



SmartRAN Open Network Interoperability (“SONIC Labs”) Programme

Cohort 6 – February 2025

1. DIGITAL CATAPULT

1.1. Digital Catapult helps business grow through innovation and the adoption of deep tech. We partner with government, industry and academia to find solutions that benefit the UK. As a part of the Innovate UK Catapult Network we show what is possible, positive and productive with deep tech. Our capabilities and expertise are focused around significant challenges and opportunities facing the UK’s economy, where technology can play a major role in providing solutions.

2. PROGRAMME OVERVIEW

2.1. Programme Description

2.1.1. SONIC (SmartRAN Open Network Interoperability Centre) Labs is a commercially-neutral, collaborative, environment for testing interoperability and integration of open, disaggregated and software-centric network solutions and multi-vendor architectures.

2.1.2. The SONIC Labs programme (“**SONIC Labs Programme**”). has been developed by Digital Catapult in collaboration with Ofcom and funded by DSIT to enable and encourage innovative vendors to participate in the UK telecoms ecosystem and facilitate a more rapid path towards 5G deployment in UK networks, by taking early-stage standalone products, integrating them and supporting commercial engagement. This Open Call is an opportunity for vendors to participate in a technology access programme (See Annex for further details) (“**Programme**”).

2.2. Programme Objectives

2.2.1. Programme objectives for Cohort 6 will address conformance testing, badging and certification of Open RAN systems in line with the following SONIC Labs programme objectives:

2.2.1.1. Enable and encourage innovative suppliers of 5G Open RAN products to participate in the UK telecoms ecosystem.

2.2.1.2. Facilitate a path towards deployment by UK mobile network operators of Open RAN technologies in UK mobile telecommunications

2.2.1.3. Provide UK mobile network operators (large and small) with a pipeline of innovative, validated suppliers and products to choose from

2.2.2. It is envisaged that the outcomes of Cohort 6 will provide UK mobile network operators (large and small) with a pipeline of innovative and competitive suppliers and products to choose from thus facilitating a path towards deployment by UK mobile network operators of Open RAN technologies in UK mobile telecommunications.

2.3. Programme Judges

2.3.1. During the application stage, the judges will be responsible for scoring the applications according to the process and criteria set out in these Competition Terms. The judges will be chosen based on their experience and expertise. The Programme Judges comprise:

2.3.1.1. Internal Judges

A number of judges from Digital Catapult will help judge the applications.

2.4. Programme Partners

2.4.1. The following organisations are partnering with Digital Catapult to deliver the Programme:

- 2.4.1.1. **Programme Funders**
Digital Catapult is working as DSIT's delivery partner on this DSIT-funded programme. The Department for Science, Innovation & Technology, a department of the United Kingdom government ("DSIT").
- 2.4.1.2. **Programme Collaboration Partners**
Digital Catapult is working in collaboration with Ofcom to deliver the Programme, The Office of Communications, the government-approved regulatory and competition authority for the broadcasting, telecommunications and postal industries of the United Kingdom ("OfCom").
- 2.4.1.3. **Programme Industry Partners**
During the Programme, Programme industry partners may include industry organisations that support the Programme through delivery of relevant workshops, hosting office hours, and/or through providing discounted services or products.

3. **DEFINITIONS & INTERPRETATION**

3.1. The following definitions have the given meanings in these Competition Terms:

Applicant:	A company that applies to this Competition.
Application Deadline:	The relevant date detailed in the Key Dates, in paragraph 8.
Competition Terms:	This document, as may be updated by Digital Catapult from time to time in its absolute discretion.
Competition:	The opportunity made available by Digital Catapult to Applicants, as governed by the Competition Terms.
Consortium:	A number of named companies working together for the purposes of applying to the Programme and, if successful, working on the Programme.
Key Contact	Applicant's main contact for the competition and Participant's main contact for the Programme.
Participant:	A company that is successful with its application and completes all pre-Programme activities (e.g. signing the Programme Agreement).
Privacy Policies	Digital Catapult's privacy policy: https://www.digicatapult.org.uk/legal/privacy-policy
Programme Contact Address	soniclabs@digicatapult.org.uk
Programme:	The programme as described in the Programme Description (see paragraph 2.1).
Submission Method	Application form via Skipso

3.2. The following interpretations shall apply to these Competition Terms:

3.2.1.A reference to a company shall include any company, corporation, or other body corporate, wherever and however, incorporated or established (unless otherwise stated) and specifically excludes all natural persons and unincorporated bodies.

3.2.2.Where a company makes an application on behalf of a Consortium, each member of that Consortium shall be considered an Applicant.

4. Consortia

4.1. An application from a Consortium is not permitted under this competition.

5. PROGRAMME BENEFITS

5.1. Participants in the Programme will receive the following benefits:

5.1.1.On successful completion and meeting the Minimum Test Criteria (“MTC”), participants will receive the appropriate badging or certification.

5.1.2.A contribution of up to £30,000 (inc VAT) per product for CU, DU, RIC, Indoor and Outdoor RU vendors on the programme, to support the costs of the ten-month programme, including the development, integration, testing and experimentation of their product within a new product chain.

5.1.2.1. The financial contributions for Participants undertaking work to connect its products will be capped to a maximum of three (3) supplied products, and assumes that they can already connect between their own products.

5.1.3.Access to Digital Catapult’s commercially-neutral, multi-tenancy open network testbed providing real-world scale environments, including test and measurement capabilities

5.1.4.Exposure to potential clients and industry leaders in the mobile systems industry in general and Open RAN ecosystem in particular

5.1.5.Peer support from other participants on the Sonic Labs Programme, sharing learnings and insights gained from the programme as well as previous expertise regarding the challenges of multi-vendor end-to-end solutions.

5.1.6.Regular interactions with the Digital Catapult Technology and Innovation Practice team to support technical activities on the programme as well as learn best practices.

5.1.7.Diagnostic sessions with your leadership team to determine current technological, commercial and strategic needs.

5.1.8.Receive brand exposure on all Digital Catapult and SONIC platforms by being part of the programme (e.g. blogs, showcase, webinars).

5.1.9.upon passing the required test cases,

5.1.9.1. the ability to demonstrate a MTC based on existing standards and specifications guidance for the British Open RAN market.

5.1.9.2. leverage the MTC to enter the Open RAN market, knowing they meet baseline deployment requirements

5.1.10. Upon successful completion of the Project, the opportunity to join the Digital Catapult Alumni Network, which keeps them informed of opportunities and relevant updates from the Digital Catapult, and which provides additional opportunities to engage with Digital Catapult and other Alumni.

5.2. Through the collaboration, Digital Catapult will gain:

5.2.1.Greater functionality of its SONIC Lab Programme, through use of the integrated assets in the facility;

5.2.2.Demonstration and development of its test capabilities;

5.2.3.And spillover benefits such as:

5.2.3.1. Demonstrating the MTC requirements serving as an enabler for leveraging Open RAN opportunities in the United Kingdom market.

6. PROGRAMME OBLIGATIONS

6.1. Participants must be willing to commit to the following key obligations:

- 6.1.1. Assign one person to be its key contact (“Participant Key Contact”) to work with the Digital Catapult to ensure a consistent working relationship between the Participant and the Digital Catapult (this includes with respect to impact reporting)
- 6.1.2. Make themselves available in person or by video where specified by Digital Catapult to attend the onboarding meeting, technical kick off, workshops, progress check-in meetings/calls, webinars and showcase events hosted by Digital Catapult
- 6.1.3. Participants should indicate the hardware and compute requirements within 2 days after selection confirmation to allow lead time to order accelerator and network cards
- 6.1.4. Participants will be required to answer the onboarding form, and the monitoring progress forms to feed information into the Benefit Realisation framework.
- 6.1.5. Participants should be willing to be physically present as required by the programme to fulfil some of the technical objectives at the relevant test sites in London
- 6.1.6. Participants will remotely start with the installation and configuration of the radio units and other Open RAN components within the lab environment as per the low-level design (LLD) created by Digital Catapult and agreed with participating vendors at the beginning of the programme
- 6.1.7. Participants will work with the DC System Integrator throughout the technical journey of this Programme
- 6.1.8. Participants will allow Digital Catapult to use the integrated assets on its SONIC Labs Programme as part of the agreement
- 6.1.9. Participants are expected to help the DC System Integrator if and when required with their product integration and configuration
- 6.1.10. Participants will support the Digital Catapult Technology and Innovation Practice teams in the weekly capture of technical and non-technical lessons learnt from the Programme, participate in exit interviews and other requirement gathering activities
- 6.1.11. Participants will have at least one representative take part in periodic meetings and all knowledge sharing (Community of Practice) sessions throughout the Programme.
- 6.1.12. During the SONIC Labs programme, it is anticipated that a showcase will take place and parties will use reasonable endeavours to participate.

6.2. Participants who are providing RUs , would also commit to the following:

- 6.2.1. Configuring and tuning RUs for optimised network coverage, provided spectrum slot, UE capacity, data throughput and any other configurations required to support the conformance testing, badging and certification test cases

6.3. Participants who are providing DUs , would also have the following commitments

- 6.3.1. Configuring and tuning DUs for optimised network coverage, UE capacity, multiple RU support, data throughput and any other configurations required to support the conformance testing, badging and certification test cases

6.4. Participants who are providing CU and RIC, would also have the following commitments

- 6.4.1. Configuring and tuning CUs and RICs for dynamic DU addition, dynamic CU, DU and RU configuration and re-configuration through SMO, UE capacity, multiple DU support, data throughput and any other configurations required to support the conformance testing, badging and certification test cases.
- 6.4.2. RIC vendors should also provide xApp and rAPPs that could be used to support badging and certification test cases.

6.5. Product’s Auxiliary Items

6.5.1. Participants will provide any auxiliary items necessary for the correct functioning and interfacing of the product in the Programme. This includes (amongst others) items such as:

- 6.5.1.1. Any installation manual or guide for the product.
- 6.5.1.2. Power cables for the radio units they will provide.
- 6.5.1.3. Spare ethernet and fibre to feed to the radio units they will provide.
- 6.5.1.4. Fans or any other cooling device.
- 6.5.1.5. Additional networking cables and any necessary adapters.
- 6.5.1.6. Network interface cards.
- 6.5.1.7. Any other item (HW/SW) that affects the correct functioning of the product i.e. SFPs etc.

6.6. Participants must also, and hereby confirm that they:

6.6.1. shall complete the Digital Catapult's EDI Survey (please note each question will have a "prefer not to say" option).

6.6.2. agree to be visibly (name and logo) associated with the Programme, whilst in the Programme, and afterwards as a former participant and beneficiary. This includes in marketing collateral, such as website, print, socials and digital materials.

6.6.3. for a maximum period of five years following the Project end date, shall use its reasonable endeavours to answer specific questions from Digital Catapult relating to its growth and progress to assist Catapult demonstrate the impact of its activities. This shall include: (i) participation in an annual telephone conversation of one hour, and (ii) participation in a two-yearly survey issued by Digital Catapult.

7. APPLICANTS

7.1. Minimum Requirements

Applicants specific to indoor testing:

7.1.1. Applicants must have at least one Open RAN product, ready to deploy and with high maturity level. This should include one or more of the following: CU (centralised unit), DU (distributed unit), RU (radio unit), RIC (RAN Intelligent Controller) including both, non-RT RIC and Near-RT RIC. RIC vendors can provide their rApps and xApps or their partner's rApps and xApps, as part of their RIC solution.

7.1.1.1. These components must conform to Open RAN interface standards (compliance with 3GPP and O-RAN Alliance)

7.1.1.2. Applicants are planning on selling or currently selling their products in the UK.

All Applicants

7.1.2. Applicants must have adequate technical resources to take part in integration and testing processes as well as other resources to take part in knowledge sharing and dissemination activities.

7.1.3. Applicants must be able to provide multiple instances of the products that could be part of gNodeB systems if required.

7.1.4. Indoor radio units provided by Applicants for shall be able to operate in the specified spectrum slots within the following range 3.3 – 4.0GHz

7.1.5. Radio Units provided by Applicants shall be compliant with the indoor EMF and RF safety requirements.

7.1.6. Applicants are not considered a high-risk vendor (as defined by the National Cyber Security Centre, or otherwise under applicable law).

7.1.7. All-in-one gNodeB combined solutions will not be considered.

7.1.8. These products will be deployed in reference networks serving friendly customers and hence should be stable, always active and serving them.

- 7.1.9. RIC, CU and DU vendors should comply with at least some minimal set of KPMs to allow cell level measurements which can be used by xApps/rApps.
- 7.1.10. SMO based configuration for CU and DU should be supported
- 7.1.11. RIC and CU should be able to be deployed on virtual machines. It is preferred to be deployed as containers on kubernetes.
- 7.1.12. Indoor RUs should preferably support an external antenna to allow RF cable-based connection to be used with T&M tools
- 7.1.13. Participating vendors should support optimising the configuration to allow the best performance supported by their products for the given radio conditions.

Applicants that include outside testing and include radio units shall also

- 7.1.14. provide outdoor Radio Units that are compliant with the outdoor IP rating requirements (IP65)
 - 7.1.15. be willing to coordinate with Digital Catapult as the System Integrator for providing required inputs for RU installation, RU optimization and stabilising the RUs for field usage
 - 7.1.16. agree to outdoor radio units being deployed in the street cabinets adjacent to the lampposts.
 - 7.1.17. ensure DU shall be able to be deployed on COTS servers in the telephone exchanges
- 7.2. **Not Used**

8. KEY DATES

8.1. The following table sets out the key dates for the competition.

Description	Date
Open Call – Applications Open	20 February 2025
Application Deadline	3 April 2025
Selected Applicants Interviews	4 – 16 April 2025
Intended notification of all Applicants	17 April 2025
Programme Agreements Signed	Two weeks after notification of successful application
Participants to provide all required hardware, VM/software requirements including hardware cards	Two weeks after signature of contract
Intended public announcement of successful Applicants	20 May 2025

8.2. The following table sets out the key dates for the Programme.

Description	Date
Programme Start Date	1 May 2025

Technical environments completed	14 June 2025
First phase of badging and certification tests completed	31 October 2025
Second phase of badging and certification tests completed	30 January 2026
Programme End Date	27 February 2026

9. THE APPLICATION

9.1. What information should my application contain?

Applicants must answer all required questions in the full online application form.

9.2. Who will see my Application?

The following people will see your application:

- **Catapult Representatives:** Relevant Catapult representatives will see your application in order to assess the application, and otherwise in the administration of your application and, if successful, participation in the Programme.

9.3. Key contact

Applicant will appoint a Key Contact. This person will be Digital Catapult's main point of contact for the competition and, if successful, Applicant's Programme activities, including: workshop and event commitments, team members' availability, ongoing activities, and assessment of progress during and after the Programme.

Digital Catapult will use this personal information for the purpose of carrying out due diligence on Applicants prior to the point of selection onto the Programme and to notify successful and unsuccessful Applicants over their submissions. The personal data we collect may be shared with and processed by (i) Programme Partners Judges for the purpose of assessing the Applications; and (ii) Programme Partners and third party service providers for the provision of benefits to the Participants in the Programme, as set out in these Competition Terms.

The Programme Funder will additionally use the personal information for grant administration purposes, programme evaluation, and to perform its statutory duties.

9.4. Submitting your application

9.4.1. All applications must be submitted via the Submission Method by the Application Deadline.

9.4.2. Once your completed application has been received, Digital Catapult will send you a confirmation receipt by email. If you do not get a receipt within twenty four (24) hours of the next working day, please email us at Programme Contact Address.

9.5. Digital Catapult's Equality Diversity and Inclusion Survey

9.5.1. In addition to your application, you will be required to complete Digital Catapult's Equality Diversity and Inclusion Survey ('Survey'). Whilst the completion of this Survey is

mandatory, please note that your responses to this Survey will be kept separately from your application and will have no effect whatsoever on your application to the Programme.

Digital Catapult (as the Data Controller) will collect and process your personal data, including the following special category data to help Digital Catapult improve its services in respect of equality, diversity and inclusion:

- Racial and/or ethnic origin
- Sexual orientation
- Health (including disability)
- Religious and/or philosophical beliefs

The data collected and processed may be shared with relevant third parties and/or published but only in an aggregated form, which means you will not be personally identifiable.

Your personal data will be kept for 15 months from the time you respond to the Survey.

Please note you are responsible for the accuracy of the data you share with Digital Catapult and you agree to inform us if your data needs to be updated.

For more information on Digital Catapult's collection, use and protection of your personal data and your rights in regards to your personal data, please see Digital Catapult's privacy policy (<https://www.digicatapult.org.uk/legal/privacy-policy/>) or contact us at privacy@digicatapult.org.uk. If you have specific queries on our use of your Survey data (including a request to delete your Survey data), please contact us at edisurvey@digicatapult.org.uk.

9.6. Not Used

10. SELECTION

10.1. Qualification

10.1.1. The Catapult will undertake an initial assessment of the Applicants against the Programme Requirements.

10.2. Selection process

10.2.1. All qualifying applications will be reviewed and scored by the Programme Judges panel to create a shortlist based on highest scoring applicants whilst ensuring that it has a portfolio of the different Open RAN components required for the system. Shortlisted Applicants will be invited to interviews to enable the ranking of Shortlisted Applicants based on the Applications and interviews. The Programme Judges panel will then choose which applicants will be accepted onto the Programme based on the highest ranked applicants of each relevant Open RAN component, again with Digital Catapult satisfying itself that the Open RAN components create the best balanced system in line with its objectives:

10.3. Application Scoring criteria and weighting

10.3.1. The scoring criteria will be assessed based on statements in the areas below. Each criterion will be scored on a range from 0 to 5. 0 being an "Unacceptable or No submission" score for each criterion and 5 being an "Excellent" score for each criterion. This scoring will be applied to all applications and will be equally weighted.

10.3.2. There are 5 criteria upon which applicants will be assessed:

1. Technology relevance and suitability (50% weighting)
 - a. One or more network products/functions compliant with the O-RAN Alliance architecture specifications for: radio units, distributed units, centralised units

and RAN intelligent controller. The products should be compliant with the O-RAN open interfaces required for the integration, interoperability and performance testing on Open RAN gNB systems with high maturity performance and ready to deploy.

- b. Products should have a high Technology Readiness level to easily plug and play.
 2. Expertise and commitment of the team (30% weighting)
 - a. The team is equipped to collaborate with DC engineers as well as system integrators in system integration activities (installation/troubleshooting), and has appropriate technology skills and resources to participate in other programme activities including knowledge sharing and dissemination
 3. Business capability (10% weighting)
 - a. The company has core competencies that would enable it to progress in the launch and commercialisation of Open RAN products within and beyond the UK
 4. Product market fit in the UK (Pass/Fail)
 - a. The company has an intention to/ is already commercialising their product in the UK
 5. Innovativeness of the product (novel features) (10% weighting)
 - a. The solution has additional features and the ability to develop new RAN intelligent, programmable and virtualised functions
- 10.3.3. Furthermore, Participants will be selected on a portfolio basis to ensure the Programme is able to deliver consistent support and activities that provide value to all Participants whilst fulfilling the architecture requirements of the selected Open RAN products system.

10.4. **Due diligence**

10.4.1. We will carry out due diligence on applicants prior to the point of selection onto the Programme. Applicants must be willing to submit further information or documentation upon request to qualify as 'successful'.

10.5. **Successful applicants**

- 10.5.1. Successful applicants will be notified and provided with a standard agreement for review and execution ("**Programme Agreement**").
- 10.5.2. The Programme Agreement is a standard agreement and not negotiable. We do try and ensure these contracts are fair and reasonable.
- 10.5.3. In some cases, additional conditions may be added to address concerns raised in due diligence or otherwise.
- 10.5.4. In order to be accepted onto the Programme, successful applicants must sign the Programme Agreement.

11. **NOT USED**

12. **OTHER GENERAL COMPETITION TERMS**

12.1. **Benefits**

- 12.1.1. All the benefits provided under the Programme by third-party organisations ("**Suppliers**") are subject to the Supplier's terms and conditions stated in the Programme T&Cs.
- 12.1.2. Any optional benefits provided by third party organisations whose terms and conditions are not contained in the Programme T&Cs will be agreed between the Participant and the Supplier directly.
- 12.1.3. Digital Catapult reserves the right to amend the list of benefits at any time and at its sole discretion.

12.2. **Accessibility**

12.2.1. We aim to make all of our programmes accessible. We welcome feedback as to how we may be able to improve the accessibility of our programmes in the future. If you have any feedback with regards to accessibility, please send your feedback by email to: edisurvey@digicatapult.org.uk. Your feedback may be used by us in our programmes and activities.

12.3. **Applicants**

12.3.1. Digital Catapult reserves the right to accept any application which does not fulfil the minimum requirements.

12.4. **Key Dates**

12.4.1. Digital Catapult reserves the right to change the Key Dates at its sole discretion. No extension to deadlines will usually be granted, with very limited exceptions where the Applicant requests an extension due to reasonable extenuating circumstances, beyond the Applicant's control and unforeseen to them, subject to the Applicant providing evidence that proves the extenuating circumstance; and the Applicant informing Digital Catapult as soon as reasonably practicable following the extenuating circumstance becoming apparent. Digital Catapult reserves the right to consider the factors and decide whether such circumstances are extenuating and whether granting an extension is fair to other applicants. No extension granted will usually be for greater than two working days.

12.5. **Applications**

12.5.1. All information and documents requested must be submitted. Failure to submit all requested information and documents may result in the application being rejected. Catapult will not use outside information in respect of your application unless otherwise indicated, other than to undertake due diligence. Digital Catapult reserves the right to not work with people or an organisation which it believes could impact its reputation.

12.6. **Previous Applications**

12.6.1. Catapult reserves the right to either (i) reassess an application from a previous competition (together with information gained from an update meeting), or (ii) accept as a successful applicant a company that was previously successful in a previous competition, but whose participation was deferred to a later Programme.

12.7. **Personal Data**

12.7.1. Digital Catapult is the Controller for the personal information submitted in the Application for the purposes of the Data Protection Act 2018 and the UK GDPR.

12.7.2. In submitting the Application, the Applicant confirms that it has made the Key Contact and any other person whose personal data has been submitted, aware of, and has the lawful grounds to enable each Controller (including its processors) to, process the personal information of the Key Contact (and any other person named in the Application and open call process) as set out in these Competition Terms and in accordance with the relevant Privacy Policies.

12.8. **Programme Agreement**

12.8.1. Digital Catapult reserves the right to make amendments to the Programme Agreement it issues up until the point of execution by both parties.

12.9. **Participant Programmes**

12.9.1. Digital Catapult reserves the right to offer Participants access to its Participant Programmes, such as its Platinum Awards and investment programme.

12.10. **Data Retention**

12.10.1. Digital Catapult will store your application and the scoring it has received for the entire duration of the Programme, or up to two (2) years, whichever the greater. If you are a successful Applicant, we shall also store your Application for a period of up to seven (7) years following the end of the Programme. For administration purposes, contracts

may be stored for up to seven (7) years, contracts providing State Assistance for up to eleven (11) years, and deeds for up to thirteen (13) years from the end of the Programme.

12.11. Confidentiality

- 12.11.1. The information provided in your Application will be kept confidential and only used and disclosed as reasonably necessary for the purpose of assessing Applications, and, if admitted onto the Programme, for working with you in the Programme. This may include with our Programme Partners as indicated above.
- 12.11.2. For practical reasons, NDAs will not be signed by Digital Catapult or the Programme Partners as part of this Programme Competition. The activities we provide can only be achieved through trust of the tech community. It is therefore not in our interest to release your sensitive information. Confidentiality provisions are included in the Programme Agreement.
- 12.11.3. The scoring of your Application will be treated as sensitive information.
- 12.11.4. As your Application will be transmitted over the Internet, ultimately Digital Catapult cannot guarantee its security.

12.12. Intellectual Property

- 12.12.1. We respect the intellectual property of others and we ask our Applicants to do the same.
- 12.12.2. In submitting the Application, you promise that you have and continue to have all necessary rights, licenses, permissions and consent to provide the content in your application to us, and for Catapult to use the Application as we have set out.
- 12.12.3. We will not remove from Applications any proprietary labels or copyright assertions

12.13. Disclaimers, Exclusions & Limitations

- 12.13.1. We accept no liability for any consequences, whether direct or indirect, that may arise from your participation in the Programme Competition, your reliance on any statements we may have made about your application, the Programme, or its suspension or withdrawal.
- 12.13.2. In any case, to the extent permitted under law, Digital Catapult's liability shall be limited to one thousand (£1,000) pounds.

12.14. Entire Agreement

- 12.14.1. These Competition Terms constitute the entire agreement between Digital Catapult and the Applicant and extinguish all previous and contemporaneous agreements, promises, assurances, and understandings between them, whether written or oral, relating to the subject matter of these Competition Terms.

12.15. Jurisdiction

- 12.15.1. The Programme Competition is governed by English law and the Applicant agrees that any dispute shall be exclusively resolved in the English courts.

ANNEX

The Programme

SONIC (SmartRAN Open Network Interoperability Centre) Labs is a commercially-neutral, collaborative, environment for testing interoperability and integration of open, disaggregated and software-centric network solutions and multi-vendor architectures.

The SONIC Labs programme has been developed by Digital Catapult in collaboration with Ofcom and funded by DSIT to enable and encourage innovative vendors to participate in the UK telecoms ecosystem and facilitate a more rapid path towards 5G deployment in UK networks, by taking early-stage standalone products, integrating them and supporting commercial engagement.

Cohort 6 will address conformance testing, badging and certification of Open RAN systems inline with the following SONIC Labs programme objectives.

- Enable and encourage innovative suppliers of 5G Open RAN products to participate in the UK telecoms ecosystem.
- Facilitate a path towards deployment by UK mobile network operators of Open RAN technologies in UK mobile telecommunications
- Provide UK mobile network operators (large and small) with a pipeline of innovative, validated and certified suppliers and products to choose from.

It is envisaged that the outcomes of Cohort 6 will provide UK mobile network operators (large and small) with a pipeline of innovative and competitive suppliers and products to choose from thus facilitating a path towards deployment by UK mobile network operators of Open RAN technologies in UK mobile telecommunications.

To this end the programme will conduct End-to-End (E2E), Interoperability (IOT) and unit testing of Open RAN products (RU, CU, DU, RIC); thus enhancing confidence in O-RAN based products and solutions. The tests will be conducted at scale leveraging SONIC Labs indoor and outdoor trial environments and will include the following.

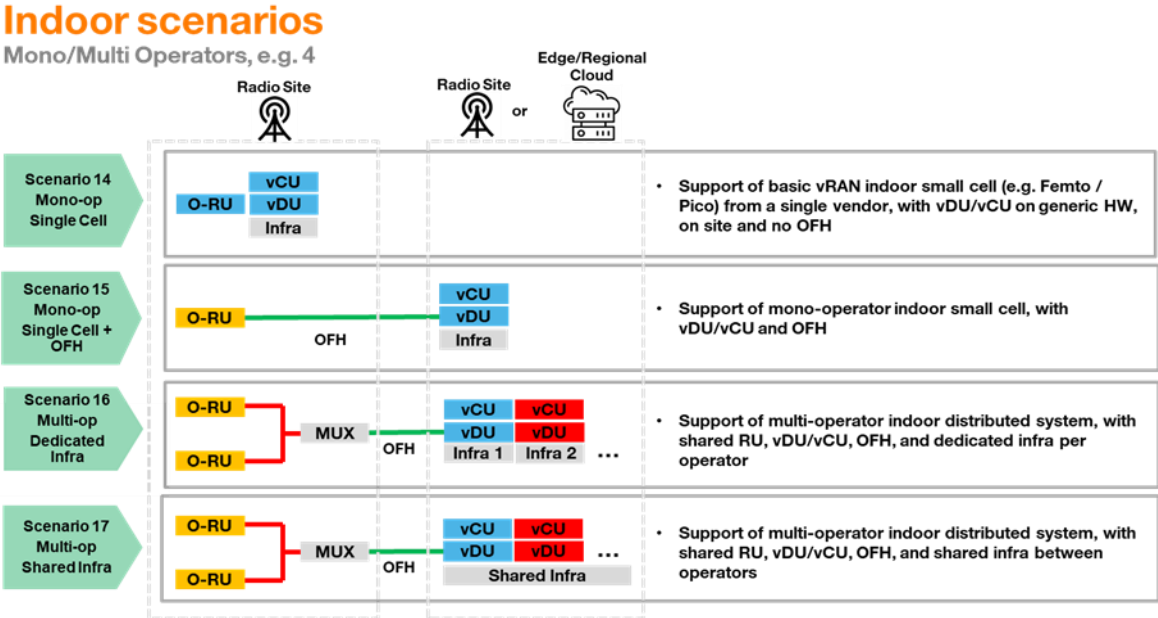
- O-RAN certification: verify that a product is compliant to O-RAN specifications, using O-RAN conformance tests.
- O-RAN Interoperability (IOT) badging: prove interoperability of a pair of products connected via an O-RAN and/or 3GPP interface, using O-RAN interoperability tests.
- O-RAN End-to-End (E2E) badging: Demonstrate and validate that an end-to-end system meets minimum requirements on functionality using O-RAN end-to-end tests.

SONIC Labs' indoor test network is a reference Open RAN 5G SA network providing 1000sqm of seamless 5G network coverage across 2 floors of office space at the Digital Catapult office in Euston Road, London. This reference network hosts an O-RAN based network comprising one O-CU, 3 O-DUs and 9 O-RUs operating at a 100 MHz bandwidth within the 3.3 to 4.0 GHz frequency band.

Cohort 6 will leverage the indoor test network while conducting testing towards badging and certification of vendor products deployed according to the indoor deployment scenarios described by TIP's Open RAN priorities (Rel-4); that were developed under a MoU with the following MNOs: Deutsche Telekom, Orange,

Telefónica, TIM and Vodafone. Cohort 6 will explore the following TIP indoor deployment scenarios for badging and certification.

- Scenario 14: Support of basic vRAN indoor small cell (e.g. Femto / Pico) from a single vendor, with vDU/vCU on generic HW, on site and no OFH.
- Scenario 15: Support of mono-operator indoor small cell, with vDU/vCU and OFH
- Scenario 16: Support of multi-operator indoor distributed systems, with shared RU, with vDU/vCU, OFH, and dedicated infra per operator.
- Scenario 17: Support of multi-operator indoor distributed system, with shared RU, with vDU/vCU, OFH, and shared infra between operators



SONIC Labs' outdoor test network

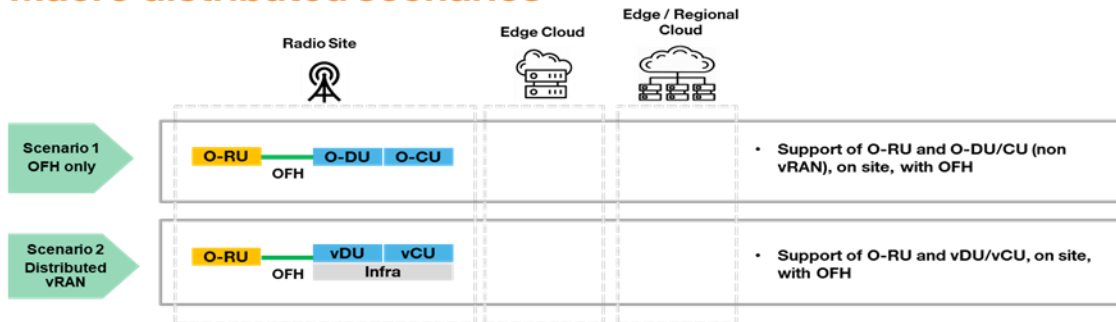
SONIC Labs' outdoor test network is a reference Open RAN 5G SA network in central London (Hammersmith and Fulham) providing 1.5km of urban street level coverage, enabling real-world test and verification. This outdoor reference network hosts an O-RAN based network comprising 14 Micro cell O-RUs and 2 Macro cell O-RUs with a total of 16 cells, 5 O-DUs and 2 O-CUs; operating at 100 MHz bandwidth within the 3.8 to 3.9 GHz frequency band.

Cohort 6 will leverage the outdoor test network while conducting testing towards badging and certification of vendor products deployed according to the outdoor deployment scenarios described by TIP's Open RAN priorities (Rel-4); that were developed under a MoU with the following MNOs: Deutsche Telekom, Orange, Telefónica, TIM and Vodafone. Cohort 6 will explore the following TIP outdoor deployment scenarios for badging and certification.

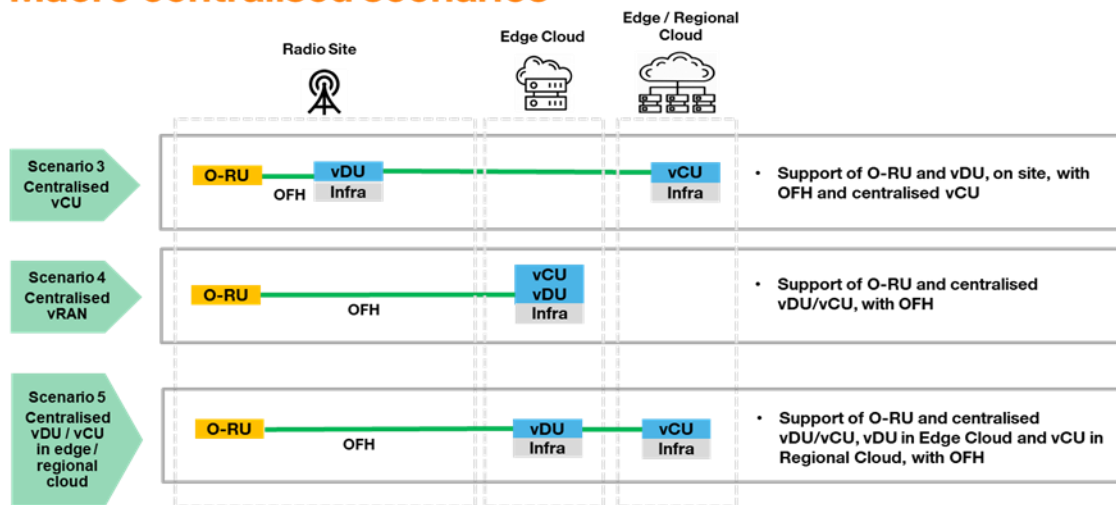
- Scenario 1: Support of O-RU and O-DU/CU (non vRAN), on site, with OFH
- Scenario 2: Support of O-RU and vDU/CU, on site, with OFH

- Scenario 3: Support of O-RU and vDU, on site, with OFH and centralised vCU
- Scenario 4: Support of O-RU and centralised vDU/vCU, with OFH
- Scenario 5: Support of O-RU and centralised vDU/vCU, vDU in Edge Cloud and vCU in Regional Cloud, with OFH

Macro distributed scenarios



Macro centralised scenarios



Applicants can submit their application through the Sonic Labs competition page (see “Submitting Your Application” section). Digital Catapult will determine an applicant’s eligibility through compliance to the conditional criteria and alignment with the open call theme and other participants for the programme. To achieve this, applicants will be required to submit responses to a detailed questionnaire which focuses on the products’ technical features. After the selection process, vendors should provide all hardware and VM requirements including accelerator card and network card programme requirements to ensure that there is sufficient lead time available for DC to procure these cards.