Potential monitoring indicators for Future RAN: Diversifying the Supply Chain

Project-level KPIs[1]

PROJECT INFORMATION

Indicator	Purpose for collection
Type of funding ● Business-led ● Academia-led	To understand the split of funding allocation
Amount funded (£)	To know the amounts being awarded
Type of project *[type of intervention, basic research, proof of concept, feasibility study etc]*	To understand how the project/sub-project is being taken forward at project level
Industry / research sector(s)	To be able to map the project/sub-project against the main sectors
Infrastructure investments (£) ● Type of infrastructure	To understand where portions of the fund are going on infrastructure investments
Business-to-business	To know how many collaborations between businesses are occurring
Business-to-academia ● New collaboration ● Collaborated within the last 5(?) years	To know how many collaborations between businesses and academic institutions are occurring and where these are new collaborations or building on existing relationships

INFORMATION ON PARTICIPATING ORGANISATIONS (including suppliers/ subcontractors)

Indicator[2]	Purpose for collection
Business Name	To contact businesses for case studies and surveys
Trading and registered address	To understand link between place and project/sub-project impact
Contact name and details (e-mail, phone etc)	Business surveys achieve a higher response rate if a named contact is available
Companies House Number; Unique Taxpayer Reference (for unregistered	In order to match with ONS data for long-term impact assessment

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[1] These are provided for information at this stage and represent a range of output metrics in which DCMS are interested. Individual output metrics actually reported on will vary between projects (and likely be a selection of these) to reflect the nature of each project. This will be agreed at Grant Funding Agreement finalisation.

[2] Indicators may be different for public bodies or academic institutions.

Indicator[2]	Purpose for collection
businesses)	
Staff (FTE) ● Number of which will be allocated to the project	To understand size of businesses engaged in project/sub-project and the proportion that are involved in the project activity
Turnover (if trading)	To understand the turnover of businesses engaged in project/sub-project
Type of business	To gain insight into the whether the businesses involved are from the private sector, public sector, another funded programme, an international organisation or other
Previously received funding from DCMS?	To gain information on proportion of new businesses being engaged by the project/sub-project

INVESTMENT STIMULATION

Indicator	Purpose for collection
For each participating organisation, provide: ● Current R&D investment levels (5G related) ● Additional £ spent on R&D due to the funded project ● Third party investment attracted (domestic/foreign) ● Further investment/ collaborations building on project's outputs	To assess project's contribution to the Future RAN Competition's objectives

TECHNOLOGY READINESS LEVELS (TRLs)[3](By agreement)

Indicator	Purpose for collection
For each application/product/service being developed, provide: ● Current TRL ● Target TRL ● Expected time to market without DCMS funding ● Target time to market ● Sales/ revenues (volume/£; % of total revenues) ● Exports/ revenues (volume/£; % of total revenues)	To monitor TRLs of network and use cases, and revenues to participating organisations from developing new applications/products/services.

TESTBED MONITORING

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[3] https://www.gov.uk/government/news/guidance-on-technology-readiness-levels

Indicator	Purpose for collection
For each KPI (e.g. latency, coverage, speed and reliability, network cost), provide ● Value at the start of the project ● Target value ● Baseline: expected value without DCMS funding (if known/ applicable)	To monitor network performance against agreed KPIs (project dependent).

USE CASE MONITORING

Indicator	Purpose for collection
For each KPI (e.g. improved health outcomes), provide ● Value at the start of the project ● Target value ● Baseline: expected value without DCMS funding (if known/ applicable)	To capture (dis)benefits from trials, including potential benefits/efficiency gains to businesses, individuals, local economy, and public sector; insights on new business models; and end users' experience. KPIs are project/sub-project dependent.

KNOWLEDGE DISSEMINATION

Indicator	Purpose for collection
Research outputs (e.g. patents applications/granted; prototypes; research publications; patent/publication citations)	To monitor dissemination activities.
No. and type events (including attendance rates)	
Other communications activities	
Increased revenue from knowledge transfer (e.g. licensing)	
Attraction and retention of qualified personnel	
Staff training (no. staff/spend)	
Number of new Master/PhD graduates in the specialised fields	
Number of spin-offs generated	
Any other	

LESSONS LEARNED

Indicator	Purpose for collection
Qualitative information on any lessons learned during project delivery (e.g. barriers to deployment and solutions identified; best practices; new business models identified)	To capture wider lessons learned and, where possible, share them widely among ecosystem publicly via UK5G and other industry bodies
Analysis of how the costs of the chosen testbed approaches compare to those of more standard deployment approaches, such as 4G and Wi-Fi (e.g. % cheaper per bit/second). Assessment of the scalability of the proposed testbed approaches and associated cost implications (taking account of potential economies of scale)	To understand the economics of the proposed deployment approaches