Open Networks Ecosystem Competition

ARIANE II

Accelerating RAN Intelligence across Networks Ecosystems

Department for Science, Innovation & Technology

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Accelerating RAN Intelligence across Networks Ecosystems

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Document History

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V 0.1	Pascale Searle	10/12/25	First Draft
V 0.2	TIP consortium	15/12/25	Input from Consortium partners
V 1.0	Pascale Searle	24/12/25	Approved version to be submitted to DSIT
V1.1	Vishal Mathur	03/02/26	Final Closure report with revisions including project name consistency
V1.2	Vishal Mathur	09/02/26	Final cash flow recorded within Project Closure Report

ONP Final Project Report: This report is expected to be publishable externally and provided to DSIT in an accessible format. The details are outlined in point 98 of the "DSIT Guidance for Live Open Network Projects". This template looks to outline the key sections we'd expect to see in projects final reports and provide prompts and guidance around the content for each section.

NAME OF PROJECT – ARIANE II (April 1st – December 31st 2025)	
List of partners	Arqit, BT, Digital Catapult, NetReply, HCLTech, TIP, Viavi
Total funding amount	Total project value: GBP £2,458,546.26 (DSIT grant value: GBP £1,499,990.10 of which £1,276,495 was claimed; Industry funded: GBP £1,182,051)
Locations	UK
Executive Summary	
ARIANE was developed to address three specific industry needs: API understanding and harmonization across RIC platforms, creating a rich set of AI driven applications and ensuring performance, security and portability of RIC apps (xAPPS and rAPPS). The extension to ARIANE, ARIANE II, picked the outcomes of ARIANE developed given the time and budget constraints to create additional value for the Open RAN industry. In doing so, ARIANE II added additional cohorts to the project: Digital Catapult (SONIC Labs), which is a testbed including RICs from CapGemini, RU-DU-CU infrastructure in the lab indoor test network (minimum 3 small cells with UE devices) with the showcase operations in Indoor OTA sites and new non-Real Time RIC platform (Capgemini) and APIs respectively.	

Specifically, the Energy management use cases developed in ARIANE, based on advanced AI/ML methods continued to evolve in ARIANE II and were extended in scope to include MIMO mode re-configuration in addition to cell ON/OFF. The use case were developed on the new Capgemini non-Real Time RIC platform, as rAPPs, which managed both the simulated RF environment (through Viavi RSG) and Indoor OTA sites provided through SONIC Labs.

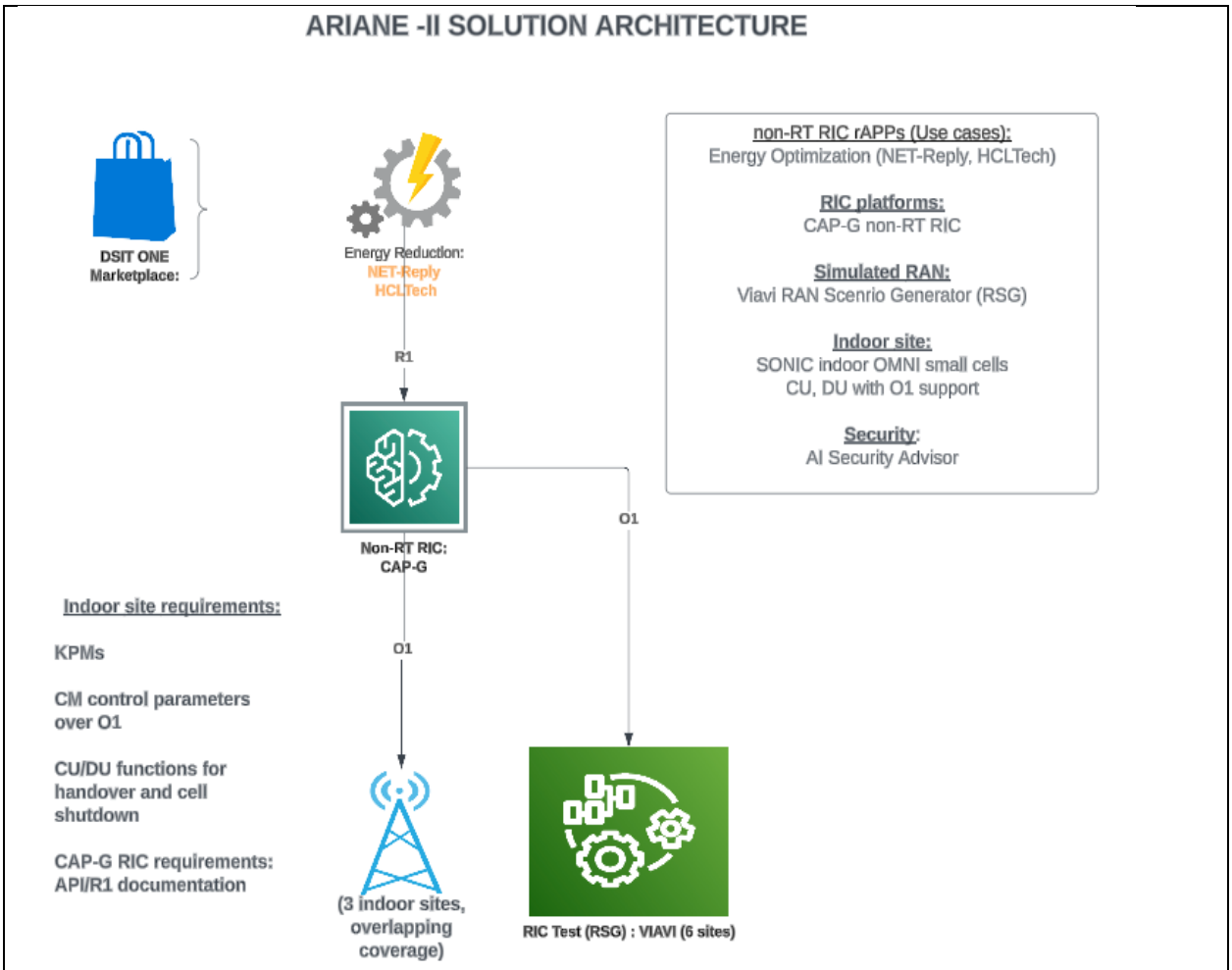
With these extensions, ARIANE II proved readiness of the Energy management rAPPs for deployment in private networks using a variety of techniques: cell-shutdown and MIMO mode re-configuration (enabling automated switch between high capacity and low capacity modes depending upon throughput requirements, and therefore enable overall power saving).

The Capgemini non-RT RIC connectivity to the Viavi RSG was a new development for SONIC Labs. This provided the SONIC Labs the ability to host, train and run more powerful rAPPS through a RIC platform with hundreds of users and high levels of traffic that exercised all possible real-world scenarios through the Viavi RSG. The project used the non-RT RIC for one direction for collecting data from AI-RSG and used the direct REST interface for configuration changes.

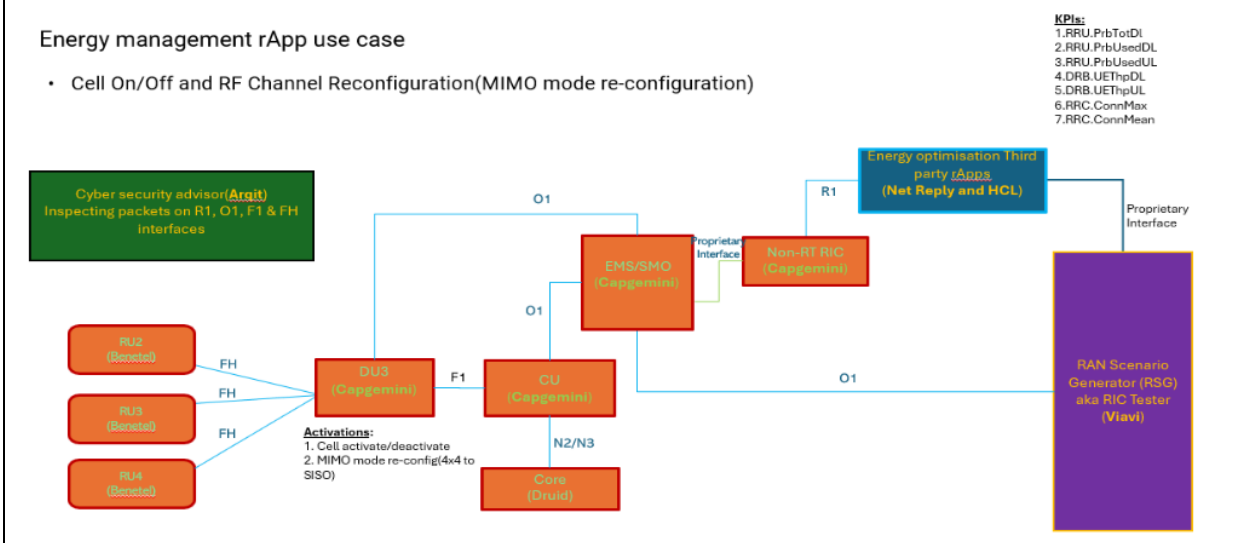
Added to the above scope, ARIANE II also brought in advanced security principles (quantum-safe encryption risk analysis). It demonstrated the application of AI assisted encryption risk remediation advice as the security extension to the project and developed a prototype AI advisor based on commercial LLM generative AI, additionally trained with public security information including (e.g.) standards body recommendations from NCSC, NIST, GSMA; known security vulnerabilities (CVE/CWE) and best practices for security mitigations. Chat-based user interaction through extension of the existing Encryption Intelligence capability, which was deployed to monitor encryption in ARIANE phase I.

Finally BT will provided reflections on the ARIANE II solution from the perspectives of commercial readiness, adoptability (on a commercial network), functionality, performance and security, as per deliverableD11.3.

Deployment Summary



A minimal number (3) of indoor sites are prescribed to keep the complexity low and serve the purposes of proving the ability for the rAPPS to seamlessly connect and manage these indoor deployed sites along with the 6 high density sites configured through the Viavi RSG. We also kept the number of users in the indoor sites to a minimum, also to show that measurements and controls can be performed on these sites fulfilling all functional requirements.



Results and Benefits Achieved

Arqit

Arqit led the security workstream of ARIANE II and deployed the Encryption Intelligence (EI) solution within the Sonic Labs to assess the encryption risk of the O-RAN integration environment. Arqit's Encryption Intelligence (EI) solution leverages AI-driven automation to assess and enhance the cryptographic security of O-RAN environments efficiently. It reduces manual efforts by ingesting and applying security specifications directly, enabling faster remediation of vulnerabilities.

- AI-driven specification ingestion: EI solution synthesized security documents and standards, such as post-quantum cryptography studies from O-RAN working group 11 ("Study on Post-Quantum Cryptography (O-RAN.WG11.TR.PQC-Security.0-R004-v01.00)"), to continuously update and improve the O-RAN environment's encryption posture without manual rule creation.
- Automated policy management: The system autonomously managed complex policy sets allowing users to shift from manual management to supervisory roles focused on higher-value tasks.
- Interactive natural language dialogue: EI incorporated large language model (LLM) technology to engage users in contextual conversations about risk assessments and security best practices, complemented by diagrammatic visualizations of the O-RAN topology for clarity. User can apply filters in the topology diagram window to filter particular network elements, IP address and timeframe. This interaction model improved usability compared to traditional tabular interfaces.

AI enabled EI solution has achieved the ambition to address the 1st step of the NCSC roadmap for post-quantum cryptography migration by capturing the current encryption standards which vulnerable to quantum computers.

As per the scope of Ariane II, it captures the encryption profiles of O1 and R1 interfaces. Also EI solution captures the traffic where no encryption was in use in the interface between:

1) HTTP traffic between Viavi and HCL rApp, as Ariane-II is using a Viavi proprietary REST interface over HTTP for CM activations.
2) Capgemini confirms that the communication between the SMO and the Non-RT RIC uses HTTP rather than HTTPS.

Digital Catapult

The ARIANE II project, delivered by Arqit, HCL Technologies, Reply UK, TIP, and Viavi Solutions in collaboration with Digital Catapult's SONIC Labs, focused on progressing Open RAN energy-saving solutions from simulation to commercial-readiness. Building on the initial ARIANE project, Digital Catapult provided an Open RAN over-the-air indoor (OTA) test network comprising Capgemini's Non-RT RIC, O-CU, O-DU and Bentel O-RUs. Within this environment, third-party rApps developed by HCL and Reply UK were successfully integrated with the Capgemini Non-RT RIC using the standardised R1 interface, demonstrating interoperability and validating real-world operation of energy-optimisation functions. Through this integration, rApps collected Performance Management KPIs from the OTA test network and executed actuations such as cell switch-off and MIMO layer adjustment to drive energy-saving behaviours.
In parallel, Capgemini's Non-RT RIC was also integrated with Viavi's AI-RSG platform to mirror the OTA setup in a simulated environment, enabling repeatable testing and comparative analysis. OTA results demonstrated 0.04–2.6% energy savings at the DU level; however, RU-level measurements were constrained by the absence of M-plane control. Despite this, scaling these savings across a mobile operator's network suggests meaningful cumulative reductions. Simulated testing using AI-RSG achieved higher energy savings of 5.85–6.17%, including RU switch-off, highlighting the broader savings potential when full control-plane functionality is available.

HCLTech
HCLTech Energy-Saving rApp delivered clear benefits across all test environments, showing that rApp can safely and effectively reduce RAN energy usage while keeping network performance stable. The solution helps operators cut energy costs, improve efficiency, and move toward more sustainable network operations.
Across the three variants, the rApp achieved measurable results:
In the ES mMIMO rApp variant, it reduced energy consumption by 6.17% and improved energy efficiency by 13.65%.
In the OTA setup with CAPG Non-RT RIC, SMO, CU/DU, and Benetel RU, it achieved a 6.92% reduction in overall power usage, lowering average consumption from 510 W to 488 W, and saving 2.6% average energy consumption at the DU.
In the OTA mimic environment, the rApp delivered 33% energy savings and 9.84% higher energy efficiency.
Importantly, these optimisations did not affect QoS, confirming the rApp's ability to make safe, reliable decisions. Its vendor-agnostic design and automated closed-loop operation make it easy for operators to integrate and scale. Overall, the rApp supports lower OPEX, reduced carbon footprint, and provides a strong base for future AI-driven

network optimisation.

NetReply

NetReply's Energy Saving rApp showed that it can reduce power use in a 5G O-RAN by making smart decisions based on real network data. It reads CM and PM information through the R1 and O1 interfaces, understands how the cells and radios are set up, checks live traffic levels, and then decides when a cell or antenna mode can be safely turned down. The Non-RT RIC sends and manages these policies, and dashboards and logs confirm every action, so nothing happens in the dark.

In the direct Viavi RSG setup, the rApp achieved 8.05 percent energy savings. When the same idea ran through the Cap-G Non-RT RIC, it delivered 5.85 percent savings and a strong improvement in energy efficiency at 42.99 percent. In the O-RAN setup, only one of three cells could be switched off, which capped the energy saving at 2.02 percent, but the rApp still behaved as expected. Across all scenarios, the rApp proved it can operate reliably in both simulated and live environments.

The impact comes from how the rApp uses the data. It checks cell layout, which radios must stay active, antenna mode settings, resource limits, and real traffic load through PRB usage. With that mix of inputs, it can cut energy use without harming service quality. Older methods

leaned on static schedules or manual tweaking, which never matched real network conditions.

For operators, this means lower running costs, less wasted energy, and progress on sustainability targets while keeping performance steady. Because the rApp follows O-RAN standards and fits cleanly into a SMO/Non-RT RIC setup, it works well with existing systems and is practical to deploy in real networks.

Anyone wanting the same benefits would follow the same steps: onboard the rApp into the SMO/Non-RT RIC, set up R1 and O1 connectivity, provide accurate CM and PM data, verify policy actions, and test under different traffic loads. With the right data and interfaces in place,

the savings can be repeated.

NetReply shows that automated RAN energy optimisation isn't theory anymore. It works, it's measurable, and it reduces power use while keeping the network performing as it should.

VIAVI

VIAVI adapted its AI-RSG framework to provide a comprehensive RAN simulation and validation environment for consortium partners. The AI-RSG solution enabled testing and validation of AI-driven RAN applications across multiple configuration topologies and scenarios.

Key technical benefits achieved include:

- Accelerated app validation: AI-RSG's App Validation Engine allowed partners to define goals and control KPIs, enabling performance comparison of RAN with and without AI applications.

- Rapid data generation: The Data Set Generation module simulated large volumes of training data in hours, significantly reducing the time needed for AI/ML model development.
- Support for complex 5G use cases: Including Energy Saving (ES) rApps with beam-level mMIMO optimizations on different SMO platforms.
- Multi-vendor testbed validation at SONIC Labs: Partners validated AI/ML applications in a controlled SONIC Labs environment, ensuring robust performance and integration.
- Enhanced innovation: Facilitated rapid experimentation, optimization, and validation of AI-driven network solutions.

Security

Please see report

1. 20251218 - ONP Security Report Framework-Ariane-II-Arqit.docx
2. Entries above and below for Arqit

High level summary of project costs

The total project value was GBP £2,458,546.26. DSIT grant value was GBP £1,499,990.10 of which £1,276,495 was claimed and Industry match funded GBP £1,182,051

Approximately 22% of total DSIT grant claimed was sub-contractor costs at GBP £291,499, and labour costs claimed was 72% of total DSIT grant claim at GBP £918,901.

Project Highlights

Arqit

O-RAN's open, multi-vendor architecture expands the attack surface, introducing new vulnerabilities. Securing this environment requires dynamic, intelligent solutions. Arqit's involvement in ARIANE II project was to assess the security of the O-RAN architecture and introduce AI-driven strategies for PQC migration.

Arqit's ambition was to bring in AI driven encryption risks discovery approach to increase efficiency and reduce the remediation time for system vulnerabilities and increase confidence for CSPs to deploy off-the-shelf ORAN solutions.

During the timeframe of the project Arqit submitted following deliverables:

- Security Report-1
    - Formulated a security strategy and deployed EI solutions in the integration environment to capture and assess the security posture of the environment. As expected during the initial phase of the integration activities, network interfaces between the O-RAN elements were either not security protected or protected with weaker encryption.
    - Highlighted the best practices to develop a secure application and integrate the application and network elements to have a secure network.

    - Highlighted the guidance from NCSC for post-quantum cryptography migration to instill secure-by-design principle and thinking beyond conventional security amongst the project partners.
- Security Demo Video-1
    - Developed an AI enabled advisor on commercial LLM generative AI to engage interactively with the user in a contextual natural language dialogue.
    - Demonstrated the AI capability of the Encryption Intelligence (EI) solution to assess and enhance the cryptographic security of O-RAN environments efficiently.
    - Incrementally captured the security posture of the integration environment. Observed that the O1-interface is SFTP which uses SSH to secure the interface, R1-interface is using TLS and no encryption between Non-RT RIC and SMO.
    - Produced a topology diagram from the captured traffic.
- Security Demo Video-2
    - Upgraded the AI enabled advisor to synthesize security documents and standards (O-RAN, GSMA, NCSC,etc) to continuously update and improve the O-RAN environment's encryption posture without manual rule creation.
    - Enhanced the capability to draw the topology diagram with features to apply filter on network element, interface and time range.

Added features to create policy automatically based on the outcome of the interactive chat session.

AI enabled EI solution has achieved the ambition to address the 1st step of the NCSC roadmap for post-quantum cryptography migration by capturing the current encryption standards which vulnerable to quantum computers.

Infrastructure team members from Digital Catapult helped and supported in

- Designing of the integration environment
- Positioning probes in the environment alongside ORAN OTA test network
- Deployment of probes in the environment and configuring the firewall/switches to direct the traffic to probes
- Mirroring traffic from the O-RAN elements
- Collection of traffic or intelligence from the environment
- Digital Catapult and Arqit cooperated to ensure a secure interface shared the essential but minimum data between the SONIC Labs and Arqit cloud services, paving the way for future projects and use-cases to benefit from the security insights offered.

This shows having a dedicated infrastructure team smoothen the deployment and configuration of the integration environment.

Digital Catapult

Digital Catapult played a central role in ARIANE II by providing a fully integrated Open RAN over-the-air indoor test network to advance real-world validation of energy-saving solutions. The testbed, comprising Capgemini's Non-RT RIC, O-CU, O-DU and Bentel O-RUs, enabled partners to integrate and test third-party rApps over the standard R1 interface, proving interoperability and practical readiness. The facility supported live Performance Management

KPI collection and network actuations such as cell switch-off and MIMO layer adjustments. Additionally, Digital Catapult supported replication of its OTA setup within Viavi's AI-RSG simulator, enabling scalable comparative testing and reinforcing the project's commercial-readiness goals.

HCL

HCLTech has successfully validated its Energy Saving rApps through a collaborative effort with VIAVI, Capgemini, Arqit, and Digital Catapult. Presented at a UKTIN industry event, these solutions were tested across diverse environments, ranging from complex urban simulations to OTA indoor deployments at Digital Catapult's SONIC Labs. The results confirm significant energy reduction capabilities across both simulated and physical network infrastructures.

NetReply

NetReply integrated and validated its Energy Saving rApp with the Non-RT RIC, enabling automated cell switch on/off and MIMO-to-SISO actions using real CM/PM data. The rApp delivered measurable energy savings across Viavi RSG and O-RAN setups, proving reliable behaviour in both simulated and OTA environments.

VIAVI

VIAVI's key highlights in the project include:

- Adapting AI-RSG modules to support partner-specific AI/ML applications and KPIs.
- Enabling automated scenario generation for complex 5G RAN configurations.
- Supporting multi-vendor testbed validation at SONIC Labs to ensure interoperability and performance.
- Providing App Validation Engine and Data Set Generation tools, accelerating AI/ML development cycles.
- Participation in consortium demonstrations, showcasing the value of AI-driven RAN validation workflows.

Project Conclusions

Overall project conclusions

The ARIANE II project successfully demonstrated industry-leading innovation across security, energy efficiency, and AI-driven automation in Open RAN environments. The security workstream, led by Arqit, introduced an industry-first AI-driven encryption risk discovery approach for open and disaggregated O-RAN systems, enabling dynamic visibility of encryption posture, alignment with NCSC post-quantum cryptography guidance, and confident deployment of off-the-shelf network elements across shared infrastructure. Through the use of AI-enabled EI solutions and standards-based LLM training, the project established a robust template for ongoing authentication, high-grade encryption, and future PQC migration.

In parallel, the project validated AI-driven energy optimisation at scale. Digital Catapult independently confirmed the readiness and scalability of Open RAN energy-saving solutions through rigorous OTA testing, highlighting the importance of open interfaces, real-world conditions, and collaborative integration. HCLTech demonstrated both reinforcement learning–based and rule-based rApp approaches that delivered measurable RAN energy reductions without degrading performance, proving flexibility, explainability, and vendor-neutral deployment across simulated, physical, and hybrid networks. NetReply further validated commercial readiness, showing reduced power consumption, preserved QoS, standards compliance, and strong observability. VIAVI confirmed that its AI-RSG platform effectively supports rapid testing, KPI-driven optimisation, and interoperability of AI/ML RAN applications within SONIC Labs, accelerating time to market and future adoption.
Collectively, ARIANE II establishes a strong, standards-aligned foundation for secure, energy-efficient, and automated Open RAN deployments, boosting operator confidence, supporting sustainability goals, and advancing the commercial readiness of next-generation RAN technologies.

Partners' Conclusions

Arqit

The ambition of the ARIANE II security workstream has been to bring in AI driven encryption risk discovery approach to increase efficiency in capturing the security posture of the integration environment.
In addition to deploy AI enabled EI solution in the integration environment in Sonic labs to capture the security posture dynamically, the focus was to enable CSPs to deploy off-the-shelf application and network elements confidently, follow the guidance from NCSC for post-quantum cryptography migration, train and user the commercial LLM generative AI with standards from NCSC, NIST, GSMA, O-RAN alliance; and known security vulnerabilities (CVE/CWE), to ensure best practices for security mitigations.
Disaggregated Open RAN system components are deployed across increasingly open and shared infrastructure. The use of shared infrastructure and dynamic deployment of new network elements, functionalities and applications enforces the need for dynamic encryption risk discovery approach. Sooner the user can identify the network element using weaker encryption it will be quicker to respond and address the risk. Disaggregation requires the use of critical data flows over standardized open interfaces between system components and has a direct implication on solution-wide security considerations. Trusted systems must be able to communicate and exchange data with each other, yet there is an enforced need to undertake ongoing authentication checks on all system components and furthermore to increase the use of high-grade encryption. This eliminates the possibility of other systems inspecting and accessing data they should not be exposed to.
The bold objectives of this security workstream make DSIT ONE ARIANE II an industry-first initiative to capture the encryption risks for an open and disaggregated ORAN environment and ready with a template for PQC migration as per guidance from NCSC.

Digital Catapult

Digital Catapult concludes that ARIANE II has effectively proven the readiness of Open RAN energy-optimisation solutions through rigorous testing in our OTA environment. The project confirmed the importance of open interfaces, real network conditions and collaborative integration in driving practical, scalable energy-saving outcomes. The results highlight the critical role of independent test facilities in supporting market adoption and industry confidence in Open RAN solutions.

HCL

ARIANE II project successfully demonstrated HCLTech's ability to apply AI-driven and rules-based automation techniques to reduce RAN energy consumption without compromising network performance. The work validated two complementary optimization approaches: a reinforcement learning (RL)–based model used in Variant 1, and rule-based energy-control logic applied in Variants 2 and 3. Both approaches proved effective within their respective environments and collectively showcased a flexible optimization framework suitable for diverse operator needs.

Variant 1 confirmed that RL can autonomously learn optimal energy-saving actions under complex Massive MIMO conditions, achieving measurable efficiency gains in a large-scale simulated network.

Variants 2 and 3 demonstrated that rule-based policies can reliably drive energy reductions in real and mimic OTA environments, offering operators predictable, explainable, and easily deployable optimization behaviour. Across all variants, the rApp maintained stable KPIs, confirming that energy savings can be achieved safely without service degradation.

The project advances HCLTech's role in intelligent RAN automation by delivering a vendor-neutral, standards-aligned rApp capable of operating across physical, simulated, and hybrid network architectures. It establishes a strong foundation for further work in both ML-based and deterministic optimization, supporting operators in reducing OPEX, meeting sustainability targets, and accelerating automation adoption within open and virtualized RAN environments.

NetReply

The rApp worked as intended: it cut power consumption without harming QoS, followed O-RAN standards, and showed clear observability through dashboards and logs. Its AI/ML-driven decisions handled varying traffic conditions and confirmed readiness for wider commercial use.

VIAVI

The project confirmed that VIAVI's AI-RSG can be effectively adapted to support diverse AI-driven RAN applications in controlled testbed environments. Key conclusions include:

- AI-RSG enables rapid testing and validation of AI/ML network applications, reducing time to market.

- The platform supports data-driven performance optimization and KPI-based evaluation, enhancing network management capabilities.
- Collaboration with consortium partners validated interoperability, scalability, and robustness of AI-RSG within SONIC Labs.
- The experience provides a foundation for further refinement, deployment, and commercial adoption of AI-RSG in next-generation RAN testing.

Next Steps

Arqit

Arqit would further enhance the AI capability of the EI solution to

- Ingest newer version of the security standards from governing bodies and design documents (HLD/LLD) of the project.
- Automatic management (Create, Read, Update, Delete) of policies based on integration of new network element.
- Automatic management (Create, Read, Update, Delete) of policies based on interactive dialogue in a natural language.
- With strong commitment from all the partners and focused integration activities in Sonic lab, security posture of the ORAN solution could have been generated sooner.
- Partners should follow security by design principles to achieve the security implementation efficiently.

BT

Please see BT's recommendations as part of D11.3. Review and Acceptance by BT

Digital Catapult

Digital Catapult has applied for TIP accreditation and is currently under review to become a TIP Authorised Lab. This designation will enable the Digital Catapult facilities to serve as a future testbed for telco-led or sponsored RAN, AI, and compute-based testing activities coordinated through TIP.

HCL

Move from the indoor lab environment to field trials with communication service providers to validate rApp performance on diverse 5G networks.

NetReply

Extend testing in larger, real-world RAN deployments, refine models using broader KPI datasets, and repeat integration cycles to further improve savings. Continue OTA troubleshooting to push the O-RAN scenario's efficiency closer to the simulated results.

TIP

ARIANE and ARIANE II are showcases of community based R&D and solution hardening in the SMO-RIC domain which is increasingly becoming a relevant area of development for Telecom operators.

As they pursue transitioning legacy and closed RAN systems to open systems, telcos are looking to transition legacy SON applications, increase their own level of control and transparency of the RAN through 3rd party SMO-RIC systems and well tested rAPPs, xAPPs, dAPPs, which can be trusted to be put into production.

The TIP community would like to progress from ARIANE II towards further R&D and commercial grade testing with the UK market environment. But building from where ARIANE II left off.

The opportunity is for TIP and UK DSIT and the UK Telco ecosystem to closely align on Modern Industry Strategy and together pursue advancements in future connectivity and AI systems. Within the TIP community, there is not only a push towards building automation into networks (brownfield and open) but also tackle a path for AI for Networks and Networks for AI.

In line with DSITs 4 year Modern Industry Strategy, TIP and its community is keen to develop UK's ambitions in Advanced connectivity and AI.

Initiatives could include R&D and commercial initiatives that consider elements such as:
(i) approaches towards the network data challenge. How should Telecom operators or enterprises safely expose sovereign network data to allow for AI/ML algorithms within priority AI apps to be trained (in sandbox digital twin) environments such that any given telco or service provider can trust that the applications will apply attenuations into the RAN system correctly.
(II) address issues of portability of apps and conflict management
(III) apply AI into RAN whereby use case / domain specific language models can be built and trained against exposed network data effectively and rapidly and be used to manage AI application functions more effectively.

Even better, federated learning across common data structures can be produced into utilisable frameworks by telcos and vendors, to build more specific SLMs or LLMs that address AI use case compute requirements.

(IV) the use of agentic functions to simplify communication/transaction across open interface within

(V) development, trial and industrialisation of Agentic and AI applications that allow for vertical sectors to query for and extract responsive quality driven network capability and inferencing capacity at the edge, such that telco networks are offering advanced network and AI architecture for businesses and citizens to derive maximum AI value.

VIAVI
VIAVI will focus on:

- Expanding support for additional AI-driven RAN applications and SMO platforms.
- Enhancing automation, scenario diversity, and real-time adaptability of AI-RSG.
- Exploring industrial deployment opportunities and customer adoption of AI-RSG for RAN validation.
- Continuing research and development to improve KPI monitoring, dataset generation, and testbed interoperability.

Media Library

Arqit
https://arqitgroup.com/resource

HCL
Test Reports:

- D11.1 AI RSG Test Report – SONIC Labs.docx
- D11.2 OTA Test Report – SONIC Labs.docx

Demo Videos:

- UKTIN Event

HCLTech ARIANE DSIT Demo - 27-11.mp4

- Final Demo : Digital Catapult Event

HCLTech Ariane 2 ES Demo Long Video.mp4

NetReply
Energy-saving metrics, scenario results (8.05%, 5.85%, 2.02%), architecture diagrams of the rApp–Non-RT RIC integration, logs, dashboards, and validation artefacts captured during the RSG and O-RAN runs.

VIAVI
VIAVI contributions may include:

- *Architecture and workflow diagrams of AI-RSG adapted modules.*
- *Screenshots of App Validation Engine and KPI dashboards.*
- *Demonstration videos of AI-RSG-enabled RAN application testing at SONIC Labs.*
- *Technical presentations and reports from consortium workshops and reviews.*
- *Sample datasets and results metrics illustrating performance improvements with ES rApps (controlled access).*