Small or medium-scale focused research project (STREP) proposal ICT Call 5

FP7-ICT-2016-12
[Animal husbandry support platform]

Special arrangements apply for the preparation of proposal Part B in the Objectives ICT-2009.9.2 and ICT-2009.9.5. See Annexes 7 and 8 of the Guide for applicants

[AHSP]

Small or medium scale focused research project (STREP)

Date of preparation: 28.01.2020.

Version number: v1

Work programme topic addressed *ICT-15-2016-2017 - Big Data PPP*

Name of the coordinating person: Uros Poznan, Kristina Gavrilovic

e-mail: poznanuros@gmail.com, kristina.lff@gmail.com

fax:

Participant no. *	Participant organisation name	Part. short name	Country
1 (Coordinator)	Faculty of Mathematics, University of Belgrade	MATF	Serbia
2	Faculty of Agriculture, University of Belgrade	FAG	Serbia
3	Ministry of Agriculture, Forestry and Water Economy of the Republic of Serbia	MAFW	Serbia
4	Faculty of Electrical Engineering, University of Belgrade	ETF	Serbia
5	IAHA - ANIMAL HUSBANDRY ALLIANCE	IAHA	Korea
6	Selerant Inc., Italy	SLR	Italy

Proposal abstract

Animal forbidery is one of the most widespread occupations of people in villages of Serbia. According to a survey conducted in 2019, 87% of rural households own at least one cattle head. On the other hand, nowadays computers are accessible to everyone, and most people use computers and the internet which provides additional features.

The aim of this project is to build a platform that will facilitate the livestock business, enable them to monitor their business in a very simple way and make significant decisions for advancement. In other hand, the platform could connect stockmen, and share information that are significant for their business. Stockman then uses this information to make decisions about next steps needed to ensure that his management is of the best quality as possible. Objective of proposed platform is to provide stockmen support in making these decisions. Stockmen would be able to connect to the platform, share current conditions and get back best possible decision they could make. Also they will be able to monitor their progress, money earning or potential losses. In this way they would practically have their own business assistant.

Table of contents

Proposal abstract	2
Section 1. Scientific and/or technical quality, relevant to the topics addressed by the call	4
1.1 Concept and objectives	4
1.2 Progress beyond the state-of-the-art	7
1.3 S/T methodology and associated work plan	8
1.3.1 Describing the overall strategy of the work plan	8
1.3.2 Work packages - Gantt and Pert charts	9
1.3.3.a Work package list	
1.3.3.b List of Deliverables	12
1.3.3.c Milestones	14
1.3.3.d Work package description	15
1.3.3.e Summary of effort	22
Section 2. Implementation.	23
2.1 Management structure and procedures	23
2.2 Individual participants	24
2.3 Consortium as a whole	25
2.4 Resources to be committed	26
Section 3. Impact.	27
3.1 Expected impacts listed in the work programme	27
3.2 Dissemination and/or exploitation of project results	27
Section 4 Ethical Issues	

Section 1: Scientific and/or technical quality, relevant to the topics addressed by the call

1.1 Concept and objectives

1.1.1 Concept

The idea of cooperation, business and social network via the Internet is not a new concept. Here, we're only applying that concept to a branch of the economy that potentially has the least access to information on the Internet. This way, a lot of new information and opportunities will be made available to people who use it. The goal of the project is building a platform that would facilitate stockmen's work in multiple ways.

The following are the main project objectives:

Objective 0: Project management

The goal of this objective is to make sure that absolutely each and every detail of this proposal is properly taken care of, which means:

- (a) All deliverables delivered in time at the highest possible level of quality
- (b) All deliverables delivered in a form that is easy to comprehend and consistent In order to achieve all of the above, an effective system of reminders and monitoring will be set.

Success criteria:

- Optimized reporting processes involved in the project (deadlines)
- Optimized control processes involved in the project
- Optimized finances of the project

Objective 1: Research and Introduction to platform

The goal of this objective is to do detailed research and to collect information that would be important for the Platform itself. Also, probably the most important part of the whole project is to interest potential users to this kind of platform. Stockmen haven't had the opportunity to use something like this for their business. Marketing consultants have role to convince users this platform would give them as much benefits as possible and that it can't make their work more difficult.

Success criteria:

- A conclusion in the form of the proposed conceptual solution
- Precise user guide to animal forestry containing crucial information for the business of stockmen.
- Precise admin guide which contains basic information of the platform based on idea on platform.

Objective 2: System research and generation of use cases

Includes detailed observation of the system. Investigation of the functional requirements that are set for the new system, the type and volume of data covered, potential problems. Generation of use cases and special cases.

Success criteria:

- Understanding the system and information that were collected during the research
- Detailed set of use cases for end users, middleman and researchers that will contribute
- List of parts of the system that need special attention and care

Objective 3: Projecting the system and preparing for the implementation of the platform

The goal of this objective is to make a preparation for implementation. The objective contains comprehensive documentation on all aspects of implementation. It is necessary to document data, process flows in the system, data structure and organization, database design, document specifications, security aspects and procedures, implementation and testing plan. The project can be significantly different from the one created in the previous step.

Success criteria:

• Detailed documentation on the project to be implemented

Objective 4: Building a database

The next step in achieving such platform, would be making a large shared database stored on the cloud. The database will be used for storing information about stockmen, their projects, and market.

Success criteria:

- Making such database and ensuring that it functions normally
- Collecting all information required
- Filling base with that information.

Objective 5: Implementation of the software platform

The goal of this objective is to create a new system (software platform) according to requirements. The systems primary purpose is collecting and analysing data that will help stockmen to improve their business. Collected data will contain information of other stockmen, number of animals they raise, prices on the market, reviews. Stockmen will also have the insight in their own projects, number of animals sold or used in other purposes, control of the money earned or spent.

Success criteria:

- Software architecture made according to requirements
- Control of the quality and testing all the features of the platform
- Release of the first version of the Platform

Objective 6: User acceptance test

The objective contains couple of months of introduction users to the platform, The system will be tested along with back end users, and the results will be compared with results before using system in order to see if it's there any progress. Along with measuring benefits of using this kind of platform, user's acceptance will be measured, in order to recognize parts that need improvement.

Success criteria:

- Complete and thorough testbeds
- Low deficiency rate
- Acceptance rate of stockmen to use the platform
- Level of independence of users while using the platform

Objective 7: Extended support for the users

This objective represents support of the technical persons to the platform users once the platform starts being used. Software engineers and developers contracted for this phase have role to communicate with stockmen in order to give them full support in the period of getting used to the platform. In case there are bugs or issues, to get them fixed as soon as possible.

Success criteria:

- Communication and understanding between technical persons and users
- Number of issues solved
- Hours spent in use of the platform by end users

Objective 8: Media campaign and education of benefits of the platform through workshops

The aim of this objective is to give people a chance to learn about the platform and its benefits. It's very important to have a strong media campaign, and to advertise this kind of project through television, newspapers and mostly, through social networks. Nowadays social networks are the strongest source of commercials and advertisements on them awareness would be raised the highest. Also through Facebook, Instagram and Twitter people will have a way to suggest their ideas of improvement which can be very important for the platform itself. In this way new clients can be reached.

Success criteria:

- Number of workshops held
- Number of mentions in media
- Total area covered with education center
- Results of conducted workshops

1.2 Progress beyond the state-of-the-art

In every sphere such as in cattle-breeding there is a vast progress everyday, scientifically proven and technologically supported. These new foundings are made up to make farmer's job easier and more productive. But progress in this area isn't of great importance if the people that are supposed to know about it, stockmen, are not aware of it. Farming is Serbia is mostly based on what was known to be good and practical from the old times, and people in the village are pretty much lagging behind when we are talking about technological improvements and new scientific and animal husbandry foundings. They are closed for new things and are used to do the things in the old-fashioned way. They hesitate when they need to meet new methods. Great number od farmers are doing things based on gut feeling rather than on concrete information. We need a shift in thinking as soon as possible, and we need to encourage and educate farmers that they must start relying on technology and computers even if it seems inapplicable to their profession. It seems that cattle breeding has reached its upper limit which cannot be passed. We want to prove that the limit can be passed and that the increase in production is possible. The World's population is growing, so it is ideal to make progress in breeding so we can go side by side with the world's population growth, we should make a growth in stock business.

1.3 S/T methodology and associated work plan

1.3.1. Overall strategy of the work plan

People getting involved is one of the main things in helping us achieve the objectives. Competent engineers and great researchers are just the beginning. As much as we need engineers and people working in centers, above all we need regular everyday people that are going to support us and join this project without expecting to directly get something in return. Also we need to enhance communication among the people regarding this issue.

The project is organized in 7 work packages as follows:

WP0 - Project Management

WP1 - Research and Introduction

WP2 - System research and generation of use cases

WP3 - Documentation and preparation for implementation

WP4 - Building a database

WP5 - Development of system architecture

WP6 - User acceptance test

WP7 - Extended support

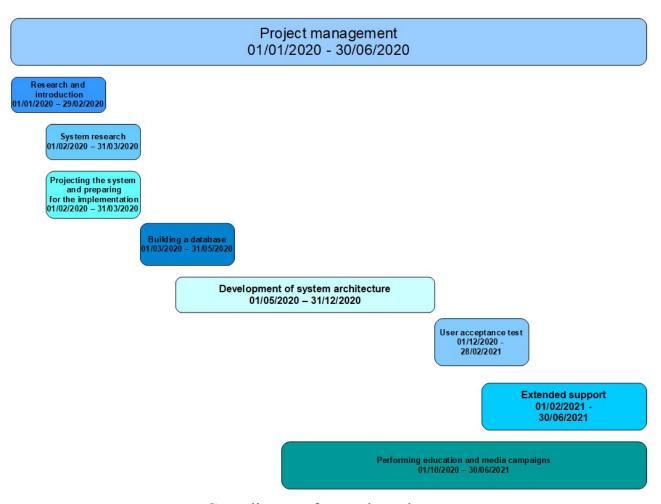
WP8 - Performing media campaigns and education

The core of project is integrated in 6 work packages (WP1, WP2, WP3, WP4, WP5, WP6). All that is planned for the packages correspond to the main strands of the project as described above. It is the responsibility of the project management team (WP0) to coordinate these activities to maximize the impact and benefits for everyone involved.

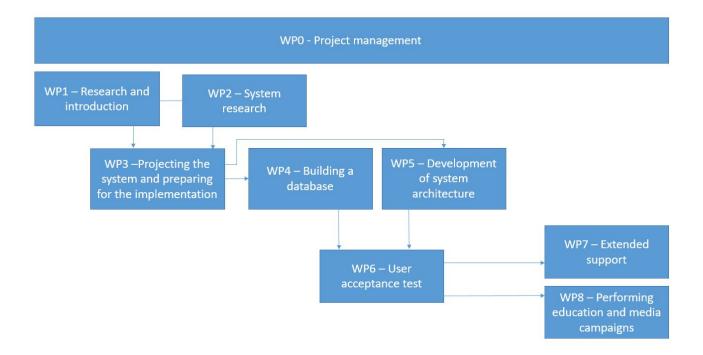
WP7 package are software engineers whose role is to te be support for the users and to keep platform updated.

Work package WP8 are marketing consultants that perform media campaign and education seminars related to the platform.

Research and introduction



Gant diagram for work packages



Pert diagram for work packages

Work package list

Work package No	Work package title	Type of activity ²	Lead partic no.	Lead partic. short name	Perso n-mon ths ⁴	Start month ⁵	End month ⁵
WP0	Project management	MGT	1	All	30	M1	M18
WP1	Research and introduction	RTD	2	MATF, FAG	60	M1	M2
WP2	System research	RTD	2	MATF, FAG	10	M2	M3
WP3	Projecting the system and preparing for the implementation	RTD	2	MATF, Selerant	20	M2	M3
WP4	Building a database	DEM	2	MATF, Selerant	10	M3	M5
WP5	Development of system architecture	RTD	2	MATF, ETF	55	M5	M12
WP6	User acceptance test	RTD	2	MATF, FOA	10	M12	M14
WP7	Extended support	RTD	2	Selerant	5	M14	M18
WP8	Performing education and media campaigns	DEM	1	MATF, MAFW, FAG,	100	M10	M18
	TOTAL				300		

Workpackage number: WP 1 – WP n.

Please indicate <u>one</u> activity per work package: RTD = Research and technological development; DEM = Demonstration; MGT = Management of the consortium

Number of the participant leading the work in this work package.

The total number of person-months allocated to each work package.

⁵ Measured in months from the project start date (month 1).

List of Deliverables

Del. no.	Deliverable name	WP no.	Nature ⁷	Dissemi -nation level	Delivery date (proj.
D0.1	Weekly Reports	WP0	R	PU	M1-M18
D0.2	Monthly Reports	WP0	R	PU	M1-M18
D0.3	Semiannual Reports	WP0	R	PU	M6, M12, M18
D0.4	Annual Report	WP0	R	PU	M12
D0.5	Project plan including quality management plan	WP0	R	PU	M1
D0.6	Final reports at the conclusion of the project	WP0	R	PP	M18
D1.1	User guide	WP1	R	PU	M2
D1.2	Admin guide	WP1	R	СО	M2
D2.1	List of Use Case Scenarios	WP2	R	СО	M3
D3.1	Detailed documentation about implementation	WP3	R	СО	M3
D4.1	Database model specification	WP4	R	СО	M4
D4.2	Reports on finishing building, and filling of database	WP4	R	СО	M5
D5.1	Algorithm Details	WP5	R	СО	M10

Deliverable numbers in order of delivery dates. Please use the numbering convention <WP number>.<number of deliverable within that WP>. For example, deliverable 4.2 would be the second deliverable from work package 4.

Page: 12 of 29

Please indicate the nature of the deliverable using one of the following codes:

 $[\]mathbf{R} = \text{Report}, \mathbf{P} = \text{Prototype}, \mathbf{D} = \text{Demonstrator}, \mathbf{O} = \text{Other}$

Please indicate the dissemination level using one of the following codes:

PU = Public

PP = Restricted to other programme participants (including the Commission Services).

RE = Restricted to a group specified by the consortium (including the Commission Services).

CO = Confidential, only for members of the consortium (including the Commission Services).

⁹ Measured in months from the project start date (month 1).

D5.2	System Architecture	WP5	R	СО	M12
D5.3	Documented Code	WP5	R	СО	M12
D5.4	Reports on Testing	WP5	R	PU	M12
D6.1	UAT reports	WP6	D	PU	M12-M14
D7.1	Updates release notes	WP7	R	PU	M14-M18
D8.1	Number of Articles Published in Media	WP8	D	PU	M10-M18
D8.2	Reports on workshops held	WP8	D	PU	M10-M18
D8.3	Project promotional materials	WP8	D	PU	M10-M18

MilestonesMilestones are control points where decisions are needed with regard to the next stage of the project.

Milestone	Milestone	Work package(s)	Expected date 10	Means of yerification
number	name	involved		11
M0.1	Evaluation of	WP0	M18	Managing structure will
	reports			evaluate progress.
M0.2	Project	WP0	M18	Final deliverables
	shutdown – all			report
	deliverables			
	achieved			
M1.1	Research	WP1	M2	Reviewing
	conclusion			
M2.1	Completed set	WP2	M3	Cross-checking with
	of Use Cases			managing structures
M3.1	Complete	WP3	M3	Report containing
	documentation			complete
	finished			documentation
M4.1	Database	WP4	M5	Reports of database
	completed			finalization
M5.1	System	WP5	M8	Verifying system
	architecture			architecture documents
	finished			
M5.2	System	WP5	M12	Analysing code
	implementation			
	finished			
M6.1	UAT finished	WP6	M14	Testing along with
				users reports
M8.1	Series of	WP8	M18	Reports on workshops
	workshops			
M8.2	Media	WP8	M18	Analyzing media
	campaign done			coverage and influence

Page: 14 of 29

 $^{^{10}}$ Measured in months from the project start date (month 1).

Show how you will confirm that the milestone has been attained. Refer to indicators if appropriate. For example: a laboratory prototype completed and running flawlessly; software released and validated by a user group; field survey complete and data quality validated.

Work package number	0	0 Start date or starting event: M1								
Work package title	Project Ma	roject Management								
Activity type 12	MGT	GT								
Participant number	1	2	3	4	5	6				
Participant short name	MATF	FAG	MAFW	ETF	IAHA	SLR				
Person-months per	10	4	2	7	2	5				
participant										

Objectives

The objectives of WP0 is overall managing of the project. This includes progress evaluation, ensuring teams are synchronized and processes aligned.

Description of work

Project Manager (PM) will be named, and its role is to translate business request and system conditions into technical solutions. All of the other stakeholders are responsible to prepare weekly, monthly, biannual and annual reports and forward them to PM for an evaluation.

Deliverables

D0.1-D.0.6(M1-M18) - weekly, monthly, biannual and annual reports, completed project guide and reports

RTD = Research and technological development; DEM = Demonstration; MGT = Management of the consortium.

Page: 15 of 29

¹² Please indicate <u>one</u> activity per work package:

Work package number	1		Start date o	r star	ting event:	M1	M1			
Work package title	Research a	esearch and Introduction to platform								
Activity type 13	RTD	'D								
Participant number	1	2								
Participant short name	MATF	FA	G							
Person-months per	40	20								
participant										

Objectives

The objective of this work package is to visit husbandry centers and to conduct workshops along with stockmen. The mutual understanding and sharing business ideas is crucial for this base.

Description of work

Consultants and researchers team are formed. Their role is to conduct workshops and to introduce and interest stockmen in this kind of platform. At the same time they get insight of needs of stockmen and the potential necessities of the platform.

Deliverables

D1.1 (M2) - User guide containing crucial information for the stockmen business with approaches to the animal husbandry(important for the engineering team)

D1.2(M2) - Admin guide containing information related to platform according to research results

RTD = Research and technological development; DEM = Demonstration; MGT = Management of the consortium.

Page: 16 of 29

¹³ Please indicate <u>one</u> activity per work package:

Work package number	2		Start date or	star	ting event:	M2	M2			
Work package title	System res	ystem research								
Activity type 14	RTD	TD .								
Participant number	1	2								
Participant short name	MATF	FA	G							
Person-months per	5	5								
participant										

Objectives

Objectives of WP2 are to analyze the functional requirements of the system and potential problems. It includes analysing of functional requirements.

Description of work

In this work package, all use case scenarios will be defined by analysing deliverables from WP1. Functional requirements that new system have to satisfy will be reviewed. Taking insight in potential problems and how to solve it.

Deliverables

D2.1 (M3) - List of Use Case Scenarios

RTD = Research and technological development; DEM = Demonstration; MGT = Management of the consortium.

Page: 17 of 29

¹⁴ Please indicate <u>one</u> activity per work package:

Work package number	3	Start date or starting event: M2							
Work package title	Projecting	rojecting the system and preparing for the implementation							
Activity type 15	RTD	ГД							
Participant number	1	6							
Participant short name	MATF	Selerant							
Person-months per	15	5							
participant									

Objectives

The main objective of this WP is preparation for implementation of the system. Projecting of a system includes writing detailed documentation related to implementation to be started.

Description of work

The goal of this objective is to determine all components relevant to the platform. In parallel, Selerant and MATF team will prepare document including input and output data, details about processes flow in system, organisation of data. The document will include plan for implementation which is relevant for next phase. Project plan can be distinct from the one created in the beginning.

Deliverables

D3.1(M3) Detailed documentation about implementation

RTD = Research and technological development; DEM = Demonstration; MGT = Management of the consortium.

Page: 18 of 29

¹⁵ Please indicate <u>one</u> activity per work package:

Work package number	4	4 Start date or starting event: M3							
Work package title	Building a	Building a Database							
Activity type 16	DEM	EM							
Participant number	1	6							
Participant short name	MATF	Sel	erant						
Person-months per	3	7							
participant									

Objectives

Project management - the goal of this objective is to create shared database on CLOUD, and to provide it's proper functioning

Description of work

(possibly broken down into tasks) and role of partners

Deliverables

D4.1 (M4) Database model specification

D4.2 (M5) Reports on finishing building, and filling of database

Work package description

RTD = Research and technological development; DEM = Demonstration; MGT = Management of the consortium.

Page: 19 of 29

¹⁶ Please indicate <u>one</u> activity per work package:

Work package number	5 Start date or starting event: M5								
Work package title	Developm	Development of system architecture							
Activity type ¹⁷	RTD	D							
Participant number	1	4							
Participant short name	MATF	ETI	F						
Person-months per	30	25							
participant									

Objectives

The objective of this work package is to develop system architecture. It includes implementation of all elements of new system according to requirements.

Description of work

In this work packages new system will be developed according to previously defined demands. Along with implementation these packages contain control of quality and testing of all components. Security mechanisms will be implemented, too. Work of these package contain also writing documentation and reports relevant for the business.

Deliverables

D5.1 (M10) Algorithm Details

D5.2 (M12) System Architecture

D5.3 (M12) Documented Code

D5.4 (M12) Reports on Testing

RTD = Research and technological development; DEM = Demonstration; MGT = Management of the consortium.

Page: 20 of 29

¹⁷ Please indicate <u>one</u> activity per work package:

Work package number	6		Start date or starting event:	M12		
Work package title	User acceptance test					
Activity type 18	RTD					
Participant number	1	2				
Participant short name	MATF	FA	\G			
Person-months per	5	5				
participant						

Objectives

Main objective of this work package is to test the platform along with final users. This is crucial because users are the people who use the platform on a daily basis.

Description of work

Persons who participated in developing platform and persons who have business sense participate in testing with users. They give tutorials to users and help them understand logic of platform. As part of these processes regularly are answered questions such as:

- Does the application work as expected?
- Do all the functions accept the correct inputs and give correct outputs?
- Does the platform give benefits for business of the users?

\mathbf{r}	_ 1	·			I. I	les
	α	11 37	Δ	-9	nı	

D6.1 (M12-M14) - UAT reports

RTD = Research and technological development; DEM = Demonstration; MGT = Management of the consortium.

¹⁸ Please indicate <u>one</u> activity per work package:

Work package number	7	Start date	M14		
		or			
		starting			
		event:			
Work package title	Extended	support			
Activity type 19	RTD			_	_
Participant number	3				
Participant short name	Selerant				
Person-months per	5				
participant					

Objectives

Main objective of this work package is to give support to people that are using platform once the system is released. In case there are potential bugs, or problems persons in charge have task to fix it as soon as possible.

Description of work

Software engineers contracted for this phase have obligation to communicate with back-end users and give them support and updates in every kind of way. If there are some that is not clear to them, they should be support. If users find something that's not working as expected developers have to investigate and give them fixes as soon as possible. These updates and fixes come in Updates, which are released after certain number of required changes

Deliverables

D7.1 (M14-M18) - Update release notes

RTD = Research and technological development; DEM = Demonstration; MGT = Management of the consortium.

¹⁹ Please indicate <u>one</u> activity per work package:

Work package number	8		Start date or		M10		
	starting event:						
Work package title	Performing	Performing education and media campaign					
Activity type ²⁰	DEM	DEM					
Participant number	1	2		3			
Participant short name	MATF	FAG		MAFW			
Person-months per	20	60		20			
participant							

Objectives

Main objective of this work package is to attract publicity through media sources and holding workshops. In this way widespread awareness will be developed by generating recognition, understanding, through public speeches and workshops.

Description of work

Media campaign will be organised to promote the platform and its benefits. Articles will be prepared and published. There will also be travelling group which would perform various demonstration of the platform. Group of people will be hired to keep social accounts updated with the news about platform.

Deliverables

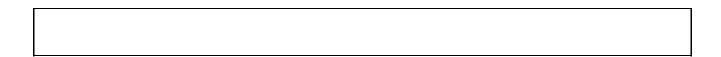
D8.1 (M10-M18) - Number of Articles Published in Media

D8.2 (M10-M18) - Reports on workshops held

D8.3 (M10-M18) - Project promotional materials

RTD = Research and technological development; DEM = Demonstration; MGT = Management of the consortium.

²⁰ Please indicate <u>one</u> activity per work package:



Summary of effort

Partic . no.	Partic. short name	WP 0	WP 1	WP2	WP3	WP4	WP5	WP6	WP7	WP8	Total person month s
1	MATF	10	40	5	15	3	30	5	0	20	128
2	FAG	4	20	0	0	0	0	5	0	60	89
3	MAFW	2	0	0	0	0	0	0	0	20	22
4	ETF	7	0	0	0	0	25	0	0	0	32
5	IAHA	2	0	0	0	0	0	0	0	0	2
6	Selerant	5	0	5	5	7	0	0	5	0	27
Total		30	60	10	20	10	55	10	5	100	300

Section 2. Implementation

2.1 Management structure and procedures

Project includes partners from all over the world and that's why the communication is very important. Communication will be established via internet.

This is an international project and it intends to provide support for multiple activities involving a number of researchers from different institutions. Like in every project of great scale, coordination and management of the project are very important. Since students will be also part of this project, each of the two universities involved in project will have one coordinator(professor) who will be in charge and whose responsibility will be to communicate with other organizations.

Milestones and delivery dates are all defined in project plan. And also project control and communication system will be created.

The management in the project relies on:

• Efficient communication tools on internet

Working document and reports can be organized in sub-groups and exchanged between authorized participants. Matf also provides a teleconference facility, that allows document sharing on the internet.

• Straightforward planning of activities

All work packages will follow the schedule. Discussions and negotiations will be held at the weekly SC meetings.

Central office

A central office will be set-up for coordination activities, reporting to the Commission and organisation of meetings and travels in the project. Reports and other deliverables will be delivered here.

<u>Daytoday management</u>

The objective of the daytoday management is to keep the project always closely aligned with the project plan, reduce the risks associated with project activities and provide support to all partners. Individual effort for administration of the project should stay at a minimum

2.2 Individual participants

Faculty of Mathematics, University of Belgrade, Serbia

Faculty of Mathematics, University of Belgrade, officially exists as independent science and education institution since 1995. Since its founding, the Faculty has graduated out more than 6000 graduate students, 700 holders of M.S. degree and more than 400 holders of doctoral degrees. Teaching and research activities are performed by more than 100 teachers and assistants with about 2000 students on undergraduate and postgraduate studies today. Numerous graduates occupy various positions in research institutions, government offices, companies and schools in the country and abroad. It is a quality indicator of the studies at the Faculty of Mathematics. It is one of the leading faculties in the country.

Faculty of Agriculture, Serbia

Faculty of Agriculture was established in 1919 as one of the six faculties of the University of Belgrade. Faculty got its own building in Zemun in 1932, where is still located. After World War II, the Faculty had very intensive development and reached the level of the first higher education institution of its kind in the country for education of students in all agricultural branches. Since its foundation in 1919 about 15.600 students have gained BS degree, 866 MS degree and 699 PhD degrees. The enrolment of students is up to 1.000 students per year, 370 students graduate, 30 receive MS degree and 20 receive PhD degrees, annually. The teaching and research activities involved 71 full professor, 52 Associate professors, 36 assistant professor, 1 senior lecturer, 4 teachers of foreign languages, 66 assistants, 32 assistants and 17 interns in the teaching staff, 140 professional and technical staff.

The Ministry of Agriculture, Forestry and Water Economy of the Republic of Serbia

The Ministry of Agriculture, Forestry and Water Economy of the Republic of Serbia (Serbian: Министарство пољопривреде, шумарства и водопривреде / Ministarstvo poljoprivrede, šumarstva i vodoprivrede) is the ministry in the Government of Serbia which is in charge of agriculture, forestry and water economy.

IAHA - Animal Husbandry Alliance

The General Assembly of IFOAM - Organics International in Korea in October 2011 recommended that animal husbandry be given more emphasis in IFOAM-Organics International through a worldwide platform to address animal health and welfare, breeding techniques, feeding (e.g. roughage versus concentrates) and related issues.

A group of interested individuals, supported by the IFOAM World Board, then began to organize and, at the end of November 2012, the IFOAM Animal Husbandry Alliance (IAHA) became approved by the IFOAM World Board.

Selerant Inc.

Founded in 1990, Selerant is a leading global provider of process-based **product lifecycle management (PLM)** software and consulting services within three core manufacturing segments: Food & Beverages, Personal Care/Pharmaceutical and Specialty Chemicals. The company develops PLM solution for tracking project management which can be usable for this kind of platform.

2.3 Consortium as a whole

The Consortium, coordinated by the Faculty of Mathematics, Belgrade brings together leading companies and universities with strong track records in the European network in the areas of work to be undertaken, as well as some new organisations with specific expertise. The consortium consists of renowned universities and companies, well known for their work and expertise in their fields of research. Coordinating tasks are divided equally, with every institution taking leading position in one of the work fields.

- i) **Subcontracting:** If any part of the work is to be subcontracted by the participant responsible for it, describe the work involved and explain why a sub-contract approach has been chosen for it.
- **ii) Other countries:** If one or more of the participants requesting EU funding is based outside of the EU Member states, Associated countries and the list of International Cooperation Partner Countries²¹, explain in terms of the project's objectives why such funding would be essential.

²¹ See CORDIS web-site, and annex 1 of the work programme.

2.4 Resources to be committed

Mobilization of resources

The resources needed for this project are taken care from numerous academic organizations and one large industrial partners. The resources profile and the participating partners are complementary in many respects. External partners that agreed to take part in this project will bring additional expertise into the project.

Travel related resources

The resources needed for travels and communication is hard to estimate precisely at this moment, so the suggestion is that they are to be allocated on the level of 100.000 euros (and extra money returned, if not used).

Financial plan

Development team resources

Development team consists of highly skilled programmers acquired from two Universities companies and one serious company and their payment is estimated to 800k Euros in accordance to their planned work hours and payment per hour.

Hardware and server equipment

Proper and reliable equipment is important part of the project. Estimation for the computers, serveres, licences for programs required for the project is about 40k Euros.

Extended support resources

Selerant team will provide extended support during this phase. Software engineers payment for this phase is estimated about 130k Euros.

Media campaign and research

University will provide team of researchers and their payment is estimated at 30k Euros.

Media campaign will partly be outsourced, with collaboration with Universities. All promotion materials, cost of workshops, along with the cost of the travelling center is projected to around E900k

The total estimated budget for the project is about 2,000.000,00 Euro.

Section 3. Impact

3.1 Expected impacts listed in the work programme

The project will provide significant advancements in business of stockmen. This will be no longer neglected industry group. In this way village life and animal husbandry will be modernised.

The expected results from the project include:

- Spending less time for planning animal raise
- Easy interaction of stockmen
- Planning anual projects for their work
- Following this industry branch from the state level
- Easy insight into costs and earnings
- Increasing number of workplaces
- Overcoming technical and computer barrieres

3.2 Dissemination and/or exploitation of project results, and management of intellectual property

One of the major goals of the project is about creating awareness of the benefits and significance of this kind of platform. As a consequence the majority of the dissemination activities is aimed at focusing attention on changing the public view on following stockmen business in this kind of way.

The following external dissemination channels and activities are planned:

- Website and presentation
- Demonstration of achieved results
- Conferences and publications
- Seminars and workshops
- Access through media (local TV and radio stations, newspapers)
- Facebook and other social media campaign

Section 4. Ethical Issues ETHICAL ISSUES TABLE

	YES	PAGE
Informed Consent		•
Does the proposal involve children?		
 Does the proposal involve patients or persons not able to give consent? 		
Does the proposal involve adult healthy volunteers?		
 Does the proposal involve Human Genetic Material? 		
 Does the proposal involve Human biological samples? 		
 Does the proposal involve Human data collection? 		
Research on Human embryo/foetus		
Does the proposal involve Human Embryos?		
 Does the proposal involve Human Foetal Tissue / Cells? 		
• Does the proposal involve Human Embryonic Stem Cells?		
Privacy		
 Does the proposal involve processing of genetic information or personal data (eg. health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction) Does the proposal involve tracking the location or 		
observation of people?		
Research on Animals		F
 Does the proposal involve research on animals? Are those animals transgenic small laboratory animals? 		
Are those animals transgenic farm animals?		
Are those animals cloned farm animals?		
Are those animals non-human primates?		
Research Involving Developing Countries		
• Use of local resources (genetic, animal, plant etc)		
 Impact on local community 		
Dual Use		
 Research having direct military application 		
 Research having the potential for terrorist abuse 		

ICT Implants		
• Does the proposal involve clinical trials of ICT		
implants?		
I CONFIRM THAT NONE OF THE ABOVE ISSUES	YES	
APPLY TO MY PROPOSAL		