



This project is co-financed by the
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finanse edilmektedir



Technical Assistance for Turkey in Horizon 2020 Phase-II
EuropeAid/139098/IH/SER/TR

Turkey in Horizon 2020 II

Main Criteria and good practices for EIC Accelerator proposals

Grigoris Chatzikostas



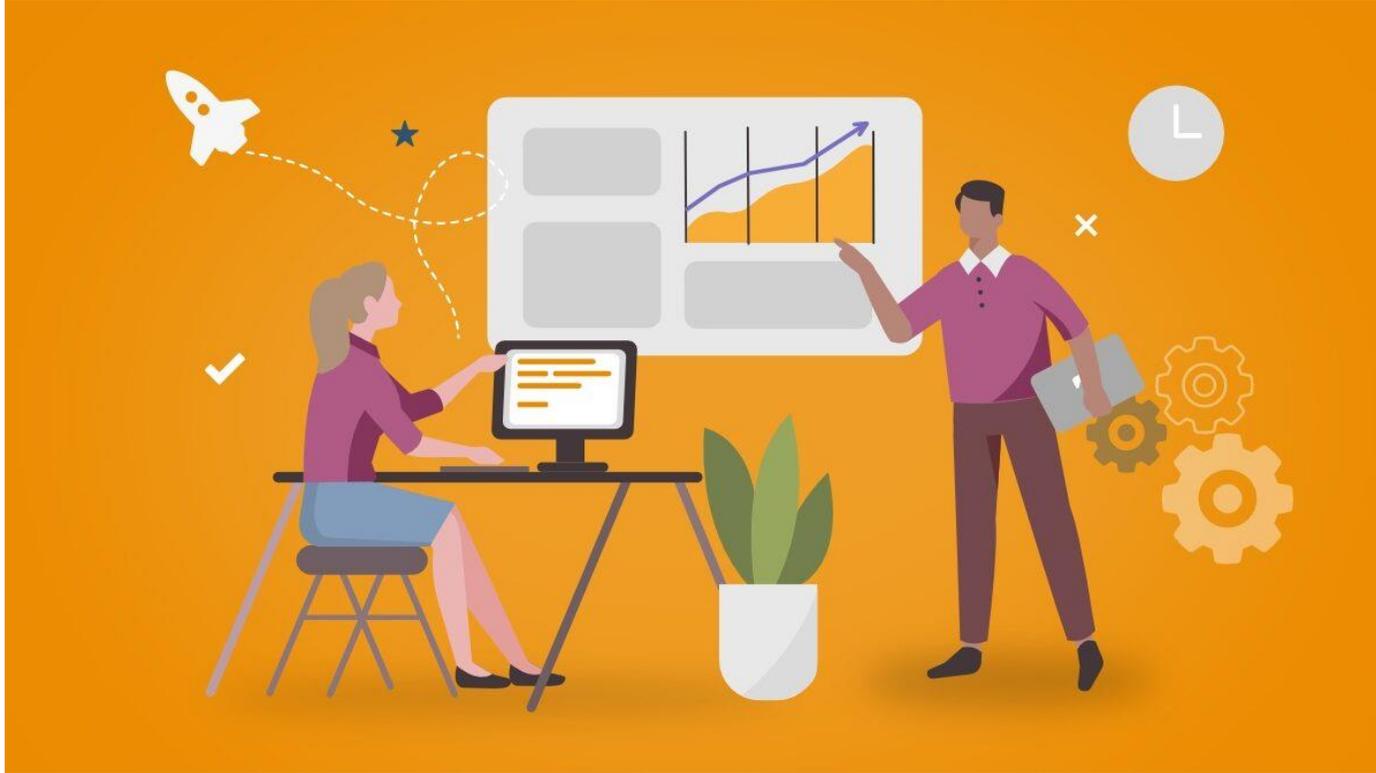
REPUBLIC OF TURKEY
MINISTRY OF INDUSTRY
AND TECHNOLOGY



COMPETITIVE
SECTORS
PROGRAMME



TÜBİTAK



The template for 2nd phase proposals will remain the same (or similar) as in H2020

EIC Accelerator Pilot – Proposal template

Document 1 - Proposal template

Summary

1. Excellence

- Idea and solution
- Innovativeness
- Stage of development

2. Impact

- Market and customers
- Commercialisation strategy
- External Strategic Partners
- Intellectual property
- Scale up potential
- Key Performance Indicators
- Broader impact

3. Implementation

- Team and capabilities
- Financing needs
- Equity (if blended finance requested)
- Need for EIC support
- Risks
- Approach
- Work packages, deliverables, milestones
- Resources

Document 2 - Annex 1 – 3

- Annex 1 – Security and Ethics;
- Annex 2 – CVs
- Annex 3 –Others

Documents 4 and 5

Annex 4 – Financial and corporate information Excel file

Annex 5 – Pitch-deck

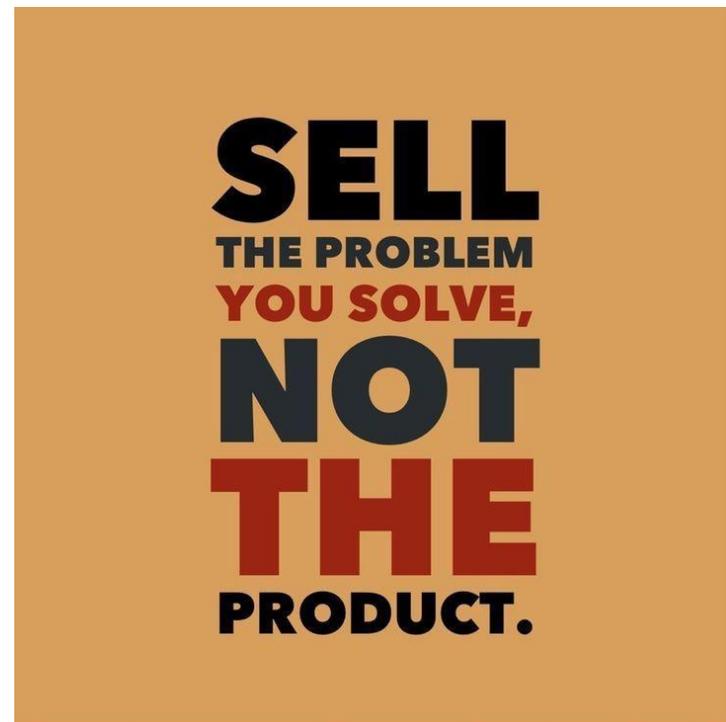
Describe your innovation **in no more than 200 words**, avoiding jargon or technical language.

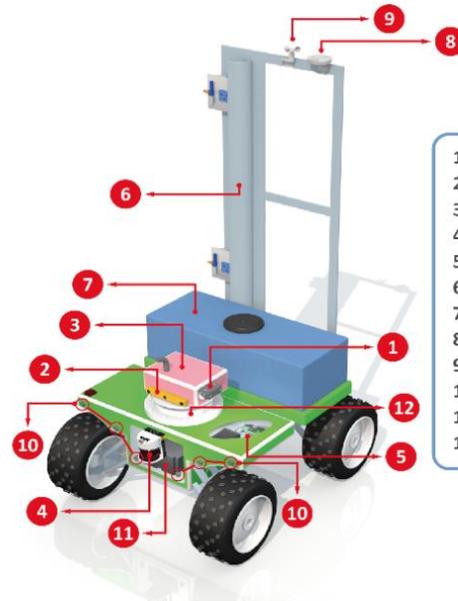
Briefly explain, **in no more than 200 words**, how your innovation relates to the overall strategy of your company.

Innovation in detail

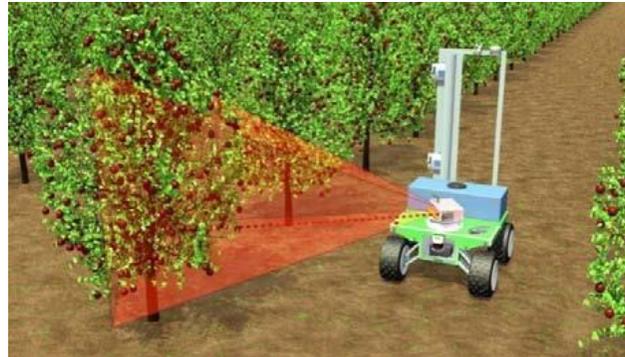
What are the objectives

What are the challenges or problems
– business, technological or societal
(climate change, environment, gender
dimension, etc.) - that you seek to
address by bringing your innovation to
market.





1. Multispectar camera
2. Stereo-camera
3. LIT-MS
4. LIDAR
5. Robot electronics compartment
6. Spraying mast with nozzles
7. Spraying tank (130l)
8. GNSS antenna
9. Meteo sensor
10. Sonar ring
11. Batteries
12. Rotating base for the perception sensors (1,2,3)



GO

The general objective of the project is to transform the existing Somatic Cell Counter prototype (TRL 6), based on flow cytometry coupled with fluorescence techniques, to a market-ready comprehensive solution (TRL 9) providing analysis, monitoring, and reporting on animal health and milk quality to dairy farmers and the dairy industry.

The starting point for the project is the prototype of a Somatic Cell Counter based on fluorescent flow cytometry, which has been tested in the lab and in a real world environment, with excellent performance in both cases. Based on this, two pre-production prototypes will be developed (the **LASSI Somatic Cell Counter devices**: a stand-alone device and a unit that will be integrated in Automatic Milking Systems). The devices will be bundled with an Internet of Things (IoT) platform (the **LASSI platform**) into the **LASSI solution**, which will provide services such as analysis, monitoring, and reporting on animal health and milk quality. The LASSI solution will provide **dairy farmers** with a Decision Support System (DSS) on animals' health, reports on animals' health history and milk quality logs, enabling them to rapidly diagnose mastitis by knowing the somatic cell count on individual cows, and save costs. The **dairy industry** will use the LASSI solution for determining remotely SCC on bulk milk quantities before loading it for transport, and for monitoring the quality of farms they cooperate with.

The specific objectives of the project are:

O1

Advanced and specific development that will evolve the existing prototype to two separate pre-production prototypes:

- **Stand-alone, portable, handheld SC Counter;**
- **Live measurement unit to be integrated into the milking system.**

Based on the core device, **two pre-production prototypes** will be developed. The **handheld** device targets the issue of bulk milk quality control at the time of milk purchase from farmers. The **live measurement unit** will be developed to be integrated into Automatic Milking Systems (AMS), allowing continuous monitoring of SCC at the time of milking. The advanced development will include perfection of various system parts: lens, detector, rotational mechanism, and cleaning mechanism, in order to further improve the SC Counter's performance. Furthermore, it will include the design of the housing for both devices, and the implementation of the automatic sampling system for the automatic SC Counter.

Objective	Key Performance Indicators (KPIs)	Target values
O1: Prototype Development	Time to design and integrate the industrial prototype of the handheld device	6 months
	Time to design and integrate the industrial prototype of the automatic device	6 months
	Improvement of the accuracy of the device	±7%
O2: Solution Development	User interfaces meet usability needs of the users	85%
	Acceptance of the proposed services by users	90%
O3: Validation	No. of full systems for milk quality control installed	1
	Number of full systems for cow health control installed	1
	Success rate of the performed system validation tests	90%

QF4 Please tell me to what extent you are worried or not about the following issues.
Answer: Total 'Worried'
"Higher levels of Worry"

Pesticide residues in fruit, vegetables or cereals			Residues like antibiotics or hormones in meat			Pollutants like mercury in fish and dioxins in pork			Cloning animals for food products		
	EU27	72%		EU27	70%		EU27	69%		EU27	65%
	EL	91%		CY	92%		CY	85%		EL	76%
	CY	90%		EL	87%		IT	83%		IT	75%
	LT	88%		LT	84%		LT	82%		LU	75%
...				
	SE	59%		UK	53%		NL	57%		EE	48%
	NL	53%		SE	50%		UK	51%		IE	48%
	UK	53%		FI	48%		SE	46%		MT	48%

Figure 1: Pesticide residues – The major food-related concern of European citizens (Source: Eurobarometer 354)

How is your innovation better or significantly
different than other existing alternatives?

Why is the timing right for your innovation?

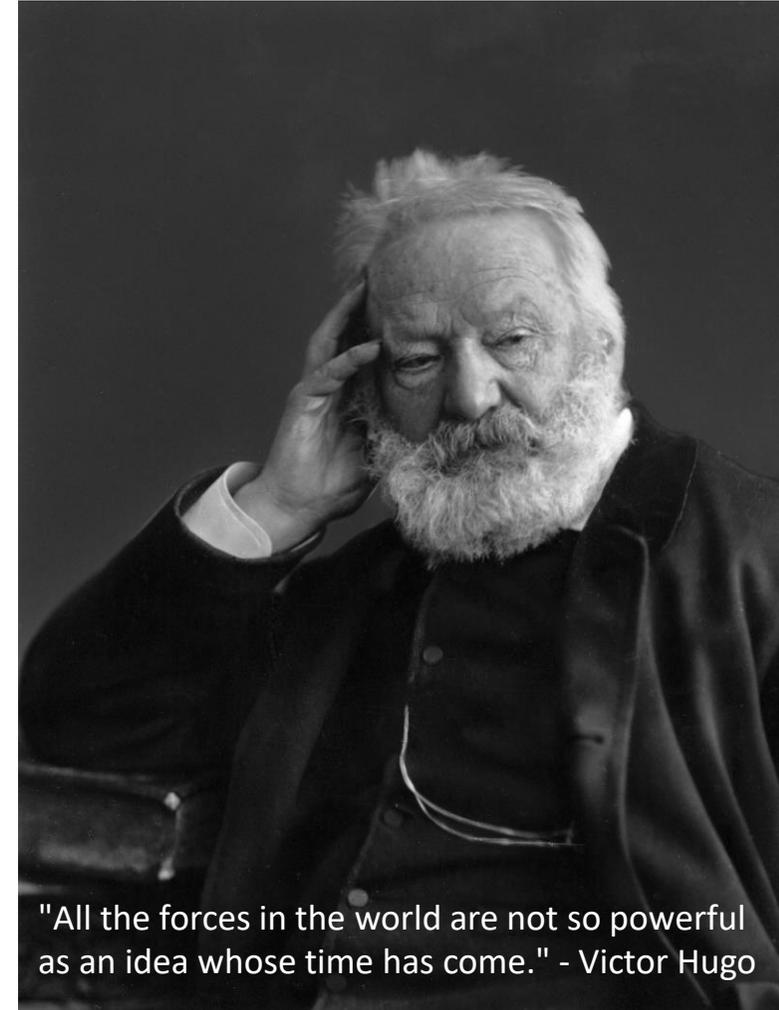
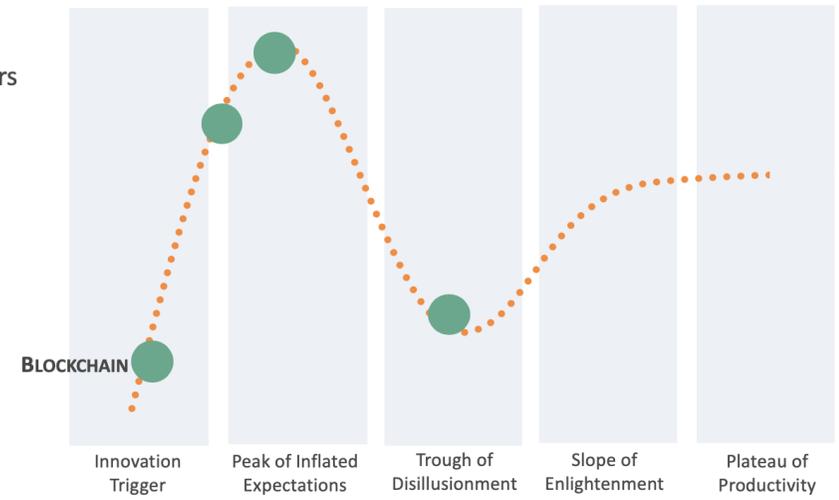
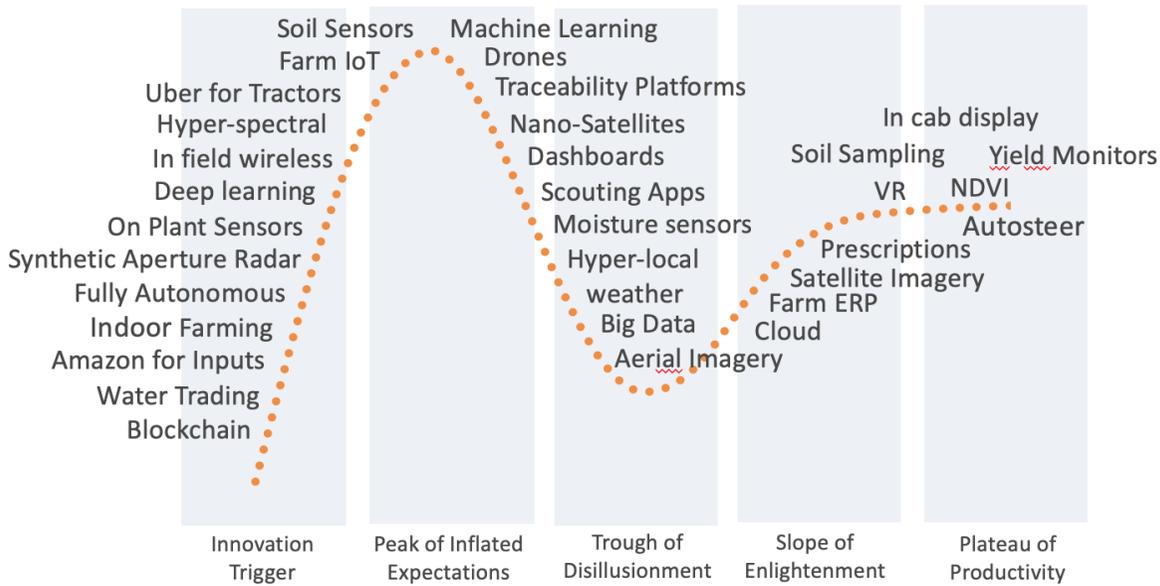


Table 6: Technical characteristics of the competitive solutions

	Test tape method (Porta SCC)	California Mastitis Test (CMT) (Ekomilk SCAN)	Automatic counting based on image cytometry technology (DeLaval Cell Counter)	Automatic counting based on flow cytometry technology (Fossomatic™ FC)	LASSI
Measuring speed	45 min for regular, and 5 min for quick test	4 min/measurement		200, 300, 400, 500 or 600 samples/hr	100,000 to 1,000,000 somatic cells per ml in laboratory conditions in less than 60 seconds
Measuring range	100.000 – 3.000.000 somatic cells/ml	90.000 – 1.500.000	10.000 to 4.000.000 somatic cells/ml	0 – 10 mill cells/ml	100,000 to 1,000,000 somatic cells per ml
Sample intake	2 ml	10 ml	Approx 60 µl in the cassette / Measuring volume: Approx 1 µl	2.5 ml (programmable 2.0 – 5.0 ml)	2 ml
Required sample temperature	0 - 8°C	15° - 30°C	10° - 40°C	30 - 42 °C	15 – 25 °C
Sample types	Bulk tank or individual sample	Bulk tank or individual sample		Cow's, goat's, sheep's milk and other	Any type of milk, bulk or individual animal.
Dimensions (HxWxD)		20 x 26 x 29 cm	23,5 x 23,6 x 24,9 cm	63 x 85 x 68 cm	10 x 10 x 5 cm
Weight	Digital reader ~ 200 g Tapes – N/A	< 4,5 kg	4.1 kg	100 kg	<1kg
Power supply	N/A - manual	AC Power Supply voltage 220V +10%/-15% / DC Power Supply voltage 12V to 14,2V		100 - 240 VAC, 50/60 Hz	12V DC power supply
Portable	Yes - handheld	Yes - tabletop	Yes – tabletop	No	Yes - handheld
Customers	Dairy farmers & milk industry companies	Dairy farmers & milk industry companies	Small milk laboratories and dairy farmers	Laboratories	Dairy farmers & milk industry companies
User level	Non-expert	Non-expert	Non-expert	Expert	Non-expert
Price range	<100 €	1 – 3 k €	<10 k €	> 10 k €	250 €

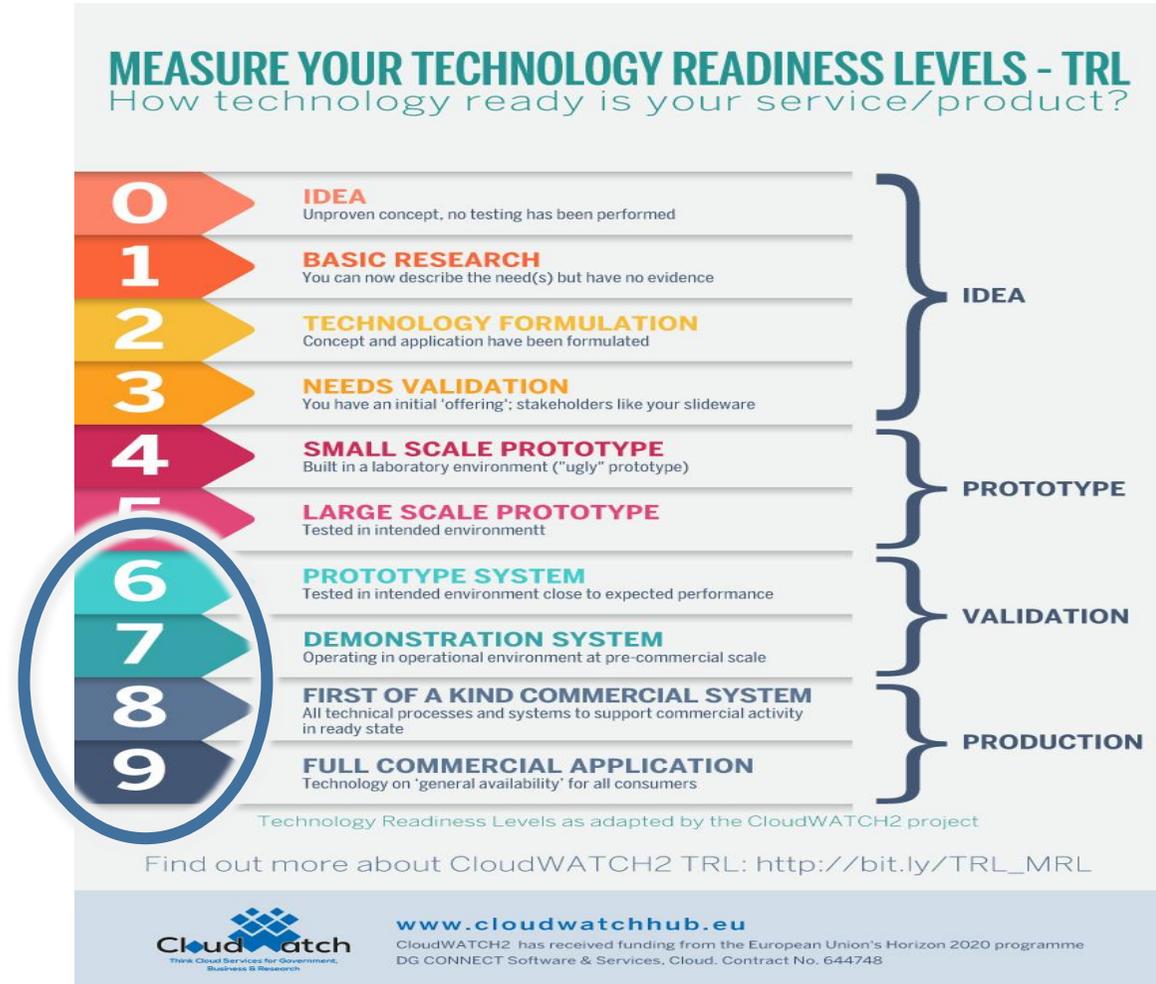
- **Innovation Trigger:** A potential technology breakthrough kicks things off. **Early proof-of-concept stories** and media interest trigger significant publicity. Often **no usable products exist** and **commercial viability is unproven**.
- **Peak of Inflated Expectations:** Early publicity produces a **number of success stories** — often accompanied by scores of failures. Some companies take action; many do not.
- **Trough of Disillusionment:** Interest wanes as experiments and implementations **fail to deliver**. Producers of the technology shake out or fail. Investments continue only if the surviving providers improve their products to the satisfaction of early adopters.
- **Slope of Enlightenment:** More instances of how the technology can benefit the enterprise start to crystallize and become **more widely understood**. Second- and third-generation products appear from technology providers. More enterprises fund pilots; conservative companies remain cautious.
- **Plateau of Productivity:** Mainstream adoption starts to take off. **Criteria for assessing provider viability** are more clearly defined. The technology's **broad market applicability and relevance** are clearly paying off.



Current stage of development)
Technology Readiness Levels),

Activities and results achieved
so far.

Next steps planned to take this
innovation to the market?



Status



Initial
set of
services
ready:

Irrigation optimization (**irrigNET**)

Pest control (**trapNET**)

Crop disease prediction (**alertNET**)

Image based analysis of fields (**fieldNET**)

Machinery and asset control (**fleetNET**)

Asset management in orchards (**boxNET**)

Farm activities log book (**activityBOOK**)

13 supported crops

Prediction of **12** diseases

Monitoring of **2** types of pests

Pilot deployments done over the last
two years

Onboarding customers in progress

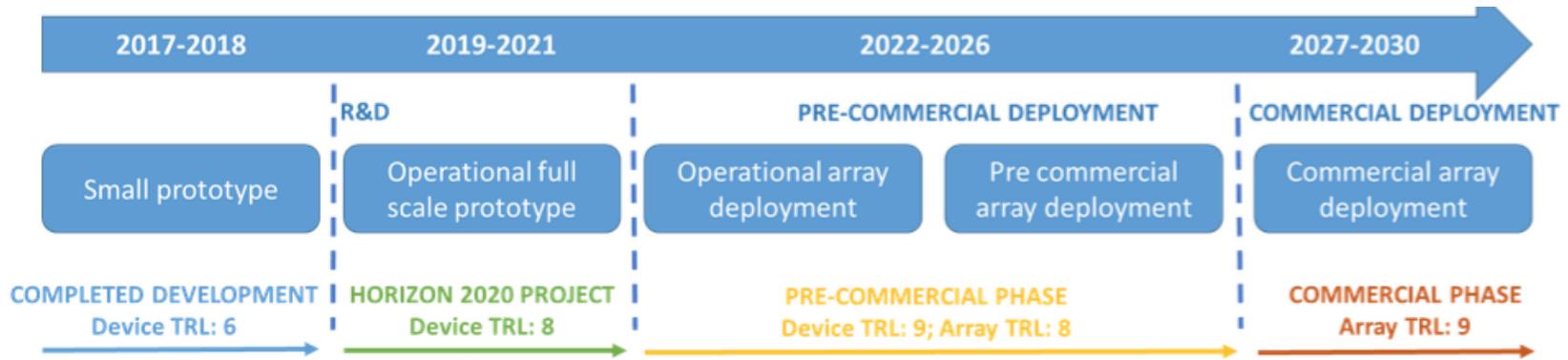


Figure 9: Project stages

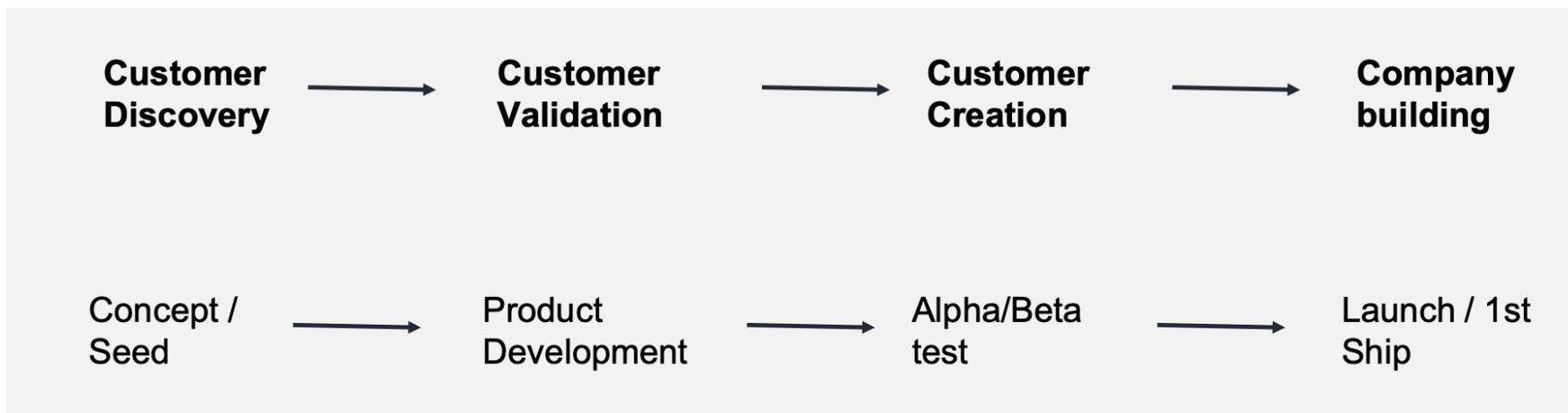
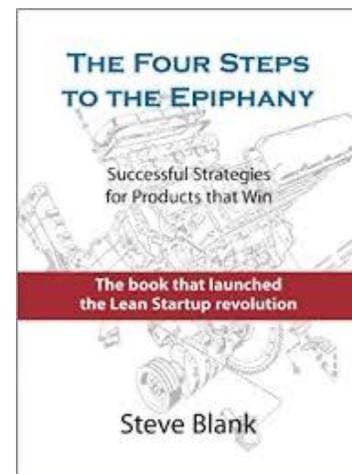
To expand team	Business development Sales and marketing, Software development Agriculture and supply chain domain experts
To expand functionality	New digital farming micro-services End-user solutions for new domains (cattle, storage of crops) Product passport with sensing capabilities

- Technological
- Practical
- Economic

Product Development Process



Customer Development Process

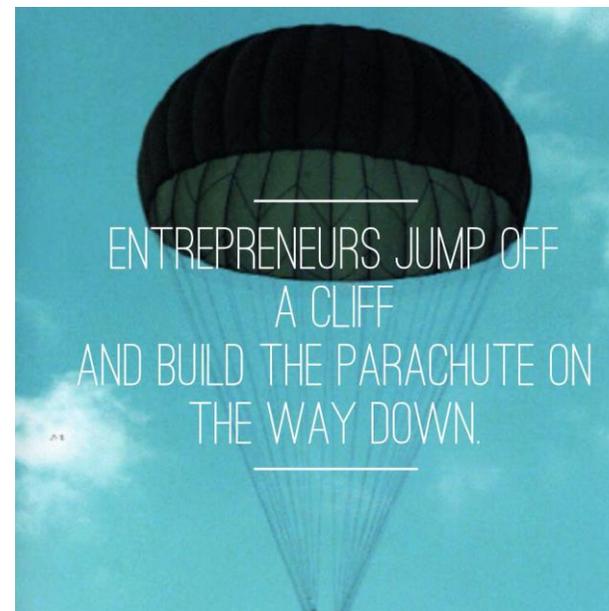


The EIC Accelerator supports **high-risk**, high-potential small and medium-sized enterprises and innovators to help them develop and bring onto the market new innovative products, services and business models that could drive economic growth.

BUSINESS RISKS (Excellence)

VS

PROJECT RISKS (Implementation)



High-risk/high-potential innovation ideas that have something that nobody else has. It should be **better and/or significantly different** to any alternative. Game-changing ideas or breakthrough innovations are particularly sought after. It's **high degree of novelty** comes with **a high chance of either success or failure**.

Realistic description of the **current stage of development**; at **least TRL 6**, or something analogous for non-technological innovations and clear outline of **steps planned to take this innovation to market**.

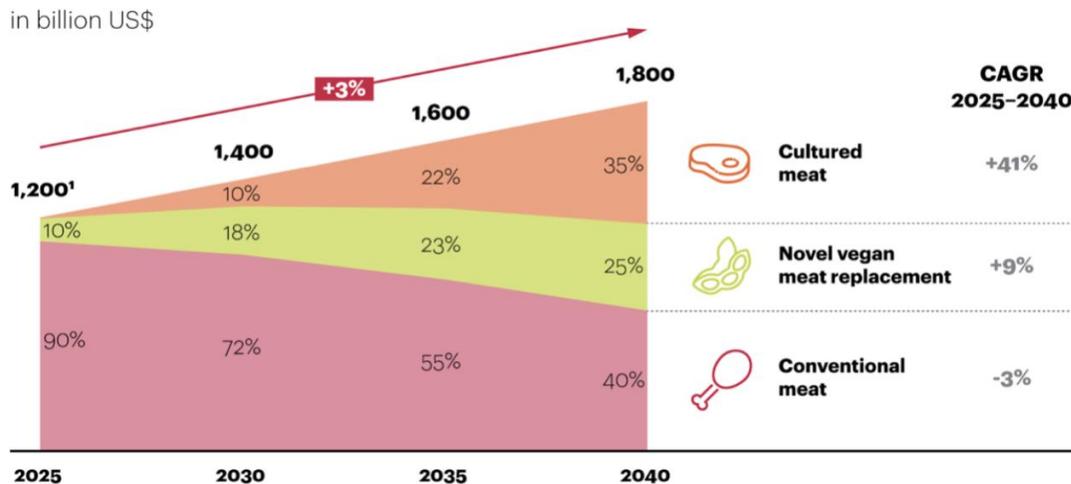
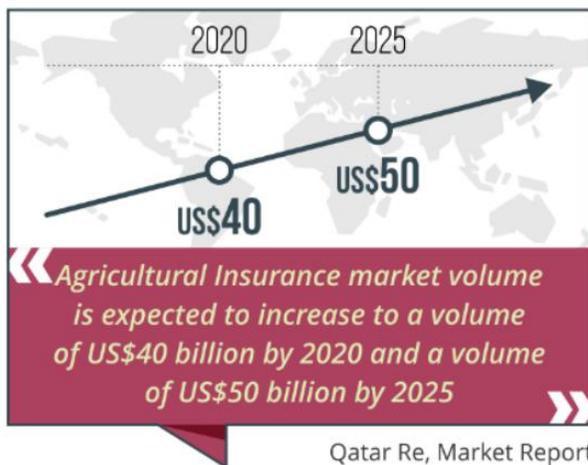
Highly innovative solution that goes beyond the state of the art in comparison with existing or competing solutions, including on the basis of costs, ease of use and other relevant features as well as issues related to climate change or the environment, the gender dimension and any other benefits for society.

Very good understanding of both risks and opportunities related to successful market introduction of the innovation from both technical and commercial points of view. Documentation on the **technological, practical and economic feasibility of the innovation**. *The 'feasibility' aspect is closely examined if you are invited to present your proposal.*

Objectives for the innovation proposal as well as the **approach and activities** to be developed are **consistent with the expected impact** (i.e. commercialisation or deployment resulting in **company growth**). Appropriate definition provided of specifications for outcome of project and criteria for success.

Taken as whole, to what extent the 'Excellence' elements are **coherent and plausible**

- Market assessment (inc. conditions and growth rate)
- Potential customers
- Unique Selling Points
- Differentiators



TAM: Total Available Market

Focus on: Total market / size

Example: **Total Agricultural Robotics Market**

SAM: Serviceable Addressable Market

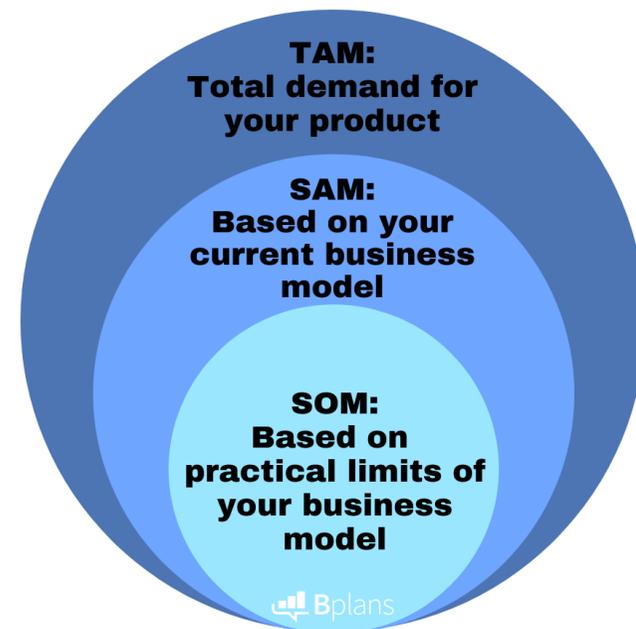
Focus on: Your own technology/ services

Example: **Total market for spraying robots** (Segment of total agricultural robotics market)

SOM: Serviceable Obtainable Market

Focus on: Which realistic market share can be obtained by myself considering: competition, trends, expected demand/forecast, countries, my sales/distribution channels and other market influences?)

Example: **My realistic goal** to sell spraying robots to farmers.



MARKET SIZE

	Avg Farm Size	Number of farm holdings			Utilised agricultural area in ha			Standard output (EUR)			Livestock units on holdings with livestock		
		All Farms	Very small & Small Farms	Large Farms	All Farms	Very small & Small Farms	Large Farms	All Farms	Very small & Small Farms	Large Farms	All Farms	Very small & Small Farms	Large Farms
Spain	24,1	965.000	758.000	52.000	23.300.000	3.559.000	12.939.000	35.979.000	16.129.000	9.049.000	14.502.000	7.409.000	3.051.000
Ireland	35,5	140.000	60.000	5.000	4.959.000	658.000	1.152.000	5.013.000	652.000	887.000	5.929.000	899.000	795.000
Serbia	4,5	650.000						5.300.000			1.800.000		
France	58,7	472.000	202.000	98.000	27.739.000	1.164.000	17.170.000	56.914.000	10.977.000	24.481.000	21.871.000	2.787.000	9.741.000
Germany	58,6	285.000	128.000	35.000	16.700.000	1.257.000	9.514.000	46.252.000	7.301.000	20.440.000	18.407.000	3.938.000	6.802.000
Italy	12	1.010.000	880.000	15.000	12.099.000	4.171.000	3.259.000	43.794.000	20.066.000	7.608.000	9.374.000	3.340.000	1.991.000
The Netherlands	27,4	67.000	38.000	2.000	1.848.000	255.000	369.000	20.498.000	9.216.000	2.066.000	6.602.000	2.983.000	446.000
EU-28	16	10.841.000	9.353.000	337.000	174.614.000	32.276.000	90.966.000	331.105.000	107.887.000	110.792.000	130.174.000	40.046.000	40.609.000

Note: Very small and small farms are defined by a utilised agricultural area <20 ha; large farms are defined by a utilized agricultural area with over 100ha

Figure 5 Market Size Statistics

MARKET SEGMENTATION

Customer Segment	Solution	Functionality	Pricing Policy	
CS-A1: small dairy farms	Stand-alone device & IT Platform	Test Milk Quality Instantly & Remotely	Device € 250	Platform € 100 Yearly Subscription
CS-A2: Medium and large-sized farms	Stand-alone device & IT Platform	Test Milk Quality Instantly & Remotely	Device € 250	Platform € 100 Yearly Subscription
CS-A2: Medium and large-sized farms	Live measurement Unit & IT Platform	Integrate to milking system	Device € 350	Platform € 150 Yearly Subscription
CS-B: Dairy industry	Stand-alone device & IT Platform	Test Milk Quality Instantly & Remotely	Device € 250	Platform € 1.500 Yearly Subscription
CS-C: Milking Systems Industry (AMS)	Live measurement Unit & IT Platform	Integrate to their milking systems and resale	Device € 300	Platform € 100 Yearly Subscription

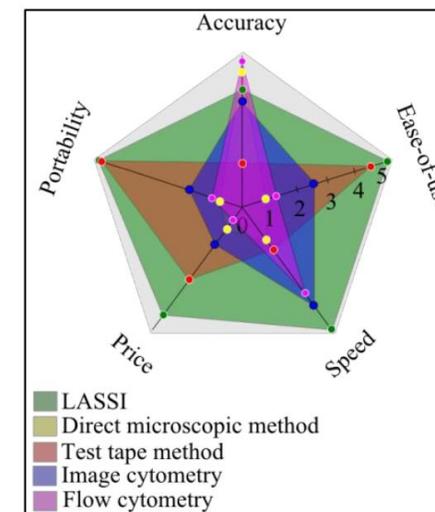
“A unique selling proposition or point (USP) refers to the **unique benefit** exhibited by a company, service, product or brand that **enables it to stand out from competitors**. The unique selling proposition must be a feature that highlights product benefits that are **meaningful to consumers**.

Unique value proposition of LASSI:

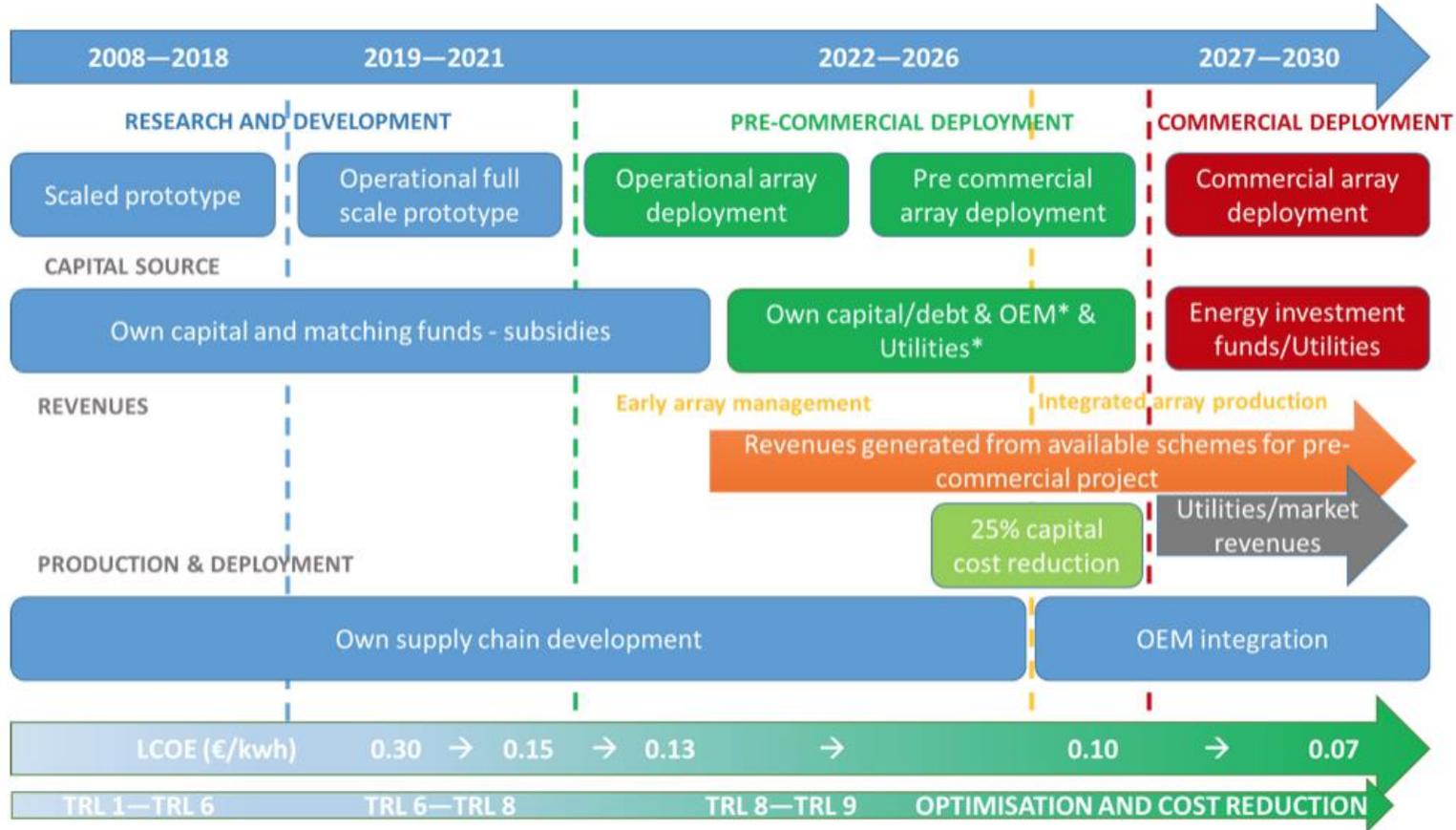
LASSI combines the advantages of the state-of-the-art solutions into a disruptive innovative solution. **High accuracy and high speed** are accomplished by using fluorescent flow cytometry, the fastest and alongside direct microscopy, the most accurate method for determining the SCC. **Ease-of-use** is achieved by automation of the sample preparation and cleaning processes. **Low price** is achieved with innovative design and use of readily available components to create a novel device. Additionally, LASSI handheld SC counter is **portable** due to its small size and it is the first handheld SC counter based on flow cytometry.

Table 4: Overall characteristics of existing solutions

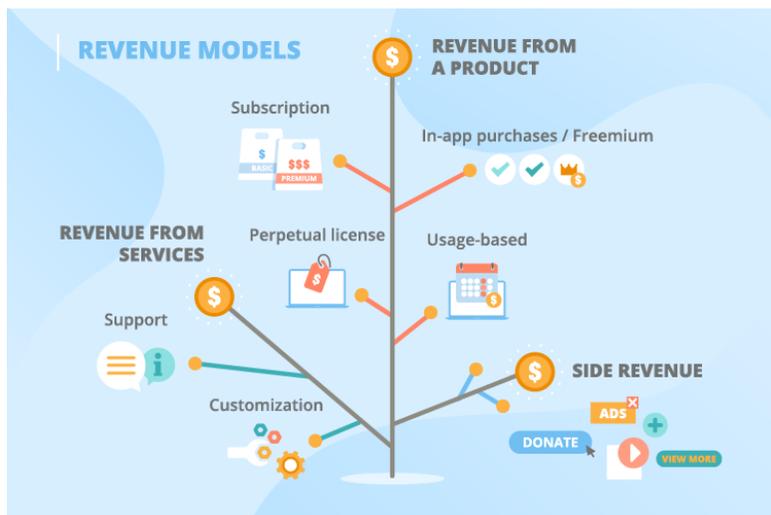
	Accuracy	Ease-of-use	Speed	Price	Portability
Test tape method	Low	Yes	Slow	Low	Yes
California Mastitis Test (CMT)	Low	Yes	Slow	High	Yes
Automatic counting based on image cytometry technology	High	Moderate	Fast	High	Yes
Automatic counting based on flow cytometry technology	High	No	Fast	High	No
LASSI	High	Yes	Fast	Low	Yes



- Strategy for commercialization
- Regulatory approvals/compliance needed
- Time to market/deployment
- Revenue model

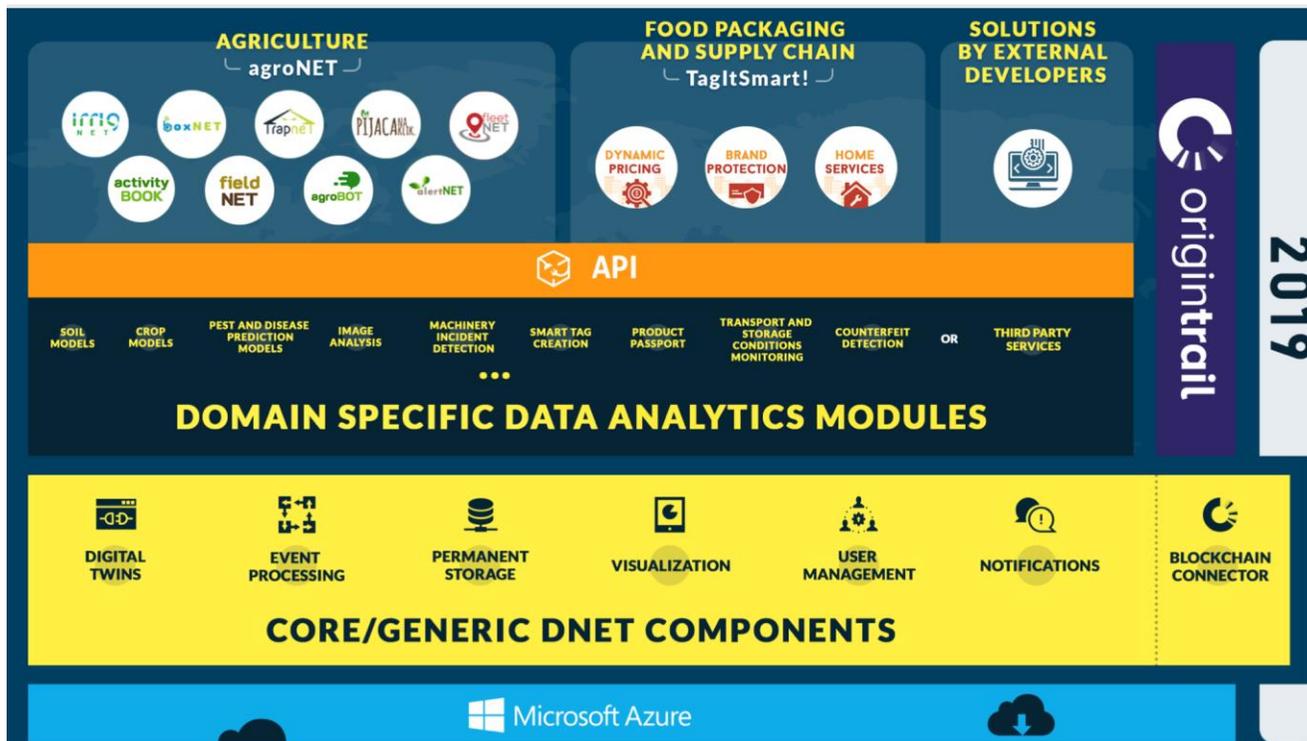


A revenue model is a framework for generating revenues. It identifies which **revenue source** to pursue, what **value** to offer, how to **price** the value, and **who pays** for the value.



SALES	Year 1
CS-A1: Small farmers	
P1: Stand Alone Device & IT Platform (Sales)	180.000,00 €
Number of new customers	300
Number of stand alone devices sold	600
Number of IT Platform Subscriptions	300
CS-A2: Medium and large-sized farms	
P1: Stand Alone Device & IT Platform	337.500,00 €
Number of new customers	250
Number of stand alone devices sold	1.250
Number of IT Platform Subscriptions	250

- Key partners required to develop and commercialise your innovation,
- What their roles/competences are
- To what extent they are already committed and incentivized



From relevant organizations
Custom (explain their interest in the letter)
Signed by decision makers
Scanned copy in Annex 3



INOSENS.rs

26th February 2018

To Whom It May Concern:

As a Head of Department for insurance in Agriculture at Generali Osiguranje Srbija ADO, I am greatly interested in the activities undertaken by the BEACON project submitted by KARAVIAS, in response to the topic DT-SPACE-01-EO-2018-2020 –“Digitising and transforming European industry and services (DT)” of the Horizon 2020 Programme.

The proposal aims to deliver agricultural insurance services into a commercial service package that will enable insurance companies to alleviate the effect of weather uncertainty when estimating risk for Agricultural Insurance products, reduce the number of on-site visits for claim verification, reduce operational and administrative costs for monitoring of insured indexes and contract handling, and design more accurate and personalised contracts by using Earth Observation data and weather intelligence, matching them with Blockchain technology and Smart Contracts applications.

As we are interested to supplement our services with advanced insurance solutions, BEACON will give us the opportunity to use current, historical and forecast EO and meteorological data, so that we enhance the estimation of the undertaken risks and crop losses and design the premiums with greater accuracy.

For the reasons above I am writing to confirm our interest in collaborating with BEACON, helping to define requirements, test and validate the proposed solution as well as being able to make use of the envisaged solution.

Best regards,


Mr. Nemanja Petranski
General Osiguranje Srbija ADO

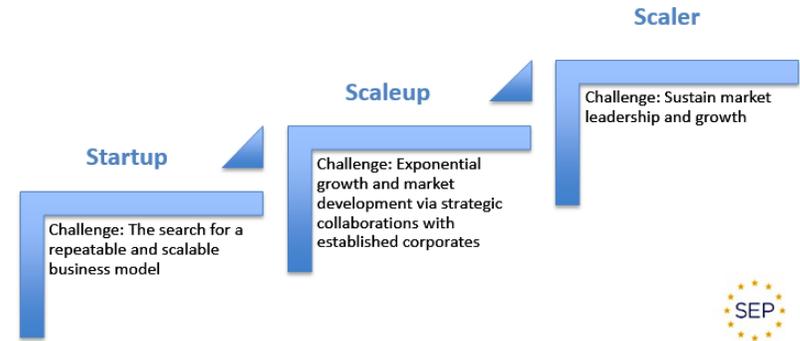
Akcionarsko društvo za osiguranje GENERALI OSIGURANJE SRBIJA, Beograd, Vladimira Popovića 8
Matičarski broj: 17108319
PIB: 100001175
Društvo pripada Generali grupi osiguranja u Registar osiguravajućih grupa tražnje koji vodi FASB.



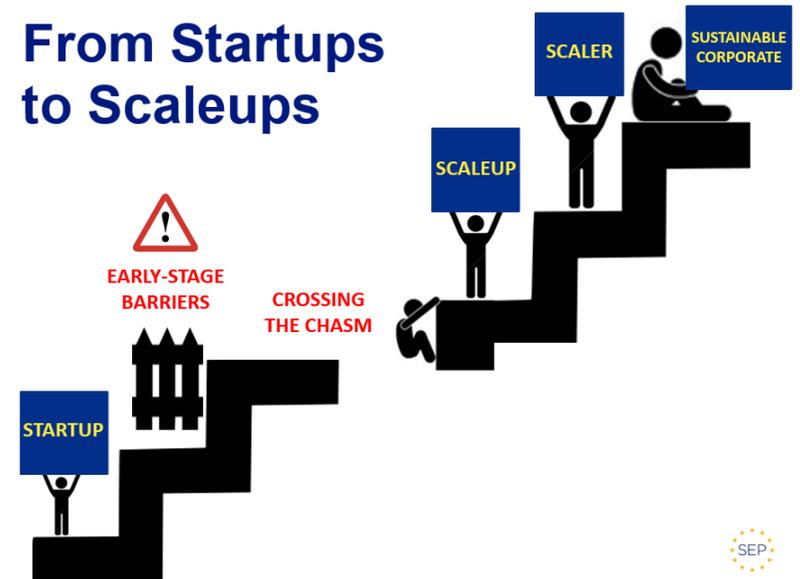
- Specify your Intellectual Property Rights in relation to your innovation.
- What are the key assumptions
- What measures are needed to ensure freedom to operate (e.g. IP, etc.)?

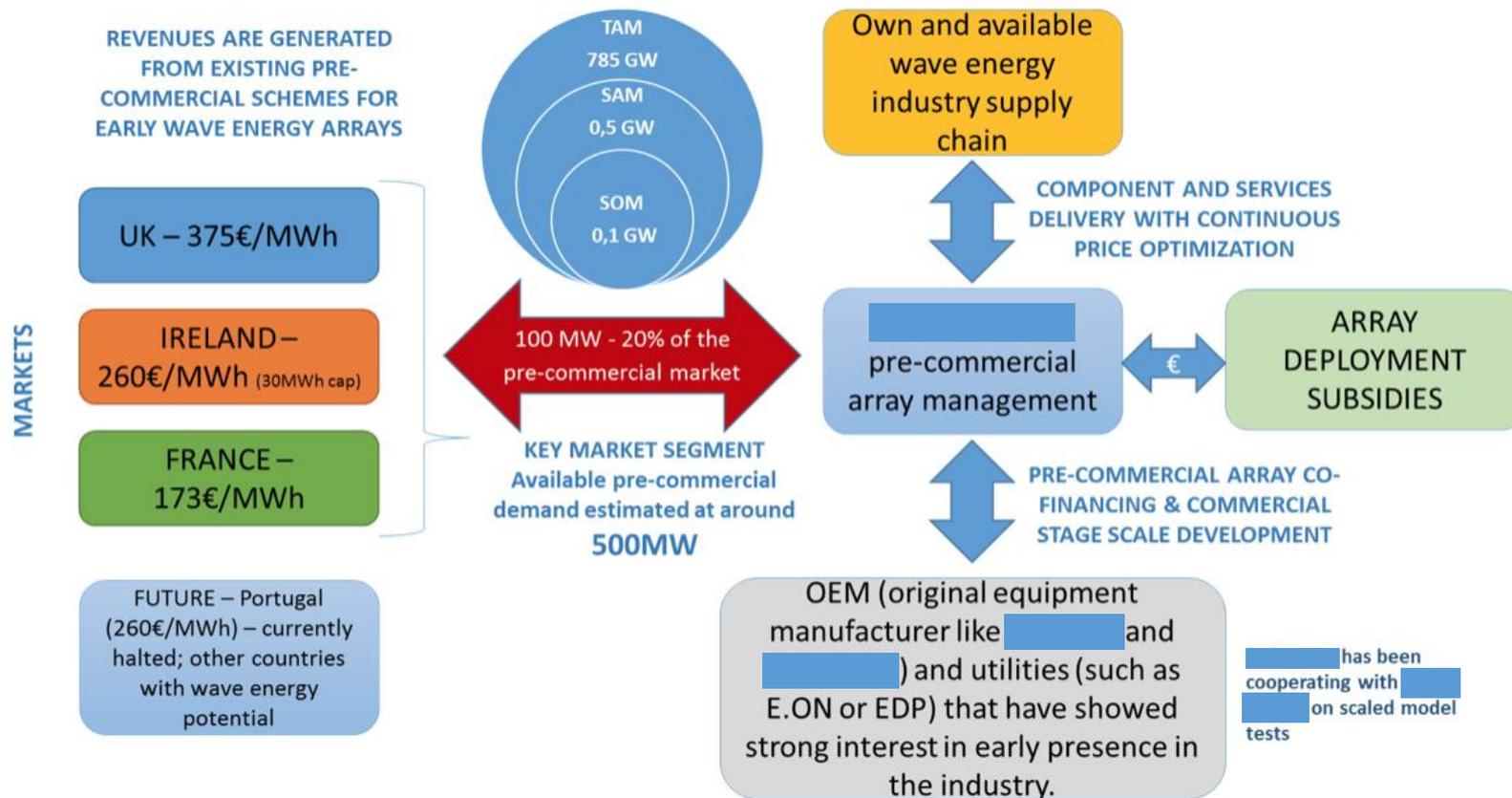
Broader area	Patent	Description
SCC detectors	US2015253302 (A1)	Based on microflow cytometry and impedance measurement. Static microchannels suffer from clogging and fabrication tolerances. Market potential questionable.
	US2014139834 (A1)	Approximation based on two-variable equation. Not very precise.
	CN102819765 (A)	Image cytometry based counter.
	US2012310541 (A1)	Apparatus for dielectric spectroscopy of milk. Not ideal for determining SSC.
	CN1789983 (A)	Colorimetric method of detecting somatic cells in liquid phase. Cumbersome sample preparation.
	US6307362 (B1)	Somatic cell analyser based on detection of sodium ions. Unreliable technique.
Methods for detection	NZ608803 (A)	A method for discrimination of cells, no device is discussed.
	NZ580123 (A)	An indirect method, based on detection of oxygen levels in milk.
	JP2010230363	A method based on active oxygen detection. Market take-up unlikely.
	WO2010079469 (A1)	Method based on CMT. There are commercially available solutions using this method. Accuracy is not very high.
	WO2005018414 (A2)	A method based on detection of nucleic acid in milk.
	US2008057596 (A1)	Colorimetric method of detecting somatic cells, similar to PortaSCC, but in liquid phase.

- How you intend to scale up your innovation, including the potential to develop new markets
- What the impact of the innovation on the growth of the company will be.



From Startups to Scaleups







	Current Situation	After KATANA
Market Share	<1% of Serbian market	3% of Serbian market 1 st marketplace for PA solutions in Europe
Customer base	Private companies: Delta Agrar, Plantaže, Victoria Group and MK Group Public sector organizations: Regional Government of Vojvodina (Dept. Of Agriculture) and the Waters of Vojvodina organization	PA solutions providers from all over Europe (500+ customers)
Local Business Portfolio	4 paying customers, all in Serbia	+10 paying customers in Serbia
International Business Portfolio	None	500 paying customers in Europe
No. of Employees	3	12
Business Activities	ICT Technologies for Agriculture	ICT Technologies for Agriculture
Potential Turnover Increase (%) and (k€)	-	+150% +750k EUR

KPIs for the expected outcomes and the related success criteria for the innovation (i.e. the technological, practical, economic, market)

Current values and the target values at specified dates (breakeven point, etc.).

Key Performance Indicators (KPIs)	Target values
Project Success Indicators	
% of outage due to changes (planned unavailability)	<3%
% of actual uptime	>97%
AgI Process cycle-time decrease (%)	60%
BEACON market readiness	
% of automation workflow achieved on AgI company level	90%
% of automation workflow achieved on AgI supply chain level	80%

- Societal,
- Economic,
- Environmental
- Climate impacts

be if your innovation if successfully commercialised?

Under this framework MOZART contributes in high priority issues in the EU Environmental Agenda related to agriculture, as reflected in various legislative documents such as the **Framework Directive on the Sustainable Use of Pesticides (2009/128/EC)**, which demands all Member States to adopt National Action Plans setting quantitative objectives, targets, measures and timetables to reduce risks and impacts of pesticide use on human health and the environment. Other relative EU legislative and/or institutional initiatives in the field include **Directive (2009/127/EC) with regard to machinery for pesticide application** (for the first time, the Directive will also cover certain environmental protection requirements) and of course the **Common Agricultural Policy (CAP)** and more specifically the cross compliance scheme that couples subsidies to farmers with environmental criteria.

Convincing specification of the potential to create new markets or create market disruption together with a convincing specification of the **substantial demand** (including willingness to pay) for the innovation. The total **market size** envisaged.

Convincing description of **targeted users or customers** of the innovation, how their needs have been addressed, why the users or customers identified will want to use or buy the product, service or business model, including **comparison with what is currently available, if anything at all.**

Realistic and relevant analysis of **market conditions** and **growth-rate**, competitors and competitive offerings, key stakeholders, clear identification of opportunities for market introduction, market creation or disruption (e.g. via new value-chains).

A realistic and relevant description of how the innovation has the **potential to scale-up the applicant company**. This should be underpinned by a **convincing business plan** with a clear timeline and complemented, where possible, by a track-record that includes financial data. *The 'potential to scale-up' aspect and associated financial needs are closely examined if you are invited to present your proposal*

Alignment of proposal with overall strategy of applicant SME and commitment of the team behind them. Demonstration of need for commercial and management experience, including understanding of the financial and organisational requirements for **commercial exploitation** as well as key third parties needed.

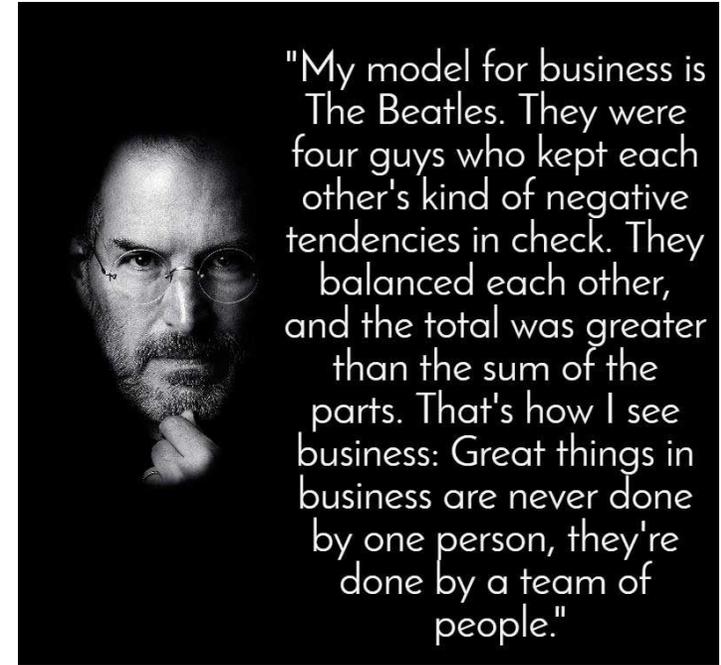
Realistic and relevant **strategic plan for commercialisation**, including approximate time-to-market or deployment. Activities to be undertaken after the project. *The 'commercial strategy' aspect is closely examined if you are invited to present your proposal.*

The **European/global dimension** of innovation with respect to both commercialisation and assessment of competitors and competitive offerings.

Evidence of or realistic measures to ensure '**freedom to operate**' (i.e., possibility of commercial exploitation), convincing **knowledge-protection strategy**, including current IPR filing status, IPR ownership and licensing issues. **Regulatory and/or standards requirements** addressed.

Taken as whole, to what extent the 'Impact' elements are **coherent and plausible**.

- Team
- Different roles and commitment
- Achievements/experience (strategic, technical and commercial) in relation to your innovation
- Role of the company's owner(s) if not part of the team.
- Shareholding and stock options of team members (including owners).
- Strengths and weaknesses of the team
- Plans to acquire currently missing competencies
- Incentives for team members



Team Member (Name and Surname)	Position	Department	Function/ key competencies	Commitment (from 1-100% where 100% is full time, i.e. no other commitment outside of the company)
	CEO			?
	CTO			
	COO			
	CMO			
	Other?			

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Who Wants to Be a Ninja? Job Titles Get a Rebranding

Companies hire for 'data wranglers,' 'growth hackers' in the race for talent

Strategic (CEO)
Technical (CTO)
Commercial (CMO)
...In **relation** to your innovation



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Ben Horowitz is a cofounder and general partner at the venture capital firm Andreessen Horowitz. He is the author of the *New York Times* bestsellers, *The Hard Thing About Hard Things* and *What You Do Is Who You Are*. He also created the a16z Cultural Leadership Fund to connect the greatest cultural leaders to the best new technology companies, and enable more young African Americans to enter the technology industry.

Prior to a16z, Ben was cofounder and CEO of Opsware (formerly Loudcloud), which was acquired by Hewlett-Packard for \$1.6 billion in 2007, and was appointed vice president and general manager of Business Technology Optimization for Software at HP. Earlier, he was vice president and general manager of America Online's E-commerce Platform division, where he oversaw development of the company's flagship Shop@AOL service. Previously, Ben ran several product divisions at Netscape Communications. He also served as vice president of Netscape's widely acclaimed Directory and Security product line. Before joining Netscape in July 1995, he held various senior product marketing positions at Lotus Development Corporation.

Ben has an MS in Computer Science from UCLA and a BA in Computer Science from Columbia University.

An **employee stock ownership plan (ESOP)** is an employee benefit plan that gives workers ownership interest in the company. Startups often use ESOPs as a corporate-finance strategy and to **incentivize employees, align their interests with those of their shareholders and compete against large companies in attracting talent.**

TYPICAL PRE-FINANCING EQUITY

Position	Range %
Founding CEO	30-60%
Active Founding Scientist	20-40%
Passive Founding Scientist	1-5%
University Founding Equity	2-20%
Professional CEO (Series ~A/B)	5-10%
C-Level	2-5%
Lead Engineer / Scientist	1-2%
Engineer (5+ years)	0.66-1.25%
Engineer (Junior)	0.2-0.66%
Ind. Board Member/Advisor	1%

- Titles range from CTO, CEO, Chief Scientist
- Many are part time, but spend at least 30% of their time at the startup
- Get 20% median and 25% mean initial equity
- The most highly compensated are founding scientist CEOs, which is rare
- Active Founding Scientist are more typical in tech companies (less common in biotech)

- Titles range from nothing, Advisor, Scientific Advisory Board to Chief Scientist
- Spending very little time day to day at the startup and some are not in touch with their companies at all
- Get less than 5% initial equity

CREDIBLE AND REALISTIC ASSESMENT

STRENGTHS	WEAKNESSES
Technical know - how	Lack of sales/ marketing skills
Long-term previous collaboration	Limited contacts in Europe
Commitment	Lack of hierarchy
....

AMBITIOUS PLANS



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📣 #Newyear, new #jobopportunities! We have a new job opening in Belgrade, Serbia. Apply now for the #technicalsales specialist and help us build more #sustainablefuture → <https://bit.ly/2Nsut9n> ...see more

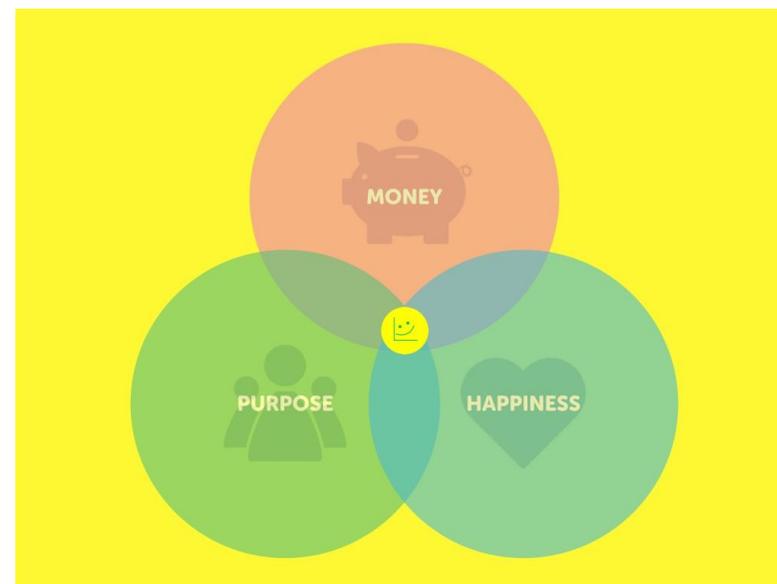
The image shows a group of five diverse professionals in a library or office setting, engaged in a collaborative discussion around a laptop. They appear to be in a meeting, with some pointing at the screen and others looking thoughtful or engaged.

FINANCIAL INCENTIVES

- Salaries
- Stock options
- Bonus (based on targets)
- Other?

NON-FINANCIAL INCENTIVES

- Flexible working hours
- Training/ travelling
- Team-building activities
- Company car
- Working environment
- **Working for a purpose**
- Other?



- Estimation of the total financial resources
- Required timing of financial needs to develop your innovation and to reach the break-even point

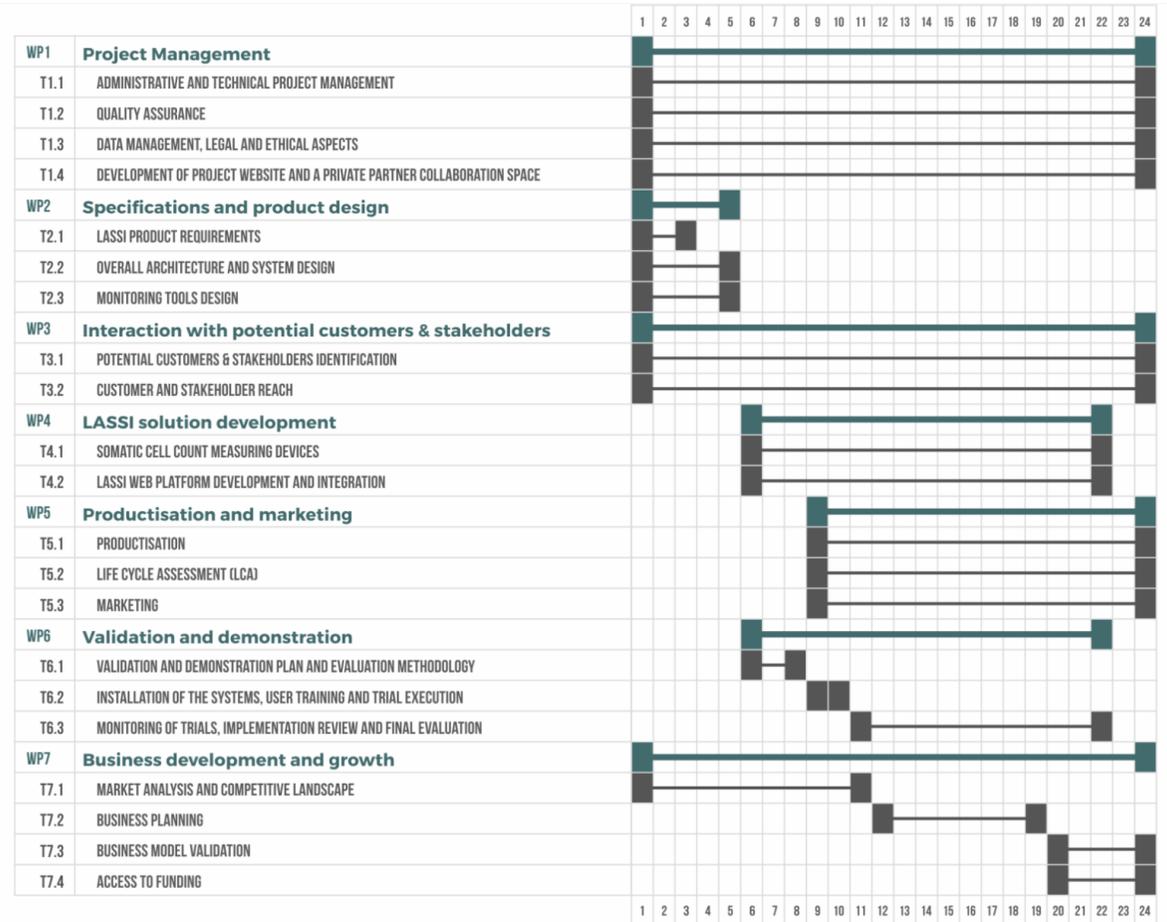
FINANCIAL TABLES

- Simplified financial information on revenues, expenditures, cash flow and balance sheet;
- Company up-to-date financial data relating to cash and debt;
- Summary information about company financial history;
- Company ownership and capital structure (Blended applicants only);
- Information about current financing round.

<i>Risk Description</i>	<i>WP(s)</i>	<i>Proposed risk-mitigation measures(Initial Contingency Plan)</i>
Technical Risks		
Not all requirements captured	2	(R): Not all requirements were recorded and analyzed. (M): Regular review and validation of outputs and interaction with stakeholders and expert group.
LIT-MS mass range	3	(R): Molecular weights of VOCs higher than the mass range that the LIT-MS can detect, which will make it unable to be detected in the open field. (M): Alterations to the electronics to increase the mass range of the instrument.
LIT-MS sensitivity	3	(R): Field detection encounters low concentration levels require increased sensitivity. (M): Examine different types of inlets to increase sensitivity.
LIT-MS resolution	3	(R): In on-site measurements there are compounds that interact among them and give close peaks. (M): These components need to be properly distinguished. High resolving power for analyzes of interest is a solution for that risk.

Description of risk	WP(s) involved	Proposed risk-mitigation measures
Development risks arising from not achieving the set objectives for the LASSI hardware and software solution	WP2	The design of the system and the product specifications will be enhanced with the involvement of target users early in the project implementation.
Incomplete understanding of customer use cases which can cause a misfit of the solution to the users' need	WP2	Create a tight feedback loop between the user responses and the technical activities. Run case studies in parallel to the technical activities to allow for continuous assessment of the results.
Customer take-up below expectations	WP4, WP6	Intensify promotional efforts. Interview customers and analyse their experience and reasons for slow take-up. Increase viral distribution incentives.

- Overall structure
 - Approach
 - Timing of work packages and activities
- (Based on the objectives and strategy)



Work Package (number and title)	Start month	End month	Deliverable (number and title)	Milestone (description and date) – if applicable	Person months	Indicative budget	Grant or Equity

- Including **TRL 9 / market deployment activities** covered by EU investment in equity **up to break-even point**
- Not more than **5 Work Packages**
- Only essential deliverables (ideally **one per Work Package**)

Work Package Number				
Work Package Title				
Start Month		End Month		
Person Months				
Budget				
Indicate if requesting financing by grant or equity investment				
WP description (You should provide enough detail to justify the proposed resources and also quantified information so that progress can be monitored, including by the Commission):				
Description of tasks:				
List of deliverables:				
Number	Deliverable name	Type	Dissemination Level	Delivery date

Deliverables are outputs (e.g. information, special report, a technical diagram brochure, list, a software milestone or other building block of the project) that must be produced at a given moment during the action.

TYPE

R: Document, report (excluding the periodic and final reports)

DEM: Demonstrator, pilot, prototype, plan designs

DEC: Websites, patents filing, press & media actions, videos, etc.

OTHER: Software, technical diagram, etc.

DISSEMINATION LEVEL

PU - Public, fully open, e.g. web

CO - Confidential, restricted under conditions set out in Model Grant Agreement

CI - Classified, information as referred to in Commission Decision 2001/844/EC.

Milestones are control points to help chart your progress. Milestones may correspond to the completion of a key deliverable. They may also correspond to other inputs, allowing the next phase to begin, to decide on further steps or to take corrective measures.



Together with deliverables they help the EC to assess whether a project is on schedule



Identify sufficient milestones to enable progress to be monitored at high level in all areas of the project at regular intervals and explain your choice



There should be a milestone when a particular stage is complete, or a target has been reached.



There should be milestones in each year of the project, so that annual reviews can be effective

Annex 1 - Security and Ethics

Annex2 - CVs

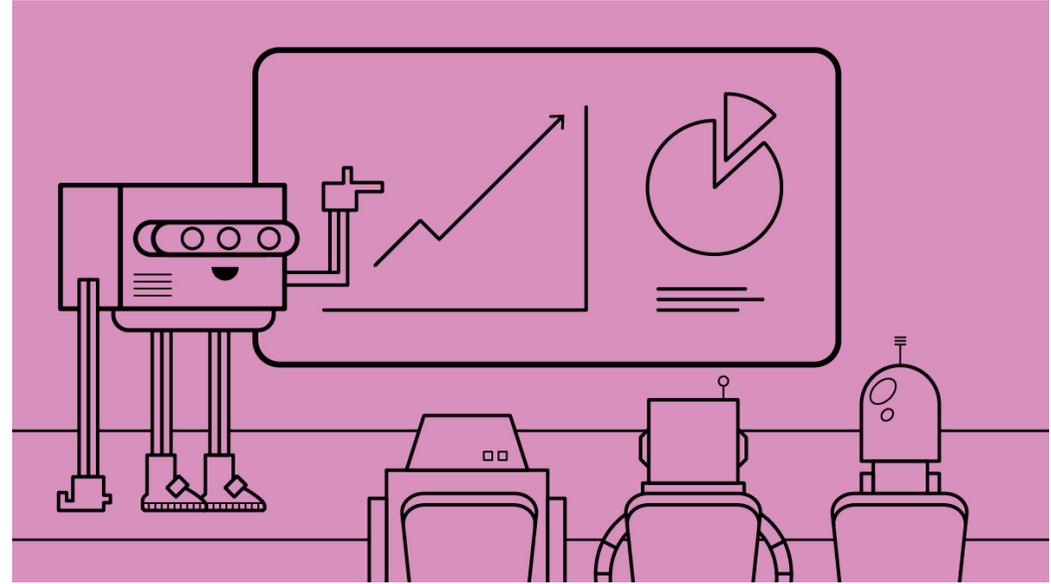
Annex 3 - Others

Annex 4 - Financial and corporate information Excel file (provided as
.pdf and .xls/.xlsx/.ods)

Annex 5 - Pitch-deck (provided in .pdf)

Total duration 10 mins:

Company Purpose
Problem & Solution
Value Proposition
Market Opportunity & Risks
Competition
Business Model
Commercialisation & Marketing
Strategy
Financial Projections Team
Conclusion



In Second stage of the evaluation, the pitch document cannot be changed anymore

One slide for each heading

Evidence that the applicant company **cannot leverage sufficient investments** from the market, particularly for applicant companies requesting blended finance support. Evidence that the applicant company is **deemed 'non- bankable'** by the market, in view of the activities to be developed. ***The 'leveraging of investments' and 'bankability' aspects are closely examined if you are invited to present your proposal.***

Technical/business experience of the team, including management capacity to lead a growing team. If relevant, the proposal includes a plan to acquire missing competences, namely through partnerships and/or subcontracting* and explains why and how they are selected (subcontractors* must be selected using 'best value-for-money' principles). ***The team aspect is closely examined if you are invited to present your proposal.***

Availability of resources required (personnel, facilities, networks, etc.) to develop project activities in the most suitable conditions. Where relevant, realistic description of how key stakeholders / partners / subcontractors* could be involved (subcontractors* must be selected using 'best value-for-money' principles). Where relevant, the estimated budget and the procedure planned for selecting the subcontractors* are appropriate.

Realistic timeframe and comprehensive description of implementation (work-packages, major deliverables and milestones, risk management) taking the company's or applicant's innovation ambitions and objectives into account.

Taken as whole, to what extent the above 'Implementation' elements are **coherent and plausible**.

Contact:

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Teşekkür ederim!
Thank you!



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