

## **SIRIOTEL PROJECT**

### **Request for Proposal for Sirius Mobile Application (Android, Phase 1)**

**Issued by:** Quality of Experience Technology Ltd (Quetech)  
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**Reference:** SIRIOTEL-RFP-SIRIUS MOBILE APP-2025

**Release Date:** 15<sup>th</sup> December 2025

**Submission Deadline:** 15<sup>th</sup> January 2026

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#### **1. Introduction**

Quality of Experience Technology Ltd (Quetech), based in Malta, is building a decentralized QoS/QoE measurement platform leveraging smartphone sensing and IoT nodes (Figure 1). The Sirius Mobile App will be the user interface for community members to generate network test data, manage their participation and rewards, and configure Sirius IoT nodes.

Quetech issues this Request for Proposal (RFP) for the development of the Sirius Mobile Application (Android, Phase 1), consisting of Lite and Full versions. The application will collect QoS/QoE KPIs, manage community member accounts, onboard/control the Sirius IoT Node, and extract the low-level signalling logs from the mobile modem.

Quetech has already developed **Sirius mobile app (TRL4)** that is functional and connected to Quetech demo cloud service. The existing **Sirius mobile app (TRL4)** version shall help the vendor to speed up the design and development phases of the new Sirius mobile app based on the experience and challenges resolved during the TRL4 development stage.

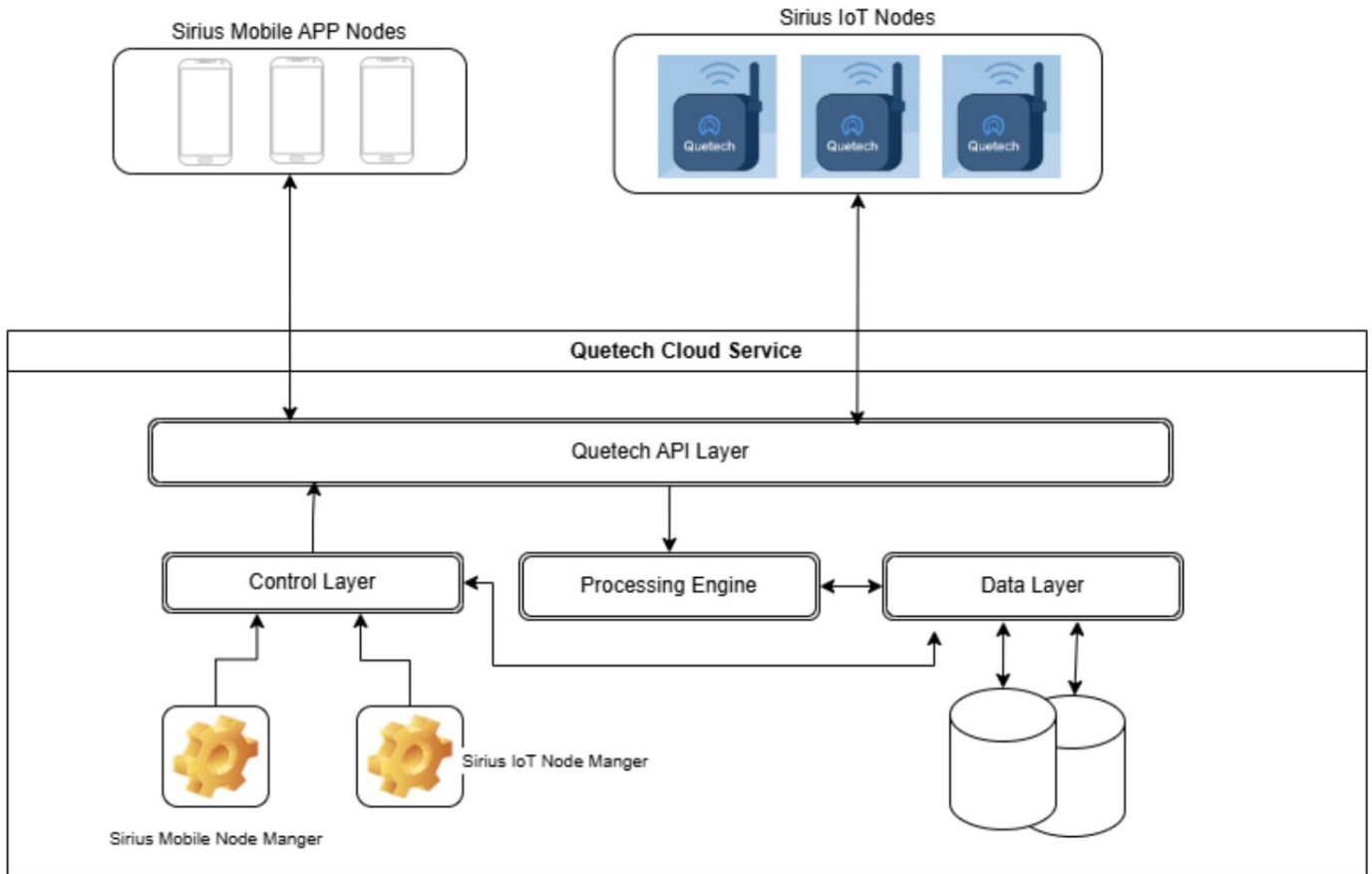


Figure 1

## 2. Overview

The vendor is requested to develop two Android applications sharing a common codebase:

- Sirius mobile app Lite: smartphone-only KPI collection, perform Internet speed tests, community account management, Sirius IoT Node onboarding, monitoring, and remote control.
- Sirius mobile app Full: all Lite features plus performing Voice / SMS / Internet speed test with advanced diagnostics and measurement.

Lite version must be production-ready and suitable for public distribution via the Google Play Store, under Quetech official developer account.

### 3. Scope of Work

The selected vendor shall provide:

#### 3.1 Sirius mobile app Lite (Android)

- Smartphone-based KPI collection (e.g., network type/technology, RSRP, RSRQ, RSSI, SINR, cell identifiers, throughput, latency, jitter, packet loss where applicable).
- GNSS-based location logging linked to measurements.
- Configurable measurement campaigns (continuous / scheduled / on-demand).
- Internet speed test (download/upload) (continuous / scheduled / on-demand)

Ability to run data throughput tests (download + upload) using Quetech-approved endpoints and methodology, including:

- Configurable test size/duration and number of iterations.
- Capture of results:
  - ✓ Download throughput
  - ✓ Upload throughput
  - ✓ Latency (RTT)
  - ✓ Jitter (app-level estimation)
  - ✓ Packet loss (best-effort, app-level)
  - ✓ Server used
  - ✓ Timestamp
  - ✓ Network type (3G/ LTE / 5G)
  - ✓ Signal KPIs exposed by Android APIs (RSRP/RSRQ/SINR if available)
  - ✓ Location (with consent) collection during the speed test session.
- Community member registration, login, and authentication.
- User profile management (country, mobile number, preferences).
- Display of quests/tasks, completed activities, and earned points.
- Wallet/balance screen for points and future airdrop eligibility.
- Local caching of measurements with secure background synchronization to the Quetech backend (REST/MQTT).
- Operation in No/low-connectivity environments with offline-store-and-forward behaviour.
- Onboarding and provisioning of Sirius IoT Nodes (QR / code scan, *serial*, *IMEI*, or token).

- Binding and unbinding of nodes to community accounts via backend APIs.
- Node status dashboard: connectivity, SIM/eSIM state, modem status, GPS lock, last telemetry timestamp.
- Remote control of drive-test campaigns (start/stop test profiles, voice/data test triggers were supported by backend and node firmware).
- Display of key KPI summaries coming from the node in real time.
- Notifications about node health, firmware updates, or configuration changes via Sirius IoT Node APIs.

### 3.2 Sirius mobile app Full (Android)

Includes all Sirius mobile app Lite features, plus:

- Drive-test features (tests + DIAG logs) (continuous / scheduled / on-demand)

The Sirius mobile app Full application must support drive-test execution workflows and collection of associated diagnostic logs for each test session (time-bounded and correlated to the test). The vendor shall propose and implement a robust correlation mechanism (session IDs, timestamps, device/node identifiers) to tie test outputs and logs together.

#### 1) Voice call test + DIAG logs

- Ability to trigger a voice call test session (outbound test call) based on Quetech-defined test scenarios, including:
  - Target number selection (pre-configured test numbers from backend and/or operator-specific numbers).
  - Call setup, answer detection, call duration control, and call termination.
  - Capture of call outcome (success/fail/busy/no answer), timestamps, and optionally basic QoE indicators (e.g., call setup time, dropped call, etc.).
- Collection and upload of associated diagnostic logs (DIAG/logcat/radio logs, modem traces where accessible) during the call test session.
- Export capability for logs (e.g., zipped bundle) and secure upload to backend.

#### 2) SMS test + DIAG logs (continuous / scheduled / on-demand)

- Ability to trigger SMS test sessions (MO and, where feasible, MT verification), including:
  - Send/receive confirmation via test gateway or backend callback.
  - Capture of timestamps, delivery status, and error codes.
- Collection and upload of associated diagnostic logs during the SMS test session.

#### 3) Internet speed test (download/upload) + DIAG logs (continuous / scheduled / on-demand)

- Ability to run data throughput tests (download + upload) using Quetech-approved endpoints and methodology, including:
  - Configurable test size/duration and number of iterations.
  - Capture of results:
    - ✓ Download throughput
    - ✓ Upload throughput
    - ✓ Latency (RTT)
    - ✓ Jitter (app-level estimation)
    - ✓ Packet loss (best-effort, app-level)
    - ✓ Server used
    - ✓ Timestamp
    - ✓ Network type (3G/ LTE / 5G)
    - ✓ Signal KPIs exposed by Android APIs (RSRP/RSRQ/SINR if available)
    - ✓ Location collection and upload of associated diagnostic logs during the speed test session.

**Notes:**

- The vendor must clearly specify what “DIAG logs” are captured on rooted Android devices, and the exact technical method used (e.g., Android Telephony APIs, logcat buffers, radio logs, packet capture, chipset-specific diag interfaces, native components).
- The UI must show clear user consent and warnings for any elevated/root-based data collection, with an option to disable at any time.
- **Remote Test Scheduling & Conflict Prevention (Mandatory)**
  - Quetech Cloud shall act as the single source of truth for node availability and test scheduling
  - For any remotely triggered test, the cloud must confirm that the target node is not already engaged in another test
  - For tests involving two endpoints (e.g., one node calling another node), the cloud must atomically reserve both endpoints before sending execution commands. If reservation of either endpoint fails, the test shall not be initiated
  - Node reservations shall be lease-based with defined expiry and renewal mechanisms to prevent permanent busy states in case of failures
  - The Sirius Mobile application shall not independently decide to start or reject tests; it shall follow cloud-issued commands and report execution state back to the cloud

- A specialised “advanced diagnostics” mode that is fully functional on rooted Android phones and can request and use superuser privileges where available, to:
  - Access additional system and radio metrics beyond the standard Android APIs (e.g., low-level modem stats, telephony service logs, chipset-specific debug outputs where permitted).
  - Capture and parse advanced QoS/QoE indicators, such as scheduling information, RLC/PDCP counters where permitted, TCP statistics, and other fine-grained KPIs.
  - Capture, filter, and export Layer 2 / Layer 3 protocol messages (e.g., RRC, NAS, and related signalling traces) using root-enabled access to packet capture, Diag/log interfaces, or kernel-level traces, subject to permitted devices, Quetech approval, and applicable legal/privacy constraints.
  - Clearly indicate to the user when advanced/root-based collection is active, obtain explicit consent, and allow the user to disable this mode at any time.
- Basic configuration flows such as measurement frequency.

The vendor must propose a technical approach for these rooted-device capabilities (e.g., use of native code, system commands, diag. interfaces, or third-party libraries) and clearly document all assumptions and limitations, including chipset or vendor dependencies.

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## 4. Technical Requirements

### 4.1 UX/UI

- Clean, modern interface aligned with Quetech branding (logo, colours, typography), and design assets (icons, illustrations, screens) to be provided by Quetech.
- Simple and intuitive navigation for non-technical community users, with advanced diagnostics features clearly separated from standard features.
- Clear warnings and consent dialogs when enabling rooted / advanced diagnostics mode, including explanations of what additional data is collected.
- Consistent layout for Lite and Full versions, with clear indication when node-related or advanced features are available.
- Responsive layouts for Android phones.

- Support for English in Phase 1, with an architecture that allows easy addition of more languages later.

## 4.2 Security & Privacy

All suppliers must comply with the **Quetech Supplier & Subcontractor Framework V1.0**, including:

- Secure authentication using industry-standard approaches (e.g., OAuth2 / JWT) integrated with Quetech backend identity scheme.
- All sensitive traffic must be transmitted over HTTPS/TLS; MQTT connections must also be secured (e.g., TLS, certificates/tokens).
- Sensitive data stored on-device must use secure storage mechanisms where applicable.
- Personal data collection and processing must adhere to GDPR principles; vendor must support Quetech in providing necessary privacy and consent flows.
- Role-based restrictions for administrative actions (where applicable in future phases).
- For rooted/advanced diagnostics mode, the vendor must ensure that any elevated access is strictly limited to the metrics and traces required for QoS/QoE analysis and must provide mechanisms to disable or revoke such access if needed.

## 4.3 Deployment & Google Play Store

The vendor is required to deliver application that is fully ready for public distribution on the Google Play Store and to support Quetech through the entire publication process.

The vendor shall:

- Prepare production-ready application bundles (AAB) for Sirius mobile app Lite, signed using keys provided or controlled by Quetech.
- Ensure compliance with all current Google Play policies, including but not limited to privacy, data safety, permissions, and background location usage.
- Clearly document and justify any permissions related to diagnostics and propose a strategy that is acceptable within Google Play policy constraints.
- Provide all required store listing materials, including:
  - App name, short and full descriptions.
  - High-resolution app icons.
  - Feature graphic(s) and promotional graphics as requested by Google Play.

- Screenshots for different device sizes.
- Privacy policy links and data safety form input guidance.
- Assist Quetech in configuring tracks (internal testing, closed/open testing, production) within Quetech Google Play Console account.
- Support at least one iteration of review feedback from Google in case of policy or review rejections during initial publication.
- Provide documentation describing the release process so Quetech can create future builds and updates independently.

Lite app must be published under Quetech official Google Play developer account. Ownership of the listing, signing keys, code, and all associated intellectual property will remain with Quetech.

#### 4.4 Deliverables

Key deliverables include, but are not limited to:

- Sirius **mobile app** Lite and Sirius **mobile app** Full Android applications (source code, project files, and build scripts).
- Implemented advanced diagnostics mode for rooted devices as described above, including L2/L3 message capture where feasible.
- API integration layer documentation (endpoints, payloads, auth flows).
- Technical design and architecture documentation, including details of the rooted/diagnostics implementation.
- Implementing the UX/UI design files and assets provided by Quetech.
- Test plans and test reports (unit, integration, basic performance, and validation of rooted/advanced diagnostics mode on supported devices).
- Google Play Store listing assets and publication guide.
- Final AAB for Lite version deliverables corresponding to the version released on Google Play.
- APK build for Full version that require separate distribution.

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#### 5. Project Timeline Requirements

The vendor must align with the SIRIOTEL Project Plan deadlines.

## Key Deadlines

Milestones	Due
M1 – Requirements & UI/UX Design integration: requirements validation, user flows, abide by the wireframes and visual design provided by Quetech	<b>10<sup>th</sup> March 2026</b>
M2 – Sirius mobile app Lite Core Implementation: KPI engine, community account flows, backend integration, node onboarding, monitoring, remote control, and initial internal test build	<b>30<sup>st</sup> April 2026</b>
M3 – Sirius mobile app Full : rooted-device diagnostics, and L2/L3 capture workflows, integrated with backend APIs	<b>31<sup>st</sup> May 2026</b>
M4 – QA, Security & Pre-Release: bug fixing, performance tuning, validation of rooted functionality on a representative device set, and preparation of Google Play pre-release builds for the Lite version	<b>15<sup>th</sup> June 2026</b>
M5 – Google Play Launch & Handover: support for publishing the Lite version to Google Play, final documentation, and knowledge transfer	<b>15<sup>th</sup> Jul 2026</b>

Suppliers must confirm in their proposals that they **can meet these mandatory project dates**.

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## 5. Key Vendor Qualifications

- At least five years of demonstrated experience in Android application development.
- Proven experience publishing and maintaining apps on the Google Play Store (links to live apps required).
- Experience with telecom, networking, or IoT applications is strongly preferred.

- Demonstrated experience with rooted Android environments, packet capture tools, or low-level radio/network diagnostics is a strong advantage.
  - Familiarity with MQTT, REST APIs, and real-time telemetry handling is an advantage.
  - Ability to provide ongoing maintenance and feature development after Phase 1 is preferred.
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## 6. RFP Submission Guidelines

- **Deadline for submission: 15<sup>th</sup> January 2026 (17:00 CET).**
- Proposals must be submitted electronically in PDF format to [procurement@quetech.eu](mailto:procurement@quetech.eu).
- Late submissions will not be considered.

Proposals shall include:

### 6.1 Technical Proposal

- Company overview and relevant experience.
- Case studies or links to previously delivered Android apps on Google Play.
- Detailed compliance matrix against technical requirements stated in section 4.
- Technical approach and high-level architecture proposal, including the approach to rooted devices and L2/L3 message handling.
- Project plan, estimated effort, and timeline by milestone.
- Team structure and key CVs.
- Detailed commercial proposal (pricing model, assumptions, payment milestones).
- Support and maintenance options (SLAs, response times, upgrade policy).

### 6.2 Financial Proposal

- Unit prices (Software Bill Of Material 'SBOM').
- Engineering hourly rates.
- Cost breakdown (BoM, NRE, licensing fees).
- Warranty & Support Terms.
- Payment schedule proposal (aligned with Quetech framework).

- Training (vendor shall specify the offered program and duration).

### 6.3 Company Information

- Company profile and certifications.
- EU VAT number.

### 6.4 Legal & Regulatory

- Confirmation of adherence to:
  - EU procurement principles with compliance to regulations and standards.
  - Data handling and protection compliance under EU GDPR.
  - Mandatory Cyber Resilience (compliance with CRA Act), and security updates for the software lifetime (5 years+).
  - Acceptance of Quetech Subcontracting Framework obligations.

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## 7. Evaluation Criteria

All proposals will be evaluated according to EU procurement standards ensuring transparency and fairness.

<b>Criterion</b>	<b>Weight</b>
<b>Technical fit and understanding of requirements</b>	<b>40%</b>
<b>Experience with Android and Google Play distribution</b>	<b>10%</b>
<b>Demonstrated capability with rooted-device or advanced diagnostic solutions</b>	<b>10%</b>
<b>Quality and clarity of the proposed architecture and UX approach</b>	<b>10%</b>
<b>Cost and value for money</b>	<b>10%</b>
<b>Timelines and resource availability</b>	<b>10%</b>
<b>References and past performance</b>	<b>10%</b>

The evaluation committee may request clarifications through a written process.

## 8. Contractual Terms

- Governing Law: Malta. Arbitration venue: Valletta, Malta
  - Payment Terms: 30 calendar days from receipt of valid invoice.
  - Intellectual Property: All deliverables and IP rights will be owned by Quetech.
  - Termination: Six (6) months' notice required in non-default scenarios.
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## 9. Terms & Conditions

Based on Quetech subcontracting framework:

### Payment Structure:

- No advance payment will be made without an equivalent, unconditional, and valid bank guarantee, issued by an approved bank, valid until the project's completion and final acceptance.
- **40%** payment via a signed preliminary software acceptance certificate (upon completion of M1, and M2).
- **30%** payment via a signed Mobile App Lite Version acceptance certificate (upon completion of M3 and M4).
- **20%** payment via a signed commissioning final acceptance certificate (upon completion of M5: Google Play GoLive and Launch).
- **10%** performance guarantee payment via a signed completion certificate of one-year L3 support certificate.

### General Conditions:

- All milestones must be confirmed by official acceptance, signed by our project manager, before any payment is released.
- 0.5% of the contract value for each calendar day of delay from the approved schedule, with a maximum cap of 20%.
- All bank guarantees must remain valid for at least 30 days after the fulfilment of the last contractual obligation.
- One year free of charge warranty period shall be proposed.

- Confidentiality valid 3 years after termination.
  - All IP generated belongs to Quetech including source code.
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## 10. Timeline

- **RFP Release Date:** 15<sup>th</sup> December 2025
  - **Proposal Submission Deadline:** 15<sup>th</sup> January 2026
  - **Evaluation Period:** 15–30 January 2026
  - **Supplier Selection & Notification:** 4<sup>th</sup> February 2026
  - **Kick-Off Meeting:** 9<sup>th</sup> February 2026
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## 11. Annexes

- **Annex A** – High Level Design Specification
  - **Annex B** – Project Plan & Deliverables
  - **Annex C** – Quetech Supplier & Subcontractor Framework
  - **Annex D** – Compliance Matrix Template
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**Issued by:** Quality of Experience Technology Ltd (Quetech)

**Date:** 15<sup>th</sup> December 2025

### Authorized Signatures:

**Project Lead**

**Mr. Abdulmagid Bensaid**



**Technical Lead**

**Mr. Sari Mansour**

