake:

i: To use such information and documents only for the purpose of the performance of the Contract, and

ii: Not to disclose or allow the said information or documents to be disclosed to any third party; except where such information or documents are disclosed with the mutual agreement to a third party having entered into a like undertaking of confidentiality and non-disclosure, and such disclosure is made for the purposes of the performance of the Contract.

14.2 All matters relating to this Contract shall be regarded by the Parties hereto as being highly confidential and shall not be disclosed without consent of both Parties to any person, Party or entity who or which is not a signatory to this Subcontract except such disclosure is necessary for the fulfillment of this Contract or required by the Governing Law. No Party shall at any time hereinafter use any technical information, save that which is in the public domain, acquired from any Party hereto except for the purposes of fulfillment of the Contract.

15. Taxes & Duties

The contract price is USD 120,799 net of all taxes, and RAD shall receive this complete 120,799USD in accordance with section 8 terms of payments.

16. Insurance

The *CONTRACTOR* shall at its own expense take out and maintain in effect or cause to be taken out and maintained in effect the necessary insurances and in adequate amount during the contract period up to the completion of the installation.

17. Dispute resolution

The parties agree that any dispute or difference of whatever nature between the Parties arising under or in connection with this agreement shall be amicably resolved between the Parties by good faith and mutual discussion. Should the parties fail amicably settle the dispute, such dispute shall be brought before the courts of Rwanda for adjudication. All proceedings shall be conducted in the English language.

18. Law Applicable

These terms and Conditions and all contracts of engagement between the two parties shall be governed by Rwanda, excluding conflict of laws principles.

19. Termination of Contract

This contract may be terminated by:

19.1 Failure to either party to fulfill their duties and responsibilities as contained herein.

19.2 The *CLIENT* may terminate this contract as may be determined by given circumstances owing to the fact that the *CLIENT* has an obligation to complete the works as per schedule agreed upon, by giving the *CONTRACTOR* one month notice of termination.

19.3 The Contractor may terminate this Agreement upon thirty (30) days' written notice if the Client fails to make any payment when due or otherwise materially breaches this Agreement and fails to cure such breach within fifteen (15) days after receipt of written notice.

19.4 All notices of termination shall be made in writing and delivered to the other party either in person or by registered mail or by electronic mail.

19.5 Termination of the contract shall not exonerate parties from any obligations that shall have arisen from execution of the contract during its effectiveness.

19.6 Upon termination for any reason, the Client shall pay the Contractor for all services performed and costs incurred up to the effective date of termination.

20. Good Faith

The parties to this Contract undertake to act in good faith in relation to the implementation of this Agreement, to discuss and mutually agree on any matter not provided for in this Agreement and to take such other reasonable measures as may be necessary for the realization of their objectives.

21. Representation and Commencement

21.1 Each individual signing hereon declares that he has the full legal right, title, power and authority to enter into this Agreement on behalf of the Parties represented here on, and that each of the Parties can perform its duties and obligations pursuant to hereof.

21.2 These Terms and Conditions shall come into force upon date of signature and will be valid from the date of signature.

22. Limitation on Liability

Neither Party shall be liable to the other for any indirect, incidental, or consequential damages, including loss of profits or business. The total liability of either Party under this Contract shall in no event exceed the total contract sum.

23. Force Majeure

Force Majeure means any circumstances beyond the control of the parties, including but not limited to:

23.1 War and other hostilities, (whether war be declared or not), invasion, act of foreign enemies, mobilization, requisition or embargo,

23.2 Ionizing Radiation or contamination by Radio-activity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel,

RADio-active toxic explosives, or other hazardous properties of any explosive nuclear assembly or nuclear components thereof,

2.3 Rebellion, revolution, insurrection, military or usurped power and civil war.

IN WITNESS WHEREOF the said Parties hereto have set their respective duly authorized hands hereunto, and to one other of the same tenor as these presents, on the date and place herein before mentioned.

For and on behalf of:

**BROADBAND SYSTEMS CORPORATION PLC (BSC),
LIMITED**

Signature:

Name: Innocent RUZINDANA

Title: Chief Technical Officer
Officer

Name: Gilbert N. KAYINAMURA

Title: Chief Executive Officer

For and on behalf of:

RAD DATA COMMUNICATIONS

RAD DATA COMMUNICATIONS LTD.

Signature:



Name: Udy Kashkash

Title: President & CEO