

Example of exploitable results

- 1 Integrated Design and Manufacturing System
- 2 CAD SW design tool for personalised
- 3 Embedded Sensors
- 4 Low cost additive fabrication of personalised

self-standing (standalone) exploitable results:

- 1) Novel wheel profiles and defect tolerant wheelsets
- 2) Improved suspension design for mixed traffic railway
- 3) Improved braked system for high speed low impact freight operations
- 4) Improved bogie design implementing lightweight materials and novel suspension systems
- 5) Lightweight body shell for high performance freight cars
- 6) Condition based predictive maintenance tools for freight rail vehicles
- 7) Condition based predictive maintenance tools railway tracks
- 8) Multifunctional geotextiles integrating sensing functions for railway embankments
- 9) Optimised track system and geometry
- 10) Business case and related tools for freight vehicle-track integrated system

Example of characterisation

Describe the innovation content of result	A that allows detection of multiple biomarkers or a single biomarker from various samples. In a more advanced embodiment, the will be integrated with a DNA amplification module.
Who will be the customer?	Clinical diagnostics industry, molecular diagnostics market (food etc.)
What benefit will it bring to the customers?	Multiple analysis alone or integrated with other modules on a single
What is the level of commercialization readiness of the result? Please use TRL tool.	TRL 4
What are your supporting information to substantiate such level and what are your milestones?	Proof-of-principle demonstrated.
When is the time to market (Mth/yr)?	2 years (for able to detect bacteria DNA and working in parallel with DNA amplification module)

What are the main technical challenges in this result?	
Have you protected or will you protect this result before disclosing it? How? When?	Yes; One patent granted and another one under filing

Example of TRL progression:

MILESTONES	MEASURES OF SUCCESS	TRL	DATE
Ability of to detect DNA targets in buffer in the lab	Demonstrated ability to detect amplified DNA with high reproducibility and sensitivity	4	08/201x
		5	
		6	
		7	
		8	
..... system with tested in a dairy products company	Detection of amplified DNA from 1 Salmonella cell in 25 g of milk in comparison to gold standard methods	9	08/201y