T5.1 – Management of Key Exploitable Results (KERs)

Lead: TALOS

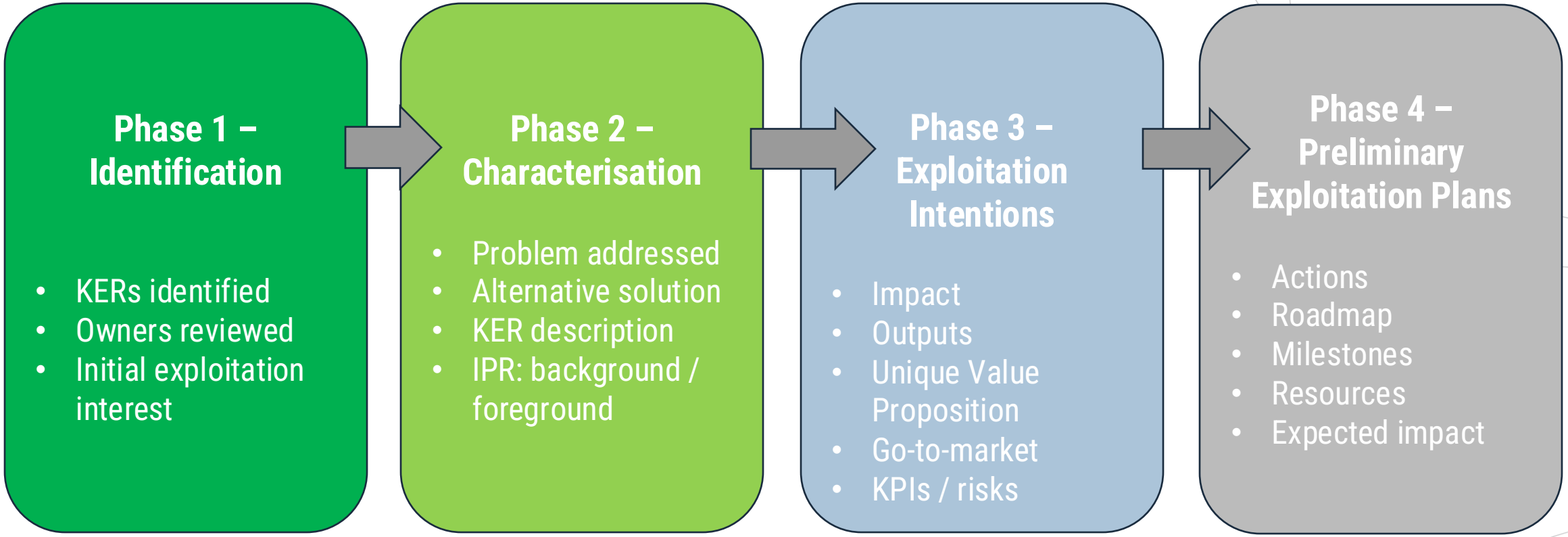
Duration: M1 – M18 (31/08/2026)

Main output: D5.1 – KERs Exploitation Map/Plan

Objective:

identify, characterise and structure the project's KERs

Exploitation Methodology



Current status:

Phase 1 completed.
Phase 2 missing contributions from 1 partner to be completed.
Phase 3 launched on 28/04/2026.

Work performed so far

Methodology developed & adapted

Tailored to IFIGENEIA

Templates prepared

Shared templates / working documents for all KERs

1st Exploitation workshop

Methodology, definitions and process presented

Written guidance provided

Instructions for partner contributions

1-to-1 Support meetings

Support where clarification was needed

Input collection & review

Continuous partner follow-up and review

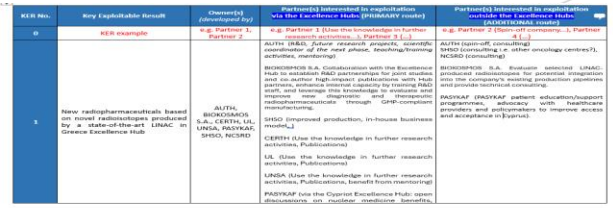
Phase 1 Completed – KER Identification

Structured inventory of KERs, owners and initial exploitation routes

Phase 1 output

- KER Summary Table completed
- 7 KERs identified *(vs 5 in the Grant Agreement)*
- Owners mapped *(refined across KERs)*
- Initial exploitation interest captured *(47 initial interests)*
- Exploitation routes distinguished:
  - Via the Excellence Hubs
  - Outside the Excellence Hubs

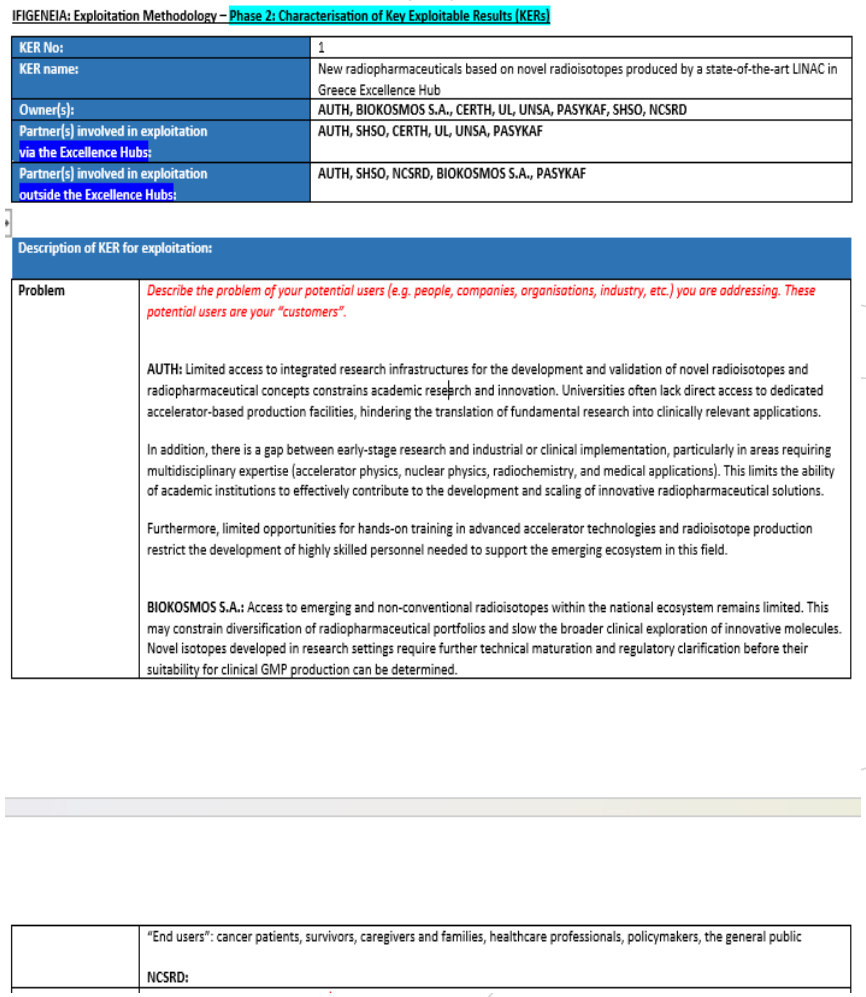
1. Production of novel radioisotopes with a state-of-the-art LINAC in the Greece Excellence Hub for radiopharmaceutical development
2. VR Radioisotope production unit
3. Compact LINAC technology
4. Innovative Radioisotope production techniques
5. Capacity building & knowledge transfer initiatives
6. ML/AI models for Predicting Isotope –Ligand Complexation Affinity
7. Methodology for Control System Development in Accelerator Facilities



Phase 2 Status – KER Characterisation

Most Phase 2 inputs received, but still waiting contribution from a partner

KER	Current Phase 2 status
KER2 – VR RI production unit	Completed
KER3 – Compact LINAC technology	Completed
KER4 – Innovative RI production techniques	Completed
KER5 – Capacity building & knowledge transfer	Completed
KER6 – ML/AI models	Completed
KER7 – Control system methodology	Completed
KER1 – Novel radioisotopes	Needs further input



IFIGENEIA: Exploitation Methodology – Phase 2: Characterisation of Key Exploitable Results (KERs)

KER No:	1
KER name:	New radiopharmaceuticals based on novel radioisotopes produced by a state-of-the-art LINAC in Greece Excellence Hub
Owner(s):	AUTH, BIOKOSMOS S.A., CERTH, UL, UNSA, PASYKAF, SHSO, NCSRD
Partner(s) involved in exploitation via the Excellence Hubs:	AUTH, SHSO, CERTH, UL, UNSA, PASYKAF
Partner(s) involved in exploitation outside the Excellence Hubs:	AUTH, SHSO, NCSRD, BIOKOSMOS S.A., PASYKAF

Description of KER for exploitation:

Problem	*Describe the problem of your potential users (e.g. people, companies, organisations, industry, etc.) you are addressing. These potential users are your "customers".* **AUTH:** Limited access to integrated research infrastructures for the development and validation of novel radioisotopes and radiopharmaceutical concepts constrains academic research and innovation. Universities often lack direct access to dedicated accelerator-based production facilities, hindering the translation of fundamental research into clinically relevant applications. In addition, there is a gap between early-stage research and industrial or clinical implementation, particularly in areas requiring multidisciplinary expertise (accelerator physics, nuclear physics, radiochemistry, and medical applications). This limits the ability of academic institutions to effectively contribute to the development and scaling of innovative radiopharmaceutical solutions. Furthermore, limited opportunities for hands-on training in advanced accelerator technologies and radioisotope production restrict the development of highly skilled personnel needed to support the emerging ecosystem in this field. **BIOKOSMOS S.A.:** Access to emerging and non-conventional radioisotopes within the national ecosystem remains limited. This may constrain diversification of radiopharmaceutical portfolios and slow the broader clinical exploration of innovative molecules. Novel isotopes developed in research settings require further technical maturation and regulatory clarification before their suitability for clinical GMP production can be determined.
	"End users": cancer patients, survivors, caregivers and families, healthcare professionals, policymakers, the general public **NCSRD:**

Phase 3 – Exploitation Intentions

Launched – partner input collection now ongoing

Phase 3 scope

- Impact
- Outputs
- Unique Value Proposition
- Target market
- Competitors
- Go-to-market
- Planned actions / KPIs / risks

What we ask from you now

- Add input **under your organisation name**
- Complete the correct route:
  - via the Excellence Hubs
  - outside the Excellence Hubs
- Fill in the relevant Phase 3 fields
- And the corresponding **planned actions / KPI / risk** table
- **Deadline: 22 May 2026**

Current focus: partner input collection

Partners invited to contribute in Phase 3

Input requested from partners who declared exploitation interest in Phase 1

KER	Via the Excellence Hubs	Outside the Excellence Hubs
KER1 – Novel radioisotopes	AUTH, SHSO, CERTH, UL, UNSA, PASYKAF	AUTH, SHSO, NCSRD, BIOKOSMOS S.A., PASYKAF
KER2 – VR RI production unit	CERTH, AUTH, UNSA, IJS	AUTH
KER3 – Compact LINAC technology	AUTH, YFOS, UNSA, PASYKAF	AUTH, YFOS, IJS
KER4 – Innovative RI production techniques	AUTH, IJS, BIOKOSMOS S.A., PASYKAF	NCSRD, BIOKOSMOS S.A.
KER5 – Capacity building & knowledge transfer	AUTH, UNSA, IJS, SIH, PASYKAF, RCM, GSI	AUTH, SIH, PASYKAF
KER6 – ML/AI models	CERTH, AUTH	YFOS
KER7 – Control system methodology	COSYLAB, UNSA	COSYLAB

Find the KER documents here

What partners are asked to complete in Phase 3

Shared KER documents – fields to be completed by the partners

IFIGENEIA: Exploitation Methodology – Phase 3: Exploitation Intentions

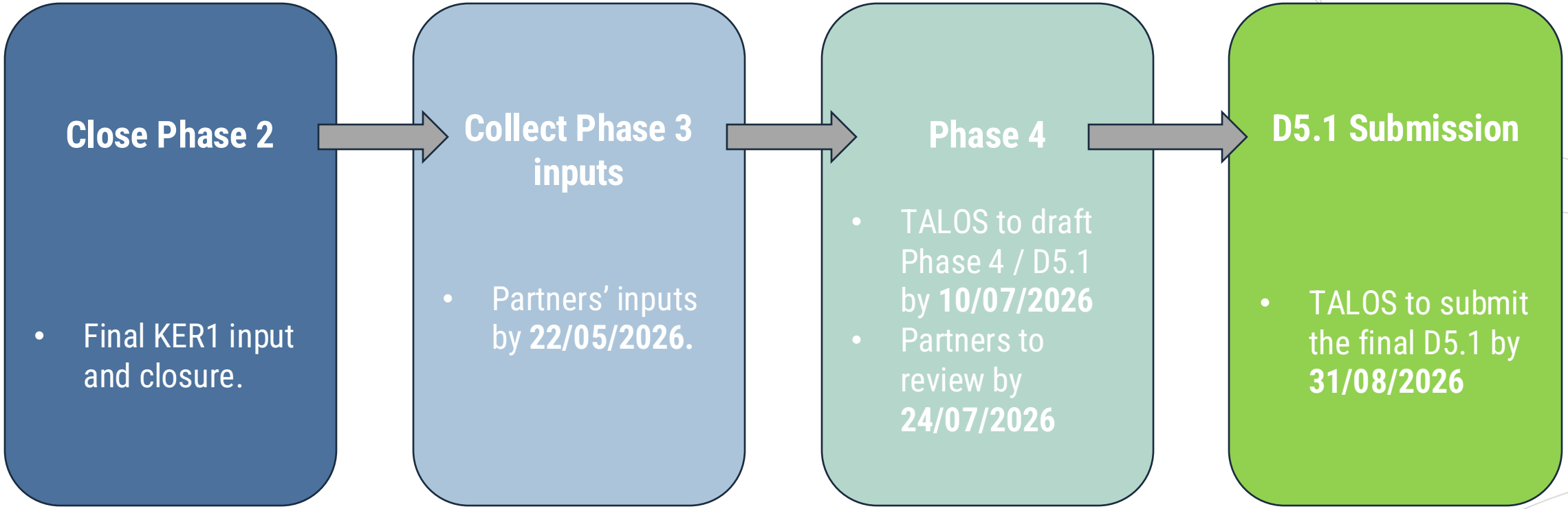
Description of exploitation via the Excellence Hubs (if applicable):	
Impact	*In what area do you expect to make an impact?* CERTH: AUTH: UNSA: IJS:
Outputs	*What outputs will be created?*

	CERTH: AUTH: UNSA: IJS:
Unique Value Proposition	*Describe the competitive advantages and the innovative aspects. What does your solution do better, what are the benefits considering what your users/customers want, how does your solution solve their problem better than alternative solutions, what distinguishes the KER from the competition / current solutions? (Value Proposition Canvas is available to help)* CERTH: AUTH: UNSA: IJS:
Target market	*Describe the market in which your product/service will be used / can compete. What is your target market? Who are the customer segments?* CERTH: AUTH: UNSA: IJS:

Timeframe	Planned actions for via the Excellence Hubs / use of the result	Partner	Key Performance Indicator	Potential risk
Short-term (up to 12 months after the end of the project)	*[Example]: Preliminary discussions with potential customers / early adopters*	Partner 1, Partner 2	*3 customer meetings*	*Lack of interest from potential customers*
	[Example]: Continuous technology watch/ patent search	Partner 1, Partner 2	*1 patent search update*	*Competitive technology obtains patent, limiting our freedom to use our result*
	[Example]: Follow up with an academic or industrial partner (in parenthesis) to develop technology	(Partner 1), Partner 2	*Higher yield by 5%*	*High risk (lack of resources)*
	[Example]: Upscaling of technology with an industrial partner (in parenthesis)	(Partner 1), Partner 2	*Increase in production volume*	*Cost of upscaling too high, bad yield, not efficient scale-up*
	[Example]: Conference presentation	Partner 1, Partner 2	*2 presentations*	*Lack of resources (financial/ human) to participate*
		CERTH, AUTH, UNSA, IJS		
Long-term (1-4 years after the end of the project)	*[Example]: Agreement with an industrial partner to produce in larger quantities*	Partner 1, Partner 2	*1 agreement signed*	*No industrial interest, conditions too hard*
	[Example]: Patent application and licensing to industrial companies developing complementary technology	Partner 1, Partner 2	*1 granted patent* *1 licensing*	*1. Existing IPR could limit the scope of a patent resulting from project's results.* *2. Lack of interest from potential industrial key players to adopt the technology.*
	[Example]: Follow up with an academic or industrial partner (in parenthesis) to develop technology	(Partner 1), Partner 2	*Higher yield by 20%*	*High (lack of resources and/ or interest)*
	[Example]: Scientific publications	Partner 1, Partner 2	*2 peer-reviewed publications*	*No risk foreseen for this action.*
	[Example]: Follow-up research projects funded by Horizon Europe	Partner 1, Partner 2	*1 follow-up project with approx. budget of XX m EUR*	*Project not approved for funding*
	[Example]: Follow up with an academic or industrial partner (in parenthesis)	(Partner 1), Partner 2	*Further development of this technology, etc.*	*High (lack of resources and / or interest)*

Next steps to M18

Path towards D5.1 – KERs Exploitation Map/Plan



Immediate priority: timely completion of the Phase 3 inputs
No further delays can be absorbed: the D5.1 submission date of 31/08/2026 is fixed