



Setting up the innovation support mechanisms and increasing awareness on the potential of Food Innovation and RTD in the South-East Europe area

Project Code: SEE/B/0028/1.3/X

WORK PACKAGE 4: SETTING UP MECHANISMS FOR BOOSTING FOOD INNOVATION

D4.2- Operational Plans for food RTD and innovation

Author: Jožica Lazar
Partner: ICRA d.o.o.

For further information please contact:
Email: jozica.lazar@icra.si

Dissemination Level:

Partner	Official name (in English)	Abbreviation	Country
LP	Centre for Research and Technology Hellas- Institute of Agrobiotechnology	EKETA- INA	Greece
ERDF PP1	Federation of Industries of Northern Greece	SVVE	Greece
ERDF PP2	National Research Council- Institute of Sciences of Food Production	CNR/ISPA	Italy
ERDF PP3	Agricultural University of Plovdiv	AUP	Bulgaria
ERDF PP4	Pazardzhik Regional Administration	OAP	Bulgaria
ERDF PP5	National Institute of Research & Development for Food Bioresources	IBA	Romania
ERDF PP6	Constanta Chamber of Commerce, Industry, Shipping And Agriculture	CCINA	Romania
ERDF PP7	Development Agency of Idrija and Cerklje	ICRA	Slovenia
ERDF PP8	European Food Chain Parliament-Foodlawment	EFPF	Hungary
10% PP1	Odessa National Academy of Food Technologies	ONAFIT	Ukraine
10% PP2	Chamber of Commerce and Industry of the Republic of Moldova	CCIRM	Republic of Moldova
10% PP3	Institute for Food Technology	FINS	Serbia

Contents:

D4.2- Operational Plans for food RTD and innovation

Annexes:

Annex 1:

Annex 2:

Abstract:

-

Project Document Information

Project acronym:	Inno- Food SEE
Project full title:	Setting up the innovation support mechanisms and increasing awareness on the potential of Food Innovation and RTD in the South- East Europe area
Project Code:	SEE/B/0028/1.3/X
Project start date:	1 st April 2011
Project duration:	30 months
Deliverable number:	4.2
Deliverable title:	Operational Plans for food RTD and innovation
Due period of deliverable:	5
Actual submission period:	
Authors:	
Editors:	
Reviewers:	
Work Package no.:	4
Work Package title:	Setting up mechanisms for boosting food innovation
Work Package leader:	CERTH- INEB
Work Package participants:	All partners
Nature:	Report
Version:	
Draft/Final:	
No of pages (including cover):	
Keywords:	

List of Acronyms and Abbreviations

Acronym/abbreviation	Resolution

TABLE OF CONTENTS

TABLE OF CONTENTS	4
EXECUTIVE SUMMARY	5
1. INTRODUCTION, SCOPE AND METHODOLOGY	6
2. REGION OF SLOVENIA	7
2.1 Description of the regional current state of play	7
2.2 Key points from the SWOT/ SOR analysis and policy recommendations report	13
2.3 Description of key measures	14
3. TRANSNATIONAL SEE ACTIVITIES	21
4. IMPLEMENTATION PLAN	22
ANNEX 1 – FRAMEWORK AGREEMENT- INTENTION FOR TRANS-REGIONAL COOPERATION	23

EXECUTIVE SUMMARY

(to be compiled by CERTH- INEB)

1. INTRODUCTION, SCOPE AND METHODOLOGY

(to be compiled by CERTH- INEB)

In the framework of this activity, the partners will develop Operational Plans for supporting food innovation in their regional context with a view to promoting knowledge- based economic development in the agrofood sector. The idea is that these Operational Plans will be presented and suggested to regional and national authorities as a part of the debate for the development of the various instruments introduced in the upcoming Programming Period 2014-2020.

How to draft the Operational Plans

Phase 1: *The Inno- Food SEE partners will use the results of D3.3 and D3.4 and develop a set of suggestions for the measures that could be included in the Operational Plans. The partners will use a standard template for drafting the measures (to be provided at a later stage), this will enable presenting the measures in such a manner that would be easy for the stakeholders and decision makers to utilise and comment upon in the 2nd phase.*

Phase 2: *A meeting with the selected stakeholders and decision makers per region/ country will be organised to feed the consultative process for the development of the Operational Plans. The stakeholders and decision makers should receive the suggested measures beforehand, thus the meeting will be dedicated to discussing the measures.*

Phase 3: *One (or two- see below) meeting/-s of 2-3 stakeholders and decision makers from each region/ country will be organised in order to feed the consultative process for the development of the Operational Plans and to propose measures on a SEE/ regional level.*

One meeting is already described under act. 2.5; it is part of the final Conference that will take place in Budapest. In the possible event of securing a 6-month project extension and a consequent organisation of the next project meeting in Plovdiv in September, it is also suggested that a meeting of regional stakeholders is organised adjoined to the meeting in Plovdiv as a preparatory step for the finalisation of the Operational Plans.

Phase 4: *In this final step the Inno- Food SEE partners will synthesise the feedback from the previous phases and finalise the measures.*

2. REGION OF SLOVENIA

2.1 DESCRIPTION OF THE REGIONAL CURRENT STATE OF PLAY

Slovenian agro-food sector is relatively small in terms of its contribution to the national economy. The shares in GDP, employment and trade have fallen since the beginning of the 1990s and are expected to decrease further, mostly due to the faster growth of non-agricultural sectors of the economy. The key determinant of situation in the national agro-food sector is the fact that the natural conditions for agriculture are relatively unfavourable in Slovenia and that the structural deficits impede competitiveness growth of the food industry.

AGRICULTURE

Natural conditions for agriculture are relatively unfavourable in Slovenia. Availability of land for agricultural production is limited in Slovenia, with forests covering more than 60% of the country's territory. The agricultural area accounts for about 30% of total land and its area has been steadily declining due to expansion of forests, built-up territories and new transport infrastructure. The greatest share of the structure of agricultural land use is covered by permanent grassland and pastures (58 %), followed by fields (36 %) and perennial crops (6 %).

Agricultural production in Slovenia still depends greatly on weather conditions; as a consequence, the volume of crop production varies considerably between years. The volume of livestock production is more stable, even though there are some oscillations due to cyclical changes in livestock numbers in the pre-accession period. The sectorial structure of agricultural output has remained almost unchanged in last decade, with livestock and crop production accounting for about 50% of GAO each. Milk and beef production are the most important livestock sub-sectors, followed by pig and poultry production. In the structure of crop production, beside forage plants, fruits and wine together represent the highest share of GAO, followed by cereals.

FOOD INDUSTRY

Slovenian food processing industry is economically and technologically rather advanced, when compared to other EU new member states, however the key competitive pressure recently comes from the expansive companies from incumbent members. Therefore, the opening up of the food market after the Slovenia's EU accession affected business performance significantly. The number of registered business subjects in the food processing industry increased significantly in the last five years however the number of employees is in decline. The revenues that the food sector generated in 2010 were only slightly lower than in 2006, while value added decreased by 1,4% in nominal terms.

The food processing industry, with 8,5% of employees is the third major employer in Slovenian processing sector, after the metalworking industry and the production of electric devices. Meat processing and the bakery sectors are two major activities, in terms of the number of companies and employees, together accounting for more than a half of all

employed in the food industry. In terms of sales value the share of meat processing industry is around 30%, while the bakery sector contributes 14%, and the same share comes from the dairy industry (AJPES, 2012).

In the period of last fifteen years food-processing companies in Slovenia have been facing several challenges. Initially the problems were consequence of the loss of markets in the republics of former Yugoslavia and, later, as the impact of Slovenia's accession to the European Union which brought severe market competition. So the adjustment to new circumstances and restructuring of companies was vitally necessary. Most Slovenian food enterprises have been modernised, despite to a rather high level of standards even in the Yugoslav times. As a result elements of competitive advantage were formed, and now Slovenian food enterprises possess a fair potential for development. A lot of companies are inward-oriented and primarily supply the domestic market or traditional export markets in former Yugoslavia. Therefore, further internationalisation is needed to attain the economies of scale in the companies with overcapacities. Concentration in retail trade has been increasing in the last decade in Slovenia which reflects most obviously in the pressures on purchase prices, shifting of an increasing share of transaction and distribution costs to suppliers, and in other demands and conditions for cooperation. Retailing industry having an increasing control over the economic flows is a global phenomenon, but it is clearly present also in Slovenia. It is therefore often stated that the economic dominance of retail trade is currently the key reason behind the deteriorated economic position of food-processing industry. Moreover, Slovenian food-processing industry, when fighting against the strategies of leading retail companies, often unwillingly reacted in favour of the trade companies.

THE NATIONAL RESEARCH AND INNOVATION FRAMEWORK

In Slovenia, to a large extent, scientific research is conducted at **Universities**. Slovenia has five Universities, namely: University of Ljubljana, University of Maribor, University of Primorska, University of Nova Gorica and Euro-Mediterranean University. The first three are public universities, funded for their academic tasks mostly by the Government, while the University of Nova Gorica presents a public-private partnership. The Euro-Mediterranean University is an international network of universities (38 countries) and it was established as one of the six priority areas of the Union for the Mediterranean with the aim to enhance the collaboration among partner institutions. Within the five universities, there are more 60 different Higher Education Institution (HEI) in all academic fields. Currently prevailing funding system for higher education in Slovenia separates the educational funding from the research one. When it comes to research, HEIs are treated as any other public research unit and apply for research funds through public calls for research programmes/projects at Slovenian Research Agency, so one could say competitive funding prevails. The HEI's can also raise support for the research activity from business sector. Due to relative independence of the research units (often called institutes) it is difficult to clearly establish the amount of financing coming to HEI from different sectors (Erawatch, 2012). In addition to the Universities there are 47 **Public research organisations** (PRO), non-university research institutes, which contribute to the country's knowledge base with a comparable share as the university system. The third category of research performers in Slovenia is **Business sector R&D units** which have experienced a considerable growth in the last decade. Structure of the business R&D expenditure reflects the predominant role of manufacturing in the country, and

within the manufacturing sector two sectors stand out: chemicals, specifically pharmaceuticals, and machinery and equipment, especially electrical equipment. The research organisations in the business sector, however has a significantly lower educational level than those in the public research sector, since only 11% of all researchers holding the PhD work in the business sector (SORS, 2011). The interface between the universities, PRO and Business sector R&D are the **Public-private Research and Technology Organisations**. These institutions can be split into two categories in Slovenia: (1) bridging institutions, namely Technology Centres, Technology Platforms, Centres of Excellence, Clusters) and (2) support institutions, namely Technology parks.

ENTITIES IN SUPPORT OF FOOD R&D AND INNOVATION

There are only very few entities in Slovenia where R&D and innovation aiming at food industry are executed, moreover the typology of research is mainly scientific, and therefore with some limitations applicable to the business sector.

Research and development in the area of food industry is mainly the domain of two largest Slovenia's universities. The **University of Ljubljana**, the country's largest university with its 56,000 undergraduate and post-graduate students, it ranks also among the largest universities in the world. The Biotechnical Faculty (<http://www.bf.uni-lj.si/>) of the University of Ljubljana carries out research, professional, and advisory services in the areas of nature (biology, microbiology), agriculture, forestry and fishery (forestry, animal science, agronomy) and in the closely related production technologies (wood science, food science, biotechnology). All the educational and research disciplines carried out at the Biotechnical Faculty incorporate the issues of the management of natural resources (soil, space, flora and fauna, water). Researchers at the Biotechnical faculty participate in numerous national and international interdisciplinary projects. The research work related to food is organised under several Chairs within the department of Food Science and Technology and Department for animal science (Dairy institute, Chair for agricultural economics, policy and law).

The **University of Maribor**, second largest university includes 17 faculties with about 20.000 undergraduate and post-graduate students. Food related research is predominantly conducted as a joint initiative of the in the Faculty of Agriculture and Life Sciences and the Faculty of Medicine. Research is particularly related to "Food safety and health" within the inter-faculty Chair of microbiology, biochemistry, molecular biology and biotechnology. There are also other units that conduct research partly related to food industry at the Faculty of Agriculture and Life Sciences (Chair of Viticulture and Enology, Chair of Agricultural Economics and Rural Development, Chair of Fruit production and Fruit Processing).

The **Agricultural Institute of Slovenia** is a public research institution founded in 1898. The status of a public research institution implies a governmental non-profit making institution with defined activities in the sense of public service. In frame of its registered activity the Institute carries out the following tasks: (a) basic, applied and developmental research in the area of agriculture and food; (b) expert projects defined by laws, (c) advising, studies and laboratory service; (c) supervision and verification of quality of agricultural products and products used for agriculture; (d) publication of findings and results of research, expert and control work. The prevailing part of the research and expert work is done in modern equipped

laboratories and in experimental fields and plantations. The breeding work is focussed on traditional Slovene products: potato, grasses, clovers and vegetables, among which there are several registered varieties owned by the Institute.

Institute for Hop Growing and the Brewing Industry in Žalec (www.ihps.si) is a research, developmental, advisory and educational public organization. It is acting for the needs of various governmental bodies as well as for the needs of home and foreign agribusiness industry. Its principal functions are research and advisory service in the fields of industrial plants growing i.e. hop breeding, agricultural technology, plant physiology, nutrition, hop marketing, protection of hops against diseases and pests and the related prognosis, as well as the application of chemical solutions used for the protection of plants, rural development, and ICT information management in agribusiness.

The Institute for Mediterranean Agriculture and Olive Growing (<http://www.zrs.upr.si/en/Institutes/Institute+for+Mediterranean+Agriculture+and+Olive+Growing>)

principally focuses on studies of chemical and sensory characteristics of olives and olive oil cultivated and produced in Slovenian Istria, as well as morphological and genetic characteristics and peculiarities of olive cultivars from this area. Moreover, the Institute examines and monitors olive oil quality. The Institute also strives to excite the recognizability of the protected designation of origin (PDO) of olive oils originating from Slovenian Istria, to promote Slovenian olive oils at home and abroad, and to preserve traditional olive groves and olive varieties as important elements of natural and cultural heritage of this area.

Emona RCP – Nutrition Research and Development, Ljubljana (http://www.e-rcp.si/o_podjetju_angla.html) is a R&D unit of the enterprise Jata Emona and is involved in various R&D projects in the area of human and animal nutrition. Main goal in field of Human nutrition is development of functional food, semi-products and components for food supplements. In field of animal nutrition researching physiological needs of animals, quality of feed and adequate supply of nutritious substances. Its main domestic/international R&D projects include EUREKA project 'Influence of Animal Diet on Fatty Acid Composition of Pork', PHARE project on production of functional foods, R&D project on bioavailability of Ca and P as well as a series of projects on the traceability of different meats (pork, beef, poultry) and eggs.

The Chamber of Commerce Slovenia, **Chamber of Agricultural and Food Enterprises** is the legal successor of the Association of Slovenian food industry. Acting as a members' representative in a business environment is a voluntary, independent and non-profit organization of companies and entrepreneurs in the business of production and processing of agricultural and food products. It operates within the Slovenian Chamber of Commerce. Its program of work defines the tasks and priorities.

The main mission of the **Competency Centre for Biotechnological Development and Innovation** (<http://www.kc-brin.si/en/>) is to achieve synergistic effects through connecting the scientific and research excellence and the infrastructure of leading Slovenian research institutions with technologically advanced and highly innovative representatives of Slovenian business in joint market-oriented R&D projects. The Competency Centre

combines research in the field of functional food and dietary supplements, probiotic microbial strains and industrial microorganisms used in the production of various active ingredients. The Competency Centre is organised as a consortium of companies and research organisations and the non-profit Institute of Biotechnological Innovation, which is responsible for the development and management of the Competence centre. The Institute is managed by the Institute's Board, which is composed of representatives of all members of the consortium. This ensures strong integration of the management skills of the business partners and the research skills of the academic institutions and research organisations.

POLICY FRAMEWORK, PROGRAMME AND MEASURES IN SUPPORT OF FOOD INNOVATION

RESEARCH AND INNOVATION GOVERNANCE

National policies exclusively promoting food industry R&D and innovativeness have not been implemented in Slovenia. However, since the mid 1990's different policy documents have repeatedly regarded life sciences, biotechnology and pharmaceutical research as scientific fields which are to be promoted with priority. Therefore, no direct emphasis on agro-food research, however, there are some measures which are partially. Ministry of Education, Science, Culture and Sport and Ministry of Economic Development and Technology are responsible for the preparation of the policy documents in the R&D area, for implementation of R&D policy (i.e. implementation of the National Research and Development Programme – RISS), the public R&D budget and international cooperation in the area of R&D. For the execution of R&D and innovation policy, two special public agencies have been established: Slovenian Research Agency (SRA) and Slovenian Technology Agency (TIA). The first is responsible for the execution of public research financing, for the professional and independent selection/evaluation process of projects and programmes and the monitoring of research programmes and projects implementation. The TIA is in charge of programmes promoting technology development and of business R&D co-financing. Until the recent economic crisis Slovenia performed quite well in the field of investments in R&D. In the year 2010 the share of Gross domestic expenditure on R&D (GERD) was 2,1% of GDP or 745,9 million EUR. There was a continuous increase of investments in R&D in the last years, since in 2008 the GERD in Slovenia amounted to 1,66% of GDP and in 2009 the value increased to 1,86% (SORS, 2011). Nevertheless, the Slovene Government, before the beginning of the current crisis started, announced that the Barcelona target of 3% of GDP for R&D will not be reached by 2010 and the new date was settled for 2013. In the current situation, it is quite realistic to announce that also 2013 is an unrealistic target date and it should be postponed to 2015 or even later. The highest share of the GERD in 2010 was contributed by companies (435,5 million EUR), which represented 58% of total sources of funding R&D. Compared with the previous year, the share of these funds remained the same.

PUBLIC RESEARCH

The public R&D funding in Slovenia is structured under the following the institutional scheme: Slovenian Research Agency is in charge of financing basics and applied research primarily in public research sector, while Technology and Innovation Agency should be financing the R&D activity in business sector or in projects where both public and private R&D institutions are involved. In addition, resources of the Ministry of Economy and Technology are provided through Public Agency for Entrepreneurship and Foreign Investment for measures supporting the mobility of researchers and the running of intermediary institutions (technology parks, university incubators, etc.) and through Slovenian Enterprise Fund for start-ups in innovation environment and bank guarantees for SMEs engaged in R&D projects and technological restructuring. Slovenia's innovation performance is varied. Some innovation inputs, notably R&D expenditure and the number of researchers per million inhabitants, are broadly on par with or even high relative to Slovenia's GDP per capita.

Table 1- Total intramural R&D expenditure (GERD) (Source: Eurostat, 2012)

	2008	2009	2010	EU average 2010
GERD as % of GDP	1,65	1,86	2,11	2,0
GERD per capita	307	323	364	490

In the past decade, Slovenia has established a complex scheme of bridging institutions within the national innovation system to help bridge the gap between public research and industry. The measures and instruments were mostly copied from more developed countries or suggested to the government by various consultancies. The bridging institutions include technology parks and centres; incubators, clusters, technology networks, technology platforms and centres of excellence. There are also different business information units such as the small business development centres, innovation relay centres, Euro-Info-Centres, regional development agencies, the Slovene Enterprise Fund, etc. All of them share the ambition of the policy makers to establish as complete an innovation system as possible.

One of the resource mobilisation strong points/advantages in Slovenia has been the growth of business R&D investment. Within aggregate R&D, the business sector's contribution gained in importance in recent years, at least until the onset of the crisis in 2008. At nearly 60% in 2007 and 63% in 2008 (Eurostat, 2010) business funding of R&D far exceeded the EU27 average of 55% and is thus in a range typical of more advanced innovation systems. However, the private sector's share of GERD is still the highest of the 12 new EU member states.

Further growth depends on the enterprises currently inactive in R&D and innovation: their involvement in R&D needs to be promoted along with sufficient increase of the absorption capacity for new knowledge/technology.

2.2 KEY POINTS FROM THE SWOT/ SOR ANALYSIS AND POLICY RECOMMENDATIONS REPORT

The SWOT/SOR analysis - from the profiling of SMEs and RTD players has highlighted some key points useful to plan and propose a set of recommendation for the formulation of policies, programmes and measures able to sustain innovation in Slovenia.

Based on the SOR matrix for SMEs, the following observations can be made:

- The food sector should take advantage of proper strengths as product and process quality as well as financial capacity in order to use all the export possibilities which are available.
- Same strength, together with product market positioning, should be used in order to deal with all the threats identified.
- The food sector is dealing with several weaknesses, which all together makes impossible to reach the opportunities available; we can't say one weakness is explicitly in front of the others.
- The food sector should mainly focus on poor networking with public actors in order to deal with the main threats, being insufficient incentives addressed to the sector and nonexistence of political long-term commitment to the sector.

Based on the SOR matrix for RTDs, the following observations can be made:

- RTDs seems to be in a good position to grasp the opportunities which are available, mainly using the existing open exchange of experiences and research for successful networking with all the other stakeholders, dealing with R&D.
- Increasing number of collaboration activities with food companies should be also used in order to deal with the existing threats of external environment, namely no jobs available for university researchers and brain drain.
- In order to be successful in reaching available R&D funds and establishing development centers RTD should focus and take care of its weaknesses, being poor linkage between them and food companies, as well as weak understanding between researchers and industry, which complicates joint projects.
- Poor linkage between food companies and research entities should be also taken into consideration in dealing with the threats, where no jobs for university researchers and brain drain are again in the front.

The SOR analysis, which is focused on food industry, showed that food industry has great export possibilities due to the position of the country, which needs to be well used. Slovenian products are known for their quality, so food industry should promote their quality in the country and beyond the country's borders.

Due to the increasing competition in the market, Slovene Food industry could succeed with advanced, innovative, quality products and services. The food sector should take advantage of proper strengths as product and process quality especially because there is increasing consumer demand for more/better varieties.

Food industry has a lot of opportunities as well as some strengths – Slovenian policy should foster this strengths and with long term commitment take care of sufficient support for this strategic industry.

In order to be successful in reaching available R&D funds and establishing development centres RTD should focus and take care of its weaknesses, being poor linkage between them and food companies, as well as weak understanding between researchers and industry, which complicates joint projects. This also have influence on development of new innovations and products. Slovenia should foster innovation in food industry – in their documents and with funds - that will help and foster RTD institutes to have more firm connections with food industry (flow of information, knowledge, experts). Collaboration between food industry and RTDs will help to transfer the knowledge from theory to practice.

Slovenian politics should establish existence of political long-term commitment to the sector of food industry – because of its strategic role (food security – self sufficient supply).

2.3 DESCRIPTION OF KEY MEASURES

These recommendations arose from the results of SWOT analysis and SOR and have been thought to be realistically adopted in the national context.

Herewith the proposed policy recommendations are listed:

- Supporting investment for restructuring and adjustment to the standards.
- Supporting development of competitive facilities and new products.
- Introduction system to promote innovation in food-industry.
- The development of network to enable the knowledge transfer - from institutions to the SMS's.
- Establishment of agro-food chains (market collaboration).
- Strengthening RTDs – SMEs cooperation.

Name of the measure	Supporting investment for restructuring and adjustment to the standards
Region	Slovenia
Timeframe	Medium term (2 – 5 years)
Rationale	<p>The major challenge for the food sector will be to adjust the products and services to both a changing environment and consumer needs. And this means food industry needs not only incentives but also support for investments in research programs, technology, and technological process. http://europa.eu/rapid/press-release_SPEECH-07-229_en.htm?locale=en</p> <p>Investments in agro-industries are known to have significant multiplier effects through both their backward and forward linkages along the value chains. http://www.fao.org/docrep/015/i2420e/i2420e01.pdf</p> <p>To spur rural development and food security, both the theory and practice of development economics has traditionally focused on increasing agricultural productivity on the farm. More recently, development practitioners and policy-makers have broadened their attention to include agro-industries – and this bring also need to support the development of food – industry with supporting investment and simplifying (less time consuming procedures) the some administrative regulations.</p>
Particular sector and subsector	Agriculture, Food Processing, Food Industry, Biotechnology
Objectives	<ul style="list-style-type: none"> ➤ Funding innovative industries (grants, loans, guarantees, equity, etc.); ➤ Dedication of responsible authorities to less time consuming procedures for (some) administrative regulations regarding the food industry (new products etc.)
Core activities	The policy should address SMEs to facilitate the financing of innovative projects - incentive to apply research to discover/improve new methodologies or create new processes and/or products. With different financial mechanisms should be supported investments in new/different technologies that would meet the new standards and quality that are required from customers and are obligatory because of standards in food-industry.
Implementing entity	Ministry of agriculture, forestry and food, Chamber of Commerce and industry of Slovenia, Food processing industry
Financial resources	The funding could be from the ERDF- Rotation fund (target value - 3% annual growth), EU's Seventh Research Framework Programme (FP7)
Target groups	Small, medium and large Food SMEs
Indicators for implementation success	Revenue from the sale in €

Name of the measure	Supporting development of competitive facilities and new products
Region	Slovenia
Timeframe	Medium term (2 – 5 years)
Rationale	The food industry is Slovenia leading manufacturing sector in terms of turnover, employment and number of companies, but the industry spends far less in research than other countries. This is mainly due to the fact that Slovenian food companies are mostly SMEs which cannot devote extensive time or resources to often lengthy research processes.
Particular sector and subsector	Agriculture, Food Processing, Food Industry, Biotechnology
Objectives	<ul style="list-style-type: none"> ➤ To enhance the support of competitive food-industry (SMEs) in Slovenia is to involve new incentives (grants, loans, guarantees, equity, etc) for innovative projects (new products and technologies that will meet the customers – specific – needs with competitive product process). ➤ The other objective is as important as the first one – as there is not enough researchers in food-industry some new measures for strengthen the cooperation between researchers/institutes and food-industry should be applied. ➤ With supporting innovative projects and with involving researchers and knowledge from different sectors, it would be reachable also the third objective and that is more (high) quality food products in the market.
Core activities	<p>The main activity should be represented by implementing new incentives for investments in innovative production process (new technology, new product process) with strong connections (obligation) of including researchers in the innovation process.</p> <p>There should be also more incentives in the field of knowledge transfer from different sectors – not only the food sector, but also in processing, human resources, medicine, engineering,...</p>
Implementing entity	Chamber of Commerce and industry of Slovenia, Food processing industry, Biotechnical faculty
Financial resources	Funds for supporting innovations (all kind of funds – as PF7, multinational and bilateral programs, funds for Universities, national and other EU funds)
Target groups	Food SMEs, Research entities
Indicators for implementation success	Number of new innovative process and products (declared and also “alive” after the end of supporting/project period).

Name of the measure	Introduction system to promote innovation in food-industry
Region	Slovenia
Timeframe	Medium term (2 – 5 years)
Rationale	<p>Innovation is considered to be essential to the long term survival and profitability of food and drink companies in the current highly competitive environment. Companies need to proactively develop new products and processes to meet the changing demands of consumers.</p> <p>The existing professional assets of high skills in research could represent a real resource for agro food system in Slovenia, to strengthen SMEs and support their innovation processes, but this assets seems to be confined to the research environment and framework, with evident difficulties to transmit advances in research useful for industry.</p>
Particular sector and subsector	Agriculture, Food Processing, Food Industry, Biotechnology
Objectives	<ul style="list-style-type: none"> ➤ to improve technological ability to innovate at national level ➤ to accelerate the innovation culture and behaviour in SMEs and RTD entities
Core activities	Provision of training services to acquire skills and tools to improve innovation processes, project management, technology transfer, creation of a web platform to exchange contents, experiences, sharing projects and skills
Implementing entity	Ministry of agriculture, forestry and food, Chamber of Commerce and industry of Slovenia, Food processing industry
Financial resources	The funding could be included from the ERDF- Rotation fund.
Target groups	Food SMEs, Research entities, consultants
Indicators for implementation success	Number of innovations in particularly SMS's.

Name of the measure	The development of network to enable the knowledge transfer - from institutions to the SMS's
Region	Slovenia
Timeframe	Medium term (2 – 5 years)
Rationale	The agro-food industry is faces with the challenge of creating innovation and developing value-added food products, (including functional foods), in addition to those classified as food for specific nutritional purposes. In the same way, the research entities, thanks to the progress in life and nutritional sciences, can and will increasingly provide significant insights to understanding the mechanisms which underpin the physiological functionality of food components. Effective research-industry partnership are imperative and will offer benefits to the consumers through more personalized nutritional advices for high-risk groups and health claims based on sound scientific evidence. To this end, it is necessary to strengthen the research infrastructures, to boost RTD investments, to improve cooperation networks' and to enhance technology transfer.
Particular sector and subsector	Agriculture, Food Processing, Food Industry, Biotechnology
Objectives	<ul style="list-style-type: none"> ➤ to develop operative network of RTD institutes and companies (SMS) and create an active context in which players share objectives with definite goals ➤ to develop sustainable (not temporary) network which could also function through some projects finance but not only as a short term network ➤ to promote networking through different actions and media
Core activities	Supporting services for establishment and function of such networks (advisory, technology transfer and training), developing incentives for developing (national and international) innovation projects, to include SMS and other subjects in whole food chain in different action with purpose to join or create a network along the food-chain producers and RTD's.
Implementing entity	Ministry of agriculture, forestry and food, Food processing industry, RTDs, consultants
Financial resources	ERDF, PF, other sources also private
Target groups	Food SMEs, RTD's
Indicators for implementation success	<ul style="list-style-type: none"> ➤ Number of new technologies realized through the incentives and network ➤ Number of new proposals for joint collaboration (through incentives or projects)

Name of the measure	Establishment of agro-food chains (market collaboration)
Region	Slovenia
Timeframe	Medium term (2 – 5 years)
Rationale	<p>The aim is to establish agro-food chains in which they would connect all actors in the supply chain (from farmers, SMEs, RTDs).</p> <p>The cooperation between the actors is necessary for more competitive productive system.</p>
Particular sector and subsector	Agriculture, Food Processing, Food Industry, Biotechnology
Objectives	<ul style="list-style-type: none"> ➤ Support for the joint production or marketing of long-term cooperation between the members of the chain. ➤ Establishment of short supply chains.
Core activities	Long-term cooperation between the members of the chain
Implementing entity	Ministry of agriculture, forestry and food, Chamber of Commerce and industry of Slovenia, Food processing industry, Chamber of Agriculture and Forestry of Slovenia
Financial resources	The funding could from the ERDF- Rotation fund
Target groups	Farmers, Food SMEs, consumer associations, media
Indicators for implementation success	Long-term cooperation between members of the food supply chain

Name of the measure	Strengthening RTDs – SMEs cooperation
Region	Slovenia
Timeframe	Long term (5 - 7 years)
Rationale	<p>The aim is to establish development programs through strategic directions to encourage cooperation.</p> <p>The cooperation between SMEs and RTDs is necessary for more competitive productive system. Lack of the resources is often difficulty that SMEs cannot investment in research and development.</p>
Particular sector and subsector	Agriculture, Food Processing, SMEs, RTDs, Biotechnology

Objectives	<ul style="list-style-type: none"> ➤ To stimulate research cooperation between RTDs and SMEs. ➤ To avoid temporary actions or networking dedicated to single or few projects (long term collaboration between stakeholders). ➤ To realize a strong commitment of SMEs and RTDs in joint projects.
Core activities	Ensuring of innovation support services (technology transfer, consulting).
Implementing entity	Ministry of agriculture, forestry and food, Chamber of Commerce and industry of Slovenia, Food processing industry, Chamber of Agriculture and Forestry of Slovenia
Financial resources	The funding could from the ERDF- Rotation fund
Target groups	Food SMEs, RTDs, consumer associations, special target groups, regional authorities, investors, consultants.
Indicators for implementation success	<p>No. of services requested and used by networks participants</p> <p>No. of new joint proposals presented</p> <p>No. of common projects</p>

3. TRANSNATIONAL SEE ACTIVITIES

To be compiled by CERTH- INEB: Identifying and planning synergies and common activities of a transnational SEE character, e.g. on how to exploit future common financial instruments in order to enhance the agrofood research and innovation cooperation in the Southeast Europe area.

4. IMPLEMENTATION PLAN

(to be compiled by CERTH- INEB), Roles and responsibilities for the implementation of the OP measures, Financial Plan, Time Plan.

ANNEX 1 – FRAMEWORK AGREEMENT- INTENTION FOR TRANS-REGIONAL COOPERATION

(to be compiled by CERTH- INEB and signed by partners and stakeholders). This will provide the framework for continuous cooperation beyond the end of the project among the Inno- Food SEE partners and further stakeholders of strategic importance.