

Grant Agreement No: 101008126

RADNEXT

RADiation facility Network for the EXploration of effects for indusTry and research

Horizon 2020 Research Infrastructures project RADNEXT

PERIODIC TECHNICAL REPORT

RADNEXT YEAR 1 REPORT

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Lead beneficiary:	CERN
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Period covered by the report: from 1 June 2021 to 31 May 2022

Periodic report: Year 1

Abstract:

A report of the work performed during year 1 of the RADNEXT project (from 1 June 2021 to 31 May 2022) including the work progress and the use of the resources.

RADNEXT Consortium, 2022

RADNEXT Consortium, 2022

For more information on RADNEXT, its partners and contributors please see https://radnext.web.cern.ch/

The RADiation facility Network for the EXploration of effects for indusTry and research (RADNEXT) project has received funding from the European Union's Horizon 2020 Research and Innovation programme under Grant Agreement no. 101008126. RADNEXT began in June 2021 and will run for 4 years.

Delivery Slip

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SUMMARY FOR PUBLICATION

Work performed from M1 (1 June 2021) to M12 (31 May 2022) and main results achieved

Note: this text is intended for the general audience

(*Max ¼ page*) [text]

1. EXPLANATION OF THE WORK CARRIED DURING THE PERIOD

Executive summary

Summary of the work carried out per WP with emphasis on the progress towards deliverables and milestones during Y1 (M1 to M12).

Note: this text should be more technical than the publishable summary and should refer to the milestones and deliverables achieved in the reporting period (to be cited in brackets).

(*Max ¼ page*) [text]

Objectives

List the specific objectives for the WP in the reporting period as described in Annex 1 and explain the work carried out during the reporting period towards the achievements of each listed objectives. Provide clear and measurable details.

(Max 5 lines)

[text]

Summary of exploitable results in Year 1 and an explanation about how they can/will be exploited

Please update the table below

WP	Type of exploitation foreground ¹	Description of exploitable foreground (relevant deliverable)	Purpose (How the foreground might be exploited and by whom)	IPR ²	Potential/expected impact (quantify where possible)	Exploitable product(s) or measure(s)	Sector(s) of application	Timetable, commercial or any other use

¹ Type of foreground: General advancement of knowledge (GAK), Commercial exploitation of R&D results (CERD), Exploitation of R&D results via standards (ERD), exploitation of results through EU policies (EUP), exploitation of results through (social) innovation (INV).

² Invention, disclosure, patent, other

1.1 EXPLANATION OF THE WORK CARRIED PER WP

(! Explain the work carried out in WP9 during the reporting period giving details of the work carried out by each beneficiary involved.)

(~ **4-6** pages per WP)

WP9: Neutron, muon and mixed-field spallation facilities and irradiation (TA1)

Task 9.1: CHARM (CERN) [text] Task 9.2 Chiplr (UKRI) [text]

Task 9.3 TRIUMF TNF (TRIUMF) [text]

Task 9.4 FNG (ENEA) [text]

Task 9.5 CNRS-LPSC [text]

Task 9.6 NESSA (UU) [text]

Task 9.7 ILL [text]

Task 9.8 EMMA (UKRI) [text]

Task 9.9 NPI-CAS [text]

Task 9.10 RIKEN-RAL (UKRI) [text]

Task 9.11 nELBE [text]

Task 9.12 GANIL-SPIRAL2 (GANIL) [text]

Task 9.13 PTB [text]

Task 9.14 Fraunhofer INT (INT) [text]

Contractual milestones and deliverables

In the Y1 reporting period, WP9 had no deliverable and one milestones to submit.

 MS29: Reporting Gateway for Irradiation Test Reports and TA info through Zenodo fully operational STATUS

Meetings of the WP

Please update the table below if necessary

Dates	Type of meeting + link	Venue

1.2 IMPACT

Include in this section whether the information from the Annex 1 (how your project will contribute to the expected impacts) is still relevant or needs to be updated. Include further details in the latter case.

(*Max ¹/2 page*) [text]

2. DEVIATIONS FROM ANNEX 1

2.1 Tasks

Include explanations for tasks not fully implemented, critical objectives, deliverables, milestones not fully achieved and/or not being on schedule. Explain also the impact on other tasks on the available resources and the planning.

Tasks / objectives/deliverables/ milestones	Deviation ³	Justification	Impact on other tasks

2.2 Use of resources

Include explanations on deviations of the use of resources between actual and planned use of resources in Annex 1, especially related to person-months per work package

³ Ahead of schedule/ Minor delay/ Significant delay

3. CRITICAL RISKS FOR IMPLEMENTATION

Please update the table below.

N°	Description of risk	WP	Proposed risk-mitigation measures	State of the play Reference reporting period	State of the play Mitigation measures applied	State of the play Risk materialized	State of the play Comments
2	Withdrawal of beneficiary/beneficiaries (Low) 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Other beneficiaries take over the responsibilities of the withdrawing partner or new beneficiaries are included in the project from the pool of collaborating institutes.				
3	Reduced or undelivered contribution by one or more of the beneficiaries to the work programme of the project (Low)	9	Redistribution of work and budget to other members of the consortium, with possible rescheduling of milestones and deliverables if needed.				
18	TA facility becomes unavailable due to hardware malfunction (Low)		TA WP consists of complementary irradiation facilities that will allow tests to be made in an alternative location in case of single facility failure				
19	19Restrictions on travel and on-site work in groups due to COVID-19 (Medium)9Promotion of remote access to experiments, at least for part of the team. Respect of social distancin during experimental work on-site		Promotion of remote access to experiments, at least for part of the test team. Respect of social distancing during experimental work on-site.				

4. DISSEMINATION AND EXPLOITATION OF RESULTS

Please update the tables below with the publications and dissemination/communication activities in your WP

4.1 Scientific publications

WP9	
<mark>N°</mark>	Author(s), <i>Title</i> , References, Date

4.2 Dissemination and communication activities

WP9					
<mark>Туре</mark>	Author(s), <i>Title</i> , References, Date				

Intellectual property rights resulting from the project

Type of IP Rights ⁴	Application reference	Date of the application	Official title of the application	Applicant(s)	Has the IPR protection been awarded (yes, no, N/A)	If available, official publication number of award of protection

⁴ Patent, Trademark, Registered design, Utility model, Other